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Online English Language Teaching of Grade Eleven Students

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Abstract. In the Philippines, English teachers face additional challenges with online learning, particularly regarding connectivity issues and the teaching of grammar. Students also struggle with modular distance learning due to the lack of stable social and physical interactions. Considering these challenges, evaluating the effectiveness of online learning in English language teaching can inform decision-making among education stakeholders. Therefore, it is crucial to assess the effectiveness of online learning for Grade 11 English language instruction. To investigate this, the study employed an experimental research design to assess the effectiveness of online English language instruction for Grade 11 students. An equal number of 30 students were allocated to both the control and experimental groups. Specifically, the control group comprised 30 GAS students receiving instruction through the modular approach, while the experimental group consisted of 30 HUMSS students undergoing online English language instruction. A comparative analysis was conducted to ascertain differences between the pretest mean scores of students taught using modular versus online methods, differences between their posttest mean scores under these approaches, and discrepancies between their pretest and posttest mean scores across both approaches. Results revealed that modular and online approaches to teaching English were both effective to the students considering that no significant difference was shown in their pretest mean scores. However, the students were more comfortable with online learning since there was a significant difference in the post-test mean scores when taught using modular and online learning.

Keywords: Online learning; Modular learning; English teachers; Grade eleven students.

1.0 Introduction

The teaching of the English language presents a dynamic and complex task for educators. According to Iqbal and Rafi (2018), teachers often resort to rote learning and the Grammar Translation Method (GTM) in their English language instruction, and the focus tends to be on students' performance in examinations rather than on practical applications of English in real life. However, Adunola (2011, cited in Iqbal & Rafi, 2018) emphasizes that competent English teachers must adapt their methods to meet the needs and knowledge of their students, adjusting their teaching strategies to the specific context in which English is being taught. English teaching in the era of the New Normal has shifted significantly, with instruction moving to remote platforms. Gautam (2020) notes that the COVID-19 pandemic has necessitated a shift to electronic, virtual, and online modes presenting challenges for teachers striving to maintain high levels of English proficiency among their students. While teachers can address issues promptly through direct interaction with students in the traditional learning setting, immediate feedback in distance learning is lacking, hindering the attainment of higher proficiency levels.

In the Philippines, English teachers face additional challenges with online learning, particularly regarding connectivity issues and the teaching of grammar. Nanquil (2021) underscores the difficulty English language teachers encounter in developing students' communicative competence, particularly in public secondary schools where modules are used for instruction. Students also struggle with modular distance learning due to the lack of stable social and physical interactions. Consequently, teachers must enhance their pedagogical skills to effectively

navigate this new learning environment. In one of the public high schools in Catbalogan City, the modular distance learning modality is being implemented in response to the mandate of the Department of Education (DepEd). However, English teachers are considering the use of online learning platforms because of the difficulty in getting immediate feedback on students' learning using modules and the inadequacy of parental support to guide the students' learning at home. Nonetheless, the teachers also face the challenge of lack of gadgets for students and poor internet connectivity if online platform is used.

Considering these challenges, evaluating the effectiveness of online learning in English language teaching can inform decision-making among education stakeholders. Therefore, it is crucial to assess the effectiveness of online learning for Senior High School (SHS) Grade 11 English language instruction in one of the public high schools in Catbalogan City to recognize and credit their contributions to overall school performance and student outcomes.

2.0 Methodology

2.1 Research Design

This study employed a quasi-experimental research design to assess the effectiveness of online English language instruction for Grade 11 students. Specifically, the research aimed to determine the pretest mean scores of Grade 11 students using both modular and online teaching approaches, as well as their posttest mean scores under the same approaches. Furthermore, a comparative analysis was conducted to ascertain differences between the pretest mean scores of students taught using modular versus online methods, differences between their posttest mean scores under these approaches, and discrepancies between their pretest and posttest mean scores across both approaches.

2.2 Research Participants

The study's participants consisted of Grade 11 students from the General Academic Strand (GAS) and Humanities and Social Sciences (HUMSS) strands at Guinsorongan National High School, Schools Division of Catbalogan City. Total enumeration, or universal sampling, was employed to include all 30 students from both GAS and HUMSS strands as respondents for the study. To ensure heterogeneous grouping, an equal number of 30 students were allocated to both the control and experimental groups. Specifically, the control group comprised 30 GAS students receiving instruction through the modular approach, while the experimental group consisted of 30 HUMSS students undergoing online English language instruction.

2.3 Research Instrument

A 50-item test was administered to gather the necessary data, aimed at assessing the effectiveness of online learning in English language teaching. The test, administered both before and after the instructional period, covered topics relevant to the third grading period's English curriculum. These topics included Imagery and its Kinds, Diction and its Types, Figurative Language, Elements of Poetry, Arrangement, Structure and Forms of Poetry, and Elements of Fiction. It's worth noting that these topics were consistent across both online and modular classes in the study. The test utilized was a standardized and departmentalized assessment routinely employed by Grade 11 English teachers at Guinsorongan National High School. Therefore, no additional item analysis was conducted. However, to ensure its reliability, the test underwent testing using the test-retest method among selected GAS and HUMSS students at Samar National School, Schools Division of Catbalogan City. The resulting r value of 0.879 indicated high reliability and validity for individual testing purposes.

2.4 Data Gathering Procedure

The researcher conducted a face-to-face examination. Prior to the test, necessary approvals were obtained from relevant authorities. Upon receiving approval, the researcher attached the letters from the Division Superintendent and School Principal to a consent form addressed to Grade 11 students from both GAS and HUMSS strands, seeking their explicit consent to participate in the study. Once consent was obtained, online classes covering topics for the third quarter's English curriculum were conducted over a week using the Google Meet application, adhering to the schedule mandated by the Schools Division of Catbalogan City, which included limited face-to-face classes. Simultaneously, the same topics were provided to the control group of students using the modular approach. Modules and Learning Activity Sheets (LAS) were distributed on Monday and collected the following week. For the pretest and posttest, face-to-face sessions were conducted in the GAS and HUMSS rooms. The experimental group was administered the test by the researcher, while a fellow English teacher from

the junior high school level administered it to the control group, following strict instructions provided by the researcher.

2.5 Data Analysis

The data were analyzed using descriptive and inferential statistics, including mean, t-test for independent samples, and probability value. The mean was used to get the average of the student-respondents' pre- and posttest mean scores. The t-test for independent samples was used to determine the differences in the pre- and posttest mean scores of students in modular and distance learning. The p value was used to determine the significance of the differences in the pre- and posttest mean scores. A significance level of $\alpha = 0.05$ was applied. Computer-assisted techniques were used for precision and accuracy in data processing.

2.6 Ethical Considerations

Ethical and legal parameters were observed in conducting the research. Approval from concerned authorities was secured before conducting the study among the Grade 11 students. The privacy and anonymity of the respondents were respected by the researcher, ensuring that the data collected were used solely for research purposes and remained privileged between the researcher, statistician, and research adviser. Consent was obtained from the respondents before the conduct of the experiment. The respondents were informed about the nature of the study and what they would do in it. Lastly, the research was submitted for review to the Ethics Review Committee of the Eastern Samar State University.

3.0 Results and Discussion

3.1 Pretest Mean Scores of Grade 11 Students Using Modular and Online Approaches

Pretest Mean Scores of Students in Modular Approach in English Language Teaching

Table 1. Pretest mean scores of grade 11 students using a modular approach

Student	Pre-test Score	Student	Pre-test Score
1	8	16	8
2	12	17	9
3	10	18	13
4	23	19	12
5	18	20	14
6	14	21	11
7	19	22	17
8	17	23	15
9	16	24	9
10	18	25	13
11	11	26	13
12	19	27	10
13	10	28	18
14	9	29	8
15	12	30	10
Mean		13.20	

Table 1 indicates that three students obtained the lowest score in the pretest, scoring eight out of 50 items, while one student achieved the highest score with 23 out of 50 items. The mean pretest score of Grade 11 students adopting the modular approach in English language teaching was calculated at 13.20. When compared cumulatively, this score equated to only 26 percent, significantly below the 75 percent passing standard. These results suggest that students taught utilizing the modular approach exhibited a low level of English achievement.

One of the challenges associated with the modular approach is the absence of a teacher to remind students of the tasks included in the module. This lack of supervision can lead to increased distraction and difficulty in maintaining focus on the lessons, ultimately impacting their learning outcomes (Vallespin, 2021). Moreover, the poor pretest scores of the student-respondents support the findings of Dargo and Dimas (2021, cited in Abude, 2021), who observed a decline in learners' academic performance following the implementation of modular distance learning (MDL) at the onset of the pandemic. They highlighted the limited interaction between teachers and students and the overwhelming number of tasks or assignments included in the module as factors contributing to the negative effects of MDL.

Olivo (2021, cited in Abude, 2021) additionally highlighted that the time allocated for completing the learning activities within the modules is inadequate due to the overwhelming number of activities included. Consequently, some parents find it challenging to provide the necessary assistance for their children to complete all the activities included in the module. Moreover, parents have raised concerns regarding the complexity of certain topics within the modules, which hinders their ability to support and guide their children in completing the learning assignments.

Pretest Mean Scores of Students in Online Approach in English Language Teaching

Table 2 reveals four student-respondents who got the lowest pretest mean score at nine out of 50 items whereas two student-respondents got the highest pretest mean score at 19 out of 50 items. The mean pretest score of the student-respondents taught using the online approach was calculated at 13.73. The low pretest mean scores of the student-respondents utilizing the online approach could be attributed to the sudden transition to online courses.

Table 2. Pretest mean scores of grade 11 students using online approach

Student	Pre-test Score	Student	Pre-test Score
1	11	16	9
2	13	17	12
3	15	18	17
4	17	19	17
5	19	20	11
6	13	21	16
7	12	22	19
8	18	23	15
9	11	24	13
10	9	25	9
11	16	26	12
12	14	27	9
13	12	28	11
14	14	29	19
15	14	30	15
Mean		13.73	

According to Bird et al. (2021), students enrolled in online courses exhibit lower rates of course completion and final grades, encounter greater challenges with persistence, and are more likely to repeat courses. The difficulties faced by students in online education may stem from the increased demand for autonomy compared to traditional face-to-face classes. Dabbagh et al. (2019, cited in Banda et al., 2021) suggested that online learning poses challenges for students who face intellectual limitations or follow non-traditional enrollment patterns.

The absence of in-person connection in online learning settings can lead to feelings of isolation and detachment from the learning community, thereby complicating student engagement. As noted by Sadiq & Zamir (2014), a key challenge for teachers in remote learning delivery modes is bridging the gap between themselves and their students to achieve desired learning outcomes. This involves effectively managing communication channels to enhance interaction between teachers and learners, thus reducing the transactional distance that often hampers learning in this mode.

3.2 Posttest Mean Scores of Grades 11 Students Using Modular and Online Approach

Posttest Mean Scores of Student-Respondents Using Modular Approach

Table 3 indicates that the lowest posttest score achieved by the student-respondents using the modular approach was 10 out of 50 items, while the highest posttest score reached 26. The mean post-test score was calculated at 16.90.

The mean posttest score of 16.90 still fell below the 75 percent passing standard, resulting in a cumulative score of 34 percent. However, there was a slight increase in the posttest mean scores of Grade 11 students using the modular approach compared to their pretest scores, indicating an improvement in the posttest scores of the student-respondents.

The adoption of the modular approach in teaching English language, as outlined by Abude (2021), aims to foster active learning, strengthen logical reasoning, and enhance problem-solving skills compared to the traditional

textbook-based method. Consequently, the use of modules in English classes offers a more flexible educational experience for students who have transitioned to non-traditional learning methods since March 2020.

Table 3. Posttest mean scores of grade 11 students using modular approach

Student	Pre-test Score	Student	Pre-test Score
1	13	16	10
2	16	17	16
3	14	18	16
4	25	19	18
5	22	20	16
6	15	21	15
7	22	22	19
8	21	23	18
9	19	24	11
10	19	25	16
11	14	26	16
12	26	27	17
13	12	28	22
14	13	29	15
15	16	30	15
Mean		16.90	

The involvement of teachers may have contributed to the enhancement of student-respondents' post-test outcomes. In modular distance learning, teachers play a vital role in monitoring their students' progress. Moreover, students could seek assistance from their teachers during home visits for monitoring or through various communication channels such as telephone, text messaging, or direct messaging on social media platforms like Facebook or Messenger (Abude, 2021).

Posttest Mean Scores of Student-Respondents using Online Approach

Table 4. Posttest Mean Scores of Grade 11 Students using Online Approach

Student	Pre-test Score	Student	Pre-test Score
1	16	16	19
2	16	17	19
3	19	18	24
4	20	19	22
5	26	20	15
6	22	21	35
7	19	22	34
8	20	23	28
9	19	24	30
10	12	25	10
11	24	26	18
12	17	27	23
13	18	28	15
14	18	29	22
15	20	30	25
Mean		20.83	

Table 4 illustrates the posttest mean scores of student-respondents engaged in online learning. The lowest posttest mean score attained by student-respondents using online learning was 10 out of 50 items, while the highest posttest mean score reached 35. The mean posttest score for student-respondents utilizing the online approach was recorded at 20.83. This represents an improvement from the pretest mean scores, which were computed at 13.73. Despite the inherent distance associated with online learning, student-respondents demonstrated an enhancement in their posttest scores.

Online learning has the capacity to bridge the geographical gap and foster a social space through virtual media, enabling a community of learners to convene and engage in a shared learning environment. Even prior to the global pandemic, online learning platforms were widely utilized in English teaching, as noted by Fjellstul (2006), due to their ability to address the concurrent needs for remote instruction and afford students greater control over their study levels, involvement, and time allocation.

Moreover, Hashemi (2021) asserted that online education enhances students' motivation and engagement in learning English. Cinkara and Bagceci (2013, cited in Hashemi, 2021) discovered that utilizing online tools and materials significantly increased students' motivation and engagement in foreign language learning. Additionally, according to Halim and Hashim (2019, cited in Hashemi, 2021), students in online classrooms develop self-confidence, which can further enhance their engagement and communication skills.

3.3 Comparison of the Pretest Mean Scores of Grades 11 Students Using Modular and Online Approach

Table 5 presents a t-value of 0.576 used to compare the pretest mean scores of student-respondents utilizing the modular and online approaches in English language teaching. Similarly, a p-value of 0.567 was obtained, exceeding the significance level of 0.05, with degrees of freedom (df) equal to 58. Consequently, the hypothesis stating no significant difference in pretest mean scores of Grade 11 students using modular and online approaches was accepted. These results indicate that whether taught through modular or online methods, student-respondents exhibited similar performance in their English language learning.

Table 5. Difference in the pretest mean scores of grade 11 students using modular and online approach

Group	Mean	SD	t-value	p-value	Interpretation/Decision
Online	13.73	3.12	0.576	0.567	Not Significant/
Modular	13.20	3.99			Accept H_0

$\alpha = 0.05$; p-value < 0.05; df = 58; two-tailed

The similarity in pretest mean English scores between student-respondents utilizing modular and online techniques may be attributed to the unfamiliarity of these modalities to them, as they were accustomed to traditional in-class English instruction. With the transition to modular and online learning approaches, students relied more on their own resources to continue learning remotely, utilizing modules and online tools and materials. Simultaneously, teachers had to adapt to new pedagogical concepts and methods of instructional delivery associated with modular and online techniques (Schleicher, 2020).

Similarly, Gursoy and Eken (2018) underscored that various factors such as available resources, professional readiness, theoretical knowledge and beliefs, and practical decision-making influence the expected outcomes of English language teaching and learning during educational changes. English language teachers, therefore, require adequate preparation in linguistic, educational, and methodological domains, necessitating proficiency in teaching dedication, disciplinary knowledge structuring, English as a Foreign Language (EFL) theoretical understanding, technological adeptness, and ongoing English language learning.

Moreover, Alipour (2020) highlighted that both online and blended learning groups outperformed the control group on an English vocabulary test, with no significant differences observed between the online and blended learning groups. This suggests that students learning English through online and other distant modalities tend to perform similarly. This uniformity could be attributed to the prioritization of innovative teaching practices by teachers, regardless of the educational approach employed, to enhance the convenience and effectiveness of instructional content delivery (Al-Hasan, 2013, cited in Alipour, 2020).

3.4 Comparison of the Posttest Mean Scores of Grade 11 Students Using Modular and Online Approach

Table 6. Difference in the posttest mean scores of grade 11 students using modular and online approach

Group	Mean	SD	t-value	p-value	Interpretation/Decision
Online	20.83	5.72	3.120	0.003	Significant/
Modular	16.90	3.86			Reject H_0

Table 6 displays a t-value of 3.120 used to compare the posttest mean scores of Grade 11 students utilizing the modular and online approaches. The computed p-value of 0.003 is lower than the significance level of 0.05. Therefore, at the 0.05 level of significance and with degrees of freedom (df) equal to 58 for two-tailed hypothesis testing, the hypothesis stating no significant difference between the posttest mean scores of Grade 11 students using modular and online approaches was rejected. The variations in posttest mean scores suggest that online learning yielded higher mean scores, indicating that student-respondents were more likely to perform well in

English when taught using the online learning strategy, despite being unfamiliar with these modalities due to their prior experience with traditional in-class English instruction.

This finding is supported by Vygotsky's Sociocultural Theory, which posits that learning is a social process. Vygotsky (1978, cited in Banda et al., 2021) proposed that interaction is pivotal in cognition, suggesting that learning occurs through collaboration and knowledge sharing among students and between students and their teachers. Fabriz et al. (2021) emphasized that in an online setting, students and teachers can engage in real-time interpersonal communication and receive immediate performance feedback, thus enhancing English language learning. This aligns with Vygotsky's theory, which suggests that learning primarily occurs through interaction and is subsequently internalized by students.

The disparity in posttest mean scores between student-respondents utilizing the modular and online approaches may be attributed to the ongoing adaptation to the shift in instructional delivery modality. Anzaldo (2021) found that not all students are fully committed to their modules, with many completing them merely to fulfill formal requirements. The low level of student engagement in classes could potentially be linked to teachers' limited capacity to monitor academic progress through text messaging, phone calls, and restricted home visits. Moreover, parents may struggle to facilitate their children's learning at home, particularly when dealing with higher-grade levels and complex lessons that demand greater educational attainment on their part.

3.5 Comparison of the Pretest and Posttest Mean Scores of Grade 11 Students using Modular and Online Approach

Table 7.0 Difference in the pretest and posttest mean scores of grade 11 students using modular and online approach

Group	Mean	SD	t-value	p-value	Interpretation/Decision
Online	7.10	4.57	3.810	0.001	Significant/ Reject H ₀
Modular	3.70	1.74			

Table 7 depicts a t-value of 3.810, illustrating the difference between the pretest and posttest mean scores of Grade 11 students using modular and online learning approaches in English. The computed p-value of 0.001 is lower than the significance level of 0.05. Therefore, at the 0.05 level of significance and with degrees of freedom (df) equal to 58 for two-tailed hypothesis testing, the hypothesis stating no significant difference between the pretest and posttest mean scores of Grade 11 students using modular online approaches was rejected. This implies that the pretest and posttest mean scores of Grade 11 students differed when taught English using modular and online approaches, with higher mean gain scores observed for students taught using the online approach.

The disparity in mean gain scores and the preference for online learning among student-respondents can be elucidated by Basar et al. (2021). They highlighted the necessity for both teachers and students to embrace the new standard in teaching and learning subject areas, encompassing the ability of students to adapt their behavior in response to novel circumstances. Regardless of students' initial feelings towards emergency remote teaching (ERT) methods like online learning, collaborative efforts between teachers and students are essential to enhance their understanding of technological educational approaches and effectively manage their studies.

Despite challenges such as limited internet access in certain geographical areas and financial constraints hindering the purchase of internet packages, Basar et al. (2021) emphasized that students still gravitate towards online modalities due to the facilitation of group learning and the assurance of teacher assistance in specific subjects. They further stressed that online learning serves as the most viable pedagogical alternative, ensuring the continuity of students' education amidst school closures during the pandemic. Consequently, online learning emerges as the most effective pedagogical alternative, as evidenced by the student respondents' higher mean gain scores in this study, indicating their successful adaptation to this approach.

4.0 Conclusion

The following conclusions were drawn based on the findings of the current study:

- a. The Grade 11 students who were taught English using modular and online learning had low pretest results, demonstrating that the teachers' instructional delivery methods did not matter. The Grade 11 students showed

lower levels of outcomes in English on the topics of Imagery and its Kinds, Diction and its Types, Figurative Language, Elements of Poetry, Arrangement, Structure and Forms of Poetry, and Elements of Fiction when taught with either the modular or online approach. Due to the negligible difference in pretest scores, it was inferred that students' English proficiency levels were nearly comparable at the beginning of the study.

- b. Even though the Grade 11 students were unfamiliar with both the modular and online approaches to teaching the English language, they showed significant gains in performance during the posttest, demonstrating a preference for online learning. Students achieved better when taught using online learning delivery modality. The students' preference for online learning indicated their preference for real-time interaction with their teachers in teaching concepts about Imagery and its Kinds, Diction and its Types, Figurative Language, Elements of Poetry, Arrangement, Structure and Forms of Poetry, and Elements of Fiction.
- c. There were no discernible differences between the pretest mean scores in English of the Grade 11 students who were instructed using both modular and online methods. The outcomes demonstrated a comparable resemblance in the students' English proficiency whether instruction was delivered online or in modules. This can be the result of the students' comparable levels of knowledge in the English language, coupled with the unfamiliarity of these two approaches of instructional delivery to them.
- d. The English posttest mean scores of the students displayed a significant difference, showing that online learning students had higher mean scores. These student-respondents were more likely to do well in English when taught utilizing the online learning strategy, even though these two modalities were unknown to them because they were used to traditional in-class English instruction.
- e. Modular and online approaches to teaching English were both effective to the students considering that no significant difference was shown in their pretest mean scores. However, the students were more comfortable with online learning since there was a significant difference in the posttest mean scores when taught using modular and online learning.
- f. The students' comfort and ease with online learning arose from the immediacy of feedback by their teachers inasmuch as it promotes real-time interactions in contrast to modular distance learning where "distance" is created because of the limited interaction between the learners and their teachers.
- g. The research used a quasi-experimental research design with randomized assignment of the participants to the group, and therefore, the pretest mean scores showed no discernible differences. Implications for use of randomization criteria to have more discernible differences among the participants at the start of the study.

Based on the conclusions made, the following recommendations are hereby proposed:

- a. English should be taught using online tools and materials so that students become comfortable with this alternative modality even after the pandemic.
- b. Modular approaches can still be used to students who are comfortable using these approaches and can learn without much teacher input in discussions of the concepts or topics in English.
- c. English teachers should continue to adapt these two modalities in teaching English to Grade 11 students.
- d. Options for the mode of instruction delivery that the students have grown accustomed to should be provided. If there is another pandemic like this one in the future, changes in the ways that instruction is delivered should be responsive and adaptable to prevent students from going through a significant cultural shock.
- e. Follow-up research must be conducted to monitor the changes in the students' performance in English language using these two approaches.
- f. In-service training through school learning action cell (SLAC) sessions on strategies for modular and online instruction should be provided to English teachers for effective implementation of these approaches.
- g. English teachers should be encouraged to enroll in short-term courses focused on developing learning resource materials for modular and online learning approaches.

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7.0 Conflict of Interests

The author declares no conflict of interest.

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City of Cabuyao Hatid-Sundo Program and Overseas Filipino Workers Satisfaction: Basis for Action Plan

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Abstract. This study was conducted to identify the level of implementation of the Hatid-Sundo Program as a mode of transportation for OFWs going back and forth to the airport and their level of satisfaction which was the basis for the action plan of the program. Hatid-Sundo Program is an initiative implemented by the City Government of Cabuyao, Laguna to provide free transportation services for the OFWs. The researcher utilized Cronbach's Alpha to test the reliability of the questionnaire being distributed. A total of 150 OFWs were involved through simple random sampling in answering the survey questionnaire. Descriptive correlational methods were utilized as the research design. Results were evaluated and analyzed using Mean, Four-Point Likert Scale, and Pearson Product Moment Correlation. The result revealed that there was a substantial link between the Level of Implementation of the City of Cabuyao Hatid-Sundo Program and Overseas Filipino Workers' Satisfaction. The probability values were all 0.000 which was less than the level of significance at .05, thus the rejecting null hypothesis. This also indicates that the better the implementation of the City of Cabuyao Hatid-Sundo Program, the more Overseas Filipino Workers satisfaction. Furthermore, the study proposed an action plan that aims to meet the goals outlined and improve the City of Cabuyao Hatid-Sundo Program by incorporating the satisfaction and inputs received from Overseas Filipino Workers such as procurement of new passenger seats, regular maintenance of air conditioning system, additional personnel, orientation for safety guidelines, values training program and conduct of forums in barangay. Modifications can be implemented based on the circumstances and available resources.

Keywords: Overseas Filipino Workers; Hatid-Sundo Program; Government program; City of Cabuyao.

1.0 Introduction

The international community has passed many legal frameworks aimed at safeguarding overseas workers; among these, the documents drawn up during the "International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families" held in New York in 1990 and the "Protocol to prevent, suppress, and punish trafficking in persons" held in New York in 2000 stand out for their importance. These frameworks, together with the rights of migrant workers approved by the International Labor Organization (ILO), serve as the underpinnings of migrants' international legislation (OHCHR, n.d.). As reported by the Philippine Statistics Authority, there have been approximately 1.8 million overseas Filipino workers since 2021; most of them are female. When it comes to addressing the requirements of returned Overseas Workers (OFWs), the institutional, policy, and program structures that have been established at national levels are not consistently replicated across the country's regions and local authorities. While efforts have been made to "localize" migration institutions, policies, and programs, the localization of migration governance has yet to be fully implemented in remote areas of the country, thus necessitating the strengthening of programs and services that are more closely linked to immigrants and their families (Asis, n.d.)

Several laws were crafted in the Philippines to protect the welfare of the so-called modern-day heroes (OFWs). Republic Act No. 8042 is an act to institute the policies of overseas employment and establish a higher standard of protection and promotion of the welfare of migrant workers, their families, and overseas Filipinos in distress, for other purposes, this act is also known as the "Migrant Workers and Overseas Filipinos Act of 1995." Recently former President Rodrigo Duterte signed on December 30, 2021, the Republic Act No. 11641 or an act creating the Department of Migrant Workers, defining its powers and functions, rationalizing the organization and functions of government agencies related to overseas employment and labor migration, appropriating funds therefor, and for other purposes. This means that all services for the OFWs are consolidated into one department which reflects the significance of the OFWs in the country.

According to the study of Manapol et al. (2022), OFW families who were left behind typically allocated the funds they received for education, meals, utilities, and transportation. The Hatid-Sundo program which converted to "Fetch and Drop-off" in English, was a solution frequently offered by schools, firms, or companies to carry people from one area to another. It was implemented in the Philippines where it was frequently utilized by institutions to transfer students and get them back home.

Overseas Workers Welfare Administration (OWWA) proposes a Hatid-Sundo Program which provides free transportation services for those OFWs departing or returning from the Ninoy Aquino International Airport (NAIA) during the peak of COVID-19. Due to this program, many OFWs are brought safely back to their families. Likewise, the Hatid-Sundo program is implemented in different provinces of the Philippines such as Pampanga, Tarlac, Benguet, and La Union. Relatively, in the City of Cabuyao, Laguna, over 431 OFWs have been helped with 35 distressed OFWs through the Cabuyao OFW Cooperation Hatid-Sundo Program (Gut, 2021). However, the satisfaction of the Overseas Filipino workers towards the proposed Hatid-Sundo Program has not yet been studied and analyzed.

The study of the City of Cabuyao Hatid-Sundo Program and its relationship with the satisfaction of Overseas Filipino Workers (OFWs) was motivated by several reasons. First, the well-being of OFWs was a top priority, as working overseas entailed challenges and sacrifices. The study aimed to improve the Hatid-Sundo Program, focusing on transportation services, to lessen the burdens and stress associated with OFWs' transit to and from the airport. Second, the economic potential of OFWs was critical, as OFW remittances were a lifeline for many Filipino families and contributed to the country's economic stability. Third, the research sought to boost government activities, as the Hatid-Sundo Program demonstrated the local government's commitment to helping OFWs. Fourth, the study aimed to enhance the Philippines' image as a supportive nation by addressing OFW issues and developing positive interactions with OFWs and their host countries. Finally, the study intended to provide evidence-based insights to inform Hatid-Sundo Program policymakers and program development. The study aimed to fill the gap in the existing literature by evaluating OFW satisfaction and identifying best practices to mitigate challenges.

2.0 Methodology

2.1 Research Design

A quantitative research design was employed to address the problem statement of this undertaking. A descriptive correlational research design was further utilized in describing variables and the relationship that naturally occurs between and among them. The researcher-made questionnaire was administered to gather related information concerning the Overseas Filipino Workers' satisfaction with the City of Cabuyao Hatid-Sundo Program in the City of Cabuyao, Laguna. The employed research design determined the level of implementation of the program, the satisfaction of the OFWs with the program, and the relationship between these two given variables.

2.2 Research Locale

Generally, the study focused on the Overseas Filipino Workers' satisfaction with the implementation of the City of Cabuyao Hatid-Sundo Program in the City of Cabuyao, Laguna. With these, the research locale of this current undertaking was the City of Cabuyao, Laguna, Philippines. The respondents were from the City of Cabuyao, Laguna particularly the OFWs who availed free transportation service provided during the implementation of the Hatid-Sundo Program.

2.3 Research Participants

Since the focus of this study was to determine the Overseas Filipino Workers' satisfaction with the City of Cabuyao Hatid-Sundo Program in the City of Cabuyao, Laguna, the researcher randomly selected the OFWs involved in the Hatid-Sundo Program as the respondents of this study. Accordingly, there are 1,700 OFWs involved in the Hatid-Sundo Program in the City of Cabuyao. In reaching out to the respondents, the researcher relied upon these records. Based on the computation through G*Power and the advice of the statistician, 150 OFWs were the total respondents for the study

2.4 Research Instrument

The study utilized a researcher-made survey questionnaire based on Republic Act 8042 and the SERVQUAL Model by (Parasuraman, et al, 1985, as cited in Sibai et al., 2021). This instrument was administered to determine the level of implementation of the Hatid-Sundo Program, and the OFWs' level of satisfaction with the said program. This 40-item questionnaire was administered through Google Forms, phone calls, or physical interaction whichever was more convenient for the participants.

2.5 Data Gathering Procedure

Before beginning the actual testing, the researcher needs to first write a request letter, which should then be retrieved once the letter has been approved. Data collection techniques were applied by the researcher for the study to collect adequate and relevant data focusing on the Overseas Filipino Workers' satisfaction with the City of Cabuyao Hatid-Sundo Program. The participants were chosen using a simple random sampling method by reaching out and contacting the OFWs involved in the program based on the provided records and lists in the year 2022-2023. To gather the information required this study used a web-based survey approach and distributed survey questionnaires via Google Forms. The data were correctly tallied, examined, and studied to proceed with the statistical treatment of this research study once they had already been acquired by the researcher.

2.6 Ethical Considerations

The ethical implications of the study were assessed to protect the rights of the participants. The study followed the ensuing ethical guidelines based on the research manual and Data Privacy Act of 2012: first, informed consent in which respondents were willing to participate voluntarily in every study. Before beginning the online survey in this study, participants were asked for their informed consent. Second, the confidentiality of the collected data was monitored and protected. The respondents were advised and given the assurance that whatever they shared with them would be kept completely confidential. Third, anonymity, in which the data collected were only used for the purposes for which the participants have given their consent. No one will be allowed to see any of the information that has been collected and last, privacy in which the researcher respected the respondents' autonomy, self-determination, and general well-being. The extent to which people feel the need for privacy depends on their expectations of what information about themselves should and should not be shared with others. Plagiarism was strictly prohibited; the references section includes all properly mentioned related material. Notably, the researcher sent an email to the survey's creator asking for their agreement. Turnitin was used to prevent plagiarism; it is a web-based tool that detects plagiarism in portions of submitted papers that correspond to passages from other sources, such as journal articles and other student papers.

3.0 Results and Discussion

3.1 OFWs' Assessment of the Implementation of Hatid-Sundo Program

Functionality

As shown in Table 1, the functionality in the City of Cabuyao Hatid-Sundo Program was Fully Implemented (3.87 o-0.22). The indicator "Ensures prompt response to inquiries and provides clear instructions regarding pick-up logistics" yielded the highest mean score of 3.92 interpreted as Fully Implemented. On the other hand, "assists me in providing a reliable transportation service" received the lowest mean score of 3.79 interpreted as Fully Implemented. The findings imply that Overseas Filipino Workers (OFWs) perceive the City of Cabuyao Hatid-Sundo Program as fully operational. The remarkably high rating for ensuring timely responses and providing clear instructions during pick-up logistics suggests a positive influence on OFWs' satisfaction. Effective communication channels and well-established procedures contribute to this success. On the flip side, the lower score concerning assistance in offering a reliable transportation service points to a potential area that requires improvement.

Table 1. OFWs' assessment of the implementation of the Hatid-Sundo program in terms of functionality

INDICATORS	MEAN	INTERPRETATION
1. Assists me in providing a reliable transportation service (Tinutulungan ako sa pagbibigay ng maaasahang serbisyo sa transportasyon).	3.79	FI
2. Ensures no delay in travel from my home to the airport (Tinitiyak na walang pagkaantala sa paglalakbay mula sa aking tahanan patungo sa paliparan).	3.85	FI
3. Enables staff to minimize delays in the pick-up process, allowing OFWs to reach their destinations right on time (Nagbibigay-daan sa mga kawani na mabawasan ang mga pagkaantala sa proseso ng pick-up, na nagpapahintulot sa mga OFW na makarating sa kanilang mga destinasyon sa tamang oras).	3.88	FI
4. Ensures prompt response to inquiries and provides clear instructions regarding pick-up logistics (Tinitiyak ang agarang pagtugon sa mga katanungan at nagbibigay ng malinaw na tagubilin tungkol sa pick-up logistics).	3.92	FI
5. Sees to it that transportation services are arranged according to the specified schedule (Tinitiyak na ang mga serbisyo sa transportasyon ay nakaayos ayon sa tinukoy na iskedyul).	3.90	FI
Standard Deviation	0.22	
General Assessment	3.87	FI

Legend: 3.25-4.00 Fully Implemented (FI) 2.50-3.24 Implemented (I) 1.75-2.49 Partially Implemented (LI) 1.00-1.74 Not Implemented (NI)

The perceived delays or uncertainties in transportation services may be a factor contributing to this lower rating, highlighting an aspect that benefited from additional attention and enhancements to ensure a more dependable experience for OFWs. To support the investigation, earlier research emphasized the significance of effective communication and logistical support in service-oriented initiatives. Pakurar et al. (2019) observed that guaranteeing quick responses and providing clear instructions had a positive impact on user satisfaction. Their research underscored the crucial role played by effective communication channels and well-established procedures in improving overall service satisfaction. The elevated mean score for ensuring prompt responses and clear instructions during pick-up logistics in the City of Cabuyao Hatid-Sundo Program aligned with these findings, strengthening the idea that robust communication practices played a substantial role in the favorable assessment of such programs by Overseas Filipino Workers.

Safety

As shown in Table 2, safety in the City of Cabuyao Hatid-Sundo Program was Fully Implemented (3.89, σ -0.21). The indicator "Maintains a trustworthy standard for checking the identities of the participants" yielded the highest mean score of 3.95 interpreted as Fully Implemented. On the other hand, the statement "provide vehicles that are deemed safe and stable" received the lowest mean score of 3.82 and was also interpreted as Fully Implemented.

Table 2. OFWs' assessment of the implementation of the Hatid-Sundo program in terms of safety

INDICATORS	MEAN	INTERPRETATION
1. Provides protocols in place to deal with an emergency (Nagbibigay ng mga protocol sa lugar upang harapin ang isang emergency)	3.84	FI
2. Maintains a trustworthy standard for checking the identities of the participants (Nagpapanatili ng isang mapagkakatiwalaang pamantayan para sa pagsuri sa mga pagkakakilanlan ng mga kalahok).	3.95	FI
3. Provides vehicles that are deemed safe and stable (Nagbibigay ng mga sasakyan na itinuturing na ligtas at matatag)	3.82	FI
4. Ensures that the driver and vehicle have a license and permit to operate (Tinitiyak na ang driver at sasakyan ay may lisensya at permit para makapagmaneho).	3.94	FI
5. Sees to it that the vehicle involved in the program is well-maintained and in excellent condition (Tinitiyak na ang sasakyang kasangkot sa programa ay maayos at nasa mahusay na kondisyon).	3.92	FI
Standard Deviation	0.21	
General Assessment	3.89	FI

The results imply that Overseas Filipino Workers (OFWs) view the City of Cabuyao Hatid-Sundo Program as fully implemented concerning safety. The highest mean score indicates a strong safety framework, instilling confidence among participants. This outcome suggests that OFWs value the program's dedication to reliable identity checks, creating a sense of security during transportation. On the other hand, the lower mean score points to a potential area for improvement in ensuring the safety and stability of the provided vehicles. To support the study, prior research conducted by Khan et al. (2021) underscored the crucial importance of rigorous identity verification in augmenting safety perceptions within service-oriented programs. Their investigation demonstrated that programs upholding reliable standards for verifying participant identities significantly contributed to a sense of security and overall satisfaction. These findings were in harmony with the present study's observation that maintaining a reliable standard for checking participant identities resulted in the highest mean score, indicating

that robust identity verification processes played a pivotal role in shaping positive safety perceptions among Overseas Filipino Workers.

Comfortability

As shown in Table 3, the comfortability in the City of Cabuyao Hatid-Sundo Program was Fully Implemented (3.80, $\sigma=0.31$). The indicator “Provides comfortable passenger seats” and “sees to it that the vehicles have an air conditioner for the passengers” both yielded the highest mean score of 3.87 and were interpreted as Fully Implemented. On the other hand, the statement “ensures that the vehicle is well maintained when it comes to internal and external features” received the lowest mean score of responses with 3.53 also interpreted as Fully Implemented.

Table 3. OFWs’ assessment of the implementation of the Hatid-Sundo program in terms of comfortability

INDICATORS	MEAN	INTERPRETATION
1. Provides comfortable passenger seats (Nagbibigay ng mga komportableng upuan ng pasahero).	3.87	FI
2. Ensures reliable luggage compartment for personal belongings (Tinitiyak ang maaasahang luggage compartment para sa mga personal na gamit).	3.86	FI
3. Sees to it that the vehicles have an air conditioner for the passengers (Tinitiyak na may air conditioner ang mga sasakyan para sa mga pasahero).	3.87	FI
4. Provides safe and enjoyable passenger travel (Nagbibigay ng ligtas at kasiya-siyang paglalakbay ng pasahero).	3.85	FI
5. Ensures that the vehicle is well maintained when it comes to internal and external features (Tinitiyak na ang sasakyan ay mahusay na pinananatili pagdating sa panloob at panlabas na parte).	3.53	FI
Standard Deviation	0.31	
General Assessment	3.80	FI

The results imply that Overseas Filipino Workers (OFWs) view the City of Cabuyao Hatid-Sundo Program as fully implemented in terms of comfort. The highest mean score suggests a strong emphasis on improving the physical comfort of participants. This outcome indicates that OFWs highly value and prioritize the availability of these amenities, contributing to an overall comfortable experience during transportation. Conversely, the lower mean score points to a potential area for improvement. The perceived need for enhancement in maintaining the vehicle's overall condition underscores the importance OFWs place on a well-maintained transportation environment to ensure a comfortable journey. To support the noted high score reflecting the emphasis on physical comfort, prior research by Hansson et al. (2019) underscored the importance of comfortable amenities in transportation services. Their study emphasized that providing comfortable passenger seats and ensuring the availability of air conditioning significantly contributed to positive perceptions of comfort and overall satisfaction among service users. The alignment of these findings with the current study reinforced the idea that prioritizing these amenities was integral to enhancing the overall comfort experience for Overseas Filipino Workers participating in the Hatid-Sundo Program.

3.2 OFWs' Satisfaction with the Implementation of the Hatid-Sundo Program

Reliability

Table 4. OFWs’ satisfaction with the implementation of the Hatid-Sundo program in terms of reliability

INDICATORS	MEAN	INTERPRETATION
1. Provides consistently trustworthy transportation services at the scheduled time (Nagbibigay ng patuloy na mapagkakatiwalaang mga serbisyo sa transportasyon sa nakatakdang oras).	3.85	VS
2. Transport passenger reliably to their destination (Maasahan na inihahatid ang pasahero sa kanilang destinasyon.)	3.88	VS
3. Provides driver that helps passengers pack shipments (Nagbibigay ng driver na tumutulong sa mga pasahero na mag-pack ng mga kargamento)	3.85	VS
4. Motivates passenger to avail the services of the program (Nag-uudyok sa mga pasahero na gamitin ang mga serbisyo ng programa).	3.89	VS
5. Sees to it that the driver is reliable when it comes to unexpected events (Tinitiyak nito na ang driver ay maaasahan pagdating sa mga hindi inaasahang pangyayari).	3.83	VS
Standard Deviation	0.26	
General Assessment	3.86	FI

Overseas Filipino Workers were Very Satisfied (3.86, $\sigma=0.26$) with the Reliability of the City of Cabuyao Hatid-Sundo Program as shown in Table 4. The indicator “Motivates passenger to avail the services of the program”

yielded the highest mean score of 3.89 and was interpreted as Very Satisfied. On the other hand, the statement “sees to it that the driver is reliable when it comes to unexpected events” received the lowest mean score of 3.83 and was interpreted as Very Satisfied. The results imply that Overseas Filipino Workers (OFWs) express overall satisfaction with the implementation of the City of Cabuyao Hatid-Sundo Program in terms of reliability. There is a strong positive sentiment among OFWs regarding the program's effectiveness in encouraging service utilization. This is attributed to effective promotional strategies, incentives, or a positive program reputation, fostering satisfaction and engagement. Conversely, the lower mean score indicates a potential area for improvement. The perceived need for enhancement in this aspect underscores the importance the OFWs place on the reliability of drivers during unforeseen circumstances, highlighting an area that could benefit from additional training or support mechanisms to further enhance overall satisfaction with the program's reliability.

The noted high score aligned with the findings of a study by Fell et al. (2020) that explored the critical aspects of effective promotional strategies and incentives within transportation programs. Their research underscored that these elements played a pivotal role in fostering positive user engagement and overall satisfaction. Particularly, the study emphasized the importance of creating an environment that not only provided reliable transportation services but also actively encouraged and motivated passengers to utilize these services. This resonated with the current study's findings, where the high mean score indicated a successful implementation of strategies that motivate Overseas Filipino Workers to avail the services of the City of Cabuyao Hatid-Sundo Program, contributing to their overall satisfaction with the program's reliability.

Responsiveness

The OFWs rated responsiveness as Very Satisfied (3.89 General Assessment and 0.25 Standard Deviation) as shown in Table 5. The indicator “Ensures that specific transportation needs are provided” yielded the highest mean score 3.91 and was interpreted as Very Satisfied. On the other hand, the statement “responds quickly to any problems or issues passengers may encounter” received the lowest mean score of 3.85 and was also interpreted as Very Satisfied.

Table 5. OFWs' satisfaction with the implementation of the Hatid-Sundo program in terms of responsiveness

INDICATORS	MEAN	INTERPRETATION
1. Respond quickly to any problems or issues passengers may encounter (Mabilis na tumugon sa anumang mga problema o isyung maaaring makaharap ng mga pasahero).	3.85	VS
2. Ensures that specific transportation needs are provided (Tinitiyak na ang mga partikular na pangangailangan sa transportasyon ay ibinibigay).	3.91	VS
3. Sees to it that the driver is dependable as to any unforeseen circumstances (Tinitiyak nito na ang driver ay maaasahan sa anumang hindi inaasahang pangyayari).	3.89	VS
4. Ensures that the program has an emergency vehicle to respond when the vehicle is in trouble (Tinitiyak na ang programa ay may sasakyang sapat na tutugon kapag may problema ang sasakyan).	3.90	VS
5. Responds immediately to passengers' requested transaction (Tumutugon kaagad sa hiniling na transaksyon ng mga pasahero).	3.89	VS
Standard Deviation	0.25	
General Assessment	3.89	FI

The results imply that Overseas Filipino Workers (OFWs) express a high level of satisfaction with the implementation of the City of Cabuyao Hatid-Sundo Program in terms of responsiveness. The elevated general assessment, coupled with the highest mean score for ensuring specific transportation needs, suggests a robust commitment to addressing individual requirements. This is attributed to tailored service offerings, efficient communication channels, and a proactive approach to meeting the diverse needs of OFWs. Conversely, the lower mean score for the statement related to responding quickly to any problems or issues passengers may encounter indicates a potential area for improvement. While overall satisfaction was high, the perceived need for enhancement in swift issue resolution highlights the importance OFWs place on timely responses and solutions, suggesting that further emphasis on addressing concerns promptly could contribute to an even more responsive program. The high satisfaction level, particularly in ensuring specific transportation needs, aligned with insights from a study by Straw et al. (2021) emphasizing the significance of tailored services in transportation programs. This research indicated that addressing specific needs enhanced overall user satisfaction through the importance of personalized approaches, highlighting how these strategies contributed to a more positive perception of transportation services. Furthermore, their findings suggested that programs adept at understanding and meeting individual needs fostered a stronger sense of customer satisfaction. This aligned seamlessly with the present

study's findings for ensuring specific transportation needs within the City of Cabuyao Hatid-Sundo Program, shaping favorable user perceptions within the realm of transportation programs.

Tangibility

The results imply that Overseas Filipino Workers (OFWs) express a high level of satisfaction with the City of Cabuyao Hatid-Sundo Program's implementation in terms of Tangibility as shown in Table 6.

Table 6. OFWs' satisfaction with the implementation of the Hatid-Sundo program in terms of tangibility

INDICATORS	MEAN	INTERPRETATION
1. Utilizes vehicles that are in good condition (Gumagamit ng mga sasakyan na nasa mabuting kondisyon).	3.93	VS
2. Ensures that service vehicles are comfortable and a secure transportation experience (Tinitiyak na ang mga sasakyang pangserbisyo ay komportable at may ligtas na karanasan sa transportasyon).	3.85	VS
3. Sees to it that the transport vehicle is safe and reliable (Tinitiyak nito na ang sasakyang pang-transportasyon ay ligtas at maaasahan).	3.93	VS
4. Requires good and proper vehicle maintenance (Nangangailangan ng maayos at wastong pagpapanatili ng sasakyan).	3.88	VS
5. Enables passengers to travel with the transport vehicle of the Hatid Sundo program rather than a public transport vehicle (Nagbibigay-daan sa mga pasahero na maglakbay gamit ang sasakyang pang-transportasyon ng programang Hatid Sundo sa halip na isang pampublikong sasakyan).	3.84	VS
Standard Deviation	0.23	
General Assessment	3.88	FI

The elevated general assessment, coupled with the highest mean scores for utilizing vehicles in good condition and ensuring safety and reliability, signifies a strong positive perception of the program's tangible aspects. This is attributed to a well-maintained fleet of vehicles, prioritizing safety and reliability, which enhances the overall tangible experience for OFWs. On the other hand, the lower mean score for the statement related to enabling passengers to travel with the Hatid-Sundo transport vehicle rather than a public transport vehicle suggests a potential area for improvement. While satisfaction is generally high, the perceived need for enhancement in encouraging program-specific transportation use highlights a potential preference among OFWs for more incentives or benefits to opt for the Hatid-Sundo vehicle over public transport alternatives. The high satisfaction level with the tangible aspects, particularly the utilization of vehicles in good condition and a focus on safety and reliability aligned with findings from a study by Nagele et al. (2020). Their study emphasized the significance of tangible elements in service delivery, highlighting those well-maintained and safe vehicles contributed substantially to positive user perceptions. Especially, aspects such as the physical condition of vehicles played a crucial role in shaping overall satisfaction within transportation programs. This alignment from the current study reinforced the understanding that a tangible commitment to vehicle quality and safety significantly enhanced the overall satisfaction of Overseas Filipino Workers participating in the Hatid-Sundo Program.

Empathy

The OFWs rated empathy as Very Satisfied (3.91 σ -0.24) as shown in Table 7. The indicators "include develop members of the program more courteous and cordial", "enjoins the driver in making passengers feel better and safe during the trip", and "sees to it that the driver helps load and unload passenger's luggage" yielded the highest mean scores of 3.92 and was interpreted as Very Satisfied. On the other hand, the statement "prescribes transport vehicle drivers to be kind and cheerful" received the lowest mean score of 3.89 and was interpreted as Very Satisfied.

Table 7. OFWs' satisfaction with the implementation of the Hatid-Sundo program in terms of empathy

INDICATORS	MEAN	INTERPRETATION
1. Develop members of the program more courteous and cordial (Tinuturuan ang mga miyembro ng programa na maging magalang at magiliw).	3.92	VS
2. Enables members to show understanding and compassion towards passengers (Nagbibigay-daan sa mga miyembro na magpakita ng pang-unawa at pakikiramay sa mga pasahero).	3.91	VS
3. Enjoins the driver in making passengers feel better and safe during the trip (Inaanyayahan ang driver na gawing mas mabuti at ligtas ang mga pasahero habang nasa biyahe).	3.92	VS
4. Prescribe transport vehicle drivers to be kind and cheerful (Magreseta sa mga tsuper ng sasakyan na maging mabait at masayahin).	3.89	VS
5. Sees to it that the driver helps load and unload passenger's luggage (Tinitiyak nito na tinutulungan ng driver ang pagkarga at pagbaba ng mga багаhe ng pasahero).	3.92	VS
Standard Deviation	0.24	
General Assessment	3.91	FI

The results imply that OFWs express a high level of satisfaction with the City of Cabuyao Hatid-Sundo Program's implementation in terms of Empathy. The highest mean scores for indicators such as developing program members to be courteous and cordial, ensuring drivers contribute to passengers' well-being and safety, and assisting with luggage loading and unloading, suggest a strong emphasis on empathetic service delivery. These are attributed to a well-trained and courteous staff, fostering a supportive and welcoming atmosphere. The lower mean score for the statement prescribing drivers to be kind and cheerful, while still very high, indicates a potential area for further enhancement. The perceived need for improvement in this aspect emphasizes the importance OFWs place on the demeanor of drivers, suggesting that fostering a consistently cheerful and kind disposition could contribute to an even more empathetic experience for passengers within the Hatid-Sundo Program. The high satisfaction level with the empathetic aspects of the City of Cabuyao Hatid-Sundo Program, particularly in developing courteous and cordial program members, ensuring drivers contributed to passengers' well-being and safety, and assisting with luggage loading and unloading, aligned with insights from a study by Ikenna et al. (2021). Their research emphasized the pivotal role of empathy in service interactions, highlighting that staff members who actively contributed to passengers' comfort and well-being significantly enhanced overall user satisfaction. The study underscored the positive impact of a supportive and empathetic service environment, particularly in transportation programs. The alignment of the current study reinforced the understanding that fostering empathy in program members and drivers played a crucial role in creating a positive and satisfying experience for Overseas Filipino Workers participating in the Hatid-Sundo Program.

Assurance

The OFWs rated Assurance as Very Satisfied (3.92, σ -0.19) as shown in Table 8. The indicator "Providing procedures to deal with emergencies or unexpected occurrences" yielded the highest mean score of 3.97 and was interpreted as Very Satisfied. On the other hand, the statement "refrains passengers from any dangerous activities after and during the travel" received the lowest mean score of 3.89 and was interpreted as Very Satisfied.

Table 8. OFWs' satisfaction with the implementation of the Hatid-Sundo program in terms of assurance

INDICATORS	MEAN	INTERPRETATION
1. Provides driver to transport passengers safely (Nagbibigay ng driver na maghatid ng mga pasahero nang ligtas).	3.89	VS
2. Provides clear and accurate scheduling and procedures (Nagbibigay ng malinaw at tumpak na pag-iiskedyul at mga pamamaraan).	3.92	VS
3. Provides procedures to deal with emergencies or unexpected occurrences (Nagbibigay ng mga pamamaraan upang harapin ang mga emergency o hindi inaasahang pangyayari).	3.97	VS
4. Sees to it that passengers feel safe during the travel (Tinitiyak nito na ligtas ang mga pasahero habang bumibiyaha).	3.92	VS
5. Refrain passengers from any dangerous activities after and during the travel (Sinasabihan ang mga pasahero sa anumang mapanganib na aktibidad pagkatapos at sa panahon ng paglalakbay).	3.89	VS
Standard Deviation	0.19	
General Assessment	3.92	FI

The results imply that OFWs express a very high level of satisfaction with the City of Cabuyao Hatid-Sundo Program's implementation in terms of Assurance. The elevated general assessment, coupled with the highest mean score for providing procedures to deal with emergencies or unexpected occurrences, suggests a robust commitment to ensuring the safety and preparedness of the program. This is attributed to well-established protocols, staff training, and clear communication procedures to address any unforeseen situations. The lower mean score for the statement related to refraining passengers from dangerous activities after and during travel, while still very high, indicates a potential area for further emphasis on safety protocols. The perceived need for improvement in this aspect highlights the importance OFWs place on passenger behavior, suggesting that reinforcing safety guidelines could contribute to an even more assured experience for passengers within the Hatid-Sundo Program. The high satisfaction level with the assurance aspects, particularly in providing procedures to deal with emergencies or unexpected occurrences, aligns with the study of Burunciuc et al. (2022). Their research emphasized the critical role of well-defined procedures and preparedness in transportation services. It underscored that passengers felt more assured and satisfied when programs have clear protocols in place to handle emergencies or unexpected events. With this, the present study reinforced the understanding that a proactive approach to safety and emergency preparedness significantly enhanced the overall satisfaction and confidence of Overseas Filipino Workers participating in the Hatid-Sundo Program.

3.3 Relationship between the Assessment of Implementation and Satisfaction

As shown in Table 9, there was a significant relationship between the level of implementation of the City of Cabuyao Hatid-Sundo Program and Overseas Filipino Workers' satisfaction with the probability values were all 0.000 which was less than the level of significance of .05, thus the rejecting null hypothesis. This also indicated the better the implementation of the City of Cabuyao Hatid-Sundo Program, the more Overseas Filipino Workers satisfaction. The *r* values were all between 0.25 to 0.75 and interpreted as moderately positive correlation. Consistent with the present study's outcomes.

Table 9. Correlational analysis between assessment of implementation and satisfaction

ASSESSMENT	SATISFACTION	R-VALUE	P-VALUE	REMARKS	DECISION
Functionality	Reliability	.468**	.000	Significant	Reject Ho
	Responsiveness	.521**	.000	Significant	Reject Ho
	Tangibility	.578**	.000	Significant	Reject Ho
	Empathy	.593**	.000	Significant	Reject Ho
	Assurance	.611**	.000	Significant	Reject Ho
Safety	Reliability	.486**	.000	Significant	Reject Ho
	Responsiveness	.706**	.000	Significant	Reject Ho
	Tangibility	.706**	.000	Significant	Reject Ho
	Empathy	.786**	.000	Significant	Reject Ho
	Assurance	.688**	.000	Significant	Reject Ho
Comfortability	Reliability	.353**	.000	Significant	Reject Ho
	Responsiveness	.474**	.000	Significant	Reject Ho
	Tangibility	.543**	.000	Significant	Reject Ho
	Empathy	.574**	.000	Significant	Reject Ho
	Assurance	.464**	.000	Significant	Reject Ho

Yang et al. (2023) conducted research underscoring the crucial role of well-executed support programs in enhancing the overall satisfaction and well-being of migrant workers. Their investigation delved into the intricate interplay between the effectiveness of support programs and the positive experiences of individuals employed abroad. The correlation coefficient of .468 ($p < .001$) underscores the significance of the Hatid-Sundo Program's functionality regarding the satisfaction of Overseas Filipino Workers (OFWs). This implies that an enhancement in the program's functionality corresponds to an increase in OFWs' satisfaction levels. This aligned with Atombo and Wemegah (2021) study, revealing that transportation-supported programs significantly influenced migrant workers' satisfaction, emphasizing the importance of reliability and functionality in such programs. Over and above that, the significance of the safety indicator in shaping migrant workers' overall satisfaction is underscored. This aligned with Aktas et al.'s (2022) recent study, emphasizing safety considerations in transportation support programs for overseas workers. The research highlighted the multifaceted impact of safety on the well-being of those employed abroad, revealing that perceived safety and reliability of transportation services were crucial contributors to migrant workers' overall satisfaction and peace of mind. This further contextualized the importance of safety within the Hatid-Sundo Program. The observed comfortability indicator was in line with existing literature stressing the significance of comfort in transportation services for the well-being of migrant workers. This corresponded with Lunke's (2020) study, exploring the impact of comfort on commuter satisfaction and overall experience. Lunke's findings revealed a positive association between higher comfort levels and increased satisfaction, emphasizing the importance of addressing comfort concerns to enhance the overall satisfaction of Overseas Filipino Workers during their transportation experiences.

3.4 Proposed Action Plan

Table 10 shows the proposed action plan to improve the Hatid-Sundo Program. The key areas to be addressed are Comfortability and Reliability. Community Engagement is also part of a key area as it turns out people are not aware of the program. On the part of comfortability, the objective is to improve the service feature of the vehicle. Strategies such as procurement of passenger seats, which should be done immediately as needed, and regular maintenance that is done annually are highly encouraged. A semi-annually feedback gathering is also needed to identify other areas for improvement. The overall success of the first key area is based on the attainment of 75% to 85% favorable responses from OFWs.

Table 10. Proposed Action Plan for Improving Hatid-Sundo Program

KEY AREAS	OBJECTIVES	STRATEGIES/ACTIVITIES	FREQUENCY	PERSONS INVOLVED	SOURCE OF FUND	SUCCESS INDICATORS
Comfortability	To improve service features of the vehicle being utilized in the program	Procurement of New Passenger Seat	As required	City of Cabuyao Hatid-Sundo Program Administrator, Staff, and Drivers	Operating Expenses (Php 200,000.00)	Attainment of 75% - 85% favorable responses regarding functionality, safety, and comfort.
		Regular Maintenance of the Air Conditioning System of the Vehicle	Annually (June)			
		Gathering feedback on comfort through focus group discussions.	Semi-Annually (June and December)			
Reliability	To strengthen the overall performance of the program	Assign Additional Personnel for prompt response	As required	Staff and Drivers of the City of Cabuyao Hatid-Sundo Program	Operating Expenses (Php 100,000.00)	Effective execution of improvement initiatives; garnering 75% - 85% affirmative feedback on suggested enhancements.
		Conduct of Orientation for Safety Guidelines	Annually (January)			
		Conduct of Values Training Program	Annually (February)			
Community Engagement	To disseminate information about the program	Conduct meetings or forums in Barangay to gather feedback and understand the needs of the community	Annually (December)	Staff, Barangay, and other Stakeholders	Operating Expenses (Php 50,000.00)	Increased number of OFWs awareness about the program

The second key area is Reliability whose objective is to strengthen the overall performance of the program. Strategies include assigning additional personnel for prompt response to queries and concerns of the OFWs. This should be done depending on the demand of the OFWs, the higher the number of OFWs who have queries the more personnel are needed to meet the demand. On the part of the personnel, conduct of orientation for safety guidelines as well as values training program are required and should be done annually. Garnering 75% to 85% affirmative feedback reflects the success of these initiatives. The last key area is community engagement whose objective is to disseminate information about the program. Initiatives like conducting meetings and forums to barangay to gather feedback and understand as well as identify the needs of the community. It is encouraged to implement this annually. The success of this activity will be based on the number of OFWs who availed themselves of the Hatid-Sundo program. The sources of funds will emanate from the operating expenses.

4.0 Conclusion

The following conclusions were drawn:

- The City of Cabuyao Hatid-Sundo Program findings were praised for their functionality, safety, and comfortability. In terms of functionality, the program provides timely responses and clear instructions thus effective communication is a big factor. Safety standards are upheld resulting in instilling confidence among OFWs'. Concerning comfortability, OFWs highly value and prioritize the availability of amenities.
- Overseas Filipino Workers (OFWs) were very satisfied with the City of Cabuyao Hatid-Sundo Program and were implied as a reliable, responsive, well-maintained, compassionate, and dependable service. The program's focus on safety, well-maintained vehicles, and clear emergency procedures has been praised. These factors contribute to OFWs' satisfaction with the program, indicating its effectiveness in meeting their expectations.
- That the assessment of the relationship between the implementation of the City of Cabuyao Hatid-Sundo Program and the satisfaction of Overseas Filipino Workers reveals consistent and significantly positive relations in terms of Functionality (Reliability, Responsiveness, Tangibility, Empathy, Assurance), Safety (Reliability, Responsiveness, Tangibility, Empathy, Assurance), and Comfortability (Reliability, Responsiveness, Tangibility, Empathy, Assurance). The rejection of the null hypothesis with p-values of 0.000

indicates a robust and meaningful connection between the program's execution and the satisfaction levels of Overseas Filipino Workers, highlighting the program's crucial role in improving the overall well-being of OFWs.

- d) Because of this study, a suggested initiative involves the establishment of an action plan designed to continually integrate additional strategies, aiming to reinforce the existing framework of the City of Cabuyao Hatid-Sundo Program while simultaneously increasing Overseas Filipino Workers' satisfaction.
- e) This current study can be used as a springboard or reference for further studies. This study's findings are useful to both current and upcoming researchers. The concepts discussed in this study may be applied as an understanding that will educate them in conducting more investigations and will provide background information and an overview of the study's chosen research topic.
- f) Implementing the Hatid-Sundo Program will help Overseas Filipino Workers' reduce their struggles in traveling back and forth in the airport with an assurance of their safety during the trip. Their satisfaction and perception of the implementation of the said program will result in proposing an action plan that can be used to improve their experience of the free transportation service.
- g) The study will be an eye-opener in proposing plans or strategies that can be used to improve the program's implementation and maintain the satisfaction of OFWs.
- h) Recruitment Agencies and employers will indirectly benefit from the program because it helps ensure that OFWs get to where they are going on time and safely. This helps foster a good working relationship between OFWs, recruiters, and employers.

5.0 Contributions of Authors

This paper has a single author and confirms that the author reviewed this study.

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7.0 Conflict of Interests

The authors declare no conflicts of interest about the publication of this paper.

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From Terrorism to Peaceful Tourism: Status of Sustainable Tourism in Cotabato Province

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Abstract. Exploring Cotabato Province's shift from conflict to a sustainable tourism hub has noticeable changes over time. Sustainable tourism is one of the dimensions of peace. This study aimed to assess the status of sustainable tourism. Using a phenomenological approach, insights were collected from interviews and focus groups in three municipalities in Cotabato Province. Results show significant strides in peacebuilding and economic empowerment, driven by community-engaging sustainable tourism initiatives. Conflicts created massive displacement, persistent conflict, economic failure, and discrimination. Inter-government and non-government stakeholders offered initiatives to address the existing conflicts. These initiatives are further anchored in peacebuilding, economy, and security. In addition, formalizing the negotiation and peace agreement between stakeholders fostered culture-to-culture and people-to-people toward the development of peace and tourism. The status of sustainable tourism provided women empowerment in the community in promoting tourism. It allowed them to engage in the economic recovery of the locality. The findings highlight sustainable tourism as a key driver for peace and development, providing a replicable model for post-conflict regions. It reversed the perception of the tourists about areas. The newly discovered status in creating sustainable tourism provides a springboard for promoting tourism development policies and standards. This study encourages the exploration of the business tourism aspect in the promotion of peace and sustainable tourism in other provinces.

Keywords: Sustainable tourism; Economic empowerment; Peacebuilding; Security; Cotabato Province; Phenomenological research.

1.0 Introduction

Sustainable tourism is an emerging practice of community economic development. It provides meaningful economic support to communities by encouraging an influx of tourists for local relaxation experiences (Giampiccoli et al., 2020) and poverty alleviation (Cayron, 2017). In addition, it supported global peace by allowing travelers to learn about other cultures and meet people from other nations (Westcott & Anderson, 2021).

Peace and protection are social dimensions of sustainable tourism (Roxas et al., 2020). However, these constructs were destabilized by several conflicts exacerbated by ideological conflicts, family feuds, and armed resistance. In 2019, 54 state-based conflicts were recorded, including Afghanistan and Syria, as the deadliest (Palik et al., 2020). In the Philippines, Southern Mindanao has been dubbed as the land of animosity and terror in the past four decades (Ballesteros, 2020; Loesch, 2017). In addition, some areas were sparsely populated and underdeveloped, with people fearing ongoing conflicts in various provinces. According to Ochiai (2016), there are three key explanations for why the Mindanao conflicts lasted so long: inequalities and injustices, ancestral domain, and political and economic depression.

In the Cotabato Province, some municipalities that once served as conflict-affected areas have been transformed into modern tourism as new attraction areas because of tangible results of stakeholders' peace process. Moreover, unlike other frameworks that look at tourism from the business perspective (Porter et al., 2018), economic development perspective (Hayward & Magennis, 2014), and entrepreneurship and small enterprise perspective (Yoosuf & Premaratne, 2017). Previous studies ascertained local sustainability indicators for tourism, sustainable tourism planning, and management for sustainable livelihoods, sustainable entrepreneurship tourism, and sustainable entrepreneurship implementation (Matiku et al., 2021; Maxim, 2016; Porter et al., 2018; Rivera & Gutierrez, 2019) but few have been conducted on the transition of peace towards sustainable tourism. This paper endeavored by exploring local tourism from the social perspective and unearth a theoretical model of peaceful transition in developing sustainable tourism. Thus, this study aimed to assess the status of sustainable tourism as springboard for promoting peacebuilding, sustainable community development, and local tourism.

2.0 Methodology

2.1 Research Design

This study employed a phenomenological research design. Using this method, the researcher qualified the underlying narratives of the participants' context, personal experiences, and perceptions about conflict, peace, and sustainable tourism transitions. According to Creswell & Creswell (2018), using this method describes and culminates the essence of the experiences of several individuals who have all experienced the phenomenon. In addition, these narratives captured prevailing concerns and guided conceptualizing themes and descriptions to answer the research questions.

2.2 Research Participants

Participants came from the municipalities of Aleosan, Pikit, and Makilala of Cotabato Province, Philippines. Six participants were interviewed for the Key Informant Interview (KII), comprising the LGU Tourism Officer and BLGU Barangay Captain. They currently hold the office and know about current tourism development and living in times of conflict. For the Focus Group Discussion (FGD), eighteen participants were interviewed, including the owners of the tourist site, the head of BPAT, teachers, vendors, habal-habal drivers, and Brgy. Kagawad. As to their inclusion, they should be barangay residents living in a time of conflict and have some knowledge about tourism development in their area.

2.3 Research Instrument

The study's instruments used a researcher-made interview guide. Before proceeding to actual data collection, the research tool was subject to validation by the researcher on peace studies. Also, a pilot test was conducted to determine the suitability and accuracy of the questions and probes. The Key Informant Interview (KII) and Focus Group Discussion (FGD) guide questionnaire used the same questions to vouch for their responses which dealt with discovered processes of transitions from peace to sustainable tourism, which seek to search for the involvement of multi-sectors to offer programs addressing tourism needs and interventions to attain sustainable tourism in their locality.

2.4 Data Gathering Procedure

This study employed interviews and focus group methods. Environmental scanning to validate and affirm the key informants' participation was conducted before the interview and focus group. The participants were identified by the researcher using the criteria provided. A letter was sent to the local tourism officer and barangay captain for approval. After receiving the acceptance letter, the interview was arranged. Interview responses were digitally documented to record the responses of the participants.

2.5 Ethical Considerations

The researcher maintained and valued the confidentiality of the participants' information. By their willingness, without any force, they shared their experiences according to the purpose of the study. The researcher also used informed- consent that values the participants' interest. All the data obtained during the interview was used mainly for the study. Proper referencing was also observed to credit the authors' ideas during the analysis and further discussion in the study. The researcher ensured that all participants' rights, safety, and -being were protected throughout the research process. Informed consent was given. The participants were informed about

the risks associated with their involvement in the research and allowed to make a voluntary decision to participate or not participate in the research.

2.6 Data Analysis

Data were analyzed using thematic analysis following phenomenological research design.

3.0 Results and Discussion

The overarching themes emerged from the analysis namely: Peacebuilding Status, Economic Status, and Security Status.

3.1 Theme 1: Peacebuilding Status of Sustainable Tourism

Table 1 shows the sub-themes of the peacebuilding status of sustainable tourism in Cotabato Province.

Table 1. Peacebuilding status of sustainable tourism

SUB-THEMES	DESCRIPTION
Holistic approach to the peacebuilding process	Local communities, local government units, non-government organizations, the private sector, and churches commit and converge for peacebuilding
Provision of social services for peace and local peacebuilding	Promotion of religious and recreational activities and conduct of training programs that increase awareness of children's rights and welfare and gender and harmful environmental activities.
Development of local infrastructure	Infrastructure projects that sustain peacebuilding and promote tourism are implemented (e.g., concrete roads, the establishment of amusement parks, a water irrigation system, and BPAT and police outposts).
Nationalism as a social dimension of peace	Local communities exhibit love and pride in their town – promote positive local image in social media.

In the recent data on UN peace initiatives from 1946-2015, peace initiatives promote peacekeeping with 9% total effectiveness (Clayton et al., 2020). This study shows that participants' understanding of the peacebuilding status of sustainable tourism can be labeled as holistic. Why? Peacebuilding in a sustainable tourism scenario involves the participation of the community, LGU, and stakeholders in promoting peacekeeping. This participation explains the positive change in the community in terms of their social interaction, visibility of support systems, and stable source of livelihood. Therefore, when the province supported the DoT to open the tourism industry, it became a targeted opportunity for investors, tourists, and stakeholders.

To support this claim, Adam (2016) insists that a more holistic approach to peacebuilding must involve a variety of traditional, religious, or kinship-based institutions and authorities for Mindanao to obtain sustainable peace. However, this involvement is not limited to these identities. Moreover, (Roxas et al., 2020) agrees with this idea and emphasizes other fields like cultural integrity, critical ecological processes, biological diversity, and life support systems to deliver peacebuilding initiatives better. All these factors contributed to the development of local and community development status. To be precise, peacebuilding status adheres to strengthening the current social and economic tourism means.

Therefore, peacebuilding contains and offers a diversity of supports and gradual development as a form of change that is not the sole work of the agent. Instead, the peacebuilding status of sustainable development calls for working inter-partnerships of agents to rehabilitate life-changing conditions for improvement. It is an improvement of the community's status of self-actualization from unjust experiences like in the event of conflicts. The more involved the community and other agencies are, the better it will provide good status. According to the UNPC and Non-UN, it provides provision for peacebuilding and integrates among its mandates: *"to focus attention on the reconstruction and institution-building efforts necessary for recovery from conflict and to support the development of integrated strategies to lay the foundation for sustainable development"* (Lambourne & Herro, 2008, p.281).

The role of the UN and other agencies is to bring enforcement to conflicted places, a new hope to them, especially in the Cotabato province, which suffered from a series of conflicts. The appearance of provision of social services coming from these agencies served as the foundation of the community to overcome the bad status. Such services are given in relief goods, health care, sanitation orientation, children's feeding programs, and livelihood assistance

(Daylusan - Fiesta, 2019). The DSWD, DOH, and DA emerged to provide these services. Every department is responsive to its tasks within the peacebuilding efforts of sustainable development.

Thus, the change of the community status through social services is not gradual; it also offers an enabling status. These allow the community and tourism industry to benefit from the peacebuilding initiatives interplayed by various agents and stakeholders of peace and development. The municipality of Aleosan, for instance, became a recipient private agency primarily attended by farmers, women, and children with specific needs. The partnership involved in this situation forms conducive support to the community. Water and electricity faculty become accessible, unlike before. These were the problems they encountered. And while the holistic approach in peacebuilding is eminent to the community's social aspects, infrastructure development followed the construction of enabling support to them. This additional peacebuilding initiative is delivered through projects based on LGU and private agencies like concreted roads, hygiene facilities, water and electric system, and security posts. On the contrary, tourism standards on infrastructure must anchor to DRRM policy because it would lead to loss of lives and property, and hence, negative consequences on the economy (Solis, 2019), which needs to be added to the tourism policy and observation of the participants.

One more thing is that peacebuilding provides nationalism to the community. Through tourism, visitors are not only local travelers. It caters to foreign travelers to unwind and experience the people, their culture, the commercial locally made products, and, more importantly, the tourism industry. Thus, peacebuilding status is holistic because of the involvement of LGUs and stakeholders that cannot be denied. Their contribution to uplifting the community's development status becomes visible and efficient. Over the past years, the favorable appearance of peacebuilding to the tourism industry has proven to be efficient, increase community livelihood, and make the entire province a place of higher respect for community support.

3.2 Theme 2: Economic Status of Sustainable Tourism

Table 2 shows the sub-themes of the economic status of sustainable tourism in Cotabato Province.

Table 2. Economic status of sustainable tourism	
SUBTHEMES	DESCRIPTION
Women empowerment as an indicator of economic growth.	Women are provided with job opportunities while attending to their gender roles (e.g., being a mother to children and doing their house chores). Self-actualizing women helps them contribute to sustainable community development.
Localities engage in different entrepreneurial activities.	Citizens sell local products that illustrate their own culture.
Local Tourism Towards Sustainable Economic Development	Local tourism provided employment, livelihood, and a source of revenue for community development.

Tourism is a significant industry in the Philippines, contributing to employment generation and economic growth (Solis, 2019). For the participants, their understanding of the economic status of sustainable tourism opens the door to women's status entrepreneurship. Initially, tourism plays a significant economic field in the community, which provides people with relaxation and experiences (Giampiccoli et al., 2020); economic growth and development (Aguila & Ragot, 2014; Roxas et al., 2020); and poverty alleviation (Cayron, 2017; Giampiccoli et al., 2020). However, the question is, who initiates this economic mobility in the locality? In the economic field, women are exposed to delivering marketing functions and income of the locality. In selected municipalities, women empowerment as a status of sustainable tourism provides a space for women to practice their skills and potential outside the home. By this, Ellerby (2016) testifies that women must be substantively represented in any form of activity. It enables women to create their meaning and identity in society. Therefore, women must be properly included in the economic status of development.

Meanwhile, the employability rate secures job opportunities for women to be recognized. It also means that DSWD and DTI government programs must be directly prioritized for women to join in the skills training where they could boost their knowledge and talents to produce economic value in the locality. Before, the cultural image of women remained a problem. It suspends equality and the opportunity for women to participate. It was mentioned by Coleman (2020) as a gap in women's participation in the workplace. When tourism arrives, it shifts the notion of doing household chores and children's caregivers. Instead, sustainable development's economic status allows

women to be important agents of economic activity. In Makilala, flower production in tourist sites is headed by women. It allows them to venture into the income-generating activity that supports their family needs. Women become models of business activity. Additionally, the municipality of Pikit showcases Muslim women for their famous delicacy of "tinadtag," smoke fish, and native coffee. The market and street roads are common arenas for women's businesses.

Thus, the status of women doing entrepreneurial situates their participation in the economic structure of the locality. Livelihood program for women serves as an efficient source of daily needs. The DSWD and DoT, the other agencies, have to cooperate to strengthen their involvement further. At the same time, recording their accomplishments is necessary to monitor their output. On the contrary, failure to integrate tourism as a livelihood source will destroy tourism assets and make it difficult to establish sustainable tourism (Carter et al., 2015). Therefore, when we speak of sustainable tourism's economic status, it perceives women's role in the entrepreneurial activities of the tourism industry. The recognition of women is a helpful foundation of the economy to welcome them into the larger society.

Furthermore, including women aims to eliminate discrimination in building economic status in sustainable tourism. Their participation improves human capital to accelerate income and mobility to economic aspects and promote sustainable tourism in the region.

3.3 Theme 3: Security Status of Sustainable Tourism

Table 3 shows the sub-themes of the security status of sustainable tourism in Cotabato Province.

SUB-THEMES	DESCRIPTION
Higher confidence on local tourism due to peace and security	There is an influx of visitors coming to visit tourist attractions due to absence of fear, threat, and local conflict.
Visibility and consistent monitoring of local security forces of peace and security.	CCTVs, checkpoints, and police patrolling are established to maintain peace and security.
Monitoring and meeting of stakeholders about status of local peace and security	The Barangay Peace and Order Council, municipal and barangay local government units, private sector, and local citizens conduct regular meetings and training to raise awareness about local peace and security.

The narratives about the security status of sustainable tourism from selected municipalities deal with the presence of security forces, resulting in higher confidence in local tourism and visibility, and consist of monitoring and meeting of stakeholders. Based on this result, security status, in general, can be drawn as inter-agency of security forces for peace and security. The appearance of security forces at the entrance and existing areas in tourist sites is the reason for the frequent increase in tourist site visits. BPAT and Barangay Peace Council at the barangay level exert effort to enforce safety to all continually.

In addition, the PNP and tourists' police under the DoT management and DILG are designated to monitor the area. In Pikit, the DoT is practicing itinerary and traveler registration, especially from other regions who wish to see the Bahay Kastila. They collaborated with the tour guide, tricycle in case they had no vehicle, and tourist police. The purpose is to properly bring them to the area and capture the historic memory of the building and the site. It is also evident in Makilala and Aleosan tourist destinations. However, one more thing that intensifies their security force is the permanent settlement of CAGU, which strengthens the security for both municipalities. The intensified management for security enables the belief of higher confidence that local tourism can provide. It can stimulate the urgency for other visitors to come again. However, minimal participation of the locals and low tourism income result in a shortage of funds for biodiversity activities. As a result, a rise in crime can be a possible scenario (Giampiccoli et al., 2020).

Figure 1 summarizes the themes and subthemes discussed previously.

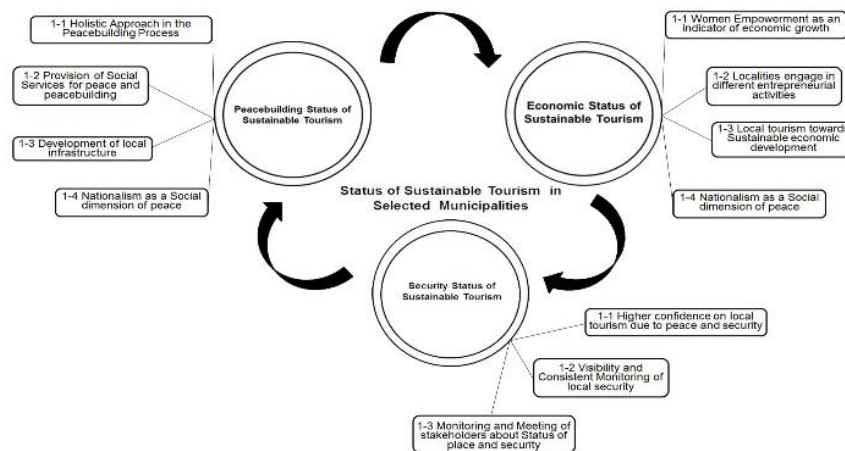


Figure 1. Status of sustainable tourism in selected municipalities

4.0 Conclusion

Emerging tourism activities in the province become a new prospect of development. The status of sustainable tourism reversed the perception of the locality as a conflicted area, as a sign of recovery, offering economic interest and upbringing, holistic scenarios where it caters to the interest and addresses problems of security, poverty, underdevelopment, and underlying misconception to people and daily activities. Peace and order are important before the development of the tourism industry. This study recommends the following: first, the DoT should ensure the delivery of service initiatives to the community by implementing tourism perspectives in peacebuilding, economy, and security, particularly to children, IPs, and women in the locality. Second, LGU, stakeholders, and the community should conduct regular updates and meetings to improve tourism services through the integration of collaborative, peaceful tourism activities and projects. And lastly, conduct the roles of DRRMC in developing sustainable tourism in various tourism spots in the region.

5.0 Contributions of Authors

The author has confirmed the equal contribution in each part of this work. The author reviewed and approved the final version of this work.

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7.0 Conflict of Interests

The author declares that he has no conflicts of interest.

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Predictors of Senior High School Teacher's Job Satisfaction Level

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Abstract. With the implementation of the Enhanced Basic Education Act of 2013, also known as Republic Act 10533 or K to 12, the Philippines initiated a curriculum change in its basic education system. This change extended the number of years in school from ten (10) to twelve (12), leading to the introduction of Senior High School. However, this alteration in the educational system posed challenges in maintaining job satisfaction among educators. Grounded in Herzberg's two-factor theory, this study aims to analyze the predictors of job satisfaction among Senior High School teachers in a private educational institution. Employing a quantitative research design, the study utilized the Job Satisfaction Survey to gauge the job satisfaction levels of these teachers. Data analysis involved T-tests and ANOVA. Results revealed that the satisfaction levels of respondents did not significantly differ, as indicated by a t-test probability value of 0.937, failing to reject the null hypothesis since 0.937 exceeds the significance level of 0.05. Thus, there was no significant difference in job satisfaction levels based on gender. However, educational attainment was found to predict differences in job satisfaction levels among senior high school teachers. Overall, the study suggests a significant relationship between job satisfaction levels and years of teaching experience among senior high school teachers.

Keywords: Job satisfaction; Herzberg's two-factor; K-12; Teachers; Senior high school.

1.0 Introduction

The job satisfaction of the employees is a critical factor in the success of any organization. Employee job satisfaction, as noted by Dormann and Zapf (2001) and corroborated by Akomolafe and Olatomide (2013), modulates the relationship between working conditions and organizational outcomes. According to Locke (1976), job satisfaction is feeling of well-being resulting from a person's admiration for their job or work experience. This satisfaction fosters organizational commitment and employee well-being, leading to increased productivity and confidence in task execution.

Job satisfaction, as defined by Corsini (1999) and cited by Tillman (2008), encompasses an employee's attitude toward their job, including their liking or disliking of the work itself, as well as factors such as rewards, promotions, recognition, and working conditions. Buchanan (2006) observed that recent attention to job satisfaction has been closely tied to broader efforts aimed at improving job design, work organization, and the overall quality of working life.

Teachers, like workers in any profession, demonstrate higher levels of professional competence when they are satisfied with their work. Given their crucial role in the teaching-learning process, satisfied teachers positively impact the overall learning experience of students. Their confidence in subject matter expertise, teaching skills, and classroom management contributes to their sense of fulfillment and pride in their educational institution.

Good teachers are essential to the overall success of the educational system. Disgruntled teachers, as noted by Sley (1992), detract from the effectiveness of the educational system. According to recent studies, secondary school teachers' job satisfaction ratings have somewhat improved. (Adetayo, 2008; Gesinde & Adejumo, 2012). Factors influencing job satisfaction or dissatisfaction, as identified by Wright and Davis (2003), Kim (2004), and Borzaga and Tortia (2006), include salary structure, working conditions, parental attitudes, student attitudes, job security, promotion opportunities, workload, among others. Situational and individual factors both affect job satisfaction.

In the current remote learning environment prompted by the pandemic, additional factors affect teacher job satisfaction, including physical, economic, and sociological elements. Despite this, not much research has been done on how psychological aspects affect secondary or high school teachers' job satisfaction in our country.

Therefore, this paper aimed to identify predictors of job satisfaction among senior high school teachers, particularly in the context of the full implementation of the Enhanced Basic Education Act (K to 12). With the addition of two years to secondary education, comprising Grade 11 and 12 or Senior High School, this paper focused on predicting senior high school teachers' job satisfaction levels in private educational institutions.

2.0 Methodology

2.1 Research Design

The study utilized a quantitative approach, employing survey questionnaires as its primary method of data collection.

2.2 Research Participants

The participants of the study comprised thirty-nine (39) senior high school faculty members from various private educational institutions, including both full-time and part-time teachers. Participants were purposefully selected for the research. A total of thirty-nine (39) participants took part in the study, consisting of eighteen (18) male and twenty-one (21) female senior high school teachers. Among them, twenty-two (22) were single, and seventeen (17) were married. In terms of educational attainment, twenty-one (21) held a college degree, while eighteen (18) obtained a Master's degree. Regarding teaching experience, twelve (12) participants had less than 5 years of teaching experience, ten (10) had between 6-10 years, eight (8) had between 11-15 years, three (3) had between 16-20 years, and six (6) had been teaching for more than twenty-one years.

2.3 Research Instrument

The research utilized a slightly modified questionnaire comprising two parts. Section 1 collected demographic information necessary for determining the representativeness of the research sample for generalization purposes. Section 2 is the Job Satisfaction Survey (JSS), developed by Paul Spector, which was used to measure job satisfaction among participants. Nine aspects of job satisfaction are evaluated by the Job Satisfaction Survey (JSS): compensation, advancement, oversight, ancillary benefits, performance-based incentives, workplace environment, colleagues, type of work, and communication. Notably, some items in the JSS are written in both positive and negative directions. In order to maintain uniformity, the scores of negatively phrased questions are reversed and then added up with the scores of positively worded items to determine the facet or total scores. Higher job satisfaction levels are indicated by higher scores on the measure.

2.4 Data Gathering Procedure

These surveys were distributed to both full-time and part-time senior high school faculty members across various private educational institutions. Respondents were invited to complete the survey through Microsoft Forms, facilitating efficient data collection and analysis.

2.5 Ethical Considerations

The researcher ensured that appropriate measures, such as obtaining consent and confirming willingness to participate, were clear to all respondents. All data gathered from the participants were transcribed accurately and treated with the utmost privacy and confidentiality.

2.6 Data Analysis

The data obtained from the administered questionnaire were subjected to analysis and interpretation. Descriptive statistics, including measures such as mean and standard deviation, were utilized to summarize the data. To investigate potential differences in job satisfaction levels among respondents, independent t-tests and Analysis of Variance (ANOVA) were employed. These statistical tests aimed to ascertain if significant variations existed in job satisfaction levels.

The association between the number of years spent teaching and work satisfaction levels was investigated using cross-tabulation analysis. The years in teaching were categorized into five groups for this analysis. Furthermore, independent t-tests and ANOVA were utilized to examine whether significant differences in job satisfaction levels existed among senior high school teachers concerning their demographic characteristics. These analyses aimed to identify any notable variations in job satisfaction based on demographic factors.

3.0 Results and Discussion

3.1 Level of Job Satisfaction

Table 1. Levels of job satisfaction of faculty members based on academic and professional qualifications

DEMOGRAPHIC CHARACTERISTICS	MEAN	SD	INTERPRETATION
Gender			
Male	4.26	0.73	Slightly agree
Female	4.28	0.64	Slightly agree
Age (in years)			
20 – 25	5.03	0.17	Moderately agree
26 – 30	4.15	0.63	Slightly agree
31 – 35	4.31	0.65	Slightly agree
36 – 40	3.80	1.04	Slightly agree
41 and above	4.18	0.65	Slightly agree
Marital Status			
Single	4.30	0.66	Slightly agree
Married	4.24	0.72	Slightly agree
Educational Attainment			
Bachelor's Degree	4.52	0.61	Moderately agree
Master's Degree	3.98	0.65	Slightly agree
Years in Teaching			
0 – 5	4.47	0.63	Moderately agree
6 – 10	4.43	0.72	Moderately agree
11 – 15	4.04	0.72	Slightly agree
16 – 20	4.15	0.86	Slightly agree
21 or more	4.02	0.59	Slightly agree
Supervisory Role			
Yes	4.20	0.59	Slightly agree
No	4.35	0.77	Moderately agree

The mean and standard deviation, two descriptive statistics, were used to show how satisfied senior high school instructors were with their jobs. Table 1 reveals that females reported a slightly higher computed mean value of 4.28, with a standard deviation of 0.64, compared to males, who achieved a mean score of 4.26, with a similar standard deviation. This result corroborates the findings of Baluyos, G.R., Rivera, H.L. and Baluyos, E.L. (2019) that male teachers are less satisfied than female teachers. Although in this study, both genders indicated a moderate level of agreement regarding their job satisfaction as senior high school teachers.

Regarding age, faculty members aged 20-25 exhibited the highest computed mean score of 5.03, with a standard deviation of 0.17, placing their responses in the moderately agree category. Conversely, teachers aged 26-30 attained a mean score of 4.15, with a standard deviation of 0.63; those aged 31-35 scored 4.31, with a standard deviation of 0.65, and those aged 41 and above achieved a computed mean value of 4.18, with a standard deviation of 0.65. The lowest mean score was derived from responses of faculty members aged 36-40, with a mean score of 3.80 and a standard deviation of 1.04. In summary, respondents aged 26 and above indicated a slight agreement regarding their job satisfaction.

Table 1 also illustrates that single teachers reported a higher computed mean score of 4.30 compared to married teachers, who achieved a mean score of 4.24. However, both single and married teachers expressed a slight agreement regarding their job satisfaction. Additionally, teachers with a bachelor's degree reported a higher computed mean score of 4.52 compared to those with a master's degree. Bachelor's degree holders indicated a moderate agreement regarding their job satisfaction, while master's degree holders fell into the slightly agree category.

Faculty members with 0-10 years of teaching experience moderately agreed on their job satisfaction. Teachers with 0-5 years of teaching experience reported the highest computed mean value of 4.47, with a standard deviation of 0.63. The lowest mean score of 4.02 was recorded among respondents with more than 20 years of teaching experience. Teachers with over 10 years of teaching experience slightly agreed on their job satisfaction.

Lastly, senior high school teachers without supervisory roles reported a higher computed mean score compared to those with supervisory roles. Teachers without supervisory roles achieved a mean score of 4.35, with a standard deviation of 0.77, indicating a moderate agreement regarding their job satisfaction. Conversely, those with supervisory roles achieved a mean score of 4.20, with a standard deviation of 0.59, indicating a slight agreement regarding their job satisfaction.

Table 2. SHS Teacher's level of satisfaction based on the subscales

SCALE	MEAN VALUE	SD	INTERPRETATION
Pay	3.67	0.12	Slightly agree
Promotion	4.00	0.13	Slightly agree
Supervision	5.22	0.23	Strongly agree
Fringe Benefits	3.47	0.12	Slightly disagree
Contingent Rewards	4.27	0.37	Slightly agree
Operating Conditions	3.03	0.15	Slightly disagree
Coworkers	5.15	0.26	Moderately agree
Nature Of Work	5.08	0.30	Moderately agree
Communication	4.43	0.12	Moderately agree
Total Satisfaction	4.26	0.68	Slightly agree

Among the nine subscales outlined in the job satisfaction survey, senior high school teachers strongly endorsed the supervision scale, registering a mean score of 5.22 with a standard deviation of 0.23. This indicates their strong agreement with the competency, fairness, and demonstrated concern for faculty welfare exhibited by their supervisors. Additionally, respondents expressed moderate agreement regarding their relationships with coworkers, the nature of their work, and communication, achieving mean scores of 5.15 (standard deviation of 0.26), 5.08 (standard deviation of 0.30), and 4.43 (standard deviation of 0.12) respectively. However, factors such as pay, promotion, fringe benefits, contingent rewards, and operating conditions fell into the slightly agreed category. Overall, the total satisfaction among all respondents yielded a computed mean value of 4.26, with a standard deviation of 0.68, placing it within the slightly agreed category.

3.2 Difference in Level of Job Satisfaction

Table 3. Differences in the levels of job satisfaction of faculty members in terms of demographic characteristics

DEMOGRAPHIC CHARACTERISTICS	T	P- VALUE	INTERPRETATION	DECISION
Gender	-0.079*	0.937	Not Significant	Accept H_0
Age	2.371**	0.072	Not Significant	Accept H_0
Marital Status	0.251*	0.803	Not Significant	Accept H_0
Educational Attainment	2.68*	0.011	Significant	Reject H_0
Years in Teaching	0.838**	0.511	Not Significant	Accept H_0
Supervisory Role	-0.678*	0.502	Not Significant	Accept H_0

Note: *t-test, **ANOVA

The study employed an independent t-test and Analysis of Variance (ANOVA) to investigate potential differences in senior high school teachers' job satisfaction levels based on their demographic features. Based on the results found in Table 3, the levels of satisfaction of respondents did not differ significantly since the probability value obtained from the t-test is 0.937. Thus, rejection of the null hypothesis was not possible since 0.937 is greater than

the level of significance of 0.05. Therefore, there is no significant difference in the levels of job satisfaction of respondents in terms of gender. The study validates the claim of Westover and Peterson (2019) as corroborated by Liu, et al (2021) that there are no significant gender differences were observed in job satisfaction.

The levels of job satisfaction and age did not differ also because the obtained p -value from the ANOVA test is 0.072 which is greater than the level of significance of 0.05. Therefore, rejection of the null hypothesis was not possible. This indicates that there is no significant difference in the levels of job satisfaction of faculty members in terms of age. The table also shows that there is no significant difference between the job satisfaction of respondents in terms of marital status. The obtained p -value is 0.803 which is greater than the level of significance. Thus, the rejection of the null hypothesis was not possible.

In terms of educational attainment, a significant difference was found in the levels of job satisfaction for those who graduated with bachelor's and master's degrees. Table 3 shows that the rejection of the null hypothesis was possible since the obtained p -value of 0.011 is less than the level of significance of 0.05. Therefore, there is a significant difference in the levels of job satisfaction of respondents in terms of educational attainment. This validates the findings of Solomon, et. al. (2022) which revealed greater income, job autonomy, and job variety were associated with higher levels of education, and that these factors were linked to lower levels of job stress and higher levels of job satisfaction.

There was no significant difference between the number of years spent teaching and the job satisfaction scores. The obtained p -value is 0.511 which is greater than the level of significance of 0.05. Thus, failed to reject the null hypothesis which suggests that there is no relationship between the levels of job satisfaction and several teaching years. The result corroborates the findings of Preehawong, et. al (2021) and Topchyan and Woehler (2021) that the number of teaching experiences did not significantly impact job satisfaction. In summary, only educational attainment predicts the difference in the levels of job satisfaction among senior high school teachers.

3.3 Relationship Between Level of Job Satisfaction and Years in Teaching

Table 4. Relationship between SHS teachers' level of job satisfaction in terms of the no. of years in teaching

YEARS IN TEACHING	CORRELATION COEFFICIENT	INTERPRETATION	P-VALUE	DECISION
0 - 5	0.30	Low Positive Correlation	Significant	Reject H_0
6 - 10				
11 - 15				
16 - 20				
21 or more				

Table 4 shows the relationship between the senior high school teachers' level of job satisfaction when grouped according to the number of years in teaching. Cross-tabulation bivariate analysis was used to examine the relationship because the number of teaching years was divided into groups namely 0-5, 6-10, 11-15, 16-20, and 21 or more teaching years. Specifically, the correlation coefficient is 0.30 which indicates a low positive correlation. Generally, it indicates that the level of job satisfaction of senior high school teachers has a significant relationship in terms of the number of years in teaching. Experienced teachers often play a crucial role in mentoring and leadership within schools (Baggay, et.al, 2021). By recognizing and addressing predictors of job satisfaction, schools can retain experienced staff members, benefiting the professional growth of both new and seasoned educators.

4.0 Conclusion

The research findings suggest that gender does not significantly influence job satisfaction among respondents, with educational attainment being the sole predictor of variance in job satisfaction levels among senior high school teachers. Those aged 26-30 generally expressed a slight agreement with their job satisfaction levels. Additionally, respondents strongly endorsed positive sentiments toward their supervisors' competency, fairness, and concern for faculty welfare. Aspects like communication, connections with coworkers, and the nature of their work were also areas where they agreed somewhat, whereas elements like operating conditions, compensation, promotions, fringe benefits, and contingent rewards were in the slightly agreed-upon group. Overall, the total satisfaction of all respondents fell within the slightly agreed category, with a computed mean value of 4.26 and a standard

deviation of 0.68. By identifying the factors that influence teachers' job satisfaction, educational institutions can create supportive environments that attract and retain qualified educators. High job satisfaction is linked to lower turnover rates, reducing the need for frequent recruitment and training of new teachers (Ertürk, R. ,2022). Moreover, understanding the factors that influence job satisfaction can help shape educational policies that attempt to enhance classroom environments, mechanisms for supporting teachers, and leadership styles in schools. Evidence-based policy choices can result in long-lasting advancements in the field of education. A closer look at teacher job satisfaction is warranted since teacher shortages are a global issue. Not only does job satisfaction have a direct correlation with teacher retention, but it also benefits teachers' and students' well-being, school cohesion, and the status of the teaching profession (Toropova, Myrberg and Johansson, 2021).

Recommendations for future research include expanding the respondent pool to gain a more comprehensive understanding of teacher job satisfaction, particularly exploring the relationship between exact teaching years and job satisfaction levels. Comparative research on factors promoting teacher retention, especially in light of ongoing teacher shortages, is also suggested. Additionally, investigating the mediating impact of burnout on the grit-turnover intention relationship could provide valuable insights. Understanding how personal, work, and client-related burnout impacts job satisfaction, alongside teachers' commitment to excellence and positivity in various circumstances, should also be considered in future studies.

5.0 Contributions of Authors

The sole author initiated and completed this study.

6.0 Funding

This work is funded by the author.

7.0 Conflict of Interests

The author declares no conflict of interest.

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Management of Experiential Learning Loss of Bachelor of Technical-Vocational Teacher Education Students

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Abstract. The study determined how teacher education institutions in Quezon Province manage the losses in experiential learning of the BTVTEd students during online learning. It also looked into the significant association between the participants' determined difficulties and the way TEIs handled the identified losses. The study employed a descriptive-survey research design with correlation using a checklist questionnaire created from CMO 79 series 2017 and statistical tools including frequency and percentage distribution, weighted arithmetic mean, and Pearson r. The study found that (1) articulating and discussing the latest developments in a specific field of practice; (2) mastery of subject matter or discipline; and (3) higher-level literacy, communication, numeracy, critical thinking, and learning skills needed for higher learning were loss during online learning. Most of the tasks associated with preparing the BTVTEd students were moderately difficult for the participants. The school administrators sometimes manage the determined losses, prioritize the safe return of teachers and students in schools, and only sometimes manage to allocate sufficient financial resources for funding an intervention program. The study also revealed a slight association between the identified difficulties in demonstrating higher level literacy, communication, numeracy, critical thinking, and learning skills required for higher learning and communicating effectively in writing using both English and Filipino and how TEIs manage the losses in experiential learning. The study suggests that school administrators should take corrective actions to compensate for the experiential learning losses of the students still in the BTVTEd program. Ensuring that the school-based intervention programs are effective in helping students grasp what they are missing, accelerate their learning, and achieve the skills outlined in the BTVTEd minimum standards program outcomes. Additionally, they should initiate capacity-building training programs to restore, retrain, and retool BTVTEd teachers on how to effectively and efficiently carry out their duties regardless of the implemented teaching-learning modalities.

Keywords: Experiential learning; Learning loss; Technical-vocational; Teacher education.

1.0 Introduction

The global health crisis transformed the academic landscape. All schools, including Teacher Education Institutions (TEIs) stakeholders, experience the longest school closure, restrictions on in-person classes and experiential learning activities, and an immediate paradigm shift to flexible learning modality, resulting in varying levels of teaching deliverables difficulties and unquantified learning losses among students.

Learning loss; as defined by Newton (2021), is the reduction in the overall academic performance of the students, such as in professional and specialized subjects, due to direct and indirect effects of the global health crisis while using online learning modality. Learning loss is the difference between what people learned after the health crisis and what they could have learned if it had not happened. The student either does not study or studies excessively but learns ineffectively. According to Gratz and Lipps (2021), students reduced their weekly study time from 35

to 23 hours. Consequently, this one-third reduction in study time ends up in a significant learning loss among students.

On the other hand, Diyan, Mukti, and Irawan (2022) described online learning as using the internet, laptops, computers, and smartphones to learn. This learning system can be used during and after the global health crisis to teach students. Stracke (2022) stated that it can be better than the second-best option for teaching and learning in difficult situations.

Olandres as quoted in Akamai (2017), "The Philippines has the slowest internet connectivity in the Asia Pacific Region." Online learning reduces education, creates equity gaps, necessitates student security and safety negotiations, and results in poor assessment outcomes. Following this, Garcia and Weiss (2020) underscored that online learning can only be effective if pre-service teachers have reliable internet access and computers, and their teachers have received specialized online instruction training and support. Baczek and Kaplon (2021) added that due to low participation, online learning did not improve the skills and competence of the students. Lastly, Adnan and Anwar (2020) emphasized that online learning is ineffective in developing countries where many students lack access to the internet due to technical and economic constraints.

Having all of the aforementioned realities in mind, TEIs must positively respond to unusual challenges and opportunities by delivering courses in innovative and flexible ways that are appropriate for educational institutions, teachers, and students (CHED, 2020-2021). TEIs must also use appropriate management approaches to recover teachers wannabes' experiential and other types of learning losses during online learning.

Thus, in this premise, the researcher analyzed the loss of skill within the minimum standard program outcomes of the Bachelor of Technical-Vocational Teacher Education (BTVTEd) and examined the difficulties in preparing the BTVTEd students for their role of becoming teachers, particularly during online learning. Also, the researcher explored the strategies employed by the selected TEIs in Quezon Province to address the limitations of experiential learning. In furtherance, based on the notable findings of the study, the researcher developed a plan for managing sustainability and facilitating learning recovery among students in technical-vocational teacher education.

2.0 Methodology

2.1 Research Design

The descriptive-survey research design with correlation was used in this study. As cited in Creswell and Creswell (2018), a survey provides a quantitative description of trends, attitudes, and opinions of a population or tests for associations between variables in a population by studying a population sample. In this study, the descriptive-survey design enables the researcher to answer two types of questions: (1) the descriptive questions, and (2) the questions about variable relationships. The descriptive questions in the study include the skills in the BTVTEd minimum program outcomes loss, the difficulties in preparing BTVTEd students to become teachers during online learning, and how experiential learning loss of BTVTEd students during online learning is managed by the selected TEIs. On the other hand, the question about the variable relationship was expressed by determining whether the identified difficulties in preparing BTVTEd students were associated with how the selected TEIs handle losses in experiential learning. The study led to the development of a sustainability and learning recovery management plan for BTVTEd students based on the highest-rated responses.

2.2 Research Participants

This study was carried out in six TEIs in the Quezon Province, offering a BTVTEd program. It includes three public and three private. These TEIs encountered various challenges while preparing BTVTEd students to become teachers through online learning, and they used a variety of management strategies to deal with the losses of the students in experiential learning. The total enumerative sampling technique was used in this study. According to Crossman (2018), a total enumerative is a type of purposive sampling in which the entire population of target participants is studied due to its manageable size, with all members sharing the given characteristic. As inclusion criteria, all participants have experienced teaching the BTVTEd students using online learning modality during the global health crisis and the new normal setting. The participants were initially composed of 83 BTVTEd teachers. 13 teachers failed to return the survey questionnaires thereby ending with only 70 participants.

2.3 Research Instrument

The study used a modified survey checklist questionnaire for gathering quantitative data. This questionnaire was primarily based on the CMO 79 series 2017 -- the Policies, Standards, and Guidelines for the Bachelor of Technical-Vocational Teacher Education program. The researcher ensured that its contents were tailor-fitted to the objectives of the study. The face and content validations were made on the research instrument. It was validated by six educational management experts. Pilot testing took place as well to guarantee its reliability. The Cronbach Alpha reliability test revealed that most of the questions were constructed very good.

2.4 Data Gathering Procedure

The researcher employed a variety of ways to acquire the needed data for the study. First, the researcher wrote a request letter to the Regional Director of the Commission on Higher Education (CHED) in the CALABARZON region, signed by his research adviser and delivered by the Vice President of Administration of the school where the researcher was affiliated. Second, upon approval, an endorsement letter was issued to the researcher, which he presented to the school administrators (deans and heads or chairpersons) of the randomly selected TEIs offering the BTVTED program in the Quezon Province. Third, upon the recommendation of the school administrators (deans and heads or chairpersons), the researcher asked for the involvement of the total enumerated teachers of the BTVTED students during online learning.

2.5 Ethical Considerations

The ethical guidelines were applied in this study. Before the collection of data for the study, the researcher sought first permission from the persons in authority. The names of the TEIs as well as the participants were not mentioned in any part of the study. Their response was treated with outmost confidentiality.

3.0 Results and Discussion

3.1 Skills in the BTVTED Minimum Standards Program Outcomes Loss During Online Learning

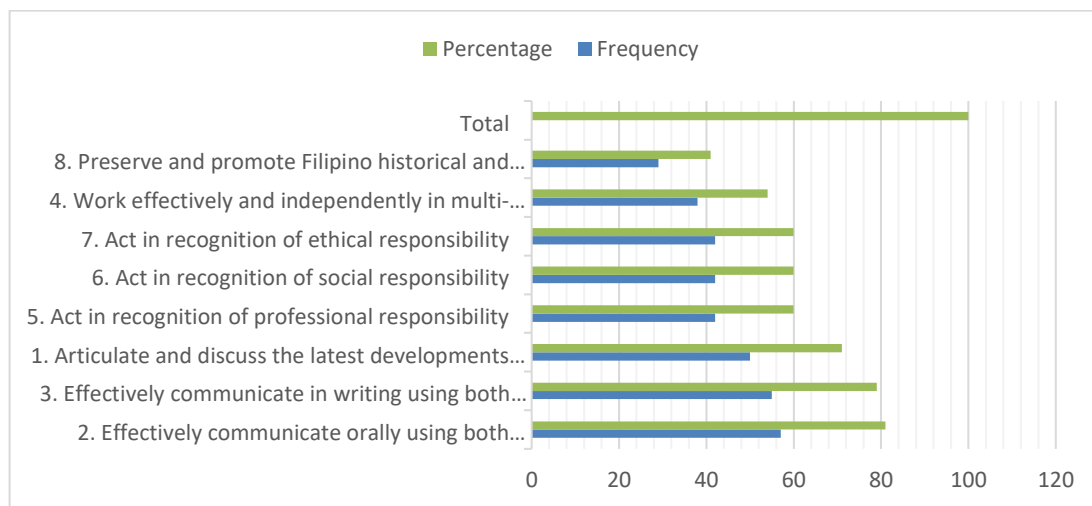


Figure 1. Skills in the BTVTED minimum standards program outcomes loss during online learning as to common to all programs

The data revealed that 57 or 81% of the participants who worked with the BTVTED students identified the skills related to oral fluency in both English and Filipino to have the most experiential learning losses during online learning (see figure 1). The data suggests that participants recognized the need to improve the oral communication abilities of the students enrolled in the BTVTED program in both languages. Jaca (2020) states that pre-service teachers' oral communication skills in English are inadequate and must be improved to meet the requirements of the teaching profession. Because English is the medium of instruction in class, pre-service teachers require specialized English courses to assist them in their practice teaching.

The data also unveiled that 55 or 79% of the participants identified writing skills in English and Filipino as having second to the most losses in experiential learning. Its development during online learning is affected by several

difficulties, including but not limited to lack of human connections (Shore, 2020); system glitches and short attention span (Amadora, 2020); distractions (Madarang, 2021); and the focus of technical-vocational education for practical skills (Omar et al., 2022), and the student's belief that not on writing.

The data likewise disclosed that 50 or 71% of the participants identified the skills regarding discussing recent breakthroughs in technical-vocational education and related disciplines during online learning as having third to the most losses in experiential learning. It can be implied from the findings that due to the limitations of online learning, the participants found it challenging to teach the BTVTEd students, considering that 84 percent of the teachers from the study of Madarang (2021) ranked unreliable mobile/internet connection as the top issue in online distance learning along with the difficulty of self-studying; distractions due to social media, noise from community and neighbors; insufficient load and data allowance; and lack of available gadgets, equipment, resources.

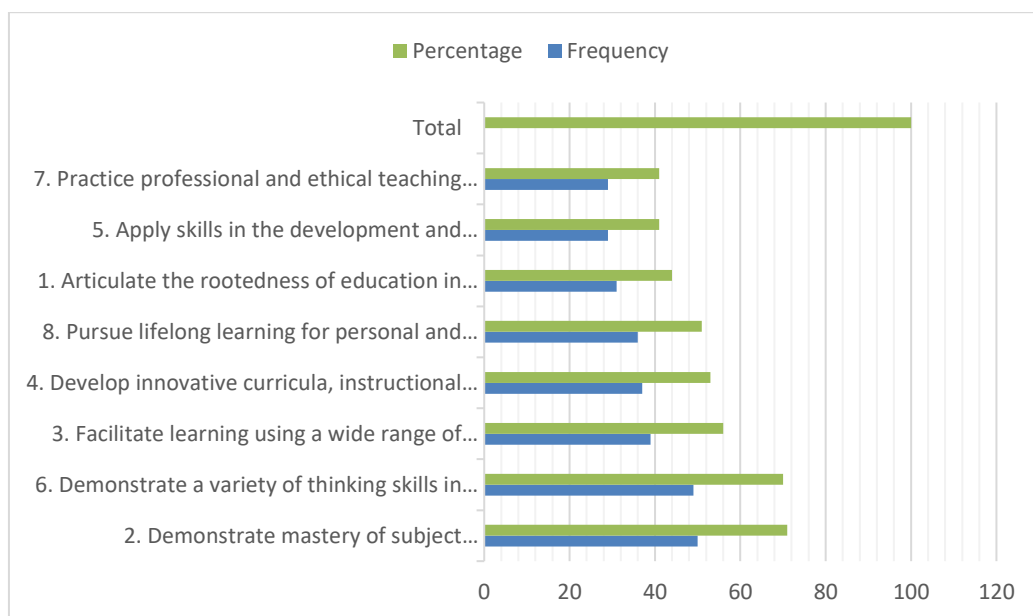


Figure 2. Skills in the BTVTEd minimum standards program outcomes loss during online learning as to specific to the teacher education program

The data showed that 50 or 71% identified the skills associated with subject matter mastery and the requisite proficiency in technical-vocational education as having the most losses in experiential learning (see figure 2). Equally, it indicates that the participants consider it critical to develop the students enrolled in the BTVTEd program since they have short attention spans (Amadora, 2020), are isolated from others, and do not know how to manage time (Tam, 2020); and no eye contact and reactions (Karyala and Kamat, 2020), therefore the overall development of students were hampered during online learning. Additionally, the BTVTEd students' failure to master the topic can be attributed to difficulties establishing communication with peers and instructors, lack of internet connectivity, technical issues, and inadequate resources like computers (Singh, 2019). Mastery of the subject matter is essential since, according to Duru et al. (2020), it can improve teaching quality, inspire students, and boost academic performance. In the same vein, adequate knowledge of the subject matter enables the teacher to teach the learner correctly and simplify topics in a language the learners can easily understand.

In like manner, the data also revealed that 49 or 70% of the participants identified demonstrate a variety of thinking skills holding the second-most losses in experiential learning. Napanoy, Gayagay, and Tuazon (2021) affirm that rigid training for pre-service teachers must be conducted before deployment to their teaching internship. Alamri (2018) added that pre-service teachers are required to have the following teaching skills and experiences: (1) preparing daily lesson plans, (2) presenting lessons, (3) preparing quizzes, (4) choosing an appropriate teaching method for the content, (5) applying an appropriate assessment technique to the content, (6) preparing activities and exercises associated with the lesson, (7) designing appropriate teaching aids, (8) dealing with the teaching

load, (9) managing allocated lesson time, (10) managing classroom efficiently, and (11) commitment to the school system.

It was further disclosed from the data that 39 or 56% of the participants identified facilitating learning using a wide range of teaching methodologies and delivery modes as having the third-most skill loss in experiential learning. It can be construed that it is challenging for the participants to effectively recreate hands-on experiences and critical thinking and apply various instructional techniques during online learning. Thereby, technical-vocational education difficulties happened partly due to the trainers' and trainees' readiness for e-learning, curriculum and assessment content, learning platforms, and internet connectivity (Yeap, Suhaimi, and Nasir, 2021).

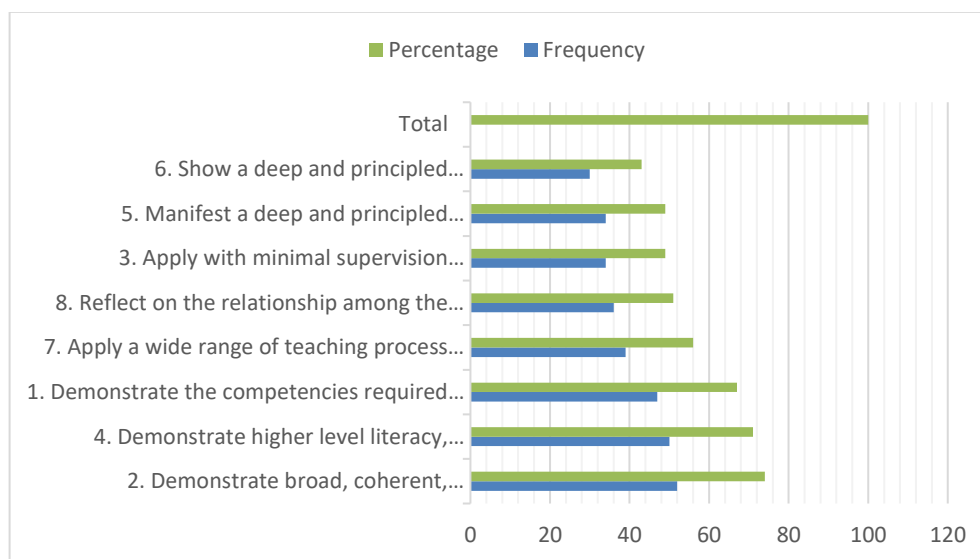


Figure 3. Skills in the BTVTEd minimum standards program outcomes loss during online learning as to specific to a sub-discipline and a major technical-vocational education

It can be observed from the data that 52 or 74% of the participants identified the skills about exhibiting a comprehensive and cohesive understanding of a specific domain within the realm of technical-vocational education, showcasing both knowledge and competent abilities to have the most skills loss in part of the BTVTEd students during online learning (see figure 3). This finding can be linked to a variety of challenges teachers faced, including a lack of technological knowledge, the ability to create digital content and online evaluation for students (Kamal and Illiyan, 2021), a technical-vocational education stream to deliver learning, with a focus on practical training where applying motor skills is critical (Omar et al., 2022), and the commitment of the students to lifelong learning, staying current in their profession and contributing to the progress of knowledge and its practices.

The data also unveiled that 50 or 71% of the participants identified the skills regarding demonstrating higher level literacy, communication, numeracy, critical thinking, and higher learning skills to possess second of the most losses in experiential learning. This result can be ascribed to various restrictions imposed on holding classes during the pandemic, which prioritized safety over providing quality education to all students (CHED, 2020), as well as weak infrastructures such as networks, poor accessibility, unavailability issues, and a lack of digital competencies, which have hampered online education (Onyema et al., 2020).

Lastly, it can be gleaned from the data that 47 or 67% of the participants identified the skills concerning demonstrating the competencies required of the Philippine TVET trainers-assessors' qualification framework holding the third most experiential learning losses. This finding can be explained by Yeap, Suhaimi, and Nasir's (2021) assertion that e-learning is only beneficial for theoretical subjects and that additional solutions are needed for the hands-on aspect of technical-vocational education. Rather than online learning, technical-vocational education students require more traditional teaching and learning, including technical and practical skills.

3.2 Difficulties in the Preparation of Bvtvd Students in Becoming Teachers During Online Learning As to Common to All Programs, Effectively Communicate Orally Using Both English and Filipino

Table 1. Difficulties in the preparation of BTVTED students on becoming teachers during online learning as to common to all programs, effectively communicate orally using both English and Filipino

NO.	INDICATORS	WAM	QI
4	Use a rich and appropriate vocabulary to convey ideas accurately when delivering reports and conducting demonstration teaching.	3.12	MD
3	Use proper grammar and sentence structure in English and Filipino when communicating orally with teachers and delivering lessons to their students.	3.05	MD
6	Listen attentively to the teachers and their students, ask clarifying questions, and provide appropriate feedback to demonstrate active participation in the conversation.	2.95	MD
7	Pay attention to body language, facial expressions, and gestures to convey messages to students while delivering classroom reports and topics in demonstration teaching.	2.93	MD
8	Speak confidently in front of their peers when delivering reports and conducting actual teaching among the students.	2.93	MD
5	Adjust the tone and pitch of their voice to match the situation and emphasize the information students must remember when teaching.	2.84	MD
2	Pronounce the words correctly in both languages when communicating with teachers or teaching students.	2.77	MD
9	Persuade and engage their students while teaching.	2.74	MD
10	Adjust their communication style to the needs of their audience, such as their peers, or their participation and teaching assistantship and teaching internship students.	2.74	MD
1	Speak English and Filipino fluently and produce messages that students can easily understand.	2.68	MD
AVERAGE WEIGHTED ARITHMETIC MEAN		2.88	MD

The results showed the tasks linked with developing oral communication skills got an average weighted arithmetic mean of “2.88” and a qualitative index of moderately difficult (see table 1). This data signifies that the participants found the task related to expanding oral communication skills moderately difficult to impart to the students enrolled in the BTVTED program during online learning. As per CHED guidelines in its memorandum order 04 (2020), higher education institutions are advised to utilize online learning modalities for conducting classes. It is strongly suggested that various technologies like desktop computers, laptops, smartphones, mobile applications, learning packets, and learning management systems be employed. Wherein, it is evident that not all students possess the necessary means to access the essential technologies that enable them to engage in spoken communication in both English and Filipino inside their respective academic settings.

Shore (2020) identified problems in online classes. These include: (1) human connections, (2) student motivation, (3) instructor ignorance, and (4) inappropriate courses. The student's mood, involvement, and engagement in an online classroom cannot be measured like in a lecture-based classroom. Many students enrolled in classes are unprepared for additional hurdles from the absence of face-to-face instructor interaction. Many of the aids and strategies that schools and teachers use to educate more classically become irrelevant if they are not adequately trained to handle the technological complexities of online classes. Thus, the findings shed light on where participants struggled to cultivate the oral communication abilities of students enrolled in BTVTED programs within online education and need further improvement.

The data also revealed that the tasks associated with developing the skills of students enrolled in the BTVTED program during online learning, particularly in the aspect of effectively communicating in writing using both English and Filipino language (see Table 2 on the next page), were found to be moderately difficult to the participants, as indicated by its average weighted arithmetic mean of 2.95. This finding can be ascribed to several factors that influence the successful and efficient execution of online education. As such, Karyala and Kamat (2020) mentioned that teachers might lack experience in developing and effectively communicating digital content in online classes. There is no eye contact, and students do not provide feedback through reactions, reducing the effectiveness of instruction. The overall development of the students may be hampered if they rely entirely on online learning, and they may underperform later in their professional careers.

It can be deduced from the idea that a possible reason for the students not fully achieving the competence outlined in the minimum standards program outcomes is the lack of experience among teachers in developing and effectively communicating digital content online. This deficiency hinders students' ability to meet specific tasks

Table 2. Difficulties in the preparation of BTVTED students on becoming teachers during online learning as to common to all programs, effectively communicate in writing using Both English and Filipino

NO.	INDICATORS	WAM	QI
2	Provide written manuscripts that adhere to high grammar, punctuation, and spelling standards in both English and Filipino.	3.07	MD
3	Create written documents that are concise, direct-to-the-point, and free of repetition and excessive wordiness.	3.04	MD
1	Prepare written documents such as a lesson plan, research paper, communication letter, and term paper that are clear, well-organized, and contain logically flowing ideas.	3.02	MD
4	Produce written communication with content that is tailored to the comprehension and familiarity level of the target audience.	3.00	MD
8	Proofread and edit any written communication to ensure clarity and accuracy.	2.96	MD
9	Provide proper citations and references in written work to credit sources and maintain credibility.	2.96	MD
7	Consider cultural sensitivity when communicating in both languages, as this can affect how the message is registered to the receiver.	2.95	MD
5	Use the appropriate register (formal, informal, or colloquial) for the context and audience in both Filipino and English.	2.87	MD
10	Clearly state the purpose of written communication, whether it is to inform, persuade, instruct, or entertain.	2.84	MD
6	Employ appropriate formatting, such as headings, bullet points, and paragraphs, to make the written content visually appealing and easy to read.	2.82	MD
AVERAGE WEIGHTED ARITHMETIC MEAN		2.95	MD

such as ensuring adherence to elevated grammar, punctuation, and spelling standards in both English and Filipino; generating written material that exhibits conciseness, clarity, absence of duplication, and avoidance of excessive terminology; and producing various types of written materials, including lesson plans, research papers, communication letters, and term papers, which should demonstrate clarity, effective organization, and a coherent progression of ideas.

Prince (2020) cites that teaching writing skills online is a significant challenge for educators. Also, as noted in Cambridge English, Prince mentioned that the average duration required to advance from one level to the subsequent level is roughly 200 hours of guided instruction. The time commitment typically ranges from approximately 160 hours at the introductory levels, while at the more advanced levels, it can extend up to 220 hours. Thus, addressing the issue, a potential course of action may entail providing teachers with professional development opportunities to augment their proficiency in digital communication and integrate efficacious online pedagogical approaches. Providing resources and support to assist teachers in effectively instructing students to satisfy specific writing requirements and generate diverse forms of written content could provide advantageous outcomes.

The data revealed (see table 3) that the participants rated the tasks linked to promoting competencies associated with the commitment of BTVTEd students to lifelong learning, staying up-to-date in their profession, and contributing to the progress of knowledge and practices during online learning to be moderately difficult, as evidenced by the calculated average weighted arithmetic mean of 3.06. It can be implied that while the tasks are not rated as extremely challenging, they are not considered easy either. Understanding the difficulty level is crucial for educators and institutions to tailor their approaches and support mechanisms accordingly.

Gupta and Sampat (2021) argue that to mitigate the growing discrepancy in educational achievement, it is crucial to establish strategies that aid educators in cultivating the belief that all students can acquire knowledge. According to Priya and Sampat (2021), identifying obstacles teachers and students encounter in their daily routines and exploring strategies to address these challenges can prompt teachers to critically examine the relationship between their instructional approaches and their influence on students. Promoting classroom technologies and suitable pedagogical methods among instructors may enhance students' learning outcomes, potentially transforming teachers' perceptions of student capabilities.

The participants found it very difficult to instill in BTVTEd students skills such as: writing research papers or articles that meet the standards of the oral examination committee, submitting them to the Dean's office, having them referred by experts, and publishing them in the school research journal or any research publications available online; Present research findings or novel ideas at relevant colloquia to exhibit active engagement and current

expertise; and Developing patents or unique solutions in the sector as tangible signs of being at the forefront of development.

Table 3. Difficulties in the preparation of BTVTED students on becoming teachers during online learning as to common to all programs, articulate and discuss the latest developments in a specific field of practice

NO.	INDICATORS	WAM	QI
1	Create research papers or articles that meet the standards of the oral examination committee, submit them to the Dean's office, referred by experts, and publish them in the school research journal or any research publications available online.	3.70	VD
2	Present research findings or innovative ideas at relevant colloquia to demonstrate active participation and knowledge of recent developments.	3.36	VD
9	Create patents or innovative solutions in the field as tangible indicators of being on the cutting edge of development.	3.28	VD
4	Participate actively in field-related organizations, which often provide access to exclusive content, conferences, and networking opportunities that allow them to stay current on the latest developments.	3.10	MD
8	Integrate emerging technologies into their work to demonstrate awareness of and adoption of the most recent advancement.	3.10	MD
10	Create and maintain a blog or website where a professional sharing of thoughts, analysis, and the latest developments in the field demonstrates a commitment to stay informed and share knowledge.	3.10	MD
12	Write critical reviews or analyses of recent publications in the field to demonstrate the ability to assess and contribute to an ongoing discussion.	3.08	MD
7	Collaborate on research projects, especially those addressing cutting-edge issues, and demonstrate a desire to advance in the field.	3.04	MD
11	Serve as a mentor or educator in the field to demonstrate commitment to passing on knowledge about the most recent developments to the next generation.	2.94	MD
3	Cite the works of other professionals and researchers considered valuable and relevant to the field of specialization.	2.92	VD
6	Participate actively in field-specific online forums, discussion boards, or social media groups to exchange ideas and discuss the latest developments with peers.	2.66	MD
5	Attend webinars and training sessions related to the field regularly to continue learning and stay current on new trends and technologies.	2.46	SD
AVERAGE WEIGHTED ARITHMETIC MEAN		3.06	MD

According to Quevillon (2021), during online learning, inactive students are more likely to comprehend the essential lecture information and feel disconnected from their teacher and peers, and fostering collaboration is crucial. Addressing such challenges in online learning environments may require additional support, instructional strategies, or resources to help participants and students improve their abilities in writing research and other pertinent documents. Generating patents or new solutions in the field is a complicated curriculum component, posing significant challenges for the participants and their students in their attempts to accomplish it. It is ambitious or advanced skills that BTVTED students are expected to achieve, and it may require significant effort, expertise, and resources to excel in this aspect.

Table 4. Difficulties in the preparation of BTVTED students on becoming teachers during online learning as to specific to the teacher education program, demonstrate mastery of subject matter/discipline

NO.	INDICATORS	WAM	QI
5	Conduct original research or make significant contributions to existing research in the field.	3.16	MD
3	Identify gaps, inconsistencies, or areas for improvement in the subject matter.	3.06	MD
10	Show a comprehensive understanding of how the subject interacts with other fields.	3.02	MD
11	Make significant contributions or advancements in the subject matter.	3.02	MD
4	Solve complex problems and apply knowledge in real-life situations.	2.98	MD
1	Discuss the fundamental concepts, theories, and principles within the discipline.	2.92	MD
13	Address persistent or complex issues within the discipline.	2.90	MD
15	Demonstrate integrity and responsibility in research and practice.	2.90	MD
8	Recognize new challenges and opportunities within the discipline.	2.88	MD
2	Explain complex concepts clearly and concisely.	2.86	MD
7	Apply subject matter expertise in real-world scenarios.	2.84	MD
9	Educate and mentor others about the topic.	2.84	MD
12	Gain respect and recognition from peers and subject matter experts.	2.78	MD
14	Adhere to ethical standards and professional codes of conduct in the field.	2.68	MD
6	Teach, mentor, or guide others in learning about the subject.	2.64	MD
AVERAGE WEIGHTED ARITHMETIC MEAN		2.97	MD

The data showed that the participants viewed the tasks, demonstrating proficiency in the subject matter/ discipline as moderately challenging to achieve for some students enrolled in the BTVTEd program during online learning (see table 4). It was evident from the obtained average weighted arithmetic mean of 2.97 and a qualitative index of moderate difficulty level across all indicators. These difficulties can be attributed to restrictions incorporated with several memos issued during the pandemic to safely continue the school operations and securely deliver teaching and learning without sacrificing the health conditions of the school's internal and external stakeholders, as well as the advisories that mainly entail procedures for preventing, controlling, and mitigating the spread of the virus in HEIs (CHED, 2021).

Similarly, this moderate difficulty experienced by the participants can also be ascribed to several factors that affect the effective delivery of online learning. These include: (1) a lack of comprehensive feedback from students, (2) feelings of isolation due to limited interaction with peers, (3) challenges in effectively managing time and maintaining high levels of self-motivation, (4) difficulties in facilitating effective communication, (5) potential for dishonesty during online assessments, (6) a greater emphasis on theoretical knowledge rather than practical application, (7) limitations in terms of applicability to specific disciplines, and (8) inaccessibility for individuals who lack computer literacy skills (Tamm, 2020).

Table 5. Difficulties in the preparation of BTVTEd students on becoming teachers during online learning as specific to the teacher education program, demonstrate a variety of thinking skills in planning, monitoring, assessing, and reporting learning processes and outcomes

NO.	INDICATORS	WAM	QI
10	Experiment with different learning methods and materials to boost creativity.	3.10	MD
20	Present analytical findings and draw meaningful conclusions from the data collected.	3.08	MD
19	Assess the quality and effectiveness of the learning process using data analysis and critical thinking.	3.02	MD
18	Collect and analyze data, feedback, and evidence to track progress and make data-driven decisions.	3.00	MD
27	Assess the effectiveness of metacognitive strategies in optimizing learning.	3.00	MD
9	Incorporate creative techniques like brainstorming or mind mapping into the learning plan to foster innovative thinking.	2.98	MD
3	Critically examine information and evidence to determine the quality of one's work and the validity of conclusions.	2.96	MD
24	Describe collaborative experiences, challenges, and the value they brought to the learning process.	2.96	MD
22	Assess the dynamics of collaborative efforts and develop strategies to improve teamwork.	2.94	MD
26	Reflect on one's thought processes, identify cognitive biases, and make changes.	2.94	MD
28	Share insights into how metacognition influenced the learning journey and outcomes.	2.94	MD
12	Highlight innovative ideas, solutions, or projects that emerged during the learning process.	2.92	MD
7	Evaluate the effectiveness of problem-solving approaches used during the learning process and make necessary adjustments.	2.90	MD
23	Examine the impact of collaboration on learning outcomes and personal development.	2.90	MD
11	Reflect on the creative aspects of the learning journey and how they contributed to the outcomes.	2.88	MD
16	Share the insights gained through reflective thinking and explain how they influenced the learning journey.	2.88	MD
1	Create a well-structured learning plan that includes objectives, timelines, and resources while considering potential obstacles and alternative approaches.	2.86	MD
2	Evaluate progress, identify errors or gaps in understanding, and make necessary changes to the learning plan.	2.86	MD
14	Examine and reflect on the learning process, personal growth, and shifting perspectives.	2.86	MD
15	Engage in self-assessment focusing on personal development and lessons learned rather than outcomes.	2.86	MD
6	Recognize when problems arise and use problem-solving techniques to address them effectively.	2.84	MD
4	Present assessments and conclusions in a clear, well-organized, and evidence-based manner, emphasizing critical analysis.	2.84	MD
21	Incorporate collaborative activities into the learning plan, such as group projects or discussions.	2.84	MD
8	Describe how specific problems in the context of the learning experience were identified and solved.	2.82	MD
17	Define clear success criteria and benchmarks for the learning plan.	2.82	MD
25	Set goals for self-awareness and self-regulation in the learning plan.	2.78	MD
5	Identify potential learning challenges or obstacles and devise strategies to overcome them.	2.71	MD
13	Include time in the learning plan for reflection, such as journaling or self-assessment.	2.61	MD
AVERAGE WEIGHTED ARITHMETIC MEAN		2.90	MD

The data disclosed that the tasks associated with the development of skills in planning, monitoring, analyzing, and reporting learning processes and outcomes that required a wide range of cognitive skills were moderately

difficult for the participants to impart to the students enrolled in the BTVTEd program via online learning modality (see table 5), as evidenced by an average weighted arithmetic mean of 2.90, and a moderate level of difficulty qualitative index applied across all indicators. The findings of Napanoy, Gayagay, and Tuazon (2021) support the results of the study, as they indicate that a considerable proportion of pre-service teachers consistently face difficulties in developing lesson plans that integrate essential activities and in selecting appropriate teaching styles that accommodate individual differences. According to the same author, the challenges might be ascribed to inadequate preparation and training of pre-service teachers. In like manner, the study of Alamri (2018) conforms to the result of the present study as it states that skills related to classroom teaching were highly challenging for the participants. These skills include selecting the proper evaluation method, managing the classroom effectively, preparing tasks and exercises for the lesson, and creating quizzes.

Table 6. Difficulties in the preparation of BTVTEd students on becoming teachers during online learning as to specific to the teacher education program, facilitate learning using a wide range of teaching methodologies and delivery modes appropriate to specific learners and their environments

NO.	INDICATORS	WAM	QI
3	Encourage active learning using problem-solving, case studies, debates, role-playing, and real-world applications.	2.97	MD
7	Ensure that all instructional materials and methods, including those for students with disabilities, are accessible to all learners.	2.95	MD
2	Adjust lesson plans, assignments, and assessments to accommodate students' needs and abilities.	2.92	MD
9	Use gamification, storytelling, and real-world relevance to motivate students.	2.87	MD
6	Encourage student collaboration through group projects, peer teaching, and teamwork.	2.85	MD
8	Reflect on teaching practices and solicit student feedback to make continuous improvements.	2.85	MD
10	Communicate learning objectives and expectations to students so that they understand what is expected of them and why they are learning specific content.	2.85	MD
5	Recognize and respect cultural diversity in the classroom and adopt instruction to be culturally sensitive.	2.79	MD
1	Give clear instructions and assistance to remote or online learners.	2.74	MD
4	Give students timely and constructive feedback to help them understand their progress and areas for improvement.	2.72	MD
AVERAGE WEIGHTED ARITHMETIC MEAN		2.85	MD

The data showed that the participants rated the tasks related to teaching methodologies and delivery modes as moderately difficult to teach in the BTVTEd students in an online learning environment (see table 6). It was indicated by an average weighted arithmetic mean of 2.85, with a moderate level of difficulty qualitative index observed in all indicators. The result suggests that the difficulties experienced by participants in a digital educational setting significantly affect the knowledge and skills acquisition among students enrolled in the BTVTEd. In particular, in their ability to inspire active learning through problem-solving strategies, case studies, discussions, role-playing exercises, and real-world applications that are moderately difficult for the participants to impart and see in action with the students. Following this, Shore (2020) confirms that many of the tools and tactics used by schools and teachers to educate more traditionally will become obsolete if they are not appropriately prepared to deal with the technological challenges of online classrooms.

It is also revealed from the data that the tasks associated with developing the skills of the BTVTEd students in ensuring all instructional materials and methods, including those for students with disabilities, were moderately challenging for the participants because online learning requires a different approach to teaching and learning. Teachers must adapt to new technologies and platforms to deliver instructions effectively. In addition, students with disabilities may require additional accommodations to access instructional materials and methods, which can be challenging to provide in an online environment (Parrish, 2019).

In addition, the participants found the task associated with adjusting lesson plans, assignments, and assessments to accommodate students' different needs and abilities moderately difficult due to the lack of face-to-face interaction and the absence of physical classroom materials. It makes it challenging for the teachers to gauge students' understanding of the subject matter and provide necessary support, particularly during online learning (Adetunji, 2018).

As a result of the difficulties faced by the teachers, Napanoy, Gayagay, and Tuazon (2021) confirmed that pre-service teachers have problems identifying suitable activities and strategies to address the diversity of the students. Thus, they must undergo training in blended learning, output-based activities, and new pedagogical approaches in light of the difficulties.

Table 7. Difficulties in the preparation of BTVTED students on becoming teachers during online learning as specific to a sub-discipline and a major (technical-vocational teacher education), demonstrate broad, coherent, meaningful knowledge and skills in any of the specific fields in technical and vocational education

NO.	INDICATORS	WAM	QI
5	Perform tasks precisely, whether in construction, vehicle repair, software programming, or any other field.	2.87	MD
8	Produce high-quality work by paying close attention to detail, precision, and following industry standards and best practices.	2.83	MD
2	Effectively operate, maintain, and troubleshoot tools, equipment, and technologies related to their field of specialization.	2.81	MD
6	Adopt new tools, techniques, and technologies as they emerge.	2.71	MD
9	Plan, organize, and manage projects while adhering to the established goals, resources, and deadlines.	2.71	MD
12	Demonstrate an understanding of ethical considerations specific to the field, such as confidentiality, data security, and adherence to professional codes of conduct.	2.65	MD
14	Understand and meet the needs of clients or end-users in a customer-facing role.	2.65	MD
15	Demonstrate knowledge of relevant laws, regulations, and compliance requirements and ensure their work meets these standards.	2.67	MD
13	Identify potential problems before they become major issues and take appropriate preventive measures.	2.63	MD
1	Explain in detail the fundamental concepts and principles of their chosen field and apply them to real-world problems.	2.62	MD
7	Create technical documents, reports, and presentations.	2.62	MD
3	Identify potential hazards and take the necessary precautions to avoid accidents.	2.58	MD
10	Pursue certifications, attend workshops, or stay current on industry trends.	2.56	MD
4	Identify and analyze problems, create solutions, and successfully implement them.	2.54	MD
11	Work well as part of a team, communicate ideas, and contribute to achieving common goals.	2.50	SD
AVERAGE WEIGHTED ARITHMETIC MEAN		2.66	MD

The disclosed that the participants rated the tasks associated with exhibiting comprehensive and cohesive proficiency in any of the specified domains within the realm of technical-vocational education, showcasing a profound understanding and practical application of information and abilities as moderately difficult to teach in the students enrolled in the BTVTEd program during online learning (see table 7). It received an average weighted arithmetic mean of 2.66 and a qualitative index of moderate difficulty across all indicators, except for indicator 11, where participants found it somewhat difficult for the students to work well as part of a team, communicate ideas, and contribute to achieving common goals.

The difficulties participants encounter in instructing the core courses of BTVTEd programs within an online learning environment can be ascribed to various factors. These factors may include but are not limited to: (1) the use of ICT among technical-vocational students is more effective in developing cognitive learning than occupational hands-on skills (Yasak and Elias, 2015); and (2) school and industry closures prevent students from completing practical training, which is an essential aspect of technical-vocational education due to its emphasis on practical skills and work-readiness. Lockdowns caused significant disruption for students because laboratory-based training and work-based learning either ceased or continued in limited numbers with rigorous hygiene procedures (ILO, 2020).

Consequently, imparting specific actions to BVTED students, such as executing activities with precision in various areas like construction, car maintenance, software development, or other relevant subjects; ensuring the production of high-quality work by demonstrating meticulous attention to detail, precision, and adherence to industry standards and best practices; and proficiently handling, maintaining, and troubleshooting tools, equipment, and technologies specific to their area of expertise, poses a moderate challenge in the absence of field experience. Wherein, as cited in the study of Napanoy, Gayagay, and Tuazon (2021), field experiences are a fundamental component within pre-service teacher education programs.

The data revealed that the activities related to exhibiting advanced competency in literacy, communication, numeracy, critical thinking, and learning abilities required for higher education were regarded as moderately difficult to instill in the students enrolled in the BTVTED program during online learning (see table 8 on the proceeding page). It gained an average weighted arithmetic mean of 2.95 and a qualitative index of moderately difficult throughout all indicators.

Table 8. Difficulties in the preparation of BTVTED students on becoming teachers during online learning as specific to a sub-discipline and a major technical-vocational teacher education, demonstrate higher level literacy, communication, numeracy, critical thinking, and learning skills needed for higher learning

NO.	INDICATORS	WAM	QI
12	Conduct statistical analyses, comprehend data distributions, and draw meaningful conclusions.	3.20	MD
11	Solve complex mathematical problems, analyze data, and interpret quantitative data.	3.12	MD
13	Apply mathematical concepts to real-world problems and situations.	3.12	MD
3	Dissect and interpret literature, identifying themes, symbols, and literary devices.	3.10	MD
16	Think outside the box to find novel solutions to complex problems.	3.10	MD
17	Build sound arguments, recognize fallacies, and make coherent, evidence-based arguments.	3.10	MD
18	Make sound decisions by weighing the pros and cons and considering the long-term consequences.	3.10	MD
14	Examine the validity and relevance of information, arguments, and evidence.	3.08	MD
4	Conduct extensive research using various sources, such as books, scholarly articles, and online databases.	3.06	MD
15	Determine problems, develop strategies, and make sound decisions.	3.06	MD
1	Understand complex texts, extract key information, and analyze the content critically.	3.00	MD
6	Articulate ideas clearly and persuasively during class discussions, presentations, or debates.	3.00	MD
22	Locate, synthesize, and organize information effectively to support learning objectives.	3.00	MD
19	Take charge of one's learning by setting goals, managing time effectively, and remaining motivated.	2.94	MD
5	Use citation styles such as APA, MLA, or Chicago when referencing sources.	2.92	MD
2	Write clear, well-structured essays or reports that effectively communicate complex ideas.	2.88	MD
23	Continuously evaluate one's learning, solicit feedback, and improve over time.	2.88	MD
10	Use various digital communication platforms and tools like email, video conferencing, and collaboration software.	2.78	MD
21	Evaluate the credibility and relevance of information sources in the digital age.	2.78	MD
7	Listen carefully to others, ask pertinent questions, and engage in meaningful dialogues.	2.72	MD
9	Create professional emails, reports, and other written communications.	2.70	MD
8	Develop effective relationships with peers and professors, and be respectful of different points of view.	2.68	MD
20	Be open to new ideas, adapt to changing circumstances, and learn from mistakes.	2.64	MD
AVERAGE WEIGHTED ARITHMETIC MEAN		2.95	MD

The result exhibited that participants encountered moderate challenges in fostering the development of 21st-century abilities among BTVTED students during online learning. These challenges may be associated with the findings of previous studies (Thangaiah et al., 2020; Nasir et al., 2018), which suggest that certain teachers prefer traditional teaching methods instead of online teaching. This preference may stem from reduced engagement between students and teachers, attributed to the teachers' limited ICT skills and inadequate collaboration among students to hone their 21st-century skills in online learning settings.

Similarly, Das (2022) states that teachers face difficulties adapting to new instructional approaches. Because of their prior exposure to traditional classroom teaching methods, many are unfamiliar with online learning. Teachers may find it difficult to teach sophisticated numerical concepts, particularly calculations. Meanwhile, in the study conducted by Mahuyu and Makochehanwa (2020), it was observed that students in technical-vocational education programs can be classified as low achievers in terms of academic performance, socio-economic background, engagement in manual labor, and lack of organizational skills. However, Gupta and Sampat (2021) present a contrasting viewpoint, suggesting that the expectations teachers hold for their students can significantly influence their level of achievement.

Indeed, numeracy skills are essential for technical-vocational education students because they can help them obtain the practical skills and information needed for their chosen career occupations. Numeracy skills are solving issues and making judgments using numbers, symbols, and procedures in various circumstances. It also includes understanding mathematical concepts like number and quantity, measurement, shape, dimensions, orientations,

data and chance, mathematical relationships and reasoning, and the skills mentioned in the top three indicators of the analyzed learning outcome.

Table 9. Difficulties in the preparation of BTVTEd students on becoming teachers during online learning as to specific to a sub-discipline and a major (technical-vocational teacher education), demonstrate the competencies required of the Philippine TVET trainers - assessors qualification framework

NO.	INDICATORS	WAM	QI
20	Participate in community outreach and development activities to raise awareness of the importance of TVET and its impact on society.	3.02	MD
2	Create and deliver effective, engaging training sessions addressing diverse learners' needs and learning styles.	2.94	MD
19	Provide guidance and mentorship to less experienced trainers and assessors, contributing to their professional development.	2.94	MD
9	Participate in ongoing learning and professional development to stay current on industry trends and teaching methods.	2.91	MD
1	Show a thorough understanding of the subject matter related to their training and assessment responsibilities.	2.89	MD
3	Create valid and reliable assessment tools and methods for accurately measuring the learners' competence.	2.89	MD
8	Place the needs and interests of learners at the center of training and assessment activities.	2.89	MD
10	Collaborate with industry partners to ensure training programs align with current industry needs and standards.	2.89	MD
4	Communicate clearly and effectively with learners, colleagues, and industry partners, both orally and in writing.	2.85	MD
7	Manage training resources such as materials, equipment, and time.	2.79	MD
6	Maintain ethical standards, professionalism, and a positive learning environment.	2.77	MD
15	Identify and address issues that arise during training and assessment.	2.74	MD
18	Keep abreast of TVET regulations and ensure compliance with national and local requirements.	2.74	MD
17	Seek feedback from learners, peers, and supervisors to improve training and assessment practices.	2.70	MD
5	Adjust to changing technology, industry practices, and educational methods.	2.68	MD
16	Effectively collaborate with colleagues, mentors, and support staff to improve the overall learning experience.	2.68	MD
11	Make effective use of technology in teaching, assessment, and administration.	2.62	MD
13	Respect and accommodate learners' diverse cultural backgrounds and needs.	2.60	MD
12	Ensure the safety of learners during practical training and uphold high-quality standards in training and assessment.	2.55	MD
14	Keep detailed records of learner performance, assessment outcomes, and training activities.	2.49	SD
AVERAGE WEIGHTED ARITHMETIC MEAN		2.78	MD

The data entailed that the tasks connected with developing competencies required by the PTTAQF were rated by the participants as moderately difficult to achieve during online learning (see table 9). It obtained an average weighted arithmetic mean of 2.78, with a qualitative index of moderately difficult level across all indicators, except for indicator no. 14 about BTVTEd students' ability to keep detailed records of their learners' performance, assessment outcomes, and training activities, which was somewhat difficult for them to attain in part of their students.

The moderate difficulties encountered by the participants can be linked to the research findings of Munyi et al. (2021), which support the notion that some instructors have low skills in integrating ICT in the classroom due to traditional teaching habits preferred over implementing ICT in teaching methods. Furthermore, as highlighted by Hoftijzer et al. (2020), the transition to distance and online learning poses a significant obstacle due to the emphasis of technical-vocational education on practical skills and employability. The acquisition of practical skills through experiential learning occurs within educational workshops and laboratories or through direct engagement in hands-on activities. Certain practical activities necessitate specialized equipment or materials, rendering e-learning methodologies a weak alternative to traditional methods. Also, as Calago (2023) seconded, technical-vocational students face a deficiency in experiential learning and hands-on experience within the context of online classes. The remote learning modality was not considered a replacement for practical, experiential learning.

It can also be inferred from the result that providing continuous support, guidance, and mentorship to BTVTEd students, especially in areas perceived as moderately challenging with emphasis on the three top-rated indicators, is crucial for their success in developing the competencies required by the PTTAQF. Wherein, Bakri and Zakaria

(2018) assert that the establishment and functionality of a workshop, equipped with appropriate tools, equipment, machines, and facilities, are vital for successfully implementing technical-vocational education programs. Ismail et al. (2018) further emphasize the importance of competent and skilled vocational lecturers or teachers in facilitating an effective teaching and learning process within technical-vocational education. This emphasis is justified by the program's objective of equipping students with the technical knowledge, skills, and attitudes necessary to meet the job market demands.

3.3 How Experiential Learning Loss of the BTVTEd Students During Online Learning is Managed by the Selected Teacher Education Institutions (TEIs)

Table 10. How experiential learning loss of the BTVTEd students during online learning is managed by the selected teacher education institutions (TEIs)

NO.	INDICATORS	WAM	QI
14	Ensure that all in-person general education, professional education, and specialized/major subjects classes resume safely in school.	3.40	MM
10	Strengthening the school learning continuity plan to mitigate the adverse effects of the pandemic using online learning.	3.37	MM
15	Understanding the needs of the students to respond positively and recover losses in learning effectively.	3.34	MM
13	Necessitating teachers to improve instructional efficiency, incorporate catch-up learning, and promote students' psychosocial health and well-being.	3.33	MM
2	Developing appropriate solutions to the identified problems.	3.30	MM
1	Assessing the level of learning of the students.	3.27	MM
4	Implementing intervention training programs tailored to the needs of students to address the losses in experiential learning directly.	3.27	MM
7	Promoting resiliency, improving emergency response, and preparing school stakeholders to deal with unforeseen problems.	3.21	STM
9	Improving the overall quality of education practices in schools.	3.17	STM
11	Holding faculty development training such as upskilling, reskilling, and retraining teachers ensures they have the 21st-century skills and knowledge needed to share with students effectively.	3.20	STM
12	Requiring teachers to improve the content of their learning materials and the delivery of instruction.	3.17	STM
5	Reaching out to all the struggling students and assisting them academically and technically.	3.11	STM
6	Providing access to upgraded infrastructures such as sufficient classrooms, laboratories (including educational technology laboratory and workshop laboratories for specialized subjects), and physical facilities.	3.06	STM
8	Keeping the struggling students in school so they can attend in-person and laboratory classes.	3.01	STM
3	Giving adequate funding to all programs and activities launched to reduce losses in experiential learning.	3.00	STM
AVERAGE WEIGHTED ARITHMETIC MEAN		3.22	STM

The data showed that participants expressed that the school administrators from the TEIs in Quezon Province sometimes manage the losses in experiential learning among BTVTEd students during online learning, as evidenced by an average weighted arithmetic mean of "3.22" (see table 10). This data suggests that there may be variability in how effectively TEIs are addressing such issues. Therefore, understanding and sharing successful practices among institutions could be beneficial. TEIs can also consider adopting a continuous improvement mindset, monitoring the impact of their strategies regularly, and making improvements depending on feedback and changing conditions. In consonance with this, Chetana (2022) mentioned that most businesses cannot survive in a fast-changing environment unless they are well-managed. Creating a favorable managerial environment for the collaborative efforts of people working in an organization to achieve planned objectives necessitates applying management knowledge to a wide range of practical problems to achieve the best possible outcome with the given circumstances and realities.

As cited in Barrot (2021), developing and improving the school's learning continuity plans to offset the impact of the pandemic, particularly in addressing learning losses, is critical. Schneider (2020) identifies three major actions that can help reverse pandemic-related losses: (1) understanding the crisis and accelerating learning; (2) responding to the crisis with new resources to help students catch up; and (3) preventing academic underachievement among the most vulnerable students. Similarly, Mateo (2022) believes that to overcome the

learning crisis, all students must be reached and retained in school, with regular assessments of their learning level prioritizing the teaching of catch-up learning and developing psychosocial health and well-being.

3.4 Association Between the Identified Difficulties in Preparing Bvtvd Students to Become Teachers and How TEIs Manages the Losses in Experiential Learning During Online Learning

Table 11. Association between the determined difficulties and how TEIS manages the losses in experiential learning during online learning

DETERMINED DIFFICULTIES		N	R	P-VALUE	INTERPRETATION
1.	Articulate and discuss the latest developments in a specific field of practice	53	.095	.500	Not Significant
2.	Effectively communicate orally using both English and Filipino	57	.132	.329	Not Significant
3.	Effectively communicate in writing using both English and Filipino	55	.303*	.025	Significant
4.	Demonstrate mastery of subject matter/discipline	50	.015	.920	Not Significant
5.	Facilitate learning using a wide range of teaching methodologies and delivery modes appropriate to specific learners and their environments	42	.162	.305	Not Significant
6.	Demonstrate a variety of thinking skills in planning, monitoring, assessing, and reporting learning processes and outcomes	50	.193	.179	Not Significant
7.	Demonstrate the competencies required of the Philippine TVET trainers-assessors qualification framework	49	-.049	.736	Not Significant
8.	Demonstrate broad, coherent, meaningful knowledge and skills in any of the specific fields in technical and vocational education	50	.138	.341	Not Significant
9.	Demonstrate higher level literacy, communication, numeracy, critical thinking, and learning skills needed for higher learning.	51	.346*	.013	Significant

The data revealed that TEIs in Quezon Province have not directly addressed the difficulties teachers encounter and their detrimental effects on the experiential learning of BTVTEd students during online learning (see table 11). The programs implemented by TEIs are mismatched to the identified issues. Hence, no association exists between 7 out of 9 identified difficulties, and the applied management strategies by the TEIs lead to the decision that they are not significant.

Meanwhile, a significant positive linear association of “.346” exists between the variables “demonstrate higher level literacy, communication, numeracy, critical thinking, and learning skills needed for higher learning” and “how TEIs manage the losses in experiential learning” and “.303” exists between the variables “effectively communicate in writing using both English and Filipino” and “how TEIs manage the losses in experiential learning.” Despite its strength of association falling under the slight association, it is still significant as it obtained a p-value of “.013” and “.05” respectively less than the significance level of .05. Therefore, the null hypothesis is rejected, and it is concluded that there is a statistically significant association between the variables.

According to the findings, as one variable increases, another variable also tends to increase as well. In other words, as the amount of difficulty increases, so should the approach to dealing with the issues. The findings of Sulaiman and Ismail's (2020) research support the assertions made in the present study since they demonstrate a robust and favorable association between professional competence and 21st-century skills among teachers. Teachers' characteristics, pedagogical approaches, ethical behavior, and technological competence, in conjunction with school leadership and advancement, are pivotal in cultivating 21st-century skills. Similarly, Dominado's (2020) research posits a strong and statistically significant correlation between the proficiency of teachers in 21st-century abilities and their technological competencies. Consequently, augmenting teachers' 21st-century skills and technology proficiency will likely enhance the collaborative dynamics between teachers and students. The elements of teacher competence can aid in developing potential teachers following 21st-century teaching and learning concepts.

4.0 Conclusion

The BTVTEd students lose the ability to: (1) articulate and discuss the latest developments in a specific field of practice; (2) mastery of subject matter or discipline; and (3) higher-level literacy, communication, numeracy, critical thinking, and learning skills needed for higher learning during online learning. Therefore, the school administrators should take corrective actions to compensate for the experiential learning losses of the students still in the BTVTEd program. Ensuring that any related school-based intervention programs are effective in assisting students to understand what they are missing, accelerate their learning, and achieve the skills outlined in the BTVTEd minimum standards program outcomes. The school administrators should also consider promoting and encouraging BTVTEd graduates to look into the TESDA Online Program for further skills development.

Most of the tasks associated with preparing BTVTEd students during online learning were moderately difficult for the participants. Thus, the school administrators should initiate a capacity-building training program to retrain, restore, and retool teachers of the BTVTEd program on how to effectively and efficiently carry out their duties regardless of the implemented teaching-learning modalities.

The school administrators of the TEIs in Quezon Province sometimes manage the issues connected with preparing BTVTEd students to become teachers during online learning. They sometimes manage to provide adequate financial resources to support an intervention program. Hence, without a budget, a great plan such as the sustainability and learning recovery management plan of the present study, will become pointless. The school administrators must find ways to implement such an intervention program. Finally, the school administrators should also revisit, reevaluate, realign, and improve the current school program to mitigate losses in experiential learning for BTVTEd students. Assuring that as challenges for obtaining quality technical-vocational education emerge, efforts to address them should rise as well.

5.0 Contributions of Authors

The author indicates an equal contribution to each part. The author examined and approved the completed work.

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7.0 Conflict of Interests

The author discusses no conflicts of interest for the publication of this paper.

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Authentic Assessment of Modular Distance Learning: Basis for Instructional Materials Development in Agriculture

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Abstract. Assessment can be viewed as a way to measure the process, the progress, and the product of learning. However, it is a complex concept within the teaching-learning process especially if it is implemented with the absence of face-to-face instruction. As observed, faculty members who are implementing modular distance learning (MDL) modality are confronted with the challenges of proper utilization of authentic assessment tools in Agriculture. Hence, this study sought the utilization of authentic assessment in Agriculture by Faculty members of state colleges in Northern Mindanao, Philippines in the academic year 2020-2021 and 2021-2022. This study employed a mixed-method research design to gather both quantitative and qualitative data from 139 participants who were given survey questionnaires in digital and print format. A focus group discussion (FGD) of 10 randomly selected participants was conducted virtually to find similarities in the participants' opinions. Results revealed that the faculty members had positive perceptions of authentic assessment. However, most of them faced several challenges in the process of utilizing the assessment tools in terms of preparation, delivery, and evaluation. These challenges were used as a basis for the formulation of a handbook of authentic assessment.

Keywords: Authentic assessment; Modular distance learning; Instructional materials development; Agriculture.

1.0 Introduction.

Assessment is recognized, both in theory and in practice, as an essential part of the teaching and learning process. The success of both teachers and learners depends upon the data gleaned from the assessment. However, the outbreak of COVID-19 has caused changes in the country's education landscape. These changes involve transitioning to different approaches to learning delivery, including new approaches to assessment.

To ensure that learning continues amidst the global health crisis, the Commission on Higher Education issued a memorandum to all higher education institutions to formulate their respective Learning Continuity Plan (HEI-LCP) (CMO No. 4 Series of 2020). In this context of change, college faculty members face a plethora of challenges not only in adapting to new ways of how students learn but also in gauging the student's understanding of the lessons. The implementation of distance learning poses challenges in the conduct of assessment due to some factors such as limitations on giving immediate feedback and the need to contextualize the assessment tasks. Under this adverse circumstance, the highlighting changes in assessment show a tendency for more authentic assessment methods. The emphasis now is placed on the fundamental questions of why it is important to learn something and how acquired knowledge, skills, and attitudes can be successfully applied in solving real-life problems.

CHED Memorandum Order (CMO) No. 46 series of 2012, outlines policies and standards to enhance quality assurance (QA) in Philippine higher education through an outcome-based and typology-based approach. While it does not specifically focus on authentic assessment practices, the principles it lays out align with authentic assessment practices. Authentic goes beyond traditional tests and embraces real-world tasks, portfolios, projects, and peer feedback.

Therefore, this study sought to determine the utilization of authentic assessments in the Agriculture subjects by the faculty members implementing modular distance learning (MDL) modality of state institutions of higher learning in Northern Mindanao, Philippines.

2.0 Methodology

2.1 Research Design

This study employed a mixed-method research design to gather both quantitative and qualitative data. Quantitative data were gathered to explore faculty members' perceptions and their extent of utilization of authentic assessment tools using a validated researcher-made survey questionnaire. Meanwhile, the qualitative data were collected through a focus group discussion (FGD) of 10 randomly selected participants that was conducted virtually to find similarities in the participants' opinions.

2.2 Research Participants

The study was carried out in six (6) State Universities and Colleges (SUCs) offering BS in Agriculture program. Only those holding permanent teaching items were included in the study. A sample proportion of 80% was employed to determine the exact number of participants per school. Hence, the participants were 139 out of 191 Agriculture faculty in the school years 2020-2021 and 2020-2022 and were given survey questionnaires in digital and print format.

2.3 Research Instrument

The researcher-made questionnaire was based on CHED Memorandum Order No. 46, s – 2012 which has three (3) parts. Apart from the questionnaire, qualitative data were taken from focus group discussions (FGD) to supplement the last part of the questionnaire and to obtain more in-depth information about the authentic assessment. The questionnaire was validated through pilot testing in four (4) public colleges and universities in Region 13 (CARAGA). The reliability coefficient of the questionnaire was sought through Cronbach Alpha using SPSS. It was found to be reliable with a 0.829 value.

2.4 Data Gathering Procedure

The questionnaire was converted into a digital format using Google Forms and distributed to the respondents. Otherwise, the print format was given to those with an unstable internet connection through their respective deans. After collecting the questionnaire, focus group discussions (FGDs) followed. Interviews were conducted in two instances. The first session was done virtually using the FB room, while the second session was carried out face-to-face. Answers to interview questions were recorded and transcribed for qualitative analysis. This helped the researcher find similarities with the participants' opinions gathered from the questionnaire.

2.5 Data Analysis Procedure

After eliciting both quantitative and qualitative data, these were translated, summarized, and analyzed using descriptive and inferential statistics. For questions 1 and 2, a weighted mean was employed to determine the respondents' perceptions and extent of utilization of authentic assessments. Pearson correlation was used for problem 3 to determine if a significant relationship exists between the respondents' perceptions and their utilization of authentic assessment tools. Lastly, for question 4, data were coded. The codes were then categorized, thematically arranged, and further analyzed to augment the qualitative analysis.

2.6 Ethical Considerations

This research study followed ethical guidelines. It obtained prior informed consent in which respondents have the freedom to withdraw from the study at any time. The anonymity of the respondents was maintained and their well-being was safeguarded.

3.0 Results and Discussion

3.1 Perceptions of the teachers toward authentic assessment?

Table 1. Faculty members' perceptions of authentic assessment

OVERALL MEAN	QUALITATIVE DESCRIPTION	INTERPRETATION
3.62	The teachers strongly agree with the perceptions of authentic assessment.	Strongly Agree

Results showed that the respondents have positive perceptions of authentic assessment. The faculty members strongly agree with each positive statement about authentic assessment. This is consistent with the findings of some researchers that faculty members held favorable perceptions of authentic assessment (Villaroel et al, 2020; Sewagegn & Dale, 2020). As shown in Table 1, the overall mean signified that in general, the respondents perceived authentic assessment positively. These perceptions imply that teachers believe that authentic assessment leads to better teaching and learning. It helps the teachers to reflect on the relevance of what they teach and provides results that are essential for improving instruction. As stated by Schultz (2022), authentic assessment allows teachers to review and evaluate the teaching and learning process. Moreover, authentic assessment is vital to determine what teachers must do to improve and develop students' abilities (Dargo and Dimas, 2021).

3.2 Extent of Teachers' Utilization of Varied Authentic Assessment Tools

Table 2. Faculty members' extent of utilization of authentic assessment tools in modular distance learning

OVERALL MEAN	QUALITATIVE DESCRIPTION	INTERPRETATION
3.25	High Extent	Very much utilized

It can be gleaned from Table 2 that the overall mean signified that the suggested assessment tools for Modular Distance Learning (MDL), as enclosed in the CMO were very highly utilized by the faculty members since there were 8 out of 12 assessment tools that were very highly utilized. In a similar study by Tugano (2022) on secondary communication arts teachers, the majority of the teachers utilized authentic assessment tools. The interview analysis results also supported the above indications. As stated earlier, these assessment tools were readily made available online through various educational sites. Hence, faculty members implementing modular distance learning modalities instantly utilized these tools.

3.3 Relationship Between Faculty Members' Perceptions and Utilization of Authentic Assessment Tools

Table 3. Analysis of the relationship between faculty members' perceptions and their utilization of authentic assessment tools

INDEPENDENT VARIABLE	DEPENDENT VARIABLE	CORRELATION COEFFICIENT	P-VALUE	REMARK
Faculty members' perception	Utilization of assessment tools	0.169	0.047	Significant

Shown in Table 3 is the low positive correlation between faculty members' perception of authentic assessment and their utilization of the assessment tools. This meant that if the faculty members' extent of agreeing about authentic assessment increases, the extent of utilization of the authentic assessment tools slightly increases. Although the association was low, the result revealed that there was a significant relationship between faculty members' perception of authentic assessment and their utilization of the assessment tools since the p-value of 0.047 was less than 0.05 level of significance. This implied that the extent of utilization of the authentic assessment tools was significantly affected by the faculty members' extent of agreeing about authentic assessment.

The study found that the Aggie faculty members' perceptions toward authentic assessment had a significant effect on their utilization practices. The faculty members tried to fully utilize these authentic assessment tools in the teaching-learning process. However, their positive perceptions were not fully reflected in practice. Varied factors that were primarily attributed to the restrictions of face-to-face instructions influenced the implementation of authentic assessment. As a result, their utilization practices were also greatly affected. In this case, only those authentic assessment tools that are ready-made and can easily be applied were given to students.

The above interpretation was consistent with findings by Jou et al (2022) that teachers seemed to be facing a conflict in effective assessment in their classroom despite their reported favorable perception of assessment. The same thing was true with the findings that while teachers held positive views of formative assessment and feedback, they did not use formative assessments regularly or effectively.

3.4 Challenges Encountered in Utilizing Authentic Assessment

Meanwhile, most teachers encountered challenges in the process of utilizing the assessment tools. Through document analysis of the focus group discussion (FGD), in conjunction with the responses to the open-ended questions, the teachers cited several challenges which are discussed under the following themes: preparation of authentic assessment tools, assessment delivery, and evaluation of learners' output.

Theme 1: Preparation of Authentic Assessment Tools

The utilization of authentic assessment revealed that faculty members have difficulties in preparing authentic assessment tools including developing instruments and determining the indicators or criteria. According to Bustillo and Aguilos (2022), teachers must engage in proper planning before implementation, such as preparing task instructions, scoring guides, and assessment rubrics. However, faculty members have encountered challenges in the preparation that are primarily attributed to the time element and their competence. As indicated by a respondent:

"It takes time to contextualize the activities in the modules that would suit the needs of my students. It's not an easy task to incorporate all the competencies allotted in one semester in a simple way that they can easily understand. Sometimes I wonder if they can absorb all the competencies given the limited time." (P2-T1-F-41yo-12S)

Lack of training in authentic assessment is also a challenge. Sabri et al. (2019) stated that authentic assessment is quite complicated as there is still a lack of faculty members' knowledge. This statement is also in the same line with the respondent's perspective below.

"There are many competencies in Agriculture and it is difficult to integrate these competencies. I also lack expertise in the area of assessment. So I only use the modules given instead of making or developing localized materials." (P1-T1-M-42yo-13S)

Consequently, without adequate knowledge and skills in authentic assessment, problems may appear among faculty members who apply the assessment

Theme 2: Assessment Delivery

Several challenges were identified in the process of assessment delivery. First, faculty members have difficulty establishing proximity. This is a challenge due to the physical distance between the faculty members and the students. In distance learning, it is difficult for faculty members to provide assistance to the students, clarify their misconceptions, and give immediate feedback during assessment activities. As articulated by a respondent:

"Unlike in the face-to-face classes, the instructors could provide support in the form of simplifying or translating the tasks to vernacular and provide more cues until they would be able to work on their own." (P10-T1-M-29yo-8S)

As emphasized by one of the respondents, the presence of a faculty member is highly needed in scaffolding and assessment delivery:

"In implementing authentic assessment, it's not the result that matters most but the process. If possible, student appointments must be done frequently because some students do not have someone in the family who is more knowledgeable who can help them or guide them in accomplishing authentic tasks." (P6-T3-F-41yo-15S)

This claim is supported by Salamuddin (2021) who stated that authentic assessment emphasizes the process rather than the product of learning. Other concerns are the monitoring of the learners and the proper guidance they received as they accomplished their tasks. Not all students are autonomous and can work with minimal supervision from more mature adults. In the same manner, not all students have family members who can facilitate learning at home. As expressed by some respondents:

"Some students require close monitoring and guidance in completing the given task. Reality is, not all of them have somebody (at home) who's capable of providing such." (P8-T3-F-30yo-7S)

The abovementioned statements showed the absence of mediated learning experiences which according to Talimodao and Madrigal (2021) occur when skilled persons assist the student to grasp something that he could not do independently.

Theme 3: Evaluation of Learners' Output

Based on the questionnaire and interview results, most faculty members faced the difficulty of evaluating the learners' performance. This challenge mainly dwells on the validity of students' output. As expressed by most faculty members:

"It is difficult to determine whether the output is made by the students themselves. We are not sure if the students are the ones doing the assessments given." (P8-T3-F-30yo-7S)

The teachers tried to administer the authentic assessment amidst the restrictions set in the "new normal" learning delivery but were confronted with various challenges. In this case, the teachers tended to only utilize some assessment tools that can be facilitated within the framework of modular distance learning.

3.5 Proposed Innovation

With the results of this study, the basis for the formulation of innovation was laid. A handbook of authentic assessment was conceived to aid the faculty members in the planning and implementation of authentic assessment. More importantly, this will help Agriculture students attain an in-depth understanding of concepts and skills, and learn how to use these in dealing with the problems and uncertainties that may arise now and in the future. In crafting the handbook, the researcher focused on the identified challenges encountered by the faculty respondents and aimed to address the gaps in the effective implementation of authentic assessment. The handbook includes a compilation of performance tasks, highlighting Wiggins' and McTighe's GRASPS model (Wiggins & McTighe, 2005). It involves three stages that are streamlined to help teachers teach for understanding and help learners make knowledge meaningful. The first stage is the *desired outcome* of the unit that deals with the standards, transfer goal, enduring understanding, essential questions, and the domains of learning. The second stage is the assessment of understanding that focuses on the culminating performance task that is differentiated. This task refers to the *product* which is one of the four elements of differentiated instruction suggested by Koh et al (2019) that deals with a culminating task that encourages learners to rehearse, apply, and extend what he has learned in a unit. This stage covers the narrative of the performance task and the analytic rubric that uses valid criteria and indicators. Lastly, the learning plan flow delves into the possible learning activities teaching approaches, and strategies a teacher can use as the unit is unfurled to the learners.

4.0 Conclusion

In this study, it could be drawn that the faculty members have positive perceptions toward authentic assessment. The majority of them strongly imbibed the perceptions inculcated by the Commission on Higher Education. These perceptions played a significant effect on their utilization of authentic assessment tools. Although the association is low, still, it indicated that faculty members' extent of utilization will likely increase as their extent of agreeing about authentic assessment increases. From the findings, as faculty members had positive perceptions toward authentic assessment, they also tried to utilize authentic assessment tools in their teaching-learning activities. In practice, the implementation of authentic assessment by the faculty members is still diverse. This notion was supported by the responses of the faculty participants upon examining their experiences toward utilization using FGD. Faculty members have explicitly elaborated that some assessment tools worked well while some did not. They encountered challenges in utilizing these tools due to the absence of face-to-face classes. They tried to administer the authentic assessment amidst the restrictions set in the "new normal" learning delivery but were confronted with various challenges. In this case, the faculty members tended to only utilize some assessment tools that can be facilitated within the framework of modular distance learning.

Given the findings and conclusions, the following recommendations are offered: a) Faculty members are encouraged to continue using the different authentic assessment tools in teaching Agriculture subjects, b) University and College Officials may provide technical assistance through capacity-building activities in instructional materials development to equip Agriculture faculty members with enabling methods and strategies for better utilization and practice, c) The designed handbook of authentic assessment for Agriculture may be utilized by state universities and colleges in Agriculture to address the needs of their faculty in developing authentic assessment tools.

5.0 Contributions of Author

The sole author is responsible for conducting the study, writing, encoding, data analysis, and editing

6.0 Funding

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7.0 Conflict of Interests

No conflict of interest exists in the conduct of the study. Plagiarism was strictly avoided and there was no bias in the interpretation of findings. The results were used purely for research.

8.0 Acknowledgment

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Too Anxious to Speak: Assessing the Impact of Social Anxiety on High School Students' Self-Esteem, Academic Performance, and Coping Strategies

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Abstract. Social anxiety is one of the most prevalent mental health issues students experience. It is the excessive worry on negative opinions about oneself from people. This study analyzes relative impacts of social anxiety on high school students' academic performance and self-esteem, and evaluates what stimulates social anxiety problems among high school students and how they overcome it. A phenomenological approach was utilized to examine experiences of 12 high school students from Central Luzon State University, Philippines. Through Social Cognitive Theory, the researchers explored the cognitive, social, and behavioral components that contributed to effects of social anxiety on high school students' self-esteem, academic performance, and coping strategies. Data were gathered through semi-structured audio-recorded interviews and were analyzed thematically. Results revealed various factors, including environmental, negative experiences, and inner conflicts that caused social anxiety. Students suffering from social anxiety struggle academically while building relationships with peers as well. Overcoming social anxiety is challenging and effective coping strategy helps reduce students' anxiety. Collectively, social anxiety significantly impacts academic performance, self-esteem, and coping strategies.. This study would contribute to literature and the educational field as it could serve as a guide to what actions should be implemented to improve the mental health of high school students through better guidance on coping strategies, which was revealed to be lacking. Therefore, school-based anxiety treatments, as well as socio-academic programs, must be concretized to develop social skills and succeed in future endeavors. This study would benefit literature and the educational field as it could guide them to what actions should be made to improve the mental health of high school students through better guidance on coping strategies, which was revealed to be lacking.

Keywords: Social anxiety; High school students; Self-esteem; Coping strategy; Academic performance.

1.0 Introduction

The human being is a social animal who interacts with his fellow members and leads a social life (Moghtader, 2019). Although not a new concern, mental health is still an increasingly challenging issue among high school students. A fundamental human right is access to stable mental health (World Health Organization, 2022). Students in higher education face mental health challenges, and poor mental health affects their attitude towards it, negatively impacting their self-reassurance (Kotera & Maughan, 2020). The prevalence of social anxiety and how it relates to students' social abilities have been the subject of several research studies (Thompson et al., 2019). According to The Lancet Global Health (2020), social anxiety affects the world's economy by more than \$1 trillion annually.

Interpersonal communication is one of the ventures required for students to affect their education positively (Luan et al., 2022). Those suffering from social anxiety experience difficulties, whereas some may not even know they suffer from it (Jefferies & Ungar, 2020). Aftermaths of social anxiety, such as distress and impairments, are experienced by adolescents, especially students (Hunt, 2019). Students who suffer from social anxiety are provoked by school activities such as reporting in class or completing a project that demands an audience. Leigh & Clark (2018) defined social anxiety as the dread of being mocked by people. Exposure to such a feared situation often causes anxiety, which can occur as a situationally bound or predisposed panic attack (Richards, 2022). Social anxiety is among most prevalent psychological issues that students face (Luan et al., 2022), thus resulting in diverse coping strategies for them to subsist.

Social anxiety can be incredibly overwhelming and debilitating, inducing immense stress. Coping strategies have a significant role in helping those suffering from social anxiety attain more balanced mental health and reduce stress (Abouammoh et al., 2020). Individuals can learn to handle the intense stress and anxiety that might accompany social anxiety by participating in healthy coping strategies such as engaging in recreational activities and socializing. However, some people also utilize unhealthy coping mechanisms like self-blame and avoidance (Ching et al., 2020), which are likely to impact their self-esteem negatively. In addition, social anxiety often leads to avoidant behavior, which is observed in students that skip classes, work independently, and avoid social interactions (Karasewich & Kuhlmeier, 2020). Social avoidance declines as communication desire rises, leading to low rates of relaxed social deferral in interpersonal communication (Mustafa & Aykut, 2018). Studies have shown that a change in coping strategies could lead to a better understanding and a change in the social anxiety of individuals (Brouzos et al., 2019).

Self-esteem is one factor that affects social anxiety, especially from a student's perspective on themselves. Filippello's (2020) study on students' behavior showed that students with high self-esteem have higher expectations for themselves and believe that they are competent once they satisfy them, which leads to the growth of academic responsibility and self-esteem. Self-esteem and academic performance are connected, as shown by a study by Akinleke (2021), that students with relatively soaring self-esteem are more successful in their educational paths. This resulted in the conclusion that a student's perspective on themselves and educational success are connected (Dolgova et al., 2021) thus, impacting their mental health. Self-esteem and different facets of social assistance were mediators in the correlations between anxiety, loneliness, and social skills (So & Fiori, 2022).

Communication is essential for students' rapid cognition, emotion, and behavior development. An individual's social interactions and skills are a natural part of development (Moss & Moses, 2018). Students in high school are mostly exposed to school projects that help them improve their social and communication skills. Social skills influence high academic performance (Torres et al., 2020). Developing high school students' social skills may be beneficial later in life. Students must have strong social skills, especially as they enter college. Improving students' social skills could benefit their emotional control and overall performance in school (Salavera et al., 2019).

Poor academic performance is one of the adverse student outcomes linked to social anxiety. Given that it is connected to lower academic achievement (Leigh et al., 2021), the educational context appears stressful for socially anxious students (Archbell & Coplan, 2022). As a result of its negative effects on learning performance and general well-being, social anxiety is regarded as a severe issue of mental health among students (Nualnong, 2019). They acquire limited chances of learning by rejecting interaction, hence the adverse effect on their academic performance. Although social anxiety is widespread, studies have shown that only 35% of individuals receive medication.

The Social Cognitive Theory, developed by Albert Bandura, explains human behavior as a result of interactions between personal, behavioral, and environmental elements. This theory is relevant to the effects of social anxiety on high school students, suggesting that social anxiety can lead to negative self-beliefs and cognitive distortions, affecting cognitive processes, motivation, and academic outcomes. The study suggests that educational institutions play a vital role in addressing students' mental health issues, and treatment for social anxiety is best conducted in a school environment (Cohen et al., 2020). This study, based on the Social Cognitive Theory, can inform the improvement of guidance and counseling programs, driving educational institutions towards a more structured and inclusive curriculum.

1.1 Social Anxiety as Perceived by Students

Social anxiety is classified as part of the most prevalent mental illnesses students face daily (Luan et al., 2022). It is indicated by an excessive worry about negative opinions about oneself from people in a social setting (Lin et al., 2019). A study conducted by Ma & Lin (2022) showed that students' interpersonal communication abilities are negatively influenced by social anxiety. Furthermore, a study by Akçakoyun (2018) showed that 22.4% of students experience social anxiety, justifying how it engulfed their daily lives and livelihood. Socially anxious students experienced a significantly lower standard of living (Alsamghan, 2020).

Students are obliged to make interpersonal interactions at school, such as public speaking, that cause distress among individuals who experienced social anxiety (Paccarangan, 2018). Social anxiety adversely affected communication with educators, economic functioning, and student experiences (Archbell & Coplan, 2022). Tayag & Gonzales (2021) stated that it has a negative effect as people with social anxiety are afraid of negative social feedback, which lead them to engage in perfectionism and even perfectionistic self-representation.

According to Boyle (2021), students who experienced social anxiety encountered physical symptoms of fear such as rapid breathing and heartbeats. Additionally, in a study by Kozan & Arslan (2022), emotional schemas such as guilt, discrepancy, consensus, and seeing emotions as dangerous significantly correlated with social phobia. Furthermore, learners that have social phobia are most likely inclined to remember social experiences negatively (Gong et al., 2023). According to Yaffe (2021), the students' social anxiety was an indication of their imposter expressions, unfavorably impacted their overall quality of life, especially in school. Likewise, Alsamghan's (2020) study showed that students' average scores for quality of life depreciate as they experience social anxiety more than those who do not have it.

Procrastination had a favorable relationship with social anxiety. Previous studies showed that procrastination is more common in people with social anxiety. Ko & Chang (2019) explained that people tend to put off tasks out of fear of failure, negative feedback, and other unpleasant or disagreeable situations. Various studies showed that treatment and proper recognition of students' mental health, particularly those with social anxiety, have an extra effort to eradicate students' social anxiety (Hajure & Abdu, 2022). A proper intervention of the educational community by implementing efforts is needed to prevent students from acquiring social anxiety (Desalegn et al., 2019).

1.2 Social Skills Influencing Academic Performance

Social skills are intellectual capacities that allow someone to engage efficiently and appropriately in a particular social setting (MacCann et al., 2020). Students need these skills due to their relation in context with academic performance and social life (Suryaningrum, 2021). Social skills and outcomes related to mental health have been linked in several studies (Moeller & Seehuus, 2019). Given that research has linked anxiety symptoms to issues with behaviors involving socializing and academics, students with social anxiety may suffer interpersonal and scholastic difficulties (De Lijster et al., 2018; Lee et al., 2022).

Based on a framework developed by Farrington and colleagues, Farruggia et al. (2016) discovered that academic perception, schooling techniques, interpersonal skills, and school engagement contribute to academic accomplishment. Thus, people who lack social skills often encounter tension and solitude which raised the probability of mental and physical health problems (Segrin, 2019). In an academic context, students' mental health affect their social skills which are great determining factors for their academic success. With these, it is clear that academic stress and social anxiety varies depending on an individual's emotional intelligence score (Cejudo et al., 2019). Vilaplana-Perez et al. (2020) stated that social anxiety contributed to the academic underachievement of students. Additionally, the degree of anxiety in students affected their self-capacity in terms of academics (Hood et al., 2021).

As shown in a study by Paroginog et al. (2018), inadequate communication skills negatively impacted performance in school, as active academic performance had an outstanding contribution to students' overall well-being (Meo et al., 2020). Pieces of evidence are test results, homework completion, problems of tardiness, and inability to maintain social interactions among peers. In addition, social skills have shown to impact students' capacity to

participate in appropriate study techniques, analytical skills, topic-mastering strategies, and assignment management approaches, resulting in low academic performance. Cohen et al. (2019) expounded that better student achievement is typically related to active learning curriculums, which frequently involve partnered or group work. However, these curriculums provided interpersonal and academic difficulties for socially anxious pupils. That being the case, implementing effective preventive strategies could minimize the consequences of social anxiety for students and conceivably improve students' educational and interpersonal performance (Przepiorka et al., 2021).

Social anxiety as well as low academic achievement are only two of the adverse consequences of low social competence (Sørli et al., 2020). Sørli et al. (2020) further conclusively stated that such interpersonal skills had been linked to other significant areas of development, including academic success. Individuals with an elevated degree of social phobia experience high amounts of self-contradictory awareness (Murad, 2020). Correspondingly, Sultana et al. (2021) disclosed that pupils with decreased self-confidence outperform students with medium and high social anxiety regarding academic achievement. They argued that social phobia is inversely alike with students' academic progress. Several studies have supported this view and revealed that socially skilled students have more positive attitudes toward learning, adapt to the school setting more efficiently and achieve better grades than their less socially adept peers.

1.3 Coping Strategies of Students Towards Enhanced Self-Esteem

A crucial aspect of psychological health is self-esteem. According to Freire & Ferreira (2019), self-esteem is an effective tool in managing, balancing, or reducing an adolescent's stress levels and increasing happiness resulting in significantly better mental health. Students with higher self-esteem exhibit more risk-taking, inventiveness, and resiliency in the midst of difficulties (Bridge et al., 2022). Meanwhile, depression, anxiety, social isolation, and decreased motivation are observed more in students with lower self-esteem (Moksnes et al., 2019). Additionally, uncertain self-perception resulted in an increased possibility of experiencing issues with mental health and identity development is more likely experienced by individuals with greater self-esteem (Masselink et al., 2018).

Educational success is linked to self-esteem (Weisskirch, 2018). Extra classes increased students' self-esteem and anxiety (Nguyen et al., 2019). Students who have an elevated view on themselves typically exhibit higher conviction to deal with challenges. They are more likely to exercise superior emotional control and take proactive steps to deal with stressful situations, such as approaching professors and classmates for assistance. Significant determinants of self-esteem include negative coping, avoiding coping, and active coping (Esin & Hamdi, 2022). Additionally, social anxiety impaired students' ability to express themselves in various contexts. It is reflected in their self-awareness, particularly compared to their peers, which lowers their self-esteem and frequently triggers depression (Murad, 2020). This implies that schools should raise students' awareness of defective coping and direct them toward healthy coping methods like self-compassion and mindfulness (Madhuri & Senel, 2021).

A study by Nguyen et al. (2019) indicated the necessity for school programs and provisions to enhance students' self-esteem through coping mechanisms in response to academic stress. Individuals, especially students, engage in active coping strategies to lessen that fear of being in an interpersonal situation (Stentz & Cogle, 2022). Likewise, coping strategies enabled students to thrive under academic pressure by lowering psychological anguish, which leads to students developing mental health problems (Ali, 2018). Self-esteem and resilience significantly impacted how people think, feel, and act, and they may even be able to forecast how they will cope. While both positive and negative emotional ontologies influenced social anxiety and were a possibility for it to develop (Kozan et al., 2022).

Coping strategies gave individuals a sense of mastery over their own lives, which helped increase their self-worth. Furthermore, effective coping strategies that help individuals be more compassionate toward themselves helped improve their self-esteem (Bridge et al., 2022). Early treatment and effective coping strategies for social anxiety in children are significant and could lessen the possibility of developing mental health disorders in the future (Krygsman & Vaillancourt, 2020). Additionally, by utilizing coping strategies, individuals can learn to recognize and take responsibility for their emotions and experiences, increasing their self-esteem. Finally, through coping strategies, individuals can learn to take an active approach to manage their experiences and emotions, leading to increased self-esteem.

2.0 Methodology

2.1 Research Design

Approved and given the protocol code 2023-164 by the Central Luzon State University-Ethics Review Committee (CLSU-ERC), the researchers examined the students' experiences with social anxiety using a phenomenological approach. Through the Social Cognitive Theory, the researchers explored the cognitive, social, and behavioral components that contributed to the effects of social anxiety on high school students' self-esteem, academic performance, and coping strategies. A purposive sampling method was employed, selecting 12 high school students from Central Luzon State University Science High School, Philippines, with two students chosen from each grade level (seventh to twelfth grade), identified as R1~R12. The researchers conducted semi-structured recorded interviews with the participants and analyzed the recorded responses to identify common themes using thematic analysis.

2.2 Research Participants

The study was conducted at Central Luzon State University, Science City of Muñoz, Province of Nueva Ecija, Philippines. The researchers conducted the semi-structured interview inside Central Luzon State University, Laboratory for Teaching and Learning - University Science High School. The researchers used a purposive sampling method to select 12 high school students in grades 7–12 with Social Anxiety Disorder for this qualitative study. A total of 55 high school students were screened via Google Forms using the Social Interaction Anxiety Scale (SIAS), where two students per grade level with the highest mean were chosen. Subsequently, the selected 12 high school students were subjected to a semi-structured interview. The inclusion criteria include: (1) matching the cut-off point during the screening; (2) must be a high school student; (3) able to comprehend and interact with interviewers and others; (4) have given an informed consent form and are willing to participate in the study.

2.3 Research Instrument

A semi-structured interview was conducted with 12 high school students, which were screened using the Social Interaction Anxiety Scale (SIAS) via Google Forms. Subsequently, a set of ten (10) open-ended questions were asked to the selected respondents. The instrument is divided into three components: (1) informed consent form and data privacy clause; (2) Google Forms survey consisting of the Social Interactions Anxiety Scale; (3) questions on the impacts of social anxiety on the respondents' self-esteem, academic performance, and coping strategies. The respondents were willing to participate and are well-informed regarding the documentation process using audio recordings.

2.4 Data Gathering Procedure

The phenomenological approach of qualitative research acquires information through a semi-structured interview. The interview outline regulates using the following questions: (1) What do you think about the extracurricular activities at school?; (2) What worries you in interpersonal situations?; (3) How do you perceive yourself in various social contexts?; (4) How do you think social anxiety affects you?; (5) Does your social anxiety affect your self-esteem?; (6) How do you cope with boosting your self-esteem?; (7) Do you think your social anxiety affects your performance in school?; (8) How do you manage social anxiety during collaborative or social activities?; (9) What coping mechanism/s do you think work best for your social anxiety?; and (10) Does social support from friends and family help lessen the negative impacts of social anxiety on students' self-esteem in high school? The discussion content is audio-recorded to document the interviewees' responses comprehensively. The researchers used thematic analysis in identifying patterns in the data to synthesize prevalent notions and establish central themes for the study.

2.5 Ethical Considerations

The study was approved and conducted according to the guidelines of the Central Luzon State University (CLSU) Ethics Research Committee (ERC), with protocol approval code 2023-164 on March 14, 2023. The following are noted as part of the study's ethical consideration:

Informed Consent and Data Privacy Clause and Consent

The modified consent form provides participants with each of the details they require to make an informed choice about participating in the study. The purpose, benefits, and risks of the study were explained to participants before they decided whether or not to participate.

Voluntary Participation

In accordance with what is stated on the consent form, participants have the freedom to join or withdraw from the study at any time without any penalty. Participation in this survey is voluntary for those who are asked.

Confidentiality and Data Privacy Clause and Consent

All participants have a right to privacy. Since the participants are remaining anonymous, the researchers cannot identify them. The public is not given access to any of the personal information and data of the respondents.

Results Communication

Both plagiarism and research misconduct are not present in the study. The study adheres to all ethical standards and guidelines. The results shall be represented truthfully by the researchers.

3.0 Results and Discussion

This section includes the summary of main findings in conducting the research to assess the impact of social anxiety in high school students' academic performance, self-esteem, and coping strategies.

Table 1. Thematic analysis of the social anxiety's impact on students' self-esteem, academic performance, and coping strategies

THEMES	CODE IDEAS
Factors Influencing Social Anxiety	Constant Pressure Fear of others' unfavorable responses Self-doubt Distorted self-consciousness
Academic Effect of Social Anxiety	Hold back the students' potential
Overcoming Social Anxiety	Ineffective coping Supportive relationships in boosting self-esteem Assurance

3.1 Theme 1: Factors Influencing Social Anxiety

The pressure to succeed has an impact on how long social anxiety persists. People who struggle with social anxiety frequently steer clear of social events to avoid criticism or attention. Students who suffer from social anxiety and feel under pressure to perform well may also avoid situations out of worry that they won't live up to their standards and will receive unfavorable feedback from others.

"Pressure not from family but from myself because I think highly of myself. A small mistake and it is like my world will collapse."

Respondents who struggle with social anxiety frequently exhibit heightened sensitivity to other people's perceptions and a fear of being adversely appraised. This proves a direct link between social anxiety and fear of judgment. In accordance with this, Grieve et al. (2021) stated that those who struggle with social anxiety have intense fears of being judged negatively, negatively affecting their academic experience.

"[People talk] let us say negatively about my performance and after the performance, people will criticize me not so nicely."

The COVID-10 quarantine impacted social interactions and skills, which contributed to social anxiety. Students did not have many opportunities to develop their social skills or could feel unprepared after spending much time alone. Excessive fear or discomfort in social circumstances are indications of social anxiety, a prevalent mental health issue (Jefferies & Ungar, 2021). High school students tend to experience pressure, particularly social and academic pressure in school which perpetuates a vicious cycle that can lead to emotions of pressure and anxiety in social situations.

"I have difficulty in thinking, I feel that I will do something wrong, it is embarrassing – I do not want to participate."

Research has shown that students who face social anxiety have difficulty refusing because of social pressure from peers, parents, and teachers. Some students desire to please others and may feel guilty about saying "no" to a request which can lead to negative consequences. With social anxiety lurking in the system of students,

opportunities are usually missed out because of their difficulty in socializing which hinders their participation in extracurricular activities, which has a negative impact on their academic performance.

"My socialization limits within the friend group or those that I am close with. It is like I cannot interact outside of my comfort zone."

Despite having anxiety about participating in extracurricular activities at school, proper guidance and support from academic institutions enable students to have a more comfortable setting for social anxiety, not to foster and achieve their own goals and aspirations (Sahu, 2020).

"SayHay (USHS) gives me the opportunity to overcome this anxiety by enforcing these performance tasks"

Lack of engagement in group conversations due to communication anxiety might result in missed opportunities to participate and interact with others. Social anxiety results in complete avoidance of social interactions, which influences regular tasks in life and school and may restrict career and social chances.

"I become more anxious because my thoughts are enclosed, I do not express them properly, including my feelings, they bottle-up because I cannot express them freely."

Concerns about social acceptance can result in a preoccupation with how individuals see themselves, which can start a chain reaction of unfavorable thoughts and feelings that negatively affect their daily life. Students with social anxiety tend to have a fear of embarrassment that limits their daily life and activities.

"I become conscious of what I say, I sometimes think of what to say because there is that fear of embarrassment or afraid of people judging what you say."

These concerns have an adverse effect on one's self-confidence and self-esteem, which can hinder one's capacity to develop deep connections with others. Furthermore, this lack of self-confidence negatively impacts their self-esteem (Murad, 2020). Therefore, it is difficult for them to start a conversation and approach others in interpersonal communication. Miftahudin (2021) revealed that overthinking and lack of self-confidence are mostly what students feel, which influence their speaking anxiety. With this said, socially anxious students are more confident in writing than speaking out.

"Most of the time, my social anxiety is what affects my communication with other people..."

A study by Roberts & Osler (2023) revealed that a person who feels extremely anxious and self-conscious might experience a more pervasive collapse of social confidence. Since self-esteem and social anxiety are closely linked and correlated (Jeelena et al., 2020), socially anxious students often doubt their capabilities. Students who experience Social Anxiety often have low social skills.

"However, when interacting with new people, I try to show the best version of myself. I want to show them that I am always perfect, like I do not make any mistakes to make a good impression on them."

Lack of self-confidence is another thing observed in students with social anxiety. Students with high levels of social anxiety have a lower self esteem than those who have lower levels of Social anxiety (Murad, 2020)

3.2 Theme 2: Academic Effect of Social Anxiety

According to a study conducted by Ma & Lin in 2022, social anxiety has a negative impact on students' interpersonal communication abilities. Scanlon et al. (2020) found out that students experiencing social anxiety were proven to have struggled academically and have a hard time creating relationships with others. Those with social anxiety find it hard to participate in group activities because they do not know how they need to communicate and how they will give their suggestions to others, which keeps them from expressing their full potential. Students who experience social anxiety tend to avoid participating in group activities (Rosen, 2018).

"I still do my work, but I do not communicate as much with my group partners."

Students' academic performance was affected negatively when they were experiencing social anxiety. It affects their confidence, how they connect with others, and building and maintaining relationships. This is affected by worrying about what others think, making a bad impression, and other experiences (Luan et al., 2022). Those who experience this often feel loneliness and a decreased support from friends due to the detachment (Weymouth, 2019).

"In terms of expressing my thoughts to my family, I think I do not express myself well enough to them. While at school, it seems like what I can say is pretty much limited because not all the things that I share with my friends are shareable to my family and vice versa."

Students with SAD are often worried about making wrong impressions. People who experience social anxiety tend to fear negative evaluation as they worry about people judging them in social interactions (Hunt, 2019). Overthinking also affects how they perceive themselves, which contributes to their self-esteem. This impacts their daily lives as it gives them worries that trigger their anxiety and its symptoms, hindering their social interactions.

3.3 Theme 3: Overcoming Social Anxiety

Managing and overcoming social anxiety is a hard task to do. An effective coping strategy can help in lessening the anxiety a student experiences. Some students set aside their social anxiety when it involves the need to communicate for academic purposes. According to them, it is easier to manage social anxiety during collaborative or group activity when they have someone close or know someone in their assigned group.

"I only talk to them when it comes to pressing matters."

Students who are experiencing social anxiety also shared what they do when they need to talk to others. Some try to communicate with their members as much as possible and think it will end soon.

In conclusion, overcoming social anxiety is easier when they have someone they can comfortably talk to during collaborative work and if it involves their academic performance. Being competitive in academic performance can help in lessening social anxiety (Kaplanova, 2019).

Social anxiety can result in ineffective coping strategies, further complicating interpersonal relationships and increasing self-consciousness (Daros et al., 2019; Konan & Celik, 2019). Students with social anxiety have shared the following ineffective coping strategies. Some students try to ignore or escape their social anxiety by thinking that no one is there during social events, which worsens their anxiety.

"Imagining people are not there when you are performing. That does not help at all because when you are faced with the reality that people are there, and people will be looking at you, they will be speaking in their head, they will be thinking. It is more anxiety-inducing."

Ineffective coping mechanisms for social anxiety, such as imagining no one is there or relying on friends and family for support, worsen social interaction difficulties. These strategies increase self-consciousness and anxiety. Recognizing the limitations of these methods is crucial. Seeking alternative coping strategies promotes personal growth and resilience. By addressing these concerns, individuals with social anxiety can navigate social situations more effectively, leading to increased well-being and fulfillment.

By fostering positive close relationships, individuals can develop prosocial behaviors that subsequently contribute to increased school engagement and academic achievement (Tan et al., 2018). Therefore, students who have supportive relationships are more likely to participate in extracurricular activities, which can enhance their academic performance and overall well-being. These activities allow students to practice their social skills and develop their self-esteem in a safe and supportive environment.

"Everyone needs supportive parents, especially when it comes to something as social anxiety, especially with social anxiety in school because apart from home, the other place that students usually socialize is in school. So having your friends or family support you inside or outside the school for your social anxiety is very helpful."

In addition, supportive relationships can help individuals develop positive coping strategies (Shao et al., 2022). These strategies may include seeking reassurance from trusted friends, using relaxation techniques, or engaging in positive self-talk.

"Maybe another big factor is having a comfort person... There are many examples that I can call my comfort people and it seems that when I feel the symptoms, I just look at them and then I am okay as if it lessens the worry."

Socially anxious students often felt the need to seek assurance through finding social support. Kamaludin et al. (2020) revealed that finding social support and using acceptance coping mechanisms were substantially related to anxiety levels. A high level of anxiety was linked to seeking social support, whereas a low level of anxiety was linked to the strategy of acceptance. A study conducted by Smith et al. (2018) confirmed the effectiveness of writing in reducing stress and anxiety. As all the interviewees affirmed that building self-esteem is achievable for everyone, thinking positively is the most common way of feeling assured with increased self-esteem.

4.0 Conclusion

Academic performance, self-esteem, and coping mechanisms among high school students could be significantly impacted by social anxiety. Socially anxious students struggle to participate in class, make friends, and participate in extracurricular activities, which affects their grades and academic performance. Their negative self-talk and incorrect perception of their skills are factors in their poor self-esteem. Avoidance and isolation are coping mechanisms that offer momentary respite but eventually exacerbate the issue.

The study serves as a foundation and driving force for school administrators, curriculum experts, and guidance counselors to work on concretizing socio-academic programs for students to improve mental health conditions. School-based anxiety treatments must be considered and implemented to alleviate the potential adverse effects of social anxiety on students by developing social skills and exposing students to situations hindering them from achieving success in future endeavors.

In light of these findings, future researchers are recommended to prioritize clinically-diagnosed students for more comprehensive results. Furthermore, surveys should be conducted face-to-face for more efficient data gathering. Finally, a larger sample group is recommended, as well as widening the scope of the study such that participants are not limited to high school students and must consider those from higher levels of education.

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6.0 Conflict of Interests

The authors declare that they have no conflict of interest regarding the publication of this paper.

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Learners' Scaffolding Techniques: Their Advantages in Learning Mathematics

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Abstract. This study aimed to examine the extent of advantages of the scaffolding techniques and how they relate to the academic performance of learners in Mathematics. The respondents of the study were the 312 randomly selected Grade 7 learners from a public secondary school in the Division of Negros Oriental during the academic year 2023- 2024. The study employed the descriptive-correlational research design and utilized a validated questionnaire. Statistical methods employed in this study encompassed percentage, mean, weighted mean, and Multiple Regression Analysis. The findings revealed that learners have "very high" perceptions on the advantages of scaffolding techniques in learning Mathematics in terms of one-on-one peer tutorial, group study, teacher demonstration, video tutorial, and self-directed learning. Moreover, the overall academic performance rating of the learners in Mathematics is at the "satisfactory" level. Furthermore, the learners' perceived effectiveness of the following scaffolding techniques significantly predicts their academic performance in Mathematics: one-on-one peer tutorial, group study, teacher demonstration, and video tutorial. By embracing and enhancing scaffolding techniques, educators can not only elevate the learning experiences of students in Mathematics but also potentially extend these positive outcomes to other academic disciplines.

Keywords: Group study, Peer tutorial, Scaffolding techniques, Video tutorial.

1.0 Introduction

The educational system of a country has a significant impact on its development. Learning is a labor-intensive process in which learners actively construct their meaning based on prior experiences (Francis et al., 2023). At all academic levels, Mathematics is a topic that calls for logical thought, organization, and demonstration. Using the motivating impact of learning through the different scaffolding techniques, promoting global consciousness and global competences of young learners, is a great strategy to integrate a global citizenship perspective in secondary education. The development of teachers has become an essential component of guaranteeing quality education and achieving Sustainable Development Goal 4 (Park et al., 2023).

Cabral (2023), on the other hand, stipulates that the educational system must adapt to the rapid changes and complexities of society. Recognizing the need for curriculum revisions to minimize future learning losses, the Department of Education (DepEd) released the MATATAG K to 10 Curriculum, a redesigned curriculum for Kindergarten through Grade 10. Philippine Vice President and DepEd Secretary, Sara Duterte-Carpio, presented priority points for the intervention of DepEd in support of its MATATAG Agenda. Areas mentioned were curriculum and teaching, literacy and numeracy enhancement, inclusive education programs, and instructional methods. Meanwhile, Cao (2024) asserted that, as an important subject in the fundamental education stage, mathematics is crucial in developing collaborative consciousness and problem-solving abilities of the students. Teachers can then integrate the use of scaffolding techniques to remedy the learning gap between the learners. As

Thompson (2023) stipulated, learners will have a better understanding of how the techniques affected their ability to progress through solving challenging issues.

Scaffolding techniques are designed to support the learning of the students (Chen, 2023). A teacher/parent, peer, a computer-based or paper-based tool, or the learners themselves can support their learning. After the pandemic, the community emphasized the role of teachers and enhanced internet access for interaction (Park, Liu, & Li, 2023). Teachers and learners integrate and innovate differentiated instructions and techniques to spot learning gaps that may have resulted from learning loss. Although there have been several types of research on scaffolding, there is a present shortage of literature concentrating on the different scaffolding techniques that can improve student performance in mathematics. Other studies usually explored the students' attitude towards peer tutoring and their academic achievement, but not a lot specifically focused on the scaffolding techniques through video tutorials and self-directed learning.

With the above premise, the researchers sought to identify the scaffolding techniques that aid learners achieve academic success in mathematics. Thus, this study attempts to provide a more thorough knowledge of the delicate connection between the different scaffolding techniques and academic performance of the students by taking into account various techniques, such as one-on-one peer tutorial, group study, teacher demonstration, video tutorial, and self-directed learning.

2.0 Methodology

2.1 Research Design

A descriptive-correlational survey was used for this research. It is descriptive in the sense that it described the nature of the scenario on the scaffolding strategies and their influence on the academic achievement of the students. Additionally, the fact that this study ascertained the connection between the extent of using scaffolding strategies and the students' performance in school made it correlational.

2.2 Research Participants

The respondents of the study were the three hundred twelve (312) randomly selected grade 7 students from public secondary schools of Sta. Catalina District, Division of Negros Oriental. These students are enrolled for the school year 2023–2024. They were chosen using a systematic sampling design in which every second student in the list became part of the study.

2.3 Research Instrument

The study utilized a custom-made questionnaire created by the researchers, combining modified standardized questionnaires and insights from related studies and literature. The entire questionnaire underwent content validation and cross-checking by three Mathematics experts to ensure alignment with the specific problems of the study. A dry run was conducted to check item reliability using Cronbach's alpha coefficient test with the following results: 0.776 for one-on-one tutorial; 0.806 for group study; 0.701 for teacher demonstration; 0.863 for video tutorial; and 0.860 for self-directed learning.

2.4 Data Gathering Procedure

A formal request letter seeking permission to conduct the study was forwarded to the Schools Division Superintendent of Negros Oriental and the District Supervisor (PSDS), with endorsement from the Dean of the Graduate School at Foundation University. Following that, the signed and approved request was forwarded to the principal of the school, the respective advisers, and the subject teachers of the grade seven students of the targeted school. During the actual data gathering, the researchers ensured that the disclosure statement was attached directly to the questionnaires right before the respondents began answering them. This was done to ensure the confidentiality of the data and to keep the respondents aware of their roles before the conduct of the study. The disclosure statement also served as proof of their consent to participate in the study. Before the conduct of the experiment and the distribution of the test questionnaires, the researchers explained to the students the significance of the research as well as the objective of the study during distribution. Students were also advised that the information they provided in response to the questions of the study would be kept confidential and kept in a safe place. After the students responded to the questions, the questionnaires were collected. Afterwards, the results were tallied, analyzed and interpreted.

2.5 Ethical Considerations

All relevant ethical considerations were observed by the researchers throughout the course of the study. Confidentiality was maintained to protect the data acquired from the respondents, ensuring their privacy and dignity. The researchers also made sure to minimize potential risks for the respondents. Adherence to ethical norms set by Foundation University's Ethics Committee was a priority and their ethical approval was provided.

3.0 Results and Discussion

3.1 Extent of Students' Perception on the Advantages of One-on-One Peer Tutorial

The extent of students' perception on the advantages of one-on-one peer tutorial is presented in Table 1. As depicted by the data, the overall extent of students' perception of the advantages of one-on-one peer tutorial is "very high," as reflected in the composite mean of 4.37.

Table 1. Extent of students' perception on the advantages of one-on-one peer tutorial (n = 312)

Through the one-on-one peer tutorial, I experience the following advantages:	$w\bar{x}$	VD	EoP
1. I feel a sense of joy and satisfaction whenever my peers assist me with our lessons.	4.57	SA	VH
2. I listen to my peer tutor when they share ideas and experiences.	4.57	SA	VH
3. I have managed to form good friendships with my peer tutors.	4.56	SA	VH
4. I appreciate the teaching strategies employed by my peer tutor, which contribute to my learning.	4.54	SA	VH
5. I ask my peer tutor questions and clarifications on various concepts.	4.49	SA	VH
6. I evaluate my current knowledge and realize my weaknesses in mathematics.	4.40	SA	VH
7. I have improved my understanding and mastery of the subject matter.	4.22	SA	VH
8. I have gained valuable knowledge from my peer tutor, which has positively impacted my studies.	4.21	SA	VH
9. I find peer tutoring more reliable and accessible compared to self-studying and traditional teaching.	4.15	A	H
10. I can exchange ideas which deepen my understanding of the subject matter.	3.98	A	H
Composite	4.37	SA	VH

Specifically, the students "very highly" perceive the advantages of one-on-one peer tutorials in learning mathematics because they feel a sense of joy and satisfaction whenever their peers assist them with their lessons. They also listen to their peer tutor when sharing ideas and experiences. These statements both rank first among other indicators ($w\bar{x} = 4.57$), which implies that the students feel satisfied and happy when their peer helps them with their lessons. This finding is likewise evident in the study of Lai and Hwang (2022), where they found that one-on-one tutoring can foster positive social and emotional benefits, including improved self-confidence, reduced anxiety, and development of communication and collaboration skills.

Furthermore, the students "very highly" perceive the advantages of one-on-one peer tutorial because they have managed to form good friendships with their peer tutors ($w\bar{x} = 4.56$) and appreciate the teaching strategies employed by their peer tutor, which contribute to their learning ($w\bar{x} = 4.54$). They also ask their peer tutor questions and clarifications on various concepts ($w\bar{x} = 4.49$); evaluate their current knowledge and realize their weaknesses in mathematics ($w\bar{x} = 4.40$); have improved their understanding and mastery of the subject matter ($w\bar{x} = 4.22$); and have gained valuable knowledge from their peer tutor, which has positively impacted their studies ($w\bar{x} = 4.21$). These data connote that the students receive a dynamic and interesting learning experience through one-on-one peer tutorial, which improves their academic performance, self-concept, attitude, social skills, and behavioral outcomes.

These findings are all indicated in a growing body of studies (Barahona, Padrón, & Waxman, 2023). One-on-One tutoring also promotes self-directed learning skills by encouraging students to ask questions, explain their understanding, and take ownership of their learning process (De Backer et al., 2020). It fosters student engagement by fostering a more personalized learning experience (Arco-Tirado et al., 2020) and addressing individual learning styles and needs (Thurston et al., 2020).

Other factors include the students finding one-on-one peer tutoring more reliable and accessible compared to self-studying and traditional teaching ($w\bar{x} = 4.15$) and students being able to exchange ideas, which deepen their understanding of the subject matter ($w\bar{x} = 3.98$). These enumerated factors are "highly" perceived by the grade 7 students as the advantages of one-on-one peer tutorial. The data suggest that peer tutoring can be employed as an alternate relevant and successful learning strategy during the learning process (Anditiasari et al. 2023).

One-on-one peer tutorial serves as a significant scaffolding technique for learners, playing a crucial role in learning mathematics. This educational intervention involves students of similar ages or academic levels collaborating to enhance their comprehension of a particular subject. It has a positive impact on academic achievement across several areas, including mathematics, biology (Khan et al., 2021), and financial accounting. Moreover, it enables learners to articulate their ideas, fostering the development of essential skills such as cooperation, self-control, and self-worth (Arthur et al., 2022). Furthermore, one-on-one peer tutoring has been a well-established educational practice for decades and recent research continues to explore its effectiveness and benefits in diverse educational contexts.

3.2 Extent of Students' Perception on the Advantages of Group Study

The extent of students' perception of the advantages of group study is presented in Table 2. The data show that the overall extent of students' perception of the advantages of group study is "very high," as reflected in the composite mean of 4.32.

Table 2. Extent of students' perception on the advantages of group study (n = 312)

Through the group study, I experience the following advantages:	$w\bar{x}$	VD	EoP
1. I enjoy working with other students on assignments and projects.	4.57	SA	VH
2. I am more responsible in accomplishing my tasks when I am with my groupmates.	4.47	SA	VH
3. I enjoy learning when I am with my classmates/groupmates.	4.43	SA	VH
4. Tasks become easier to accomplish when working with my classmates or groupmates.	4.43	SA	VH
5. I am more confident in expressing my ideas when working with groups.	4.30	SA	VH
6. I look forward to daily interactions with my classmates/groupmates.	4.30	SA	VH
7. I am comfortable learning when I'm alongside my classmates.	4.24	SA	VH
8. I feel confident when sharing my insights with my groupmates.	4.21	SA	VH
9. I get high scores in the test exams when studying with classmates/groupmates.	4.13	A	H
10. I easily comprehend ideas or concepts when they are explained by my classmates or groupmates.	4.13	A	H
Composite	4.32	SA	VH

It is also reflected in the table that the students "very highly" perceive the advantages of group study because they enjoy working with other students on assignments and projects, which rank first among other indicators ($w\bar{x} = 4.57$). This finding indicates that group study can help students enjoy working and have a better knowledge of the concepts, increase their critical thinking abilities, and solve problems more effectively. A similar finding was also manifested in the study of Ahn (2020), where collaborative learning environments fostered by group study can enhance motivation and engagement.

The data further reveal that: a) the students "very highly" perceive the advantages of group study because they are more responsible in accomplishing their tasks when they are with their groupmates ($w\bar{x} = 4.47$); b) they enjoy learning when they are with their classmates/groupmates and tasks become easier to accomplish when working with their classmates or groupmates which both indicator ($w\bar{x} = 4.43$); and c) they are more confident in expressing their ideas when working with groups and they look forward to daily interactions with their classmates/groupmates which both indicator ($w\bar{x} = 4.30$). In addition, the students are comfortable learning when they are alongside with their classmates ($w\bar{x} = 4.24$); and feel confident when sharing their insights with their groupmates ($w\bar{x} = 4.21$). These results suggest that working in a group encourages effective communication, teamwork, and resolution of conflicts and allows students to share various perspectives and expertise, resulting in a deeper understanding of the subject matter. These findings affirm the statement of Zohrevandi et al. (2024) that exchanging knowledge and information helps learners become more aware of their learning needs. Likewise, Yang et al. (2024) posited that learning with others in a group allows students to become aware of their own strengths and weaknesses in sharing knowledge and learning, and then take action to manage their efforts.

Other factors "highly" perceived by the students include getting high scores in the test exams when studying with classmates/groupmates ($w\bar{x} = 4.13$) and easily comprehending ideas or concepts when they are explained by their classmates or groupmate ($w\bar{x} = 4.13$). This finding means that collaborative learning help students to comprehend ideas and concepts easily, resulting in getting high scores in their test examinations. Similarly, the study of Cheng et al. (2021) and He and Zhu (2020) found that participating in group conversations and activities can help students get a better understanding, retain more knowledge, and convey ideas to others. Additionally, Byiringiro (2024)

found that students work in cooperative groups, learn how to provide and receive information, gain fresh insights and views, and express themselves in a socially acceptable manner.

In general, group study serves as a valuable tool for students to enhance academic achievement, develop collaborative skills, and deepen their understanding of course material. It is labeled as one of the significant scaffolding techniques of the students, playing an important role in learning mathematics. Beyond academic achievement, group studies help strengthen communication and collaborative skills, promote critical thinking and problem-solving (Liu et al., 2020), improves motivation and engagement (Shen et al., 2020), and gives social support while lowering anxiety.

3.3 Extent of Students' Perception on the Advantages of Teacher Demonstration

The extent of students' perception of the advantages of teacher demonstration is presented in Table 3. Based on the data, the overall extent of students' perception is "very high," as reflected in the composite mean of 4.52.

Table 3. Extent of students' perception on the advantages of teacher demonstration (n = 312)

Through the teacher demonstration, I experience the following advantages:	$w\bar{x}$	VD	EoP
1. I feel excited to learn when I see and observe our teacher demonstrating exercises first.	4.70	SA	VH
2. I find it easier to understand concepts when my teacher provides examples in his/her discussion.	4.67	SA	VH
3. I enjoy watching our teacher demonstrate the processes involved in our lesson.	4.61	SA	VH
4. I love learning when the teacher allows us to explore new ideas within the given time.	4.58	SA	VH
5. I feel the eagerness to learn when the teacher involves us in the class activities.	4.56	SA	VH
6. I grasp the concepts well when my teacher relates them to real-life examples.	4.46	SA	VH
7. I can develop my skills effectively when my teacher adds hands-on activities in the class.	4.46	SA	VH
8. I feel motivated when the teacher incorporates varied instructional materials into lessons.	4.41	SA	VH
9. I find it engaging when the teacher uses different activities in our class.	4.38	SA	VH
10. I gain confidence when my teacher encourages my participation during discussions.	4.34	SA	VH
Composite	4.52	SA	VH

The data further show that the students "very highly" perceive the advantages of teacher demonstration because students feel excited to learn when they see and observe their teacher demonstrating exercises first ($w\bar{x} = 4.70$), which ranks number 1 among other indicators. This signifies that teacher demonstrations can engage students and encourage active engagement in the learning process and positively impact student learning outcomes. Correspondingly, Boyle et al. (2023) maintained that observing demonstrations encourages students to witness effective problem-solving ways, which improves their ability to apply taught tactics independently. Also, Klassen et al. (2020) highlighted the potential for demonstrations to spark curiosity and increase active participation of the students.

Furthermore, the students "very highly" perceive the advantages of teacher demonstration in learning mathematics because they find it easier to understand concepts when their teacher provides examples in their discussion ($w\bar{x} = 4.67$). They also enjoy watching their teacher demonstrate the processes involved in the lesson ($w\bar{x} = 4.61$); they love learning when the teacher allows them to explore new ideals within the given time ($w\bar{x} = 4.58$); they feel the eagerness to learn when the teacher involves them in the class activities ($w\bar{x} = 4.56$). In addition, students grasp the concepts well when their teacher relates them to real-life examples and they can develop their skills effectively when their teacher adds hands-on activities in the class, which both have a mean rating of 4.46. Moreover, students feel motivated when the teacher incorporates varied instructional materials into lessons, find it engaging when the teacher uses different activities in the class, and gain confidence when the teacher encourages their participation during discussions, garnering the following weighted mean values of 4.41, 4.38, and 4.34, respectively, all denoting a "very high" extent of perception. Also, teacher demonstrations, varied instructional materials, hands-on activities, and student involvement contribute to positive outcomes, including increased engagement, improved understanding, positive attitudes, motivation, and effective skill development among students. Similarly, Alghamdy (2024) affirmed that to assist students in achieving complete development, teachers must provide appropriate learning opportunities and assistance. Thus, teacher demonstrations and discussions are an effective tool to engage students in the learning process (Wang, 2024) and effective demonstrations should be personalized to the student's specific learning style, prior knowledge, and degree of understanding (Lee & Kim, 2022).

Teacher demonstration serves as one of the learners' significant scaffolding techniques, playing an important role in learning mathematics. It has been a cornerstone of effective teaching across various disciplines and educational levels. Teacher demonstrations facilitate student learning by increasing comprehension, lowering cognitive load (Dowdy & Dean, 2021) and enhancing engagement (Klassen et al., 2020). However, it is critical to tailor demonstrations to individual needs (Lee & Kim, 2022), maintain clarity and conciseness (Cho & Cho, 2021), and include interactive aspects. Furthermore, stressing student agency (Chin & Lin, 2020) and implementing alternate tactics such as different scaffolding techniques (Van de Walle et al., 2021) might improve the effectiveness of teacher demonstrations.

3.4 Extent of Students' Perception on the Advantages of Video Tutorial

The overall extent of students' perception of the advantages of video tutorials is "very high" as reflected in the composite mean of 4.35.

Table 4. Extent of students' perception on the advantages of video tutorial (n = 312)

Through the video tutorial, I experience the following advantages:	$w\bar{x}$	VD	EoP
1. Video tutorials enable me to learn and understand effectively since I can view them at my own pace, rewind, and review portions I did not understand the first time.	4.50	SA	VH
2. I find video tutorials enjoyable and effective in increasing my interest in learning.	4.46	SA	VH
3. I become motivated to learn when watching video tutorials.	4.43	SA	VH
4. I consider video tutorials as valuable sources of information.	4.42	SA	VH
5. Video tutorials have helped me improve my performance in mathematics.	4.42	SA	VH
6. I am satisfied with the learning I acquired from video tutorials.	4.30	SA	VH
7. I spend more time studying while watching video tutorials to acquire mathematical skills.	4.28	SA	VH
8. I conveniently access information anywhere and at any time.	4.27	SA	VH
9. My mathematical skills are enhanced and improved with the use of video tutorials.	4.23	SA	VH
10. I easily comprehend the material and find explanations for my questions after watching video tutorials.	4.19	A	H
Composite	4.35	SA	VH

Based on the data presented, the students "very highly" perceive the advantages of video tutorials because these enable them to learn and understand the lessons effectively since they can view the tutorial at their own pace, rewind, and review portions they did not understand the first time ($w\bar{x} = 4.50$). This statement ranks first among other indicators, signifying that learners can access video tutorials from any location at any time and that video tutorials provide a simple and accessible learning option, allowing students to learn at their own pace and revisit certain areas as needed. In a way, video tutorials promote inclusiveness and democratize access to knowledge. Similarly, Attard and Holmes (2022) claimed that outside of the scheduled sessions at school, alternative teaching techniques are made available.

Furthermore, the students "very highly" perceive the advantages of video tutorials in learning mathematics because they find video tutorials enjoyable and effective in increasing their interest in learning ($w\bar{x} = 4.46$) and they become motivated to learn when watching video tutorials ($w\bar{x} = 4.43$). Also, the students consider video tutorials as valuable sources of information that help them improve their performance in mathematics ($w\bar{x} = 4.42$). The data further reveal that students are satisfied with the learning they acquire from video tutorials ($w\bar{x} = 4.30$); spend more time studying while watching video tutorials ($w\bar{x} = 4.28$); conveniently access information anywhere and at any time ($w\bar{x} = 4.27$), and the mathematical skills of the students are enhanced and improved with the use of video tutorials ($w\bar{x} = 4.23$). These findings imply that video tutorials have emerged as a popular learning resource in a variety of sectors due to their accessibility, entertaining style, and effectiveness in transmitting information.

Video tutorials are seen as a valuable content-delivery tool that may be used in a variety of learning modes. Thus, the process and results of learning can be enhanced by the incorporation of instructional videos (Prastiti et al., 2023), which is an excellent supplemental instructional tool that can help improve learning (Delos Santos et al., 2022). In addition, the students "highly" perceive the advantages of video tutorials in learning mathematics because they easily comprehend the material and find explanations for their questions after watching video tutorials ($w\bar{x} = 4.19$). This shows that video tutorials enable learners to discover, study, practice, and evaluate their

progress (Basitere et al., 2023) and encourage them to think and understand arithmetic more effectively, quickly, and deeply (Sudiarta & Widana, 2019). This also affirms the statement of Delos Santos et al. (2022) that video tutorials help students enhance their capacity to understand.

Overall, video tutorials have grown in popularity and effectiveness, providing a combination of visual and auditory information to accommodate a wide range of learning styles. It has become an increasingly popular learning tool in a variety of educational and professional settings, serving as one of the significant learners' scaffolding techniques in learning mathematics.

3.5 Extent of Students' Perception on the Advantages of Self-directed Learning

Table 5 presents the extent of students' perception of the advantages of self-directed learning. As depicted on the table, the overall extent of students' perception is "very high," as signified by the composite mean of 4.27.

Table 5. Extent of students' perception on the advantages of self – directed learning (n = 312)

Through self-directed learning, I experience the following advantages:	$w\bar{x}$	VD	EoP
1. I am able to follow my own learning plan.	4.42	SA	VH
2. I have the opportunity to evaluate my progress as the lesson progresses.	4.37	SA	VH
3. I can organize and improve my own learning.	4.34	SA	VH
4. I make choices depending on my strengths and weaknesses.	4.32	SA	VH
5. I develop a sense of responsibility and feel in control with my own learning.	4.29	SA	VH
6. I can choose my own learning styles and strategies to achieve learning goals.	4.29	SA	VH
7. I express my views and activities that address my needs.	4.21	SA	VH
8. I enjoy learning and work well at my own pace in various activities.	4.19	A	H
9. I have developed problem-solving skills by dealing with the different areas of difficulty on my own.	4.18	A	H
10. I learn better and more effectively through setting my own learning priorities.	4.12	A	H
Composite	4.27	SA	VH

The data reflect that the students "very highly" perceive the advantages of self-directed learning because they are able to follow their own learning plan ($w\bar{x} = 4.42$), ranking number 1 among other indicators. In addition, the data reveal that the students can organize and improve their own learning ($w\bar{x} = 4.34$), which implies that self-directed learning provides students with a sense of autonomy and the ability to personalize their educational experiences. This finding is parallel with the result obtained by Abidah et al. (cited in Harini et al., 2023) that SDL involves individuals taking control of their own learning process by determining and managing their own study materials, schedule, learning environment, and utilizing various educational resources.

Furthermore, the students "very highly" perceive the advantages of self – directed learning because they have the opportunity to evaluate their progress as the lesson progresses ($w\bar{x} = 4.37$). They can make choices depending on their strengths and weaknesses ($w\bar{x} = 4.32$), and express their views and activities that address their needs ($w\bar{x} = 4.21$). Also, students develop a sense of responsibility and feel in control with their own learning; and can choose their own learning styles and strategies to achieve learning goals with both indicators having a weighted mean of 4.29. These results indicate that in self-directed learning, students can evaluate their learning progress, their strengths and weaknesses, and they can express their perspective to address their learning needs. A similar finding was also manifested in the study of Yang et al. (2023) where they found out that education must expose young people to a variety of learning situations, as well as real-world responsibility (Putra et al., 2023).

Moreover, the students "highly" perceive the advantages of self-directed learning because they enjoy learning and work well at their own pace in various activities ($w\bar{x} = 4.19$). They have developed problem-solving skills by dealing with the different areas of difficulty on their own ($w\bar{x} = 4.18$), and learn better and more effectively through setting their own learning priorities ($w\bar{x} = 4.12$). Studies suggest that learners taking ownership of their learning experience are more engaged and motivated, leading to deeper understanding and knowledge retention (Boekaerts, 2020).

Self-directed learning (SDL) is one of the core common values of students (Kieu et al., 2023) and serves as one of the significant scaffolding techniques, playing an important role in learning mathematics. Affirming the study of

Abidah et al. (cited in Harini et al., 2023), SDL involves individuals taking control of their own learning process by determining and managing their own study materials, schedule, learning environment, and utilizing various educational resources.

3.6 Academic Performance of the Students in Mathematics

Table 6 shows the academic performance of the students in Mathematics. The data reflect that only 14.10% of the students obtained an outstanding rating, and 31.73%, which is the highest percentage, have a very satisfactory rating. About 30% of them have satisfactory performance, while around 22% of the students have a fairly satisfactory rating. Approximately 2% of the students did not meet expectations. The students with fairly satisfactory ratings and those who did not meet expectations must be provided remedial activities and minimize gaps in their Mathematics learning in the upper grades. Based on the findings, it could be inferred that the majority of the students are at a very satisfactory level in their Mathematics performance.

Table 6. Academic performance of the students in mathematics (n = 312)

Rating	Frequency	Percent
90% - 100%	44	14.10
85% - 89%	99	31.73
80% - 84%	95	30.45
75% - 79%	69	22.12
< 75%	5	1.60
Total	312	100.00
Mean = 83.57 (Satisfactory)		
SD = 5.32		

The overall performance of the students is 83.57% with a verbal description of satisfactory. This implies that in general, students at this level have developed the essential knowledge, abilities, and core understandings of the principles of mathematics. Based on DepEd Order No. 8, s. of 2015, the Policy Guidelines on Classroom Assessment for the K to 12 Basic Education Program, classroom assessment is an essential component of curriculum implementation, allowing teachers to track and measure the progress of the students and change instruction accordingly. Thus, teachers and students are encouraged to collaborate to improve the academic performance of the students in mathematics using various scaffolding techniques.

3.7 Relationship between the Perceived Extent of Advantages of Scaffolding Techniques and Students' Academic Performance in Mathematics

Table 7 presents the data identifying the relationship between the extent of advantages of the five scaffolding techniques and the academic performance of the students. Using Multiple Linear Regression Analysis, the study found that the overall F-test is significant ($p = <.001$). This means that the sample data provide enough evidence to reject the null hypothesis for the entire population. In other words, some of the explanatory or independent variables (scaffolding techniques) are significant predictors of the students' academic performance in Mathematics.

Table 7. Regression Analysis result

Variables	Coefficients	SE	t Stat	p-value
Intercept	77.083	4.361	17.674	0.000
One-On-One Peer Tutorial	3.280	1.153	2.845	0.005
Group Study	-2.787	1.010	-2.760	0.006
Teacher Demonstration	4.134	1.192	3.470	0.001
Video Tutorial	-3.448	0.988	-3.489	0.001
Self-Directed Learning	0.121	0.832	0.146	0.884
R = 0.316				
R ² = 0.100				
adjusted r ² = 0.0845				
F-ratio = 6.775				
p-value = <.001 (significant)				
Level of significance = 0.05				

The regression output reveals that the one-on-one peer tutorial ($p = .005$), group study ($p = 0.006$), teacher demonstration ($p = 0.001$), and video tutorial ($p = 0.001$) are significant predictors of the students' Mathematics performance. The results also indicate that students who experienced the high advantage of one-on-one peer tutorial and teacher demonstration tend to have a better performance in mathematics (the coefficients have positive signs).

According to Moliner and Alegre (2020), one-on-one peer tutoring can improve students' Math self-concept, resulting in enhanced confidence and motivation for the subject. Its interactive nature can create a greater mental comprehension of mathematical principles (Nasir et al., 2023) and promote inclusive education ideals and cooperative learning (Alegre et al., 2019). Tutors explain concepts in simple words, encouraging tutees to actively learn as well as allowing students for more focused education while also catering to their individual needs.

In terms of students who experienced the high advantage of teacher demonstration, Klassen et al. (2020) highlighted the potential for demonstrations to spark curiosity and increase the active participation of the students. Teacher demonstrations can be an effective strategy for enhancing academic achievement (Asmawati & Malkan, 2020). Students can observe and imitate effective techniques, improving their own performance tasks. Thus, teacher demonstrations and discussions are an effective tool to engage students in the learning process (Wang, 2024).

In addition, the students who claimed to experience a lower advantage of group study and video tutorials are those who perform well academically in mathematics (the coefficients have negative signs). Students who are confident in their mathematics ability may feel less reliant on external assistance and prefer the control provided by individual studies. Xu and Luo (2021) theorized that high-achieving mathematics students generally choose independent learning techniques. These students may find that group conversations disrupt their concentration and prefer a more personalized approach to learning subjects. Also, Ambrose et al. (2020) discovered that students who have a thorough comprehension of a subject may be slowed down by others who require additional explanation. This can limit the breadth of exploration for high-achieving math students who absorb concepts quickly.

For those students who claim to experience a lower advantage of video tutorials, unlike teachers or tutors, video tutorials are unable to adapt to their individual needs or respond to particular inquiries in real-time. This can be difficult for students seeking a deeper understanding of a concept. According to the study of Winne and Yoon (2019), students who excel at mathematics may find video tutorials redundant if they already understand the concepts. They might find that video tutorials lack the depth and challenge they want (Vandebrouck et al., 2018). Meanwhile, the extent of the students' self-directed learning is not significantly related to the academic performance of students in Mathematics ($p = 0.884 > \alpha = 0.05$). This result negates the findings of Bashir and Amin (2020) and Cremersac et al. (2020) that students who exhibit self-directed learning behaviors tend to achieve higher scores. While a positive correlation has been established between SDL and the academic performance of students, there is still disagreement about the cause and direction of the relationship.

Mathematics educators should be aware that, while the ideas of students about mathematics can be influential, they are not sufficient to predict mathematical achievement, according to Alotaibi and Alanazi (2021). Equipping students with appropriate concepts of mathematics and self-directed learning skills is key to enhancing their performance in mathematics. Nevertheless, further research is needed to investigate these intricacies and identify the specific aspects of SDL that have the greatest impact on mathematics achievement.

4.0 Conclusion

This work advances the field by providing empirical evidence of the effectiveness of various scaffolding techniques in mathematics education and shedding light on the influence of students' demographic profiles on their perceptions. Collaboration, demonstration, offline and online video tutorials, and independent study can help learners become more involved and motivated in their mathematics studies. Students with lower family monthly income have limited access to educational resources outside of the classroom, so they rely more on teacher demonstrations as a valuable source of learning and value collaborative learning environments such as group studies, which allow them to gain access to a pool of resources, share knowledge, and navigate academic

challenges collectively within the classroom setting. Regardless of age, students hold a highly positive view of scaffolding techniques in the context of learning mathematics. There must be longitudinal studies to assess the long-term effects of scaffolding interventions on academic performance and learning trajectories.

5.0 Contributions of Authors

The authors confirm their equal contribution to every part of this research. All authors reviewed and approved the final version of this paper.

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7.0 Conflict of Interests

All authors declared that they have no conflicts of interest as far as this study is concerned.

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Campaign Spending and Its Effect during the 2013 and 2016 Elections in the Province of Cebu

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Abstract. Elections play a crucial role in legitimizing authority in democratic societies, yet the impact of campaign spending necessitates further investigation. This research delves into the influence of campaign expenditures on election outcomes in Cebu province between 2013 and 2016. Analysis of the Statement of Contributions and Expenditures (SOCE), this study explores how candidates make decisions regarding the allocation of campaign funds. Employing a mixed-method research approach, quantitative techniques like regression analysis are utilized to examine the relationship between spending and election results, while qualitative methods including scrutinizing SOCE documents and conducting interviews with candidates and COMELEC officials shed light on spending patterns and offer recommendations for policy enhancements. Cebu Provincial data elections spanning 2013 and 2016 reveal a strong positive correlation between election spending and votes. Travel expenses, compensating campaigners, and communication demonstrate statistically insignificant correlations with voting outcomes (p-values of 0.842, 0.771, and 0.811, respectively). Similarly, printed materials and the employment of watchers' expenditures display slightly positive correlations but lack statistical significance (p-values of 0.239 and 0.984). Moreover, campaign headquarters, meetings, and rallies show no significant correlations (p-values of 0.841 and 0.458). Advertising expenses emerged as the sole statistically significant factor in 2013 ($p = 0.000$), indicating a substantial 22.6 increase in votes for every 55,895 pesos spent. In the 2013 elections, only campaign paraphernalia and media spending correlated with votes; conversely, media spending was the sole positive correlation in 2016. Findings suggest that wealth played a significant role in the 2013 election, undermining the democratic principle of meritocracy where the most deserving candidate should prevail. Proposed policy changes include criminalizing campaign malpractices, ensuring candidate qualifications are rigorously vetted, and enhancing voter education programs spearheaded by academia. These measures are essential to mitigate the undue influence of money in politics and uphold the integrity of our electoral system.

Keywords: Campaign spending; Electoral outcome; Pattern of campaign spending; Philippine election.

1.0 Introduction

Electoral studies were vital to political science and provided the first layer to understanding the dynamics of democracies (Rokkan, 2009). In the Philippines, where elections were the heart of democracy, much literature emphasized voter behaviour and candidate strategies (Holmes, 2016). Nevertheless, the effect of campaign spending on electoral outcomes needs to be studied more. The role of campaign spending elicited attention across the globe as analysts and stakeholders warned of potential unfair democratic influence. The argument was based on the potential for campaign spending to bias the electoral outcome while creating an unequal playing ground for contenders. Concerns had been raised over the potential for spending to favour wealthier candidates, granting them a better chance of winning while diminishing the candidacy of non-money owners Sobari (2017).

Additionally, using money in politics has raised ethical concerns over the policy implications of undermining the voices of the seemingly marginalized population. For these reasons, understanding the relationship between

campaign spending and electoral outcomes was vital in promoting fairness and inclusivity. Understanding the dynamics of elections had always been pleasant for a political science student since it revealed the most critical aspect of democracy. Citizens needed to understand how spending affected outcomes so that they were well-informed and not influenced to vote outside their interests. Understanding such dynamics would neutralize the advantage acquired by wealthy candidates. Such a study promoted fair and structured election processes in which qualified candidates did not need to be rich to offer quality leadership Besley (2005).

2.0 Methodology

2.1 Research Design

The study used a mixed methods approach, combining quantitative and qualitative techniques. Quantitatively, it employed a descriptive-correlational research design, analyzing the correlation between campaign spending and electoral outcomes. Statistical analyses, including correlation and regression, were conducted using SPSS to determine the relationship between campaign expenditures and vote counts. Qualitatively, interviews were conducted to gain insights into participants' views on the impact of campaign spending. By integrating quantitative analysis with qualitative interviews, the study aimed to offer a comprehensive understanding of the relationship between campaign spending and electoral outcomes.

2.2 Research Participants

The study's respondents were a representative sample of the COMELEC's officials, including the electoral candidates who won or lost the election for the Governor, Vice Governor, or District Representative positions in the province of Cebu. This offered a qualitative application of the study since their insights about the effects of campaign spending on electoral results and policy recommendations were also analyzed.

2.3 Research Instrument

This study employed predetermined interview questions.

2.4 Data Gathering Procedure

This study used Statement of Contributions and Expenditures (SOCE) before the Commission on Elections and interview responses from participants.

2.5 Ethical Considerations

This research study adhered to established ethical guidelines. The response involved obtaining informed consent from all participants, ensuring the confidentiality of data, and obtaining approval from the institutional review board (IRB) of the University of San Carlos, before commencement.

3.0 Results and Discussion

3.1 Expenditures and Total Votes

Gubernatorial Elections

Table 1. Distribution of expenditures and votes for gubernatorial elections

2013 Election	Expenditure	Total Percentage of Expenses	Votes	Total Percentage of Votes
1. Davide, Hilario III	6,080,839	0.70	654,054	0.56
2. Garcia, Pablo	1,801,204	0.21	490,148	0.42
3. Cortez, Roliveth	845,000	0.10	25,735	0.02
4. Bulala, Hermilito	916	0.00	8,104	0.01
2016 Election				
1. Davide, Hilario III	4,667,053	0.56	616,381	0.48
2. Garcia, Winston	3,712,031	0.44	593,725	0.46
3. Cortez, Roliveth	0	0.00	46,703	0.04
4. Estinizo, Desiderio	No data	0.00	13,352	0.01
5. Patalinghug, Leandro	10,000	0.00	10,997	0.01
6. Magnanao, Nonito	0	0.00	8,518	0.01

In the 2013 election, Table 1 shows the expenditures and votes obtained by Gubernatorial candidates. Hilario Davide emerged as the winner, spending 6,080,836 pesos, which represented 69.67% of total expenses, and securing 654,054 votes, accounting for 55.52% of the total. His closest competitor, Pablo Garcia, spent 1,801,205

pesos (20.64% of total expenses) and received 490,148 votes (41.61% of the total). Roliveth Cortez and Hermilito Bulala ranked third and fourth, with Cortez spending 845,000 pesos (9.68% of total expenses) and Bulala spending 916 pesos (0.01% of total expenses). Davide notably funded 78% of his campaign expenses from contributions, with a significant portion dedicated to advertisements (58.55% of total expenses). In contrast, Garcia received 2,256,575 pesos in contributions, with a large portion also directed towards advertisements (71% of total expenses). During the 2016 election, Davide once again emerged victorious, surpassing his opponents by spending 4,667,053 pesos (55.63% of total expenses) and securing 616,381 votes (47.79% of the total). His closest rival, Winston Garcia, spent 3,712,031 pesos (44.25% of total expenses) and garnered 593,725 votes (46.04% of the total). Davide received contributions amounting to 65% of his campaign expenses, while Garcia financed his campaign entirely from personal funds. Both candidates allocated a significant portion of their budgets to advertisements (44% for Davide and 92% for Garcia). Similar to the 2013 election, Davide's success in 2016 was aided by the support of the Liberal Party and his incumbency as Governor. The substantial financial backing Davide received enabled his campaign efforts, unlike Garcia, who self-financed his campaign. Additionally, both candidates heavily invested in advertisements, which proved to be an effective method of voter communication.

Vice-Gubernatorial Elections

Table 2 shows that in the 2013 elections, Vice Gubernatorial candidates collectively spent Php6,373,591.72, with a total of 1,110,514 votes cast. Agnes Magpale, the eventual winner, spent only 42.93% of the total expenses, amounting to Php2,736,312. Magpale secured 49.39% of the total votes, significantly surpassing her opponent, Glen Anthony Soco, who spent 52.67% of the total candidate expenses. Despite Soco's higher spending, Magpale emerged victorious, aided by significant party support from the Liberal Party. In the 2016 elections, Magpale's spending accounted for 80.42% of the overall expenses, totaling Php1,044,054. She secured 57.99% of the total votes, outperforming her rivals by a large margin. Notably, Magpale's campaign was heavily supported by external contributors, with 99% of her expenses sourced from various contributors, sparing her from significant personal expenditure. Soco's high spending in 2013 did not translate into success, as his expenditure surpassed that of Magpale and Durano combined. Similarly, in 2016, the combined expenditures of the second and third runners-up were significantly lower than Magpale's, indicating the effectiveness of her campaign strategy and party affiliation. Magpale's victory can be attributed to her incumbency as Vice Governor and substantial backing from the Liberal Party. Her strategic allocation of resources, particularly towards advertisements, played a crucial role in her electoral success in both elections.

Table 2. Distribution of expenditures and votes for vice-gubernatorial elections

2013 Election	Expenditure	Total Percentage of Expenses	Votes	Total Percentage of Votes
1. Magpale, Agnes	2,736,312	0.4	548,455	0.5
2. Soco, Glen Anthony	3,357,279	0.5	381,120	0.3
3. Durano, Ramon IV	280,000	0.0	180,939	0.2
2016 Election				
1. Magpale, Agnes A.	1,044,053	0.8	721,276	0.6
2. Ruiz, Nerissa	244,249	0.2	482,315	0.4
3. Montenegro, Juanito M.	10,000	0.0	40,274	0.0

First District Representative Elections

Table 3. Distribution of expenditures and votes for first district representative elections

2013 Election	Expenditure	Total Percentage of Expenses	Votes	Total Percentage of Votes
1. Gullas, Gerald Anthony	503,801	100%	176,632	Gullas, Gerald Anthony
2016 Election				
1. Gullas, Gerald Anthony	704,698	62%	186,091	65%
2. Canoy, Antonio Llanto	413,609	36%	92,589	32%
3. Nunez, Michael Espina	21,514	2%	6,612	2%

Table 3 displays the breakdown of campaign expenses for Gerald Anthony Gullas, the unopposed candidate for first district representative in the 2013 elections. Gullas, who spent 503,801 pesos, received 176,632 votes due to a lack of competitors, guaranteeing his victory. He self-funded his campaign, distributing 53% of the budget to printed materials, 20% to travel, and 16% to hiring watchers.

During the 2016 elections, the total expenditure by first district representative candidates amounted to Php1,139,821.64. Gullas contributed 61.83% of this total, amounting to 704,698 pesos. He accumulated 186,091 votes, surpassing his rival Antonio Llanto Canoy by 291,089 pesos. Canoy funded his campaign independently, spending 413,609 pesos and securing 92,589 votes. Michael Espina Nunez, who came in third, only spent Php21,514 and gained 6,612 votes. Gullas sourced 23% of his campaign funds from various outlets, allocating 15% to compensating campaigners, 12% to meetings and rallies, and 7% to travel. Canoy, on the other hand, divided his budget with 40% going to printed materials, 22% to meetings, and 21% to travel. Both candidates emphasized traditional campaign methods over advertising. In contrast to 2013, Gullas encountered more competition in 2016 when he ran with the Nacionalista Party. He possibly capitalized on his family's political heritage, inherited from his grandfather Eduardo Gullas, a former first district representative. Gullas, outspending all opponents combined, outshone them by 30.76% in popularity, indicating a lack of equally strong challengers. Canoy funded his campaign independently, allocating a significant portion to printed materials, meetings, and travel.

Second District Representative Elections

Table 4. Distribution of expenditures and votes for second district representative elections

2013 Election	Expenditure	Total Percentage of Expenses	Votes	Total Percentage of Votes
1. Caminero, Wilfredo	808,652	44%	91,529	49%
2. Garcia, Pablo	600,000	32%	86,105	46%
3. Kintanar, Simeon	450,000	24%	10,137	5%
2016 Election				
1. Caminero, Wilfredo	217,458	41%	81,167	81%
2. Celes, Teresita	213,625	40%	11,893	12%
3. Kintanar, Cora-Lou	105,565	20%	7,453	7%

As shown in Table 4, the second successful campaign of Caminero took place in 2013 for the position of the second district representative. He spent 808,652 pesos 43.51% of the total expense and received 91,529 votes, which constituted 48.75%. The least number of votes was evident for Garci who spent 600,000 pesos 32.28% of the total and received 86,105 votes 45.86% of the total, which left Caminero behind only 5,424 votes 2.89%. The distribution of finances for their campaigns was: 48% for employment of the watchers, 21% for advertisements, and 18% for printed materials, with 13% and 9% left for other expenses, correspondingly for Caminero; and 30%, 30%, and 18% for travel, printed materials, and employment of watchers, mainly 13% and 9% for other expenses, correspondingly. Specifically, spending on printed materials and employment of watchers was the most remarkable dissimilarity. Although Garci identified as a Nationalist and was associated with politics through her family, the campaigner's choice of liberals and Caminero's successful implementation of resource mobilization determined the victory of the early candidate. In 2016, Caminero also won the elections spending 217,458 pesos 40.51% of the total and receiving 81,167 votes 80.75% of the total. Celes had spent 213,625 pesos 39.81% of the total and received 11,893 votes 11.83% of the total. The third candidate, Kintanar, spent 105,565 pesos 19.67% of the total, and received 7,453 votes 7.41% of the total. The expenditures were distributed differently: 60% and 40% were allocated to printed materials and travel expenses aspects, correspondingly. Celes spend money only on travel, salaries of campaigners and especially employment, which was paid 44%, 40%, and 9%. Therefore, Caminero's victory in 2016 was determined by incumbency, lack of experienced competencies, and available Liberal party colleagues. Hence, the political party did not play a significant role in the electoral process.

Third District Representative Elections

Table 5. Distribution of expenditures and votes for third district representative elections

2013 Election	Expenditure	Total Percentage of Expenses	Votes	Total Percentage of Votes
1. Garcia, Gwendolyn	375,338	21%	105,424	50%
2. Yapha, Geraldine	1,410,856	79%	103,440	50%
2016 Election				
1. Garcia, Gwendolyn	841,895	67%	140,097	62%
2. Sanchez, Grecilda	420,013	33%	83,023	37%
3. Osorio, Teodoro	0	0%	2,206	1%

As shown in Table 5, despite experiencing relatively lower expenditures than her contender, with 375,338 pesos accounting for 21.01% of total costs, Gwendolyn Garcia won the election with 105,424 votes, representing 50.47%

of total votes. Conversely, although spending 1,410,856 pesos, which constitutes 78.99% of total expenditure, Geraldine Yapha lost with 103,449 votes, which represents 49.53% of total votes. Yapha's expenditure was three times that of Garcia, but she lost by 1,984 votes, accounting for 0.94% of total votes. However, in the 2016 elections, Garcia led with 884,907 pesos, which constitutes 66.72% of total expenditure and won with 140,097 votes, which is 62.18%. Her competitor, Grecilda Sanchez, spent 523,013 pesos, which constitutes 33.28% and garnered 83,023 votes, which is 36.95%. Garcia lost by 57,074 votes, which is 25.33%. Worth noting is Garcia funded her campaign from her pocket, and she spent 87% and 10%, and 3% of her expenditure went to physical materials and advertisements, respectively. Garcia won the election using her political experience and family interests, while Yapha relation's defeat despite her spending outlays the role of wealth and political history. Party alignment underscored by Garcia served under the United Nationalist Alliance, and Sanchez served as the Liberal Party was a factor in the election. Generally, Garcia won the elections showing the societal nature of family, wealth, and politics in Cebu's politics.

Fourth District Representative Elections

Table 6. Distribution of expenditures and votes for Fourth District Representative elections

2013 Election		Expenditure	Total Percentage of Expenses	Votes	Total Percentage of Votes
1.	Salimbangon, Benhur	379,271	55%	124,552	63%
2.	Martinez, Celistino III	307,492	45%	73,811	37%
2016 Election					
1.	Salimbangon, Benhur	173,478	26%	135,437	61%
2.	Martinez, Celestino	491,846	74%	86,836	39%

Table 6 presents the campaign expenses of candidates running for the position of fourth district representative in the 2013 elections, totaling Php686,762.83. Incumbent congressman Benhur Salimbangon emerged victorious after spending Php379,271 and securing 124,552 votes, defeating Celestino Martinez III by 50,741 votes. Martinez, who spent Php307,492, allocated less funds compared to Salimbangon. Salimbangon independently financed his campaign, distributing 38% to hiring watchers, 37% to printed materials, and 18% to travel. In contrast, Martinez, not receiving external contributions, allocated 45% to printed materials, 22% to travel, and 14% to delivery charges. Salimbangon represented the National Unity Party, while Martinez was associated with the Liberal Party. During the 2016 elections, fourth district representative candidates collectively spent Php665,323.45. Salimbangon, with expenditures amounting to Php173,478, clinched victory over Martinez, who spent Php491,896. Salimbangon directed 73% of his funds to hire council members, 18% to printed materials, and 9% to travel. Similarly, Martinez, who also self-financed his campaign, allocated 60% to advertisements and 20% to printed materials. Salimbangon's success, despite his lower spending, was ascribed to his incumbency and affiliation with the National Unity Party, whereas Martinez's ties to the Liberal Party distinguished him from the other candidates.

3.2 Relationship Between Election Expenditures and Total Votes

2013 Election

Table 7. Correlation analysis result

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.879 ^a	.773	.765	79923.991

a. Predictors: (Constant), Total Expense

Table 7 determines the degree of correlation between campaign spending and total votes cast by the candidates in the 2013 Gubernatorial, Vice Gubernatorial, and District Representatives elections. The result shows a strong correlation between the total amount of expenditure (an independent variable) and the total votes cast (a dependent variable) for election year 2013. The value of "R" is 0.879, indicating a high positive correlation between the expenditures and votes cast. This means that there is a confidence level of 87.9% positive correlation. The result also shows that the values of the "R Square" and "Adjusted R Square" are considerably high. The value of the "Adjusted R Square" is 0.765 or 76.5% of the total votes cast vis-à-vis the total amount of expenditure.

Table 8 reports how well the regression equation fits the data. The results show that the value of "Sig." is 0.000, which is the perfect value to ascertain that the data happened not by chance. The regression model predicts the total votes cast significantly well. In other words, the data is 95% (level of significance used in the study), sure that

it did not happen by chance and that the expenses incurred in this election predict the total votes cast by each candidate.

Table 8. Regression analysis result

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	652527099527.681	1	652527099527.681	102.151	.000 ^b
Residual	191635331684.194	30	6387844389.473		
Total	844162431211.875	31			

a. Dependent Variable: Votes Cast
b. Predictors: (Constant), Total Expense

Table 9 provides the necessary information to predict the total votes cast from the total campaign expenditures. The value of "Sig." is 0.000, less than 0.05. This is considered the perfect value, suggesting that the data is 95% sure it did not happen by chance. The value of the "B" column under the "Unstandardized Coefficients" column is 0.119, which indicates an 11.9 increase in the number of votes for every 26,826 peso increase in expenditures. The regression equation can be presented as votes cast = 26,826 + .119 (expenses). In other words, for the Gubernatorial, Vice-Gubernatorial, and District representative elections, the number of votes garnered was increased by 11.9 when the candidates incurred more value/pesos in their campaign expenditures.

Table 9. Significance analysis result

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	26825.745	17094.437		1.569	.127	-8085.752	61737.243
Total Expense	.119	.012	.879	10.107	.000	.095	.143

a. Dependent Variable: Votes Cast

2016 Election

Table 10. Correlation analysis result

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.758 ^a	.574	.563	116833.059

a. Predictors: (Constant), Total Expense

Table 10 shows a strong correlation between the total amount of expenditure (independent variable) and the total votes cast (dependent variable) for election year 2016. The value of "R" is 0.758, indicating a 75.8% positive correlation between the expenditures and votes cast. The value of the "Adjusted R Square" is .563. This means the total expenditure explains 56.3% of the votes cast.

Table 11. Regression analysis result

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	699848616864.394	1	699848616864.394	51.271	.000 ^b
Residual	518698619189.381	38	13649963662.878		
Total	1218547236053.774	39			

a. Dependent Variable: Votes Cast
b. Predictors: (Constant), Total Expense

Table 11 shows that the value of "Sig." is 0.000 which is less than 0.005. This value indicates that the regression model statistically and significantly predicts the outcome variable (votes cast). In other words, the data is 95% sure it did not happen by chance. However, it presents the statistical prediction that the total expenses greatly affected the electoral outcome during the 2016 elections.

Table 12. Significance analysis result

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	45560.385	20654.459		2.206	.034	3747.619	87373.151
Total Expense	.146	.020	.758	7.160	.000	.104	.187

a. Dependent Variable: Votes Cast

The value of "Sig." in Table 12 is 0.000, which is considered a perfect value. It is also less than 0.005, indicating that this data is 95% sure it did not happen by chance. The value of the "B" column under the "Unstandardized Coefficients" column is 0.146, indicating a 14.6 increase in the number of votes for every 45,560 pesos increase in

expenditures. The regression equation can be presented as votes cast = 45560 + .146 (expenses). In other words, for the 2016 Gubernatorial, Vice-Gubernatorial, and District Representatives elections, the number of votes garnered can be increased by 14.6 if the candidates incur more value/pesos in their campaign expenditures.

The election results from 2013 and 2016 highlight the significant impact of campaign expenditures on electoral outcomes. Candidates who invested more in their campaigns tended to achieve victories, demonstrating the sway of financial resources. In 2013, there was a strong correlation of 76.5% between campaign spending and votes, with each additional Php26,826 linked to 11.9 more votes. However, by the 2016 elections, this correlation had decreased to a moderate 56.3%, with each increment of Php45,560 resulting in only 14.6 additional votes. Consequently, candidates in 2016 spent approximately Php3,052.1 per vote, a significant increase compared to the Php2,254.29 in 2013, signaling rising campaign costs. While effective, the demand for significant financial backing poses challenges for candidates. The financial emphasis in elections may jeopardize the caliber of elected officials, prioritizing resources over qualifications. The game theory of spending elucidates the competitive nature of campaign expenditures, underscoring how surpassing opponents in spending can sway voter favor. Scholarly research supports the notion that higher campaign spending correlates with increased vote shares, emphasizing the crucial role of financial resources in electoral triumph. Nevertheless, while campaign spending impacts election results, victory is not assured, with other factors also playing crucial roles, necessitating thorough analyses of electoral dynamics. Nonetheless, campaign spending remains a key factor in shaping election results, underscoring its enduring importance in the electoral sphere.

3.3 Relationship Between Subcategories of Spending and Total Votes

The objective of this part of the study is to reveal the correlation of the subcategories [(i.e., travel expenses, compensation of campaigners, communication expenses, printed materials, employment of watchers, campaign headquarters, political meetings & rallies, and advertisements (media, etc.)) of campaign expenditures to the votes cast for the positions of Governor, Vice Governor, and District Representatives.

2013 Elections

Table 13. Correlation analysis result

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.941 ^a	.886	.846	64816.880
a. Predictors: (Constant), Advertisements, Communication Expenses, Compensation of Campaigners, Employment of Watchers, Campaign Headquarters, Printed Materials, Travel Expenses, Meetings & Rallies				

Table 13 determines the degree of correlation between campaign spending and total votes cast by the candidates in the 2013 Gubernatorial, Vice Gubernatorial, and District Representatives elections. As seen in the table above, there is a robust correlation between the total amount of expenditure (independent variables) and the total votes cast (dependent variable) for election year 2013. The value of "R" is 0.941, indicating a 94.1% positive correlation between the overall expenditures and votes cast. The value of the "Adjusted R Square" is 0.886 or 88.6% of the total votes cast, which is explained by the total amount of expenditure. This means that in the election year of 2013, for the positions of Governor, Vice-Governor, and District Representatives in the province of Cebu, there was an 88.6% degree of correlation between the total campaign expenditures and total votes cast.

Table 14. Regression analysis result

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	747534189041.340	8	93441773630.168	22.242	.000 ^b
	Residual	96628242170.535	23	4201227920.458		
	Total	844162431211.875	31			
a. Dependent Variable: Votes Cast						
b. Predictors: (Constant), Advertisements, Meetings & Rallies, Communication Expenses, Travel Expenses, Employment of Watchers, Printed Materials, Campaign Headquarters, Compensation of Campaigners						

Table 14 reports how well the regression equation fits the data. The table shows that the regression model predicts significantly well and with a high degree of the dependent variable (votes cast). In the "Regression" row and the "Sig." column, the value of "Sig." is 0.000, which is considered the highest value. Such indicates that overall, the

regression model statistically and significantly predicts the outcome variable (votes cast). In other words, the data is 95% sure that it did not happen by chance and that the expenses incurred in this election predict the total votes cast by each candidate.

Table 15. Significance analysis result

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	28912.604	17791.476		1.625	.118	-7891.867	65717.076
Travel Expense	.174	.199	.097	.874	.391	-.238	.586
Compensation of Campaigners	-.010	.236	-.008	-.043	.966	-.498	.478
Communication Expenses	-1.430	.616	-.188	-2.321	.029	-2.704	-.156
Printed Materials	.313	.090	.380	3.483	.002	.127	.499
Employment of Watchers	-.050	.110	-.053	-.451	.656	-.277	.178
Campaign Headquarters	-.677	1.160	-.096	-.584	.565	-3.076	1.722
Meetings & Rallies	.071	.201	.032	.351	.729	-.346	.487
Advertisements	.146	.025	.690	5.748	.000	.094	.199

a. Dependent Variable: Votes Cast

Table 15 reveals the necessary information to predict the total votes cast from the total campaign expenditures. The "Sig." column can only determine the significance level. The examination of campaign expenses for the 2013 Gubernatorial, Vice-Gubernatorial, and District Representative elections provides valuable insights into the correlation between spending and election results. Notably, only two types of expenditures – Advertisements and Printed Materials – emerged as statistically significant predictors of the number of votes received. Specifically, the statistical significance (Sig.) values indicate the importance of each expenditure category. Travel Expenses, Compensation of Campaigners, Communication Expenses, Employment of Watchers, Campaign Headquarters, Meetings, and Rallies all displayed Sig. values above 0.05, implying that the data collected for these categories may have occurred by chance. In contrast, Advertisements and Printed Materials stood out with Sig. values below 0.05, signifying that these expenses had a substantial impact on voter behavior. Particularly, Advertisements exhibited the highest level of significance, suggesting that with every 28,913 pesos increase in advertising expenditures, there was a corresponding decrease of 14.6 votes. Moreover, the "Unstandardized Coefficients" offer insight into the influence of each expenditure category on votes obtained. Printed Materials, for example, showed a coefficient of 0.313, implying a 31.3 vote increase for every 28,913 pesos spent on these materials. Although some categories showed no statistical significance, they still hold importance in conveying campaign messages. Therefore, candidates must strategically distribute their resources to maximize their impact. By focusing on media advertisements and printed campaign materials, candidates can more effectively influence voter behavior compared to traditional methods like meetings and rallies. In conclusion, the efficient allocation of campaign funds is vital for candidates to optimize spending and improve their electoral chances. By prioritizing expenditures with the most significant impact on voter behavior, candidates can make informed decisions to enhance their campaign effectiveness and increase the likelihood of success in elections.

2016 Elections

Table 16. Correlation analysis result

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.797 ^a	.635	.541	119699.208
a. Predictors: (Constant), Advertisements, Communication Expenses, Compensation of Campaigners, Employment of Watchers, Campaign Headquarters, Printed Materials, Travel Expenses, Meetings & Rallies				

Table 16 shows a robust correlation between the total types of expenditure (independent variables) and the total votes cast (dependent variable) for the 2016 elections. The "R" represents the simple correlation with a value of 0.797, which indicates a 79.7% positive correlation between the expenditures and votes cast. Although it has a much lesser positive correlation than the 2013 election, it can still be considered statistically significant. The result also shows that there is a very high degree of correlation. However, compared to the 2013 election, which had a

value of 0.941, the "Adjusted R Square" in 2016 was only 0.541. In other words, the total expenditure can explain 54.1% of the total votes cast.

Table 17. Regression analysis result

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	774382325122.673	8	96797790640.334	6.756	.000 ^b
	Residual	444164910931.102	31	14327900352.616		
	Total	1218547236053.774	39			
a. Dependent Variable: Votes Cast						
b. Predictors: (Constant), Advertisements, Meetings & Rallies, Communication Expenses, Travel Expenses, Employment of Watchers, Printed Materials, Campaign Headquarters, Compensation of Campaigners						

As shown in the Table 17, the regression model predicts with a very high degree the dependent variable (votes cast) statistically and significantly well, just like in the 2013 elections. In making sense of the "Regression" row and the "Sig." column, the value of "Sig." is 0.00. Such a figure is considered the highest value and is less than 0.005, indicating that the regression model statistically and significantly predicts the outcome variable (votes cast). In other words, the data is 95% (with a 5% margin of error), sure that it did not happen by chance and that the expenses incurred in this election predict the votes cast by the candidates.

Table 18. Significance analysis result

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	55895.953	25354.662		2.205	.035	4184.779	107607.126
Travel Expenses	.061	.305	.050	.201	.842	-.561	.684
Compensation of Campaigners	-.136	.462	-.037	-.293	.771	-1.078	.807
Communication Expenses	-2.746	11.376	-.028	-.241	.811	-25.946	20.455
Printed Materials	.146	.121	.219	1.200	.239	-.102	.393
Employment of Watchers	.012	.591	.002	.021	.984	-1.193	1.217
Campaign Headquarters	.117	.579	.024	.203	.841	-1.063	1.298
Meetings & Rallies	-.738	.982	-.211	-.752	.458	-2.741	1.265
Advertisements	.226	.049	.834	4.583	.000	.125	.326

a. Dependent Variable: Votes Cast

As shown in Table 18, among the various spending categories examined, only Advertisements were found to be both statistically significant and reliable in predicting the number of votes. For categories like Travel Expenses, Compensation of Campaigners, and Communication Expenses, the "Sig." values exceeded 0.005, indicating random correlations. Additionally, the "Unstandardized Coefficients" for these categories did not show significant impacts on voter behavior. In contrast, Advertisements demonstrated a high level of significance with a "Sig." value of 0.000. The "Unstandardized Coefficients" revealed a positive influence on votes, with a 22.6 increase for every 55,895 pesos rise in expenses. This emphasizes the importance of investing in modern campaign methods that offer convenience to candidates, despite their higher costs.

The study also identified a shift in campaign tactics, with candidates increasingly favoring digital platforms like social media for publicity over traditional methods such as campaign materials and rallies, especially in challenging locations with low attendance rates. Comparing these findings to the 2013 elections, candidates from that cycle seemed to allocate their funds more effectively, as shown by the stronger correlation between expenditure subcategories and votes. This underscores the significance of strategic budgeting to maximize the effectiveness of campaign expenditures. In conclusion, the changing landscape of campaign spending emphasizes the necessity for candidates to adapt and invest in strategies that efficiently communicate information to voters. Leveraging resources like social media can offer a cost-effective alternative to traditional advertising methods, leading to a more efficient utilization of campaign funds.

3.4 Insights and Policy Recommendations

The Necessity and Effect of Campaign Spending

The researcher believed that campaign expenditure is essential for any electoral ambition. Candidates who run for any position without funds (personal or donations) will experience disadvantages in competing with candidates with financial resources. All respondents also believed that campaign spending is necessary in an election. The most common purpose of campaign spending is used for logistics, where candidates will have to spend money on vehicles for travel, bringing campaign paraphernalia and people to a destination where the campaigning may happen; it can also be used by the supporters or campaigners to roam around the constituencies to put up posters or give leaflets to the public. For campaigning, each candidate must roam around the city or province where they are campaigning so that the people will personally see and hear from them through their platforms and convince them why they should vote for the candidate. An election officer states that *"Politics in the Philippines is not cheap. Candidates who need more money to run a campaign will have difficulty roaming around campaigning. They cannot visit each place for their campaign, and going around takes weeks to finish, so it is not that easy."*

The researcher surmised that the main reason why candidates spend during elections is to benefit from publicity for themselves. Politicians wanted to reach out to the people so they could promote themselves to the voting populace. Publicity can be done in various ways and requires considerable money. Reaching out to the masses is also a challenging task and, all the more, not cheap. Thinking about the number of people a candidate must bring and the number of places that they should pay a visit already costs money for transportation and food. Sometimes, a candidate can only visit some places, so they also have to spend money on printing campaign materials like tarpaulins and leaflets to be posted in the major public areas for the voters to see. These campaign paraphernalia are essential tools that any candidate will use, as they are the easiest and most convenient way to promote themselves or advertise themselves to the public. The most common paraphernalia used by most candidates were posters posted to public places; some of them were made from used sacks, manila papers, or Carolina, where candidates would write their names and the position they are running; some used bond papers with their printed names or pictures on it and some candidates nowadays use tarpaulins, which are more expensive but much larger and much more durable than any conventional posters. For wealthy or well-funded candidates, the media is also used for efficient and effective advertising, either by radio or television. Some candidates used these methods as the fastest, most convenient, yet most expensive way of campaigning because paying for the advertisements on TV or radio is expensive. Election candidates also share the same opinion that money fuels the effectiveness of one's campaign as it is necessary for practical campaign operations. In his statement, one mentioned that, *"To be honest, if you do not spend money on your candidacy, naturally, you do not have extensive publicity, like preparation and procurement of tarpaulins. That is very important so the public will know you are a candidate."*

Respondents generally concurred that financial resources can provide candidates with an edge, heightening their chances of triumphing in elections. Yet, it's crucial to emphasize that money is not the sole deciding factor in electoral results. While substantial campaign expenditures can sway outcomes, they are not the sole variable in the equation. Numerous victorious candidates hail from well-established political lineages, utilizing their family background to strengthen their candidacy. This hereditary legacy often bestows upon them a perceived advantage, surpassing even more seasoned rivals. Nevertheless, financial resources alone do not guarantee electoral victory. Qualities like integrity, experience, and distinct attributes also play pivotal roles in winning over voters. Even though candidates who solely rely on their platforms may encounter obstacles due to limited exposure, campaign spending does not assure success. Candidates lacking significant financial support can still secure victories if they possess other appealing traits, such as political dynastic ties or robust party endorsement. In the end, the impact of money has its constraints, as underscored by an election officer, *"Campaign spending has effects; it does not necessarily prevail since there were also some candidates who spent more money but were unable to win the election, so it is not the only factor as there are other bases for you to win."*

Nevertheless, this research proved that spending on the campaign is still the most critical action every candidate should take because, regardless of whether a candidate has other factors, they still have to spend to make these other factors effective. Five out of five of the respondents agreed with the research that campaign spending has a positive effect on the outcome of the election. They also thought that campaign spending was one of the main factors in winning since their most common explanation is that candidates must travel. Since campaigning is always about letting the people know about their candidacy. Most of the time, candidates must travel to different

places, incredibly far-flung areas, to reach the electorates and convince them to be present in the polling precincts and vote for them. This implies that candidates must have the financial capacity to promote their candidacy. No matter how unfair it may be for those who do not have such an amount, the current system only allows those who can spend during the campaign, whether from personal money or through donations from relatives, friends, and supporters. The election is a race based on platforms, familiarity, or publicity, and candidates have no choice but to spend money for them to reach their voters. Voters will most likely ignore candidates with insufficient publicity since they are unknown.

Questions on SOCE's Reliability

Money is essential in running an election, but the unexpected worth of it adds more pressure to ordinary people. Even rich politicians are outspent by their opponents in many ways, and they find it difficult to know. The respondents repeatedly mentioned the issue of undeclared expenses during the election. They believed that candidates, specifically the rich ones, spent more than what was declared in their SOCE. Though there are specific penalties for not saying campaign expenditures in the SOCE, the respondents still believed that there are candidates who go beyond the limit. An election officer mentioned, *"That is very simple. You cannot get a real outcome because it is not true that the candidates will declare their expenses; it is because they will estimate their spending to comply with the law."* Another added *"It is public knowledge that even if the COMELEC regulates or limits campaign spending, candidates still go beyond the limits. Filing SOCE is not that honest since many expenses are hidden just to satisfy the limits of the requirement provided."*

The stated campaign expenses of candidates in their SOCE were deemed to represent their actual expenditures. However, there are apprehensions about candidates exceeding legal limits, leading to a scenario where only the affluent can truly vie for positions, swaying voters through financial supremacy. This exclusivity could obstruct aspiring leaders from public service due to financial restrictions. Survey participants were doubtful about the accuracy of SOCE data and mentioned potential underreporting to conform to legal boundaries and unreported expenses linked to illicit activities like vote-buying. While these concerns merit scrutiny, the ultimate responsibility lies with the government, especially COMELEC, to enforce rules and sanctions against deceitful candidates. Neglecting thorough examination of SOCE submissions implies toleration of potential overspending as inconsequential, diminishing the credibility of elections and democracy itself. The impact of finance on elections is a shared concern necessitating proactive steps from all stakeholders to uphold democratic principles.

4.0 Conclusion

In this regression analysis, the variable "Advertisements" shows a significant positive coefficient (Beta = 0.834, $p < 0.05$), indicating that an increase in spending on advertisements is associated with a significant increase in the number of votes cast. Therefore, we can accept the hypothesis that spending on advertisements positively affects the number of votes cast. However, for the other variables such as "Travel Expenses," "Compensation of Campaigners," "Communication Expenses," "Printed Materials," "Employment of Watchers," "Campaign Headquarters," and "Meetings & Rallies," their coefficients are not statistically significant ($p > 0.05$). This suggests that there is no significant relationship between spending on these campaign components and the number of votes cast. Therefore, we should reject the hypothesis that spending on these campaign components affects the number of votes cast. The hypothesis that money can affect the outcome of elections is supported by the findings of this research. However, this does not necessarily mean that the influence of money on elections is inherently negative. While it is true that excessive spending can lead to various problems and exploitations, such as corruption and the perpetuation of political dynasties, it is essential to recognize that the issue lies not with money itself but with how it is used in the electoral process. The potential for candidates to engage in corrupt practices in exchange for financial support is a legitimate concern. However, this does not mean that all candidates who spend large amounts of money engage in corruption. Effective regulation and oversight mechanisms can mitigate this risk, ensuring transparency and accountability in campaign finance. While it is true that financial resources can provide an advantage in elections, it is not an insurmountable barrier for qualified professionals without significant financial backing. Public financing mechanisms and grassroots organizing efforts can level the playing field, allowing candidates from diverse socioeconomic backgrounds to compete effectively. Money's influence on elections may undermine the democratic process, but it is not the sole determinant of electoral outcomes. Factors such as candidate qualifications, policy platforms, and grassroots mobilization also play significant roles in shaping election results. Moreover, the responsibility to uphold democratic values and promote the public good

ultimately lies with both voters and elected officials, regardless of their financial resources. While money's influence on elections can present challenges and negative consequences, it is not an inherent flaw in the electoral system. By implementing effective regulations, promoting transparency, and fostering civic engagement, societies can mitigate the negative impacts of money in politics and uphold the integrity of the democratic process.

5.0 Contributions of Authors

The sole author initiated and completed this study.

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7.0 Conflict of Interests

The author declares no conflict of interest.

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Peer-to-Peer Support in Mathematics Education: Its Effectiveness for College Students in Mindanao State University-Sulu

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Abstract. This study assessed the extent of effectiveness of peer-to-peer support for college students in Mindanao State University-Sulu in the contest of study groups, peer review and mentoring. It employed descriptive-correlational research design with 100 student-respondents taken through simple random sampling method. Frequency distribution and percentage, mean and standard deviation, one-way analysis of variance (ANOVA) and Pearson product-moment correlation were the statistical methods used in the study. The following are findings of this study: Of the 100 student-respondents, majority are 20-21 years old, female, 2nd year level, and from the college of Arts and Sciences; The student-respondents agree on the extent of effectiveness of all three variables of peer-to-peer support for college students at Mindanao State University-Sulu; No significant difference in the extent of the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu when data are grouped according to their demographic profile in terms of age, gender, year level and course; And, generally, there is a significant positive correlation among the sub-categories subsumed under the extent of effectiveness of peer-to-peer support for college students in terms of study groups, peer review and mentoring. This study recommends the following: School heads should impose and support the implementation of peer-to-peer support programs in their institutions to improve the learning outcomes and academic performance of their students in mathematics; Mathematics Teachers should facilitate and implement the use of peer-to-peer support among their students to enhance their motivation and collaboration in learning mathematics; Mathematics teachers should practice their students on how to manage effective study groups, peer review, and peer mentoring sessions; Parents should support and encourage their children to participate in peer-to-peer support activities to help them develop their social skills; Students should actively engage in peer-to-peer support with their classmates to improve their understanding and confidence in learning mathematics; and Future researchers should conduct further studies on the effectiveness of peer-to-peer support for college students especially in different contexts and disciplines.

Keywords: Peer-to-peer support; Mathematics education; Study groups; Peer review; Mentoring.

1.0 Introduction

A support system from another person is known as peer-to-peer. You can get information, instruction, and direction from them; they might be your mentors, classmates, or fellow members of your group. Through sharing and working together, peer-to-peer assistance is a mutual aid system. In order to promote one another's success, peers might offer encouragement and firsthand knowledge to one another. Having good peer-to-peer support helps to foster a sense of community among students. According to Carmody and Wood (2009), peer tutoring in university mathematics improves both tutors' and students' education, bridging the budget gap and fostering independent learning and responsible learning.

Peer-to-peer learning is an educational approach that involves communication and interaction between students outside of the traditional classroom setting, where students gather to interact with one another and work toward academic goals. It is essentially learning support that facilitates student collaboration, learning, and connection. A peer who is more informed or has a better grasp of the subject than the peer provides the peer with an explanation. This peer must converse with them and speak the same language. As such, the practice lends a complimentary tone to traditional training. Instead of working against one another, they enhance one another. Peers are people who are in the same class as you and who are similar to you in terms of education, experience, and background in traditional educational contexts like universities or the workplace (LinkedIn, 2021).

According to Boud et al. (1999), peer learning is a teaching and learning approach where students learn alongside and from one another without the direct assistance of a teacher. By giving them more access to resources and information on higher order thinking, peers with experience can support the development and success of other students. According to Tipping et al. (2017), peer learning can support students in achieving academic achievement, forming cooperative connections with others, appreciating diversity, and exploring other viewpoints.

In both hospital and educational contexts, peer support has been established as a scalable strategy for growing the number of mental health professionals (King and Fazel, 2021; White et al., 2020). Studies show improvements in self-confidence, self-esteem, self-management, hope, empowerment, and loneliness in educational and medical environments. It has been discovered that peer work treatments enhance a number of important outcomes (White et al., 2020; Johnson et al., 2018; King and Fazel, 2021). In addition to encouraging empowerment, optimism, and rehabilitation, the two-way communication lessens social isolation (Mead et al., 2001).

According to Boud et al. (1999), peer learning is a teaching and learning approach where students learn alongside and from one another without the direct assistance of a teacher. By giving them more access to resources and information on higher order thinking, peers with experience can support the development and success of other students. Peer learning can support students in valuing diversity, exploring many points of view, forming cooperative connections with others, and achieving academic achievement (Topping et al., 2017).

Peers frequently help others by providing methodical behavioral treatments or adaptable mutual peer support (Repper & Carter, 2011; Byrom, 2018). In both hospital and educational contexts, peer support has been established as a scalable strategy for growing the number of mental health professionals (; White et al., 2020; King and Fazel, 2021). Studies show improvements in self-confidence, self-esteem, self-management, hope, empowerment, and loneliness in educational and medical environments. It has been discovered that peer work treatments enhance a number of important outcomes (Johnson et al., 2018; White et al., 2020; King and Fazel, 2021). By offering each other social, practical, and emotional support, the two-way relationship promotes empowerment, hope, and recovery (Mead et al., 2001).

According to Gershenfeld (2014) and Menzies and Baron (2014), peer mentoring and student organizations are often hierarchical and concentrate on the academic growth of the student mentee. Peer mentorship has been shown to enhance professional and academic achievements, while peer support has been shown in individual research to improve mental health and reduce depression and anxiety scores (Terrion and Leonard, 2007; Kilpela et al., 2016; Byrom, 2018; Leavitt et al., 2022). Research indicates that mentoring can help students feel less distressed psychologically, adjust more easily, and obtain better results (Grossman & Rhodes, 2002; Bernard et al., 2005; Harmon, 2006; Hurd et al., 2014; Hurd, Tan, & Loeb, 2016). University students attest to the benefits of mentoring programs for enhancing their academic performance, adjustment, retention, and accomplishment (Johnson et al., 2007; Jain et al., 2016; Yomtov et al., 2017).

On May 29, 2023, the national student clearinghouse reported that 76.3% of students were still enrolled in public four-year colleges. That approximately one in every four pupils left their school to pursue their studies elsewhere or not at all. A lack of support is one of the many reasons why students drop out of school. Without the necessary resources, academic difficulties might feel daunting and unachievable. Isolation, social issues, and financial difficulties are some other variables to consider. A number of academics believe that when students participate in informal learning, peer interaction helps them succeed and stay in higher education (e.g., Kahu & Nelson, 2018).

Many Higher Education Institutions (HEIs) have used peer support initiatives for students for several years. is widely used in higher education to promote student retention and success. When peer assistance is integrated into a supportive school-wide attitude or policy, it performs better (Cowie & Jennifer, 2007; Cowie & Smith, 2010).

Based on the articles stated above, it appears that peer-to-peer support is vital for the success of other students. Students frequently seek support from friends and family, especially when distressed, and this may or may not be a precursor to seeking additional aid (Mantzios, 2020). As a result, the researcher intends to address this issue by assessing the efficiency of peer-to-peer support and its indications using Vygotsky's Social Development Theory/Lev Vygotsky's Sociocultural Theory of Cognitive Development. Thus, this study examined the effectiveness of peer-to-peer support in mathematics education for college students in Mindanao State University-Sulu.

2.0 Methodology

2.1 Research Design

This study used the descriptive-correlational technique because it is most suited for gathering information on the specific issue at hand and assessing the research's hypotheses. Gay (1976) states that the descriptive-correlational technique involves data collection in order to test hypotheses and offer answers to the subject matter of the research as it stands at the moment.

2.2 Research Participants

Respondents to the poll were one hundred college students from Mindanao State University-Sulu selected using purposive sampling technique. Purposive sampling was the method and approach employed in this study, using a deliberately selected sample population of Mindanao State University-Sulu students. The sampling design was used since it made easier for the researcher to collect data from the respondents.

2.3 Research Instrument

This study employed a checklist-style survey questionnaire that was modified, patterned, and updated from Peer Support Is Effective! by Clark and Andrews (2011). The survey questionnaire was broken up into two parts. The questions in Part I pertain to the respondents' demographic profile. Three components make up Part II: peer mentoring (5 items), peer review (7 items), and study groups (6 items). The Andrews and Clark's (2011) research tool was altered, developed, and modeled. To make sure it was relevant for the current study and its local circumstances, the questionnaire was examined by a minimum of two experts from the Graduate Studies faculty at Sulu State College.

2.4 Data Gathering Procedure

The researcher started her questionnaire after receiving approval from the Dean's Office of Graduate Studies. Upon obtaining the authorization letter from the Graduate Studies Dean's Office, the researcher promptly moved on to request the Chancellor of Mindanao State University-Sulu for approval. The researcher gave the instruments to the sample respondents, who were listed, after consent of the authority from Mindanao State University-Sulu to administer the instrument.

2.5 Data Analysis

The statistical tools listed below were used to process the data:

1. Frequency distribution and percentage were the statistical methods employed to ascertain the study's demographic profile.
2. Mean and standard deviation were used to assess the degree of efficacy of peer-to-peer support in Mathematics.
3. One-way Analysis of Variance (ANOVA) was used to determine if there is a significant difference in the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu when data are grouped according to profile.
4. Pearson product-moment correlation was used to ascertain the significant correlation among the subcategories subsume under the effectiveness of peer-to-peer support in Mathematics.

3.0 Results and Discussion

3.1 Profile of the respondents

Table 1. Student-respondents' demographic profile

	FREQUENCY	PERCENTAGE
Age		
19 years old and below	22	22%
20-21 years old	60	60%
22 years old and above	18	18%
Gender		
Male	47	47%
Female	53	53%
Year Level		
1 st year	14	14%
2 nd year	58	58%
3 rd year	11	11%
4 th year	17	17%
Course		
College of Arts and Sciences	34	34%
College of Computer Studies	33	33%
College of Education	33	33%

Table 1 presents the demographic profile of the student-respondents at Mindanao State University-Sulu in terms of age, gender, year level and course. The table indicates that out of 100 student-respondents, it highly concentrated in the 20-21 years old group which makes up 60% (60), while 19 years old and below, and 22 years old and above account for 22% (22) and 18% (18), respectively. This implies that most of the student-respondents are in the typical age range for college and that there are fewer who are younger or older than the average. The table also indicates that out of 100 student-respondents, it slightly skewed toward females who make up 53% (53), while males account for 47% (47). This implies an even representation of male and female student-respondents in the surveyed group. Moreover, it indicates that out of 100 student-respondents, it highly concentrated toward 2nd year level who make up 58% (58), while 4th year level, 1st year level, and 3rd year level account for 17% (17), 14% (14), and 11% (11), respectively. This implies a higher participation or representation of 2nd year student-respondents in the surveyed group. In addition, it indicates that out of 100 student-respondents, it slightly favors the college of Arts and Sciences who make up 34% (34), while the college of Computer Studies and the college of Education have an equal representation accounting for 33% (33) each. This implies that there is no dominant or preferred course in the surveyed group.

3.2 Effectiveness of Peer-To-Peer Support

In terms of Study Groups

Table 2. Extent of effectiveness of peer-to-peer support in terms of study groups

INDICATORS	MEAN	SD	RATING
1. work in groups are better able to communicate with each other.	4.47	0.643	Agree
2. When I explain the lesson to my group, I get more knowledge.	4.26	0.812	Agree
3. I dislike working in groups because my group members engage in off-task activities (e.g., chatting, jokes).	3.19	1.143	Moderately Agree
4. I expect everyone in a group will contribute and learn.	4.28	0.726	Agree
5. Everyone in a group gets together on a specific day to have lunch, either one person presents a topic of interest to their peers about work-related challenges.	3.96	0.887	Agree
6. When I collaborate with others in a group, I anticipate that everyone will contribute to the discussion and that no one person will take center stage.	4.16	0.813	Agree
Overall Mean	4.053	.4469	Agree

Legend: 4.50-5.00 = Strongly Agree (SA), 3.50-4.49 = Agree (A), 2.50-3.49 = Moderately Agree (MA), 1.50-2.49 = Disagree (D), 1.00-1.49 = Strongly Disagree (SD)

Table 2 shows the extent of effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu in terms in terms of study groups. The result shows that the total mean score is 4.053, which indicates an overall rating of "Agree". This means that on average, the student-respondents agree that study groups are effective as peer-to-peer support. The total standard deviation is 0.4469, which indicates that there is less variation among the student-respondents in their agreement with the statements.

The mean scores indicate that student-respondents agree that they work in a group facility, when they explain the lesson to their group they get more knowledge, anticipate everyone will contribute and learn, and contribute in the discussion, get together on a specific day to present topics about work-related challenges to their peers, but moderately agree that they dislike working in a group who participate in off-task activities. The highest mean score is 4.47, which corresponds to the statement “Working in a group facilitates effective communication with each other.” This implies that the student-respondents agree that they value the chance to interact and exchange ideas with their peers in a group setting. The lowest mean score is 3.19, which corresponds to the statement “I dislike to work in a group because my group members engage in off-task activities (e.g., chatting, jokes).” This implies that the student-respondents moderately agree that they face difficulties in maintaining their focus and motivation in a group setting.

In terms of Peer Review

Table 3. Extent of effectiveness of peer-to-peer support in terms of peer review

INDICATORS	MEAN	SD	RATING
1. I develop social skill, When I work with other students (e.g., sharing, cooperating, responsibility, etc.)	4.34	0.831	Agree
2. I learn more if we have each other point of view.	4.43	0.685	Agree
3. When I receive explanation from a peer, I learn more.	4.28	0.780	Agree
4. When I work alone, I learn more.	3.78	0.905	Agree
5. I learn more from his/her point of view, rather than my own.	3.88	0.879	Agree
6. Working together can promote positive students’ relationship with others.	4.39	0.680	Agree
Overall Mean	4.183	.5022	Agree

Table 3 shows the extent of effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu in terms in terms of peer review. The result shows that the total mean score is 4.183, which indicates an overall rating of “Agree”. This means that on average, the student-respondents agree that peer review is effective as peer-to-peer support. The total standard deviation is 0.5022, which indicates that there is less variation among the student-respondents in their agreement with the statements.

The mean scores indicate that student-respondents agree that they develop social skill, when they work with other students, learn more if they receive each other point of view, learn more when they work alone, and agree that working together can promote positive students’ relationships with others. The highest mean score is 4.43, which corresponds to the statement “I learn more if we have each other point of view.” This implies that the student-respondents agree that there is a diversity and richness of perspectives that they can gain from their peers in a group setting. The lowest mean score is 3.78, which corresponds to the statement “when I work alone, I learn more.” This implies that the student-respondents prefer to work independently and at their own pace.

In terms of Peer Mentoring

Table 4. Extent of effectiveness of peer-to-peer support in terms of peer mentoring

INDICATORS	MEAN	SD	RATING
1. I like working one-on-one with students.	4.07	0.795	Agree
2. Studying mathematics with peer is more interesting than studying alone.	4.35	0.770	Agree
3. I feel that peer mentoring will help me get better marks.	4.18	0.672	Agree
4. Peer mentoring has made me more passionate about my field of study.	4.15	0.672	Agree
5. Peer mentoring has helped me learn on my own.	3.99	0.810	Agree
6. Working with a peer has been shown to be a beneficial learning experience.	4.33	0.682	Agree
Overall Mean	4.178	.5175	Agree

Table 4 shows the extent of effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu in terms in terms of peer mentoring. The result shows that the total mean score is 4.178, which indicates an overall rating of “Agree”. This means that on average, the student-respondents agree that peer mentoring is effective as peer-to-peer support. The total standard deviation is 0.5175, which indicates that there is less variation among the student-respondents in their agreement with the statements.

The mean scores indicate that student-respondents agree that they like working one-on-one with students, studying mathematics with peer is more interesting than studying alone, they feel that peer mentoring will help

them get better marks, Peer mentoring has made them more passionate about their field of study, Peer mentoring has helped them learn on their own, and working with a peer has been shown to be a beneficial learning experience. The highest mean score is 4.35, which corresponds to the statement "Studying mathematics with peer is more interesting than studying alone." This implies that the student-respondents agree that enjoy the social and collaborative aspects of studying mathematics with their peers. The lowest mean score is 3.99, which corresponds to the statement "Peer mentoring has helped me learn on my own." This implies that the student-respondents agree that they benefit from the guidance and feedback of their peers in developing their own learning.

3.3 Difference of Results in terms of Demographic Profile

Age

Table 5. Difference in the extent of the effectiveness of peer-to-peer support when data are grouped according to age

SOURCES OF VARIATION		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.	DESCRIPTION
Study Groups	Between Groups	0.6070	2	0.304	1.537	0.220	Not Significant
	Within Groups	19.164	97	0.198			
	Total	19.771	99				
Peer Review	Between Groups	0.0210	2	0.011	0.041	0.959	Not Significant
	Within Groups	24.951	97	0.257			
	Total	24.972	99				
Peer Mentoring	Between Groups	0.2120	2	0.106	0.390	0.678	Not Significant
	Within Groups	26.302	97	0.271			
	Total	26.514	99				

*Significant at alpha 0.05

Table 5 presents the difference in the extent of the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu when data are grouped according to age. The effects include Study Group, Peer Review, and Peer Mentoring. The table shows that the F-values and probability values for all effects are not significant at alpha 0.05. This means that the perceptions of student-respondents aged 20 to 21 years old on the extent of these effects do not differ from those of student-respondents aged below 19 years old, and above 22 years old, or vice versa. This implies that the student-respondents perceive the extent of effectiveness of peer-to-peer support in the same way regardless of their age. Therefore, the hypothesis which states that, "There is no significant difference in the extent of the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu when data are grouped according to age." is accepted.

Gender

Table 6. Difference in the extent of the effectiveness of peer-to-peer support when data are grouped according to gender

VARIABLES	GROUPING	MEAN	SD	MEAN DIFFERENCE	T	SIG.	DESCRIPTION
Study Groups	Male	4.138	0.400	0.160	1.811	0.073	Not Significant
	Female	3.978	0.476				
Peer Review	Male	4.188	0.473	0.009	0.086	0.932	Not Significant
	Female	4.179	0.531				
Peer Mentoring	Male	4.223	0.434	0.085	0.833	0.407	Not Significant
	Female	4.138	0.583				

*Significant at alpha 0.05

Table 6 presents the difference in the extent of the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu when data are grouped according to gender. The effects include Study Group, Peer Review, and Peer Mentoring. The table shows that the mean difference and probability values for all effects are not significant at alpha 0.05. This means that the extent of these effects does not affect the perceptions of male and female student-respondents differently. This implies that the student-respondents perceive the extent of effectiveness of peer-to-peer support in the same way regardless of their gender. Therefore, the hypothesis which states that, "There is no significant difference in the extent of the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu when data are grouped according to gender." is accepted.

Year Level

Table 7 presents the difference in the extent of the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu when data are grouped according to year level. The effects include Study Group, Peer Review, and Peer Mentoring.

Table 7. Difference in the extent of the effectiveness of peer-to-peer support when data are grouped according to year level

SOURCES OF VARIATION		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.	DESCRIPTION
Study Groups	Between Groups	1.8780	3	0.626	3.359*	0.022	Significant
	Within Groups	17.893	96	0.186			
	Total	19.771	99				
Peer Review	Between Groups	0.6540	3	0.218	0.860	0.465	Not Significant
	Within Groups	24.318	96	0.253			
	Total	24.972	99				
Peer Mentoring	Between Groups	1.2380	3	0.413	1.568	0.202	Not Significant
	Within Groups	25.276	96	0.263			

*Significant at alpha 0.05

The table shows that the F-values and probability values for all effects, except for study groups, are not significant at alpha 0.05. This means that the perceptions of 3rd year student-respondents on the extent of study group effects differ from those of 4th years student-respondents, or vice versa, as shown in table 3.3.1. However, there is no significant difference in the perception of peer review and peer mentoring. This implies that the student-respondents perceive the extent of effectiveness of peer-to-peer support differently depending on their year level, except for peer review and peer mentoring. Therefore, the hypothesis which states that, "There is no significant difference in the extent of the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu when data are grouped according to year level." is accepted.

Table 8. Multiple comparison of effectiveness of peer-to-peer support by year level

DEPENDENT VARIABLE	(I) GROUPING BY AGE	(J) GROUPING AGE	MEAN DIFFERENCE (I - J)	STD. ERROR	SIG.
Study Groups	3 rd year	1st Year	0.12771	0.17395	0.883
		2nd Year	0.28370	0.14198	0.196
		4th Year	0.48485*	0.16706	0.023

*The mean difference is significant at the 0.05 level

As shown in Table 8, a Post Hoc Analysis using Tukey test was conducted to identify which among groups classified according to year level have different levels of mean in the extent of study groups when data are grouped according to students-respondents' demographic profile in terms of year level. On study groups: It shows that 3rd year student-respondents obtained the mean difference of .48485* with the Standard Error of .16706 and p-value of .023 which is significant at alpha 0.05 over 4th year student-respondents.

Course

Table 9. Difference in the extent of the effectiveness of peer-to-peer support when data are grouped according to course

SOURCES OF VARIATION		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.	DESCRIPTION
Study Groups	Between Groups	2.887	2	1.443	8.293*	0.000	Significant
	Within Groups	16.884	97	0.174			
	Total	19.771	99				
Peer Review	Between Groups	1.802	2	0.901	3.772*	0.026	Significant
	Within Groups	23.170	97	0.239			
	Total	24.972	99				
Peer Mentoring	Between Groups	1.289	2	0.644	2.477	0.089	Not Significant
	Within Groups	25.226	97	0.260			

*Significant at alpha 0.05

Table 9 presents the difference in the extent of the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu when data are grouped according to course. The effects include Study Group, Peer Review, and Peer Mentoring. The table shows that the F-values and probability values for all effects, except for peer mentoring, are significant at alpha 0.05. This means that the perceptions of college of arts and sciences student-respondents on the extent of these effects differ from those of college of computer studies, and college of education student-respondents, or vice versa, as shown in table 3.4.1. However, there is no significant difference in the perception of peer mentoring. This implies that the student-respondents perceive the extent of effectiveness of peer-to-peer support differently depending on their year level, except for peer mentoring. Therefore, the hypothesis which states that, "There is no significant difference in the extent of the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu when data are grouped according to course." is rejected.

Table 10. Multiple comparison of effectiveness of peer-to-peer support by course

DEPENDENT VARIABLE	(I) GROUPING BY AGE	(J) GROUPING AGE	MEAN DIFFERENCE (I - J)	STD. ERROR	SIG.
Study Groups	College of Arts and Sciences	College of Computer Studies	0.3397*	0.10195	0.003
		College of Education	0.3750*	0.10195	0.001
Peer Review	College of Arts and Sciences	College of Computer Studies	0.3278*	0.11943	0.020
		College of Education	0.1712	0.11943	0.328

*The mean difference is significant at the 0.05 level

As shown in Table 10, a Post Hoc Analysis using Tukey test was conducted to identify which among groups classified according to course have different levels of mean in the extent of study groups and peer review when data are grouped according to students-respondents' demographic profile in terms of course.

On study groups: It shows that college of Arts and Sciences student-respondents obtained the mean difference of .33972* with the Standard Error of .10195 and p-value of .003 over college of Computer Studies student-respondents, and a mean difference of .37505* with the Standard Error of .10195 and p-value of .001 over college of education student-respondents which are both significant at alpha 0.05.

On peer review: It shows that college of Arts and Sciences student-respondents obtained the mean difference of .3278* with the Standard Error of .11943 and p-value of .002 over college of Computer Studies student-respondents which is significant at alpha 0.05.

3.4 Correlation Among the Sub-Categories

Table 11. Correlation analysis result

VARIABLES		PEARSON R	SIG.	N	DESCRIPTION
DEPENDENT	INDEPENDENT				
Study Groups	Peer Review	0.634*	.000	100	Moderate
	Peer Mentoring	0.622*	.000	100	Moderate
Peer Review	Peer Mentoring	0.713*	.000	100	Very High

*Correlation coefficient is significant at alpha .05

Correlation Coefficient Scales Adopted from Hopkins, Will (2002): 0.0-0.1 = Nearly Zero; 0.1-0.3 = Low; 0.3-0.5 = Moderate;

0.5-0.7 = High; 0.7-0.9 = Very High; 0.9-1 = Nearly Perfect

Table 11 presents the correlation among the sub-categories subsumed under the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu. The table shows that the computed Pearson correlation Coefficients (Pearson r) between these variables are significant at alpha 0.05. Specifically, the degree of correlations among the sub-categories subsumed under the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu are: a) High positive correlations between study groups and peer review, and peer mentoring, and b) Very high positive correlations between peer review and peer mentoring.

This indicates that the other variable tends to increase as one variable increases, and that these relationships are not likely to be random. The strongest correlation is between peer review and peer mentoring ($r = 0.713$, $p < 0.01$), which implies that these two variables of peer support have a very high degree of association and influence each other's effectiveness. The weakest correlation is between study groups and peer mentoring ($r = 0.622$, $p < 0.01$), which implies that these two variables of peer support have a moderate degree of association and influence each other's effectiveness to a lesser extent. Therefore, the hypothesis which states that, "There is no significant correlation among the sub-categories subsumed under the effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu." is rejected.

4.0 Conclusion

The study concludes that:

- Of the 100 student-respondents, majority are 20-21 years old, female, 2nd year level, and from the college of Arts and Sciences. This means that the student-respondents at Mindanao State University-Sulu are a diverse and representative group of college students, with varying age, gender, year level, and course preferences.

- b) The student-respondents agree on the extent of effectiveness of all three variables of peer-to-peer support for college students at Mindanao State University-Sulu. The student-respondents at Mindanao State University-Sulu perceive peer-to-peer support as an effective way of enhancing their learning and academic performance. According to Collier (2017), the two most effective mentoring models for fostering college student achievement are peer (e.g., student-student) and hierarchical (e.g., student-adviser or faculty member).
- c) No significant difference *in the extent of the effectiveness of peer-to-peer support* for college students at Mindanao State University-Sulu when data are grouped according to their demographic profile. The student-respondents at Mindanao State University-Sulu have similar perceptions of the effectiveness of peer-to-peer support regardless of their age and gender. However, their perceptions vary depending on their year level and course. According to Gacosta (2022), regardless of gender, there is no significant difference in the four combinations' achievement levels; however, when partnered with male tutees, the female tutees scored the highest.
- d) Generally, there is a significant positive correlation among the sub-categories subsumed under the extent of effectiveness of peer-to-peer support for college students at Mindanao State University-Sulu. The student-respondents at Mindanao State University-Sulu perceive peer-to-peer support as an effective way where peer mentoring and peer review are the most complementary types of peer support, while study groups and peer mentoring are the least complementary types of peer support. According to Filade et al. (2019), undergraduate students' academic performance is significantly influenced by their peer group. Additionally, there is a strong correlation between students' academic achievement and their peer group.

A study conducted at Mindanao State University-Sulu (MSU-Sulu) revealed that students of various ages, genders, and academic years derived benefits from peer-to-peer support initiatives, such as mentoring and review sessions. Although all forms of support were beneficial, mentoring and review were found to be the most effective. The findings of the research indicated that MSU-Sulu can enhance student learning by promoting peer support programs, customizing them according to the students' academic year and program, and fostering a culture that fosters peer interaction.

The following are recommendations of this study:

- a) School heads should impose and support the implementation of peer-to-peer support programs in their institutions to enhance the learning outcomes and academic performance of their students in mathematics.
- b) Mathematics Teachers should facilitate and implement the use of peer-to-peer support among their students to enhance their motivation and collaboration in learning mathematics.
- c) Mathematics teachers should practice their students on how to manage effective study groups, peer review, and peer mentoring sessions.
- d) Parents should support and encourage their children to participate in peer-to-peer support activities to help them develop their social skills.
- e) Students should actively engage in peer-to-peer support with their classmates to improve their understanding and confidence in learning mathematics.
- f) Future researchers should conduct further studies on the effectiveness of peer-to-peer support for college students especially in different contexts and disciplines.

5.0 Contributions of Authors

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7.0 Conflict of Interests

The author declare no conflicts of interest about the publication of this paper.

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The Influence of Aesthetic Education on Emotional Intelligence of College Students in China

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Abstract. The study investigated the link between aesthetic education and emotional intelligence among Sichuan University, China college students. Using the Bar-On Emotional Quotient Inventory, the research found that students who received aesthetic education had higher emotional intelligence scores in various domains. The findings highlight the importance of incorporating aesthetic education into the curriculum to enhance emotional intelligence among students, contributing to their holistic development and providing insights for educators and administrators.

Keywords: Aesthetic education; Emotional intelligence; College students.

1.0 Introduction

Colleges and universities face challenges adapting to higher education standards in today's competitive world. China emphasizes "Aesthetic Education," focusing on developing students' aesthetic feelings and appreciation for beauty. In 2013, the Communist Party of China made aesthetic education a central content of reform, and in 2019, the State Council and Ministry of Education emphasized its importance. It is generally agreed that aesthetic education is an essential component of education that helps students develop their moral, intellectual, artistic, physical, and labor skills. Furthermore, it also describes an educational approach that aims to help students become more adept at recognizing, comprehending, appraising, and producing beauty by exposing them to a variety of valuable objects and experiences (Shih, 2020). In Chinese colleges and universities, the main objective of aesthetic education is to enhance the students' aesthetic ability, giving them the skills to identify what beauty is, create a positive outlook on life, and adopt good morals and values to promote and help develop society as a whole.

Emotional intelligence (EI) is gaining recognition as a vital skill for students, enabling them to recognize, evaluate, and manage their emotions. It helps students excel through life transitions, such as high school, college, and the workforce. EI positively influences students' learning motivation and self-efficacy, although it does not directly impact academic achievement.

The goal of aesthetic education is to cultivate students holistically. Aesthetic education in colleges and universities may influence students' emotional intelligence, thus helping them succeed better in school and life. This paper intends to determine the relationship between aesthetic education and the emotional intelligence of college students at Sichuan University, Sichuan Province. Based on a preliminary literature review, more research must be done into aesthetic education and its connection to emotional intelligence. Examining the relationship between the two variables will provide opportunities to enhance the aesthetic education curriculum, identify areas requiring improvement, and implement aesthetic education focusing on developing students' emotional intelligence. This research aims to fill that knowledge gap, focusing on the Chinese context.

This study finds out the relationship between aesthetic education and the emotional intelligence of college students at Sichuan University, Sichuan Province. The following are specific statements of the problem: What is the emotional intelligence of respondents who received aesthetic education and did not receive aesthetic education in terms of: Intrapersonal, interpersonal, Stress Management, Adaptability, and General Mood? What is the status of the respondents in terms of their experience with aesthetic education? And Is there a significant difference in the emotional intelligence of those who received and did not receive aesthetic education?

The study's results are of immense benefit to school administrators who are keen to include aesthetic education in their curriculum. As schools generally prefer a comprehensive approach to student development, the findings of this study may persuade administrators to incorporate aesthetic education in their curriculum. Additionally, those administrators who already offer aesthetic education will leverage the study's insights to improve their curriculum further. The study's findings can guide administrators in deciding the appropriate art forms and teaching methods to maximize the benefits of aesthetic education on students' emotional intelligence.

2.0 Methodology

The study utilized a descriptive-comparative design to analyze respondents' experience in aesthetic education and emotional intelligence, aiming to determine if there is a significant difference. The study was conducted at Sichuan University, a high-level research-oriented comprehensive university in western China, directly affiliated with the Ministry of Education. The Bar-On Emotional Quotient Inventory (BarOn EQ-S) is a self-report instrument used to measure emotional intelligence. It consists of 51 items and measures five composite scales and fifteen sub-scales. The study focuses on the Intrapersonal scale, Interpersonal EQ, Stress management scale, Adaptability scale, and General mood scale. The scores were converted into standard scores using profile sheets specific to males or females. Students with scores between 130 and 129 were considered to have atypically well-developed emotional and social capacities. Students with scores below 70 or markedly low were considered to have atypically hinder emotional and social capacities that need improvement. The test's interpretation is based on the respondents' responses. The defense panel approved the proposal, submitted it to the University Ethics Committee, and obtained permission from the Sichuan University Student Affairs Office, College of Arts, and College of Literature and Journalism. Data was collected through questionnaires, and informed consent was given. Participants were informed of the study's purpose, and participation was voluntary. Raw information was destroyed after processing. The study used percentages, percentile rank, and t-tests to analyze demographics, aesthetic education status, and emotional intelligence data. It also compared test scores, weight distribution, and emotional intelligence between those with and without aesthetic education. The University Research Ethics Committee reviewed the proposal, ensuring ethical practices were followed. The authors obtained permission to use a standardized questionnaire, and participants were free to decline. Data was processed confidentially, with no one accessing any related information.

3.0 Results and Discussion

3.1 Emotional Intelligence

Intrapersonal Domain

Table 1. Emotional intelligence of respondents in terms of intrapersonal domain

Percentile range	Received aesthetic education	%	Did not receive aesthetic education	%
90 - 99 (Very High/Superior)	13	8.72	6	4.14
76 - 89 (High/ Above Average)	36	24.16	21	14.48
60 - 75 (High Average)	100	67.11	118	81.38
40 -59 (Average)	0	0.00	0	0.00
26 - 39 (Low Average)	0	0.00	0	0.00
10 - 25 (Low/Below Average)	0	0.00	0	0.00
01 - 09 (Very Low/Poor)	0	0.00	0	0.00
Average	21.29		20.71	

Exemplified in Table 1 is the detailed analysis of the distribution of participants' scores in the intrapersonal domain and their aesthetic education. One hundred forty-nine participants who received aesthetic education participated in the emotional intelligence test. Among them, 13 participants scored in the 90–99 percentile range, 36 participants scored in the 76–89 percentile range, and 100 participants scored in the 60–75 percentile range. Among the

participants who received aesthetic education, the proportion of scores in the 90–99 percentile range was 8.72%, in the 76–89 percentile range was 24.16%, and in the 60–75 percentile range was 67.11%. Emotional intelligence education, according to Meher, Baral, and Bankira (2021), is a crucial part of college students' overall development and advances their intelligence quotient (IQ). One hundred forty-five participants did not receive aesthetic education and participated in the emotional intelligence test. Among them, six participants scored in the 90–99 percentile range, 21 participants scored in the 76–89 percentile range, and 118 participants scored in the 60–75 percentile range. Among the participants who did not receive aesthetic education, the proportion of scores in the 90–99 percentile range was 4.14%, in the 76–89 percentile range was 14.48%, and in the 60–75 percentile range was 81.38%. Based on these data, the majority of participants scored in the high average range (60–75) in the intrapersonal domain, with fewer participants scoring in the very high/excellent range (90–99) and high/above average range (76–89). No participants scored below 40 in the intrapersonal domain. Among the participants who received aesthetic education, the proportion of scores in the high range (90–99, 76–89) was slightly higher than that of participants who did not. However, the proportion of scores in the average range (60–75) was higher among participants who received aesthetic education. The findings presented in this study significantly resonate with the insights garnered from Goldstein's (2017) research, which intricately explored the impact of arts education on various dimensions of personal development among students. Goldstein's study illuminates several vital aspects that parallel the outcomes observed in the current investigation, further reinforcing the importance of arts education in enhancing emotional and psychological well-being. Goldstein's investigation highlighted the potent role of arts education in cultivating self-awareness, self-regulation, and self-management. These aspects align closely with the present study's emphasis on intrapersonal skills and emotional intelligence. The consistency between these two studies underpins the notion that engagement with artistic and aesthetic activities can lead to heightened self-awareness, enabling individuals better to understand their emotions, motivations, and reactions. As observed by Goldstein, this heightened self-awareness could contribute to the broader development of emotional intelligence, a sentiment mirrored in the current findings.

Interpersonal Domain

Table 2. Emotional intelligence of respondents in terms of interpersonal domain

Percentile range	Received aesthetic education	%	Did not receive aesthetic education	%
90 – 99 (Very High/Superior)	42	28.19	14	9.66
76 – 89 (High/ Above Average)	53	35.57	48	33.10
60 – 75 (High Average)	54	36.24	83	57.24
40 -59 (Average)	0	0.00	0	0.00
26 – 39 (Low Average)	0	0.00	0	0.00
10 – 25 (Low/Below Average)	0	0.00	0	0.00
01 – 09 (Very Low/Poor)	0	0.00	0	0.00
Average	149	100.00	145	100.00

As indicated in the respondents' section, two groups were being dealt with in this study, as delineated in Table 2: those who took aesthetic education and those who did not. One hundred forty-nine participants who received aesthetic education participated in the emotional intelligence test. Among them, 42 participants scored in the 90–99 percentile range in the interpersonal domain, 53 in the 76–89 percentile range, and 54 in the 60–75 percentile range. Among the participants who received aesthetic education, the proportion of scores in the 90–99 percentile range in the interpersonal domain was 28.19%, in the 76–89 percentile range was 35.57%, and in the 60–75 percentile range was 36.24%. One hundred forty-five participants did not receive aesthetic education. Among them, 14 participants scored in the 90–99 percentile range in the interpersonal domain, 48 participants scored in the 76–89 percentile range, and 83 participants scored in the 60–75 percentile range. Among the participants who did not receive aesthetic education, the proportion of scores in the 90–99 percentile range in the interpersonal domain was 9.66%, in the 76–89 percentile range was 33.10%, and in the 60–75 percentile range was 57.24%. Based on these data, the majority of participants scored in the high average range (60–75) in the interpersonal domain, with fewer participants scoring in the very high/excellent range (90–99) and high/above average range (76–89). No participants scored below 40 in the interpersonal domain. Among the participants who received aesthetic education, the proportion of scores in the high range (90–99, 76–89) was slightly higher than that of participants who did not.

However, the proportion of scores in the average range (60–75) was higher among participants who received aesthetic education. College students need emotional intelligence education in order to develop a healthy personality, strong morals, a strong will, and harmonious interpersonal relationships, according to Estrada, Monferrer, Rodriguez, and Moliner (2021). Furthermore, the congruence of the results of this investigation with the viewpoints expressed by Farrington, Maurer, McBride, Nagaoka, Puller, Shewfelt, Weiss & Wright (2019) provides strong backing for the claim that involvement in the arts has significant developmental effects on kids and teenagers. The present investigation, supported by the insights of Farrington et al., shows the various benefits that the arts can provide in promoting social and cognitive development in young people. The current study's emphasis on enhancing emotional intelligence gives support to Farrington et al.'s claim that meaningful peer interaction can occur in the arts. The demonstrated higher intrapersonal and interpersonal skills scores among participants who received aesthetic education hint at the possibility that engagement with the arts provides an environment conducive to interpersonal connection. The arts, with their focus on artistic expression, can promote empathy and open communication, supporting the claim made by Farrington et al. that artistic endeavors enable people to interact and work together productively. The claim made by Farrington and colleagues that the arts foster understanding of different viewpoints is comparable to the idea of adaptability, which is a facet of emotional intelligence. Effective stress management and conflict resolution depend on the ability to recognize and understand different points of view (Babatunde, Sunday & Adeshina, 2023), two areas in which participants in aesthetic education performed better in the current study. This congruence underscores the potential of aesthetic education not only to encourage openness to diverse perspectives and contribute to the broader emotional intelligence framework, promoting adaptability and effective handling of interpersonal challenges.

Furthermore, the benefits found in this study are consistent with Farrington et al.'s identification of arts engagement as a facilitator of effective communication, conflict resolution, and collaborative skills. The higher stress management and adaptability scores among participants who received aesthetic education hint at their improved capacity for addressing conflicts constructively and maintaining composure in challenging situations. This dovetails with the skills essential for collaborative endeavors, highlighting the practical applicability of arts education in fostering holistic personal growth.

Stress Management Domain

Table 3. Emotional intelligence of respondents in terms of stress management domain

Percentile range	Received aesthetic education	%	Did not receive aesthetic education	%
90 – 99 (Very High/Superior)	20	13.42	12	8.28
76 – 89 (High/ Above Average)	46	30.87	31	21.38
60 – 75 (High Average)	82	55.03	102	70.34
40 -59 (Average)	1	0.67	0	0.00
26 – 39 (Low Average)	0	0.00	0	0.00
10 – 25 (Low/Below Average)	0	0.00	0	0.00
01 – 09 (Very Low/Poor)	0	0.00	0	0.00
Average	149	100.00	145	100.00

Delineated in Table 3 are data about the distribution of participants' scores in the stress management domain and their aesthetic education. One hundred forty-nine participants who received aesthetic education participated in the emotional intelligence test. Among them, 20 participants scored in the 90–99 percentile range in the stress management domain, 46 participants scored in the 76–89 percentile range, and 82 participants scored in the 60–75 percentile range. This supports the study of Wu Qi (2019), who recommends that colleges and universities develop courses, promote teaching methods, and innovate teaching concepts to cultivate college students' emotional intelligence abilities in primary teaching. This includes enhancing college students' mental soundness, emotional control, stress resistance, and communication skills to promote the construction of emotional intelligence education.

Among the participants who received aesthetic education, the proportion of scores in the 90–99 percentile range in the stress management domain was 13.42%, in the 76–89 percentile range was 30.87%, and in the 60–75 percentile range was 55.03%. One hundred forty-five participants did not receive aesthetic education. Among them, 12 participants scored in the 90–99 percentile range in the stress management domain, 31 participants scored in the 76–89 percentile range, and 102 participants scored in the 60–75 percentile range. Among the participants

who did not receive aesthetic education, the proportion of scores in the 90–99 percentile range in the stress management domain was 8.28%, in the 76–89 percentile range was 21.38%, and in the 60–75 percentile range was 70.34%. Based on these data, the majority of participants scored in the high average range (60–75) in the stress management domain, with a few participants scoring in the very high/excellent range (90–99) and high/above average range (76–89). After conducting research, Sahranavard, Miri, and Salehiniya (2018) came to the conclusion that self-regulation – which they defined as the capacity to comprehend and control one's emotions and behaviors as well as exert control over one's thoughts and actions – is essential for academic success. Only a few participants scored in the average range (40–59). Among the participants who received aesthetic education, the proportion of scores in the high range (90–99, 76–89) was slightly higher than that of participants who did not. However, the proportion of scores in the high average range (60–75) was higher among participants who received aesthetic education. The congruence between the present study and the recent research by Van Lith and Cheshire (2021) underscores the potential of artistic engagement to influence emotional well-being and personal growth positively. Van Lith and Cheshire's study focused on mindfulness-based art therapy, which demonstrated significant reductions in stress levels and simultaneous improvements in self-awareness, self-regulation, and emotional resilience. This alignment highlights the broader efficacy of artistic activities in enhancing emotional intelligence-related outcomes, regardless of the modality employed. However, it is essential to acknowledge the nuanced distinctions between mindfulness-based art therapy and conventional aesthetic education. While both approaches exhibit positive effects, they have different objectives and methodologies. Mindfulness-based art therapy leverages mindfulness techniques alongside creative expression, potentially contributing to stress reduction through focused attention and relaxation practices. In contrast, as explored in the current study, conventional aesthetic education encompasses a broader array of creative activities that may impact emotional intelligence through diverse channels.

Adaptability Domain

Table 4. Emotional intelligence of respondents in terms of adaptability domain

Percentile range	Received aesthetic education	%	Did not receive aesthetic education	%
90 – 99 (Very High/Superior)	83	55.70	66	45.52
76 – 89 (High/ Above Average)	51	34.23	54	37.24
60 – 75 (High Average)	15	10.07	24	16.55
40 -59 (Average)	0	0.00	0	0.00
26 – 39 (Low Average)	0	0.00	1	0.69
10 – 25 (Low/Below Average)	0	0.00	0	0.00
01 – 09 (Very Low/Poor)	0	0.00	0	0.00
Average	149	100.00	145	100.00

As shown in Table 4, 149 participants took the emotional intelligence test. Among them, 83 participants scored in the 90–99 percentile range for adaptability, 51 participants scored in the 76–89 percentile range, and 15 participants scored in the 60–75 percentile range. Among the participants who received aesthetic education, the proportion of scores in the 90–99 percentile range for adaptability was 55.70%, in the 76–89 percentile range was 34.23%, and in the 60–75 percentile range was 10.07%. A total of 145 participants did not receive aesthetic education. Among them, 66 participants scored in the 90–99 percentile range for adaptability, 54 in the 76–89 percentile range, and 24 in the 60–75 percentile range. Among the participants who did not receive aesthetic education, the proportion of scores in the 90–99 percentile range for adaptability was 45.52%, in the 76–89 percentile range was 37.24%, and in the 60–75 percentile range was 16.55%. Based on these data, most participants scored in the higher range of adaptability, particularly in the very high/excellent range (90–99) and high/above average range (76–89). A few participants scored in the high average range (60–75). Among participants who received aesthetic education, the proportion of scores in the high range (90–99, 76–89) for adaptability was slightly higher than that of participants who did not. Zhang (2015) analyzed how aesthetic education fosters the development of college students' emotional intelligence and argues that emotional intelligence, as a vital aspect of human psychological quality, plays a significant role in college student's personal growth, adaptability to society, and success.

General Mood Domain

Table 5. Emotional intelligence of respondents in terms of general mood domain

Percentile range	Received aesthetic education	%	Did not receive aesthetic education	%
90 – 99 (Very High/Superior)	48	32.21	4	2.76
76 – 89 (High/ Above Average)	60	40.27	65	44.83
60 – 75 (High Average)	41	27.52	76	52.41
40 -59 (Average)	0	0.00	0	0.00
26 – 39 (Low Average)	0	0.00	0	0.00
10 – 25 (Low/Below Average)	0	0.00	0	0.00
01 – 09 (Very Low/Poor)	0	0.00	0	0.00
Average	149	100.00	145	100.00

Table 5 delineates the distribution of participants' scores in the general mood domain and their aesthetic education. One hundred forty-nine participants who received aesthetic education participated in the emotional intelligence test. Among them, 48 participants scored in the 90–99 percentile range for general mood, 60 participants scored in the 76–89 percentile range, and 41 participants scored in the 60–75 percentile range. Among the participants who received aesthetic education, the proportion of scores in the 90–99 percentile range for general mood was 32.21%, in the 76–89 percentile range was 40.27%, and in the 60–75 percentile range was 27.52%. In terms of general mood, emotional intelligence is all about recognizing and handling emotions, both yours and others, in a way that makes sense for the situation. According to Fteiha & Awwad's research (2020), it's critical to acquire abilities that enable you to control your emotions with grace and flexibility. One hundred forty-five participants did not receive aesthetic education. Among them, four participants scored in the 90–99 percentile range for general mood, 65 participants scored in the 76–89 percentile range, and 76 participants scored in the 60–75 percentile range. Among the participants who did not receive aesthetic education, the proportion of scores in the 90–99 percentile range for general mood was 2.76%, in the 76–89 percentile range was 44.83%, and in the 60–75 percentile range was 52.41%. Based on these data, most participants scored in the higher-than-average range (76–89) and the high-average range (60–75) in the general mood domain. A few participants scored very high/excellent (90–99). Among participants who received aesthetic education, the proportion of scores in the higher range (90–99, 76–89) for general mood was slightly higher than that of participants who did not.

The current study's findings resonate closely with the outcomes of a study conducted by Futterman Collier (2016) that delved into the impact of engaging in textile handcrafts on emotional and physiological well-being. Futterman Collier's research, which focused on quilting, knitting, and embroidery, revealed noteworthy improvements in participants' moods, providing further credence to the current study's observations. This parallel emphasizes the broader applicability of creative engagement in fostering emotional well-being and suggests that the benefits extend beyond the context of aesthetic education. However, while both studies highlight positive emotional outcomes resulting from engagement in creative activities, it is crucial to acknowledge the potential differences in the underlying mechanisms. Futterman Collier's study examined mood enhancement and inflammatory immune changes, suggesting potential physiological and psychological impacts.

In contrast, the present study concentrates on emotional intelligence dimensions, encompassing self-awareness, interpersonal skills, stress management, adaptability, general mood, and overall emotional intelligence. Therefore, while the positive effects align, the mechanisms underlying these effects might vary between the two studies. This synergy between the two studies contributes to a growing body of evidence supporting the integration of creative activities to enhance emotional well-being and psychological resilience. The art of crafting, whether textile handcrafts or engagement in aesthetic education, taps into the human capacity for self-expression and creativity, which can positively affect an individual's mood and potentially even physiological responses to certain stimuli. This collective evidence underscores the versatile potential of creative endeavors in fostering holistic well-being.

3.2 Difference in Emotional Intelligence

Table 6 provides a detailed analysis of the differences in emotional intelligence scores between participants who received aesthetic education and those who did not.

Table 6. The difference in emotional intelligence between those who have taken aesthetic education and those who have not

Emotional Intelligence	MEAN		VARIANCE		t	p
	Received aesthetic education	Not Received aesthetic education	Received aesthetic education	Not Received aesthetic education		
Intrapersonal	72.83	70.30	103.06	59.28	2.40	0.02*
Interpersonal	82.57	75.93	93.54	93.23	4.74	0.00*
Stress Management	76.56	72.57	158.50	93.83	3.05	0.00*
Adaptability	93.13	86.48	267.69	165.63	3.86	0.00*
General Mood?	84.32	75.35	165.04	57.77	7.26	0.00*
Total	73	66.78	76.59	23.12	7.52	0.00*

Intrapersonal

The average score for participants who received aesthetic education was 72.83, while the average score for participants who did not was 70.30. Participants who received aesthetic education scored significantly higher in intrapersonal abilities. According to the t-test results, the difference in emotional intelligence scores was statistically significant ($t = 2.40$, $p < 0.05$).

Interpersonal

The average score for participants who received aesthetic education was 82.57, while the average score for participants who did not was 75.93. Participants who received aesthetic education scored significantly higher in interpersonal abilities. According to the t-test results, the difference in emotional intelligence scores was statistically significant ($t = 4.74$, $p < 0.001$).

Stress Management

The average score for participants who received aesthetic education was 76.56, while the average score for participants who did not was 72.57. Participants who received aesthetic education scored higher in stress management abilities. According to the t-test results, the difference in emotional intelligence scores was statistically significant ($t = 3.05$, $p < 0.001$).

Adaptability

The average score for participants who received aesthetic education was 93.13, while the average score for participants who did not was 86.48. Participants who received aesthetic education scored higher in adaptability. According to the t-test results, the difference in emotional intelligence scores was statistically significant ($t = 3.86$, $p < 0.001$).

General Mood

The average score for participants who received aesthetic education was 84.32, while the average score for participants who did not was 75.35. Participants who received aesthetic education scored significantly higher in general mood. According to the t-test results, the difference in emotional intelligence scores was statistically significant ($t = 7.26$, $p < 0.001$).

Total Emotional Intelligence

The average score for participants who received aesthetic education was 73, while the average score for participants who did not was 66.78. Participants who received aesthetic education scored significantly higher in overall emotional intelligence. According to the t-test results, the difference in emotional intelligence scores was statistically significant ($t = 7.52$, $p < 0.001$). The study of Hou (2017) suggests that the ultimate goal of education is to achieve all-around development for individuals. However, traditional exam-oriented education and talent evaluation methods often prioritize IQ over emotional intelligence and theory over practice, neglecting individuality in talent cultivation. This results in a restricted all-around development for students and a lower quality of talent cultivation in colleges and universities. Therefore, it is essential for higher education institutions to deeply understand the meaning of all-around development and focus on the five developments of "moral, intellectual, physical, and aesthetic aspects; scientific spirit and humanistic quality; IQ and emotional intelligence; potential for individual development; and lifelong learning for continuous development."

Based on these data, participants who received aesthetic education scored significantly higher in intrapersonal skills, interpersonal skills, stress management, adaptability, general mood, and overall emotional intelligence than

those who did not. This finding supports Chinese education scholars who have conducted extensive research to enhance the emotional intelligence level of Chinese college students. For instance, According to Zhu (2023), practical exercises and art classes can help college students develop their emotional intelligence. Additionally, current research indicates that emotional intelligence is associated with traits such as self-awareness, self-control in the face of urges and anger, and maintaining composure and confidence in the face of failures and setbacks. These traits are also associated with success (Wallbridge, 2023). Furthermore, the results of this study are in line with Zhu's (2023) theories about how art classes and hands-on learning can effectively raise emotional intelligence in college students. The results of this study provide strong empirical support for Zhu's theories, which highlight the contribution of artistic engagement to enhancing emotional intelligence. This consistency highlights Zhu's recommendations' ongoing relevance and usefulness in the context of modern education. The alignment between the current study and Zhu's (2023) assertions validates his conceptual framework and contributes to the ongoing dialogue surrounding educational methodologies that extend beyond traditional cognitive approaches. The empirical support offered by the current findings adds depth to Zhu's argument by demonstrating the tangible benefits of integrating aesthetic education into curricula to foster emotional intelligence development. This synthesis of research and practice highlights the potential of artistic engagement to cultivate multifaceted skills crucial for personal and professional success.

Moreover, the harmonious connection between Zhu's ideas and the study's outcomes underscores the intricate interplay between artistic expression and emotional intelligence. The current study's focus on intrapersonal skills, interpersonal skills, stress management, adaptability, general mood, and overall emotional intelligence aligns seamlessly with Zhu's contention that artistic activities offer a unique avenue for individuals to explore and refine their emotional competencies. The observed empirical support lends credence to the argument that aesthetic education can act as a vehicle for nurturing a well-rounded skill set that extends beyond the boundaries of conventional education. Based on the preceding findings, the neglect of the null hypothesis is rooted in the robust empirical support provided by the data and the alignment of the findings with contemporary perspectives on aesthetic education and emotional intelligence. These factors collectively contribute to the researchers' decision to reject the null hypothesis, underlining the substantial impact of aesthetic education on various aspects of emotional intelligence.

4.0 Conclusion

Based on the analyses and the findings of the study, the following conclusions were drawn:

- a) The majority of the respondents in the study were female college students from Sichuan University.
- b) The most significant number of respondents fell within the 19-year-old age group, and the distribution of respondents across different age groups was reasonably balanced, showing no significant age deviation.
- c) Among the respondents who received aesthetic education, the scores in all domains mostly ranged from high Average to superior levels.
- d) Similarly, for the respondents who did not receive aesthetic education, the scores in all domains were mainly in the high Average to superior range.
- e) Respondents who received aesthetic education demonstrated significantly higher scores in intrapersonal skills, interpersonal skills, stress management, adaptability, general mood, and overall emotional intelligence than those who did not.
- f) There were statistically significant differences in all domains of emotional intelligence between respondents who received aesthetic education and those who did not.
- g) Emotional intelligence is crucial for success in life, affecting behavior, social complexities, and personal decisions. It is influenced by four core skills: personal and social. Those with aesthetic education should increase their emotional intelligence from high to very high/superior. Administrators and professors can enhance emotional intelligence through well-planned events and school engagement.
- h) Enable school administrators to encourage and include aesthetic education into the curriculum so that all students, particularly those who have never attended an aesthetic education session, can participate.
- i) Schools should prioritize aesthetic education to enhance students' literacy and self-understanding. This approach can foster emotional growth and interpersonal competence among college students. Expanding artistic education within academic institutions can provide a comprehensive, enriching educational experience for academic and personal growth.

5.0 Contributions of Authors

All authors have equal significant contributions to this research.

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7.0 Conflict of Interests

The authors confirmed no conflicts of interest regarding this study.

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Understanding How Senior High School Students Choose a College Degree Program: A Phenomenological Study

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Abstract. The college programs that SHS students choose influence their lives as young adults. It defines their future careers and significantly changes the course of their lives. With this in mind, many factors influence the decision-making process of incoming first-years. With the implementation of the K-12 Program in the Philippines, costs needed for education have further soared. Apart from this, parental and familial relationships could also influence most students' education, as they serve as children's pillars of support, meaning parents, finance, and many other elusive factors could potentially inhibit SHS students' choices when entering college. Therefore, to provide even more insight into the career decision-making process of incoming college students, it is necessary to solidify an understanding of how exactly different factors affect graduating STEM students' choices. To explore this, semi-structured interviews were conducted with five participants using ten (10) general, parent-related, and finance-related questions. The thematic analysis was used to find the results. It had been divided into six (6) themes: parental and familial factors, financial factors, environmental factors, capabilities and interests, perspectives on the STEM strand, and confidence/belief in choosing the right field. The results highlighted that familial and financial influence were the most prevalent factors. Students' environment, skills, and preferences also played a significant role. Additionally, the interviewees' positive views on STEM and their confidence that they have thoroughly analyzed all other factors have also played a role in their college program decision-making process.

Keywords: Parental relationships; Financial status; STEM students; Career; College.

1.0 Introduction

College programs determine the majority of what most aspiring adults become in life (Cuy & Salinas, 2019). The decisions they make during their time in universities and colleges significantly impact the flow of their career (Zaini et al., 2021). Students who have reached and completed tertiary education have a higher likelihood of becoming successful in the adult world, improving their chances of having a better life in virtually all aspects. One thing that influences college students' programs is their strand in Senior High School (SHS) (Malaguial et al., 2023). These strands include, but are not limited to, Accountancy and Business Management (ABM), Humanities and Social Sciences (HUMSS), General Academic Strand (GAS), Technical-Vocational-Livelihood Strand (TVL), and Science, Technology, Engineering, and Mathematics (STEM) (Malaguial et al., 2023).

Senior High School is also in conjunction with our current K-12 educational system (Mokher & Mella-Alcazar, 2024). The Department of Education (DepEd) recognized that the previous and relatively brief ten years of primary and secondary education did not suffice for the majority of students, as it put the Filipino students' quality of education lower than those of international schools; there was a very apparent need for an improvement with the country's educational system, thus implementing and extending the length of said primary and secondary. This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0).

education to twelve years in total. A system of education known as academic tracking tracks students' progress and places them in groups according to their academic levels (Jotform, 2024). It has been proved that SHS graduates have higher proficiencies for developing middle-level skills and have a higher rate of employment/entrepreneurship (Carada et al., 2022). The goal is to ensure that each student is on the best learning path for their needs and circumstances (Cogal et al., 2019).

Apart from this, parental support is considered an essential aspect of child improvement, especially in terms of nourishing children socially, psychologically, and physically (Rathee & Kumari, 2022). Recent research demonstrates the importance of parent-child bonds in kids' learning processes, which is now recognized as a significant influence on both their academic success and day-to-day functioning (Li et al., 2022). Therefore, parental involvement in school, such as participating in parent-teacher conferences or assisting their child with academic problems, is critical for children's academic outcomes (Lara & Saracossti, 2019).

Money places restrictions on consumers' daily lives, particularly those of students. It is challenging for consumers not to buy different needs and wants, which causes financial shortages among students (Acbang et al., 2018). As the financial cost necessary to successfully pass and graduate college slowly but surely increases – and the aid for finance remains virtually stagnant – most college students continue to struggle to provide the necessities vital for their respective career paths (Brausch, 2018). The invested resources of college students are directly proportional to the quality of education they receive (Baker, 2018).

The two factors stated above – money and parental relationship – have been proved by countless studies to be vital in determining the career decisions and college majors of students, both locally and internationally. If one is interested in improving their chances of achieving a more successful future, money and parental support are two of the most essential components to put into consideration. Through this study, the researchers aimed to contribute insightful information regarding the improvement of success in the field of career decision-making. For students with low socioeconomic status, seeking higher education is their primary tool in overcoming poverty (Peng & Yue, 2022). In a report by Pew Research Center in 2021, an employee with a bachelor's degree earns more than an employee with a high school diploma and no college degree (Schaeffer, 2022). Hence, it is essential for students to select the most suitable degree program because it will create job opportunities for them in the future.

Planning a career path is a complex process, thus causing an impact on students' mental, economic, and social health (Levin et al., 2020). However, students experience conflict in making career decisions until the completion of their college degree. Career indecisiveness may damage their professional and social lives. Furthermore, career indecisiveness leads to jobs unaligned to the employees' interests and capabilities, eventually affecting their career satisfaction. Career satisfaction is a crucial factor in employees' performance and motivation, for it impacts their productivity and efficiency. A negative impact on an employee's career satisfaction leads to damage to their well-being and job performance (Boštjančič & Petrovčič, 2019).

Thus, understanding the factors and influences affecting students' career decision-making is crucial, for it will affect their professional lives and socioeconomic status. The researchers saw a need to shed light on how specifically parental and financial factors affect STEM students' decision-making process for the programs they have pursued in college as an attempt to provide more beneficial insight into the field of education and career planning.

2.0 Methodology

2.1 Research Design

An in-depth *phenomenological approach* was utilized in this qualitative study. A phenomenological approach proved to be the best for this study as it aimed to find the causes and motives behind college students' decision-making process. The researchers also did not need to interact with the participants for a long period since the desired results could already be collected through the use of a simple *semi-structured interview*. *Purposive sampling* was utilized to identify individuals who met the specific criteria for the research study. By targeting college students who had pursued STEM as their strand in SHS but were presently enrolled in a non-STEM-related program at a university, the researchers were able to narrow their focus to a specific subgroup with shared

attributes. This strategic approach enhanced the coherence and relevance of this study. While the inclusion of five participants may seem limited, it adheres to the qualitative research principle of data saturation, which emphasizes depth and breadth of information. Furthermore, five individuals were chosen to ensure that there was sufficient data and to formulate reliable conclusions.

2.2 Research Participants

The chosen participants were five (5) college students of ages 18 and above who have graduated in SHS from the STEM strand and continued their college journey by taking a non-STEM-based program. The researchers and interviewees conducted the interview through Google Meet, an online video-communication service platform.

2.3 Research Instrument

This study utilized a semi-structured interview as the instrument to answer the research objectives. The interview consisted of ten (10) questions: four (4) general questions regarding the interviewees' educational background, three (3) specific questions regarding parental relationships, and three (3) specific questions regarding financial status. Follow-up questions were asked accordingly.

2.4 Data Gathering Procedures

The interaction with each of the five interviewees was audio- and video-recorded to preserve the information they provided for the researchers' study. The transcribing of the interviews took 20 minutes to 1 hour, depending on its length. The researchers reviewed the transcribed interviews and familiarized themselves with their contents. After familiarizing the transcript, the researchers derived codes relevant to answering the research questions from the interviewees' answers. The researchers reviewed these derived codes to identify patterns and generate themes. The generated themes were examined to ensure they answered the research questions. For the last step, the themes were defined and named for further discussion. Data triangulation and cross-checking were also observed to maintain the accuracy, validity, and reliability of the results.

2.5 Data Analysis

The data was analyzed after the five participants were interviewed, and the results were concluded accordingly. The researchers used thematic data analysis, a methodological approach that supports phenomenology, to identify and interpret patterns, themes, and meanings within the qualitative data. The researchers used a systematic process and categorizing approach to break down the varied participant experiences into coherent themes reflecting the essence of the similarities of their decision-making process. This analytical approach contributed to uncovering the underlying patterns, reasons, and factors driving the participants' decisions. Through thematic data analysis, the overall understanding of college students' decision-making process is better understood. (Castleberry, 2018; Kiger, 2020).

2.6 Ethical Considerations

The undertaking of this study was reviewed and had been approved by the Ethics Review Committee of Central Luzon State University (CLSU) with the ERC Code 2023-171.

3.0 Results and Discussion

Based on the thematic analysis done, the narratives of each interviewee had been summarized and compared with one another, ultimately leading to six (6) themes embodying the recurring factors behind every bit of vital information shared by the interviewees. Additionally, these themes are arranged in order of what influenced the interviewees from most to least.

Theme 1: The Parental and Familial Factors Influencing Strand and Career Decisions

Parents and family proved to be the most influential factor in the six themes based on all of the interviewees' responses. Most of what their parents and families have said whenever career decisions are brought up has generally influenced what they want to go for as their career.

In connection to this, all interviewees agreed that their parents had given them insights and requests on their possible careers. The participants shared that some of their families had subtler and weaker influences on them, while others had a much more substantial and direct impact.

One of the interviewees shared that their parents had only given them hints, suggestions, and recommendations on what path they should choose for their future career path:

"They told me that it was my choice. But they would say things like, 'Try Accountancy,' so, yes, it was Accountancy."

On the other hand, one participant stated that their parents had influenced their decisions with more than just suggestions and recommendations. They believed that their parents were the single most important factor as to why they chose the program that they had in mind:

"Back then, they had already kind of sculpted me – they had molded me to become a doctor, nurse, or public health worker. My parents had a big influence on me, socially and culturally, that's why I should choose a Bachelor of Science in Public Health. And whatever happens, I should still choose it."

Based on the information gathered, they were aligned with the findings of Nawabi and Javed (2019), wherein the parents and guardians are crucial variables in how they evaluate decisions made by their children. Parents play a significant role in their children's life decisions – from when they are born to when they become adults. Although their influence on their children diminishes the older they become, they remain, and they have solidified their role as their children's primary support throughout their lives.

According to another study conducted by the University of York (2019), parents from well-educated backgrounds positively impact their children's academic development, regardless of hereditary propensity. Participants with parents in high-ranking professions or are employed in higher-than-average compensation will likely recommend that the participants follow in their footsteps. The majority of the time, the participants believe they should be achievers. That is why better-educated parents prefer to have children who are similar to them.

The findings led the researchers to conclude that parents influenced the participants' decision-making abilities. Depending on how sure the interviewee was with their program of interest and how open-minded the parents were with their child's chosen program, the mothers, fathers, and other family members could influence their children's choice by either a small or large margin.

Theme 2: The Effects of Finance in Strand and Career Decisions

Another significant factor that the interviewees considered was their respective financial situations during the decision-making process of their desired program and school.

Regardless of the interviewees' household income, they had all chosen the program that had the most practical, convenient, and inexpensive option.

As for those less financially secure, it was clear that they expressed their reluctance to enter universities beyond their family's financial capabilities, choosing the least expensive outcome to prevent further financial problems from arising.

One of the interviewees shared their experience on the compromises that needed to be made in order to make sure that both the interviewee themselves and their siblings were able to receive proper education, even if it meant that it was not their priority program and that it was a very foreign field of study for the interviewee.

"My siblings studying in a private school was already a huge burden, so if I also decided to study in a private school, then our financial expenses would become a lot bigger. That's why, even if I was not familiar with the course at first, I still decided to pursue it because it is a public school – because there is no need for tuition fees."

Another interviewee had stated that in order to make the most out of their financial resources, they needed to have made an agreement with their cousins to make sure that they will all be able to get proper, high-quality education.

"I also think that we can save [money] since there are four of us here. If I did pursue my studies at SLU, I would've had to pay double since the rent of a solo condominium unit would've already been equivalent to the tuition fees. But because there are four of us (studying in UP), that means that me and my cousins could split the expenses for our condo."

Another crucial finance-related factor is the influence of scholarships and other incentives in order to solve most aspiring students' lack of financial resources.

"Other than having free education at CLSU, we also receive incentives for academic awardees. This is per semester and because the amount given is quite large, it is a huge help for my budget and allowance."

Furthermore, the interviewees chose or pursued STEM as a strand in senior high school due to financial considerations. According to the responses gathered, the fact that the school is a no-tuition public school further cemented or sealed their decision to pursue STEM, despite their preference for another strand.

"USHS, being a public school, further motivated me to stay and pursue STEM."

A study by Humayon et al. (2018) discovered that economic factors, personal interests, and family influence had a significant impact on students' career decisions. Although it did not have the highest influence among the factors, it was the third-most influential factor among the factors mentioned in their study.

Abusama et al. (2023) also mentioned the importance of finance in education. According to their findings, many students choose their respective programs for financial reasons, opportunities, settings, and demand. This implies that students deciding on their future program usually base their course of action on the most financially effective option.

With all of this in mind, the researchers safely concluded that finance played a significant role in the education or studies of college students.

Theme 3: The Environment and other External Factors

One of the factors observed among the interviewees' responses regarding their decision-making is their environment, specifically their peers, location, and experiences. This meant that before deciding on what career path they wanted to pursue, they first put into consideration certain things like the difficulty of transportation, the people (e.g., students and teachers) that they were going to interact with, and the actual location of the campus.

One of the interviewees explained that, due to their location and residence, it was inefficient and impractical to study in a different school:

"I had a feeling that I was going to have a hard time adjusting to the location of the supposedly new school I was going to transfer in... Especially because the pandemic had just started at that time, and I didn't think that it was going to be reasonable if I was going to change schools."

Another interviewee had also shared that she was able to discover her current program a random interaction with another applicant when they were taking an entrance examination

One of the participants revealed that a peer of hers introduced her to her current non-STEM program:

"I had no idea what Public Administration was before I applied to U.P. I had the chance to talk to another applicant who revealed that they wanted to take Public Administration."

Another interviewee revealed that the people around them influenced her decision:

"But of course, there were external factors that influenced my decision, like my peers, church family, and my acquaintances working in different fields. Would they recommend their job? How is their experience with that field?"

Peer pressure plays a significant positive and negative role in influencing students' behavior and decision-making process regarding their career choices (Kaur, 2020). Additionally, peer interactions with students can influence their career decisions and academic performance (Moldes et al., 2019). However, it may also cause students to inhibit negative behaviors and bad decisions that may impact their personal adjustment to their environment (Sahu, 2022).

The consistent pattern shown by the interviewees led the researchers to conclude that the students' environment, specifically friends and peers, influences and encourages their decision-making.

Theme 4: Capabilities and Interests of the Participants

Another theme that had been seen to be prevalent among all of the interviewees was their skills and preferences. To a certain extent, though not as impactful as the previously mentioned factors, the participants had considered their likes and abilities before deciding on what program they had chosen for college. However, due to other more influential factors, like a student's familial, financial, and environmental situation, the interviewees shared that they had needed to compromise and find the best alternative given all of the factors to be considered.

One of the interviewees mentioned that their current program had started from curiosity to learn about it on the Internet. They had then realized that what they had found from searching through the Internet was aligned with their interests:

"I got curious about what Public Ad was; hence, I searched through the internet. I discovered that public ad covers public service and policy reforms, which were some of my interests. I also found out that public ads focus more on essay writing. I knew I could get through it, so I put it as one of my choices, and that is where I passed."

This specific finding is in conjunction with a study by Pascual (2014), wherein it was implied that the biggest reason why Filipino college students tend to prefer science-related programs the most and agriculture-related programs the least is because of their interest in what is deemed to be the "popular courses" in the country. The study shows that whatever program is aligned with the college students' preferences (i.e., science-related programs) proved to be the more prevalent option.

With this in mind, the researchers were able to safely conclude that, although inferior to the other previously mentioned factors like parents and family, money, and location, an individual's academic preference tends to also influence the overall decision-making process of those aiming to look for their desired college program.

Theme 5: The Perspective of the Participants Regarding STEM

Another prevalent factor apparent to every interviewee was their general view on the STEM strand. Every participant believed STEM to be a safe and stable option, especially for students still unsure of what they will continue pursuing. Consequently, this affected their decision.

The interviewees also believed STEM to be a helpful and safe strand in preparation for college studies, regardless of its connection to whatever non-STEM-related program they had taken. The participants believed that STEM, although not wholly related to their current programs, helped them more than they initially thought despite their non-STEM-related careers. This made it easier for the interviewees to let go of their strand to pursue a program that is not as connected to STEM.

One of the interviewees shared that choosing STEM as their strand for SHS was the right decision. Although the program they had chosen was non-STEM-related, they shared that they would have made the same decision if they had the opportunity. Their confidence in the STEM strand being beneficial to their chosen program had made it easier for them to pursue a career that was not entirely related to their SHS strand:

"I would still go with choosing STEM because my course right now is heavily math related. So, I think STEM helped me a lot in my current course, so I'm not experiencing that much difficulty."

One of the participants also shared that specific subjects that are covered by the STEM strand proved to be beneficial for general college studies, as it boosted students with preparatory college materials.

"Yes. Actually, it's an advantage... Our foundation in STEM has a big role. And also, in research, because in every semester, there is research... And in Math, all of the courses in college have Math subjects, so it helps out in that sense, too. ...being a STEM graduate is an advantage."

These narratives are in connection to the results from a study conducted by (Gonzales & Digo, 2024), wherein selecting the right academic track or strand can help propel high school students' skills when they get the chance to go with their preferred course in college. In the case of this study, the interviewees, as SHS students who had taken the STEM strand but had chosen a non-STEM related program in college, the academic strand that they chose significantly helped them overcome difficulties in their college life, regardless of how related they are to the STEM strand, as this strand covers a wide variety of general academic necessities that can help students become more prepared with their college studies.

With this in mind, the researchers were able to conclude that STEM, although not entirely connected to their programs, had still shaped the interviewees to an extent, influencing what they would ultimately choose in their careers, as the universal benefits that can be learned from the STEM strand had made them more confident in choosing from a wide range of college programs.

Theme 6: The Participants' Confidence and Belief on them "Choosing the Right Career"

In conjunction with the positive impressions that the interviewees had of the STEM strand, they also shared that they were confident with what they had done in the past and trusted in themselves that they had made the best decisions for their careers.

The interviewees believed that whatever decision they had made during their time in SHS in STEM was the right choice and that they had considered all of the factors possible, leading to them feeling confident and content with their decisions.

Additionally, when asked if they would change their past decisions if they had the opportunity to do so, every single participant was completely satisfied with how things have ended up in their current academic lives. All of them stated that they were completely prepared for the undertakings of their respective careers and would not want to change to another program, even if they had the chance.

One interviewee, proud and satisfied with the decision that they had made during their SHS times, shared that:
"I'm quite happy with my course, so far."

Another participant had mentioned that, though they experienced struggles, the fact remained that they still felt content that they had made the right decision, and that they were grateful that the confident decision that they had chosen when they were in SHS proved to be fruitful now that they were in college.

"Although it's hard, I'm still having fun. ... So, I was able to ... appreciate more the gifts and talents the Lord has given me in the sense that I could help others using this field – this course. That's why I realized even more that, 'Oh, this really is for me.'"

The findings analyzed from this study's interviews are in conjunction with the study of Lee (2024), wherein it was stated that the satisfaction of college students with their education had a positive relation with their overall life satisfaction. This implies that for students to feel more positive about their current college life, they would need to feel content and satisfied with the decisions that they had made in the past that led to where they are now.

Additionally, in another study conducted by Wong & Chapman (2022), it has also stated that the quality of education, student services, and academic programs played a significant role in determining the life satisfaction of college students, implying that the environment, curriculum, and society within a school or university influence the how a college student views their life as.

Thus, with this in mind, the researchers concluded that the interviewees had made their past decisions for their college programs specifically because one of the factors that influenced their choice was their confidence and belief that they had chosen the right path.

4.0 Conclusion

Given the analysis of the narratives from the interviewees, it is undeniable that family and finance significantly impact one's career path and program. They both played an essential role in determining a college student's future. If one wants to improve their chances of achieving a better future, it is crucial to note that money and their relationship with their parents can help or hinder them in reaching their aspirations.

Furthermore, family seemed to be the more dominant factor since, similar to the situation of one of the participants, financial problems—on certain occasions, like getting a scholarship—can be alleviated more easily than parental problems. As a result, many people who have qualified for scholarships can expand the opportunities they can get and also decide from more choices.

The concept of scholarship played a very significant role in providing free tertiary education, positively impacting the chosen programs of the participants who have qualified for it. It improves financial capabilities, allowing a student to focus on other critical financial hurdles without having the problem of worrying about expenses and tuition fees.

Apart from this, the researchers have also discovered that the scope of influence is limited to one's parents and one's own other family members (e.g., cousins, grandparents, siblings). Other factors like one's own peers and community members also played a role in career decisions. Therefore, to improve their chances of success, apart from parents and finances, seeking advice from other family members, guardians, friends, teachers, mentors, and the like can also play a significant role.

Additionally, one's interests and capabilities also had a substantial impact in dictating what a college student would choose as their program, sometimes even having more influence than with finance and parental relationships. In other words, there are times when it would be better to follow one's desires/ambitions than to listen to other people's opinions.

Lastly, STEM, as a whole, had—for the most part—a positive effect on almost all of the interviewees and their respective programs, stating that, regardless of their program's disconnection with STEM, it still proved to be helpful with the majority of the programs present within a program. This proved to be a surprising and unexpected result, indicating that for people still undecided about what program they would like to take for college, STEM could be a very safe choice that offers vast opportunities for future career paths.

Future researchers should focus on interviewees from the lower class or lower middle class. In this way, they can derive more accurate answers regarding the influences of financial status on the students' career decision-making. It is also recommended that future researchers interview more than 5 participants to make the data more dependable. Additionally, future researchers can consider former STEM students from different schools aside from those from University Science High School. They may also consider finding interviewees from different strands besides the STEM strand to establish more inclusive data. This way, researchers could derive more diverse and accurate data from the interviewees. Additionally, future researchers may include a broader scope of variables. Instead of focusing only on parental relationships, they can also consider other interpersonal relationships and interactions, such as students' relationships with their teachers, friends, peers, and environment.

As for the government, this study recommends and urges us to continue aiming for equal opportunities and more inclusive education for everyone. Government support may also include increasing the funding for education to ensure that local universities and public schools can accommodate more students and provide a supportive learning environment for them. The interviewees' responses also highlight the importance of financial aid and scholarships from the government.

Moreover, since the study tackles the importance of education, it is recommended that teachers and school officials know and understand the importance of educational or academic opportunities for students. Additionally, teachers may also personally look into the influences and factors affecting their students' career decision-making to help them reach their full potential.

With regard to students and families alike, it is recommended that they use the findings of this research as a stepping stone to look into all of the related factors when it comes to career decision-making, even those that are possibly elusive and minor. It is also recommended that they always maximize their resources and collect as much preliminary information as possible to ensure that they or their children can get the highest quality education they can be provided.

5.0 Contributions of Authors

The authors confirm their equal contribution to every part of this research. All authors reviewed and approved the final version of this paper.

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7.0 Conflict Of Interests

The authors declare no conflicts of interest.

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The Demographics and Ethical Leadership Practices of Public School Leaders in the Hinterland

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Abstract. Effective ethical leadership is crucial in creating a positive and harmonious work environment. To determine the demographic profile and ethical leadership practices of school leaders in public hinterland schools of Misamis Oriental Districts, this study utilized a descriptive research design with 89 teachers and 15 school leaders in the hinterland as respondents. Mean, frequency, percentage, and T-test were used to analyze and interpret the data. The findings disclosed that the school leaders and the teachers rated the school leaders of the schools in the hinterland as practiced in all domains of ethical practices such as Integrity, Fairness, People Orientation, Power Sharing, Ethical Guidance, Role Clarification, and Concern for Sustainability. Moreover, there was a significant difference in the ethical leadership practices as rated by the teachers and the school leaders. The result showed that teachers' rating was lower than the ratings of the school heads on the ethical leadership practices of the School Heads. Likewise, there was a significant difference in respondents' ethical leadership when grouped according to their demographic profile. The study concludes that ethical leadership practices have a bearing with the teachers' quality of teaching; thus, it is important to improve the ability of school leaders to lead ethically, and this can be strengthened with practice, focus, and time.

Keywords: Ethical leadership; Demographics; Leadership practices; Public school leaders.

1.0 Introduction

Organizational effectiveness is the ultimate goal of any organization, and to achieve it, leaders must focus on increasing workers' productivity, dedication, and motivation (Koyuncu et al., 2006). The importance of optimism, trust, and engagement had been recognized as crucial factors that influence organizational efficacy (Welch, 2011). The active application of emotional, cognitive, and behavioral energies at work, which is called engagement, is required for individuals to work according to the goals and strategies of the organization (Andrew & Soian, 2011). The combined efforts of motivated individuals contribute to the performance and success of the organization (Bakker, 2011).

Leadership is a crucial factor in achieving organizational effectiveness, and the literature suggests that inherent traits such as profile of leaders and members can propel institutions to success (Sirisookslip, Ariratana, & Tang, 2015; Okoji, 2015). McGregor's definition of leadership emphasizes the importance of constantly mentoring and developing others, and it is essential for leaders to convert their qualities into several "demographics" to achieve success (Cha, 2019).

In addition, ethical leadership is critical to a leader's credibility and potential to influence, and it is defined as the exhibition of normatively suitable conduct through personal acts and interpersonal interactions (Brown, Trevino, & Harrison, 2005). Ethical values in organizational behavior are known as ethical practices, which cover all aspects

of institutional conduct, including corporate governance, employment procedures, stakeholder relations, and corporate social responsibility (Den Hartog & Belschak, 2012).

On the other hand, ethical leaders act according to the principles and values such as integrity, respect, trust, fairness, transparency, and honesty, which are recognized as foundations for the common good (Eisenbeiss & Giessber, 2012). Educational institutions derive their organizing principles from basic ethical concepts such as freedom, equality, justice, and human dignity, which are geared toward community well-being (Pieper, 2012). Ethical leaders promote fairness and equality regardless of status, position, and background, and their main goal is to create an open climate relationship among members of the group through ethical behavior to strengthen relationships, build respect, and promote positive environments that foster collaboration.

Moreover, an ethical leadership practices of school leaders in the schools of the hinterland were crucial because they were dealing with people who had different cultures and traditions. They were mostly impeccable and wholesome as what was observed by the researcher. School leaders and teachers were not literally living in that certain area, so they'll be adopting the culture and the ways of living of the people in the hinterland especially when it comes to ethical practices because for them school leaders were the influencers and inspiration of doing good to others. In addition, school leaders were also good examples of being honest, fair, transparent, and can be trusted especially in managing the school since they served as a role model and motivators for those around them. Consequently, they can be a giving direction in an ethical manner and be positively influenced by showing them a list of activities they can take to help and come up with greater good. The simple act of kindness and honesty had a big impact in the school or community. School leaders had a big role in influencing the lives of its teaching personnel. Same as the teachers, they also shaped the life of each student, especially in teaching them ethically. The use of ethical practices in the school has a greater impact on the development of the students since teachers and school administrators have influenced the students with righteous acts. Buzzelli and Johnston (2002) explain why teaching and learning are so important and may be viewed as a moral activity: '... teaching is based on a moral foundation.' relationship between two or more individuals... instructors are involved in influencing the behavior of others to achieve predetermined goals.

Moreover, school leaders in the hinterland had to be aware of applying ethical leadership practices because it is a way that people living in the area preserved their wholesome personality, the positivity of the people, and the peaceful environment. For instance, teachers also will be guided accordingly with the proper conduct not only in their aspects such as attitudes, characteristics, and in doing good deeds but also in their teaching perspective. The teachers will teach by heart and soul since the school leaders uplifted and motivated them to do the right thing, especially in teaching the students to follow the proper procedure in implementing the school rules and policies. In addition, teachers will also do the best they can in teaching the students to produce quality education despite the tiredness, fatigue, and sleepless nights but still able to work hard to meet the necessary needs of every student. All of these are done by the teachers with an open heart and mind since they see that the school leaders are also doing their part to achieve a similar goal of producing quality education for all the students in the hinterland.

In connection to these, school leaders who were ethically oriented allowed their teachers with open arms to grow professionally by inspiring them to join different seminars, trainings, and workshops that will help enhance their teaching ability, skills, and strategies that equip them and become more competent teachers considering the quality of teaching domains such as content knowledge and pedagogy, learning environment, diversity of learners, curriculum and planning, assessment and reporting, community linkages and professional engagement and lastly, professional growth and professional development. Many characteristics of expert teachers have been identified in the literature, including substantial pedagogical content knowledge, improved problem-solving skills, and better adaptation to a variety of situations. learners, improved decision-making, improved awareness of classroom events, increased context sensitivity, and increased respect for peers (König, Blömeke, Paine, Schmidt, & Hsieh, 2011). Thus, the study aimed to determine the demographic profile of the school leaders and teachers in the hinterland schools of Misamis Oriental Districts of the Department of Education. Further, this study will determine the ethical leadership practices of school heads. Finally, this study aims to contribute to improvements and innovations in the Department of Education, particularly in the ethical leadership practices among school heads of hinterland schools in the Districts of Misamis Oriental.

2.0 Methodology

2.1 Research Design

This study utilized descriptive research design as it seeks to determine the demographics and the ethical leadership practices of school leaders in the hinterland of the two districts of Misamis Oriental, Department of Education.

2.2 Research Participants

The respondents of this study were the teachers assigned in the schools situated in the hinterland as well as the school leaders of the two selected districts of the Division of Misamis Oriental, Department of Education. The teacher-respondents were under the school leaders. Using a proportionate stratified sampling design, a total of 89 teachers and an additional 15 school leaders who handled the schools in the hinterland of the two districts who were the respondents of the study.

2.3 Research Instrument

A survey questionnaire was used in the study. This questionnaire was composed of two parts. Part I was the demographic profile of the respondents which includes the age, sex, highest educational attainment, and position. Part II was an adapted questionnaire on ethical leadership practices by Vikaraman, Mansor, Mohd Nor, Alias, and Gurusamy (2021). This questionnaire on ethical leadership practices includes the following domains: integrity, fairness, people orientation, power sharing, ethical guidance, role clarification, and concern for sustainability. To establish the reliability of the instrument, pre-testing was conducted on 30 teachers assigned in the hinterland from the district. These thirty teachers were asked to answer the questionnaire. The gathered data through pre-testing be computed and analyzed through Cronbach's Alpha. The desired coefficient result of .950 indicates that the instrument is reliable. For the validity of the instrument, three experts were asked to evaluate and examine the instrument. This is to make sure that the questionnaire will measure the characteristics desired for the study. These experts have conducted and published research. The two experts were supervisors in the Division of Misamis Oriental, Department of Education. The third expert was a professor at a university who had published several articles in international journals.

2.4 Ethical Consideration

For ethical considerations, Informed Consent form were provided to the respondents; they were informed that they have the freedom not to participate the study. Those respondents who willingly participated were assured of the confidentiality of the information revealed through the study.

2.5 Data Analysis

Frequency and percentages were used to describe the demographic profile of the respondents which includes sex, age, highest educational attainment, and position. Mean was used to determine the ethical leadership of school heads and the teachers' quality of teaching. T-test was used to establish the significant difference in the ethical leadership practices of school leaders in the schools of the hinterland when grouped according to profile.

3.0 Results and Discussion

3.1 Demographic Profile of the School Leaders and Teachers

Table 1 presents the distribution of school leaders-respondents when grouped according to profile.

Table 1. Distribution of school leader's profile

CHARACTERISTICS	SPECIFICATION	FREQUENCY	PERCENTAGE
Age	20 - 30 years old	1	6.7
	31 - 40 years old	8	53.3
	41 - 50 years old	5	33.3
	51 - 60 years old	1	6.7
Number of Years in Service	6-10 years	5	33.3
	11 years above	10	66.7
Highest Educational Attainment	Master's Degree with units	12	80.0
	Master's Degree	3	20.0
Designation	School Head	5	33.3
	School In-charge	10	66.7

The data revealed that 20 to 30 years old had 1 or 6.7 percent, 31 to 40 years old had 8 or 53.3 percent, 41 to 50 years old had 5 or 33.3 percent, and 51 to 60 years old had 1 or 6.7 percent. This means that the distribution of age of school leaders was dominated by 31 to 40 years old with 8 or 53.3 percent. However, 20 to 30 years old and 51 to 60 years old had the lowest frequency of 1 or 6.7 percent. This suggests that the majority of the school leader-respondents were middle-aged adults or adults in their mature years of age. This implies that the majority of the school leader-respondents belonged to the age bracket of 31-40 years old. It can be deduced that the respondents' age corresponds to the requirements of their position as school leaders. In addition, this indicates that the school leader-respondents were highly capable in terms of workloads and responsibilities, mentally mature enough to handle any challenges and difficulties teaching life may offer, and had accumulated enough experience and exposure in the educational system which was essential to perform the duties and responsibilities of being an ethical leader at the same time a teacher.

Moreover, in school leaders' number of years in service, the data revealed 6 to 10 years had 5 or 33.3 percent, and 11 years above had 10 or 66.7 percent. This indicates that the majority of the school leaders were in the service for 11 years or more. On the other hand, service for 6 to 10 years attained the lowest frequency. This means that the majority of the school leaders in the schools of the hinterland belonged to the years' bracket of 11 years and above in terms of the number of years in service. Therefore, school leaders at this length of service were more experienced when it comes to teaching.

Furthermore, it was illustrated in the school leaders' profile in terms of highest educational attainment that school leaders with Master's degree units had 12 or 80.0 percent, and those who graduated a Master's degree had 3 or 20.0 percent. In connection to this, school leaders with Master's degree units were the highest in terms of highest educational attainment with a frequency of 12 or 80.0 percent. On the contrary, the lowest frequency was 3 or 20 percent belonging to school leaders who graduated with a Master's degree. This means that most of the teachers who were assigned as a school leader in the hinterland had only earned a unit of Master's degree while few completed it. This indicates that not all school leaders were Master's degree holders but some of them had only earned a unit which is depicted in the table. Therefore, most of the school leaders were designated as a school in charge based on their length of service that they were capable enough to handle a school.

Lastly, the school leaders in terms of designation show that school leaders had 5 or 33.3 percent and School In-charge had 10 or 66.7 percent. Moreover, the highest in terms of designation with a frequency of 10 or 66.7 percent belonged to the School In-charge position. On the other hand, the lowest frequency in designation was 5 or 33.3 percent belonged to participants in School leader position. This means that the majority of the schools in the hinterland were led by a teacher who was only designated as School in charge.

In addition, the data implies that not all school leaders had the qualification of being a school head but some of them were designated only as school In-charge in which they are qualified based on the length of service and the scarcity of school leaders in a certain district. Furthermore, based on the researcher's experience, the majority of the schools in the hinterland was headed by Teacher I to Teacher III only who handled the schools in mostly combination class schools and an integrated school composed of five to eight total populations of teachers. In addition, the number of years in service was one of the bases mostly in the schools of the hinterland why Teachers I to III were designated as school In-charge because the experience of these school In-charge was enough to handle a small school in a far-flung area.

The distribution of teacher-respondents' profiles is reflected in Table 2. As presented, the majority of the teachers-respondents when grouped according to age, 20 to 30 years old had 40 or 44.9 percent. Followed by 31 to 40 years old had 34 or 38.2 percent, then 41 to 50 years old had 14 or 15.7 percent, and lastly, 51 to 60 years old has 1 or 1.1 percent. This revealed that the distribution of responses in teacher-respondents' age is dominated by 20 to 30 years old with 40 or 44.9 percent. However, 51 to 60 years old has the lowest frequency of 1 or 1.1 percent. This means that the majority of the teacher-respondents belonged to the age bracket of 20-30 years old. This implies that most of the teacher-respondents were young and newbies in the department. Therefore, this indicates that teacher-respondents still need guidance and support from the school leaders in handling any challenges and difficulties in teaching life.

Table 2. Distribution of teachers' profile

CHARACTERISTICS	SPECIFICATION	FREQUENCY	PERCENTAGE
Age	20 - 30 years old	40	44.9
	31 - 40 years old	34	38.2
	41 - 50 years old	14	15.7
	51 - 60 years old	1	1.1
Number of Years in Service	0-5 years	44	49.4
	6-10 years	33	37.1
	11 years above	12	13.5
Highest	Bachelor's Degree Graduate	46	51.7
	Master's Degree with units	33	37.1
	Master's Degree Completed	7	7.9
Educational Attainment	Doctorate Degree with units	3	3.4
Designation	Teacher I	68	76.4
	Teacher II	8	9.0
	Teacher III	7	7.9
	Master Teacher I	6	6.7

Furthermore, Table 2 demonstrates the frequency and percentage distribution of the teacher-respondents according to their number of years in service. The data revealed that years of service for 5 years and below had 44 or 49.4 percent, followed by 6 to 10 years that had 33 or 37.1 percent, and lastly, 11 years above had 12 or 13.5 percent. This indicates that the majority of the teacher-respondents in terms of year in service belonged to the bracket 5 years and below while in years of service for 11 years above has 12 or 13.5 percent, which attained the lowest frequency. This means that the majority of the teachers-respondents who were assigned to schools in rural areas were newly hired or had less than five years of teaching experience. These findings are consistent with previous studies which have found that new teachers were often assigned to remote and rural areas due to the shortage of experienced teachers in these areas (Mijares & Fajardo, 2019; Arreola, 2020). This also suggested that newbie teachers were flexible not only in school-related work but also in different aspects since they trust and follow senior colleagues who they think are more experienced than them.

Meanwhile, teacher-respondents in terms of highest educational attainment, the data illustrate that graduates with a Bachelor's degree had 46 or 51.7 percent, while with Master's degree units had 33 or 37.1 percent, then graduated Master's degree had 7 or 7.9 percent, and with Doctor's degree units had 3 or 3.4 percent. In connection to this, data revealed that the majority of the teacher-respondents were Bachelor's degree holders in terms of highest educational attainment with a frequency of 46 or 51.7 percent. However, the lowest frequency was 3 or 3.4 percent belonging to teacher-participants with Doctor's degree units. This means that most of the teachers who were assigned to the school of the hinterland were fresh graduates and had less experience in teaching since most of them were bachelor's degree holders. It might be inferred that many teachers were still not progressing academically or professionally. However, some people who started by enrolling in master's programs only finish up obtaining units for some reasons that they were able to achieve fully in continuing their graduate school studies.

In conclusion, while there are challenges in advancing academically and professionally in the hinterland schools, there are still various avenues for teachers to enhance their knowledge and skills. Education stakeholders need to continue to provide support and resources to ensure that teachers are equipped with the necessary competencies to provide quality education to their students.

Lastly, the table also presents the teachers-respondents in terms of designation. Data show that teacher-respondents' designation as Teacher I had 68 or 76.4 percent, while Teacher II had 8 or 9.0 percent, then Teacher III had 7 or 7.9 percent, and Master Teacher I had 6 or 6.7 percent. Moreover, the highest in terms of designation with a frequency of 68 or 76.4 percent belongs to the Teacher I position. In contrast, the lowest frequency in designation is 6 or 6.7 percent belongs to participants of Master Teacher I. This means that the majority of the teacher-respondents in the schools of the hinterland were teacher I in position. This indicates that most of the newly hired teacher were deployed or assigned to the schools in the hinterland as their first training ground station and served there for three to five years before being transferred to another station.

3.2 Ethical Leadership Practices of School Leaders in the Hinterland Public Schools

The school leaders and teachers rated the ethical leadership practices of school leaders in the hinterland public schools according to seven domains such as integrity, fairness, people orientation, power sharing, ethical guidance, role clarification, and concern for sustainability. Table 3 presents the summary of the school leaders' ethical leadership practices as rated by the teachers and the school leaders themselves based on the following domains such as integrity, fairness, people orientation, power sharing, ethical guidance, role clarification, and concern for sustainability.

Table 3. Summary table of school heads' ethical leadership practices as rated by themselves and the teachers

DOMAINS	TEACHERS			SCHOOL HEADS		
	$\bar{x}$	SD	Interpretation	$\bar{x}$	SD	Interpretation
Integrity	3.52	0.52	Always Practiced	3.90	0.22	Always Practiced
Fairness	3.59	0.52	Always Practiced	3.96	0.12	Always Practiced
People Orientation	3.49	0.53	Always Practiced	3.93	0.23	Always Practiced
Power Sharing	3.57	0.52	Always Practiced	3.95	0.16	Always Practiced
Ethical Guidance	3.47	0.54	Always Practiced	3.80	0.46	Always Practiced
Role Clarification	3.58	0.54	Always Practiced	3.93	0.26	Always Practiced
Concern for Sustainability	3.60	0.54	Always Practiced	3.92	0.28	Always Practiced
Overall	3.55	0.53	Always Practiced	3.91	0.24	Always Practiced

Legend: 1.00-1.75 (Strongly Disagree) 1.76-2.50 (Disagree) 2.51-3.25 (Agree) 3.26-4.00 (Strongly Agree)

As shown in Table 3, the domains of ethical leadership practices of school leaders as rated by themselves and the teachers were always practiced. Specifically, the highest mean according to teachers' rating was Concern for Sustainability with a mean of 3.60 and an SD of 0.54, then followed by Role Clarification with a mean of 3.58 and an SD of 0.54. However, for the school leaders' rating, the highest mean was fairness with a mean of 3.96 and an SD of 0.12. On the other hand, the lowest mean for teachers' rating was on Ethical Guidance with a mean of 3.57 and an SD of 0.54. The same with the rating of the school leaders with the lowest being Ethical Guidance with a mean of 3.80 and an SD of 0.46.

The results indicate that the school leaders in the schools of the hinterland of the two districts of Misamis Oriental had exemplary performance and practiced their ethical leadership, particularly on ethical guidance. This means that school leaders and teachers assigned to the schools of the hinterland greatly valued their responsibilities and duties since they were working and collaborating in all aspects as what being depicted in the results. Moreover, school leaders were ethically guided because they were able to meet the necessary needs of the schools and the teachers. This result is supported by the study of Vikaraman, Mansor, Yusoff Mohd Nor, Alias, and Gurusamy (2021) in which the respondents, who are principals, shared that they advise their teachers to be loyal, sincere, and always speak the truth. Principals must follow ethics to guide the teachers later on.

3.3 Significant Difference in the Ethical Leadership Practices between the School Heads and Teachers' Ratings

Table 4 explains the significant difference in the ethical leadership practices between the school heads and teachers' ratings.

Table 4. Difference in the ethical leadership practices between the school heads and teachers' ratings

CLASSIFICATION	RATINGS ON ETHICAL LEADERSHIP PRACTICES		
	t-value	p-value	Decision on Ho
Teachers	-20.761	.000	reject
School Heads	-89.738	.000	reject

Significant if P-value < 0.05

Legend: Ho is rejected if Significant

Ho is accepted if Not Significant

The data showed that there was a significant difference in the ethical leadership practices as rated by the Teachers with a t-value=-20.261 and p-value=0.000. Moreover, the data also showed significant difference in the ethical leadership practices as rated by the School Head with a t-value=-89.738 and p-value=0.000. Furthermore, the result shows that the teachers' rating is lower than the ratings of the School heads on the ethical leadership practices of the School Heads. This implies that school heads in the hinterland schools need to practice and strengthen their ability to lead ethically because morally upright leaders can inspire their employees to follow in their footsteps,

and because of their example, teachers are more likely to interact successfully, which in turn affects productivity and improves everyone's attitude at work.

According to Tourigny, Han, Baba, and Pan (2018), the starting point of the long chain is the high moral ground and social responsibility of an ethical leader. Along the chain, the most prominent variables are “trust” and “shared perceptions” of teachers. This indicates that building trust is the most crucial quality school administrators should appreciate and cultivate to help instructors do the same. Leaders who uphold moral principles do so via both their words and actions, acting with integrity and refusing to ignore wrongdoings. Furthermore, Schaubroeck et al. (2012) stated that moral leaders influence followers' behavior by building moral cultures. These cultures influence followers' behavior through social influence. To maximize the effectiveness of the teachers, it boosts their morale and makes sure they don't operate unethically.

3.4 Significant Difference in the Ethical Leadership Practices of School Heads in Hinterland Schools when Grouped According to Profile

Table 5 describes the significant difference in leadership practices of the school heads when the respondents are grouped according to their age, number of years in service, highest educational attainment, and designation. The data showed that there was a significant difference in respondents' ethical leadership practices in terms of integrity, fairness, people orientation, power sharing, ethical guidance, role clarification, and concern for sustainability when grouped according to their demographic profile. The result shows that $p\text{-values} = 0.000$, therefore the null hypothesis was rejected. This means that school leaders' capacity to lead their teachers with difficulties in the educational system can be affected by their demographic profile such as age, number of years in service, highest educational attainment, and designation.

Table 5. Difference in the ethical leadership practices of school heads in hinterland schools when grouped according to profile

ETHICAL LEADERSHIP PRACTICES	PROFILE OF SCHOOL HEADS											
	Residence			Years in Service			Highest Educational Attainment			Designation		
	t-value	p-value	Decision on Ho	t-value	p-value	Decision on Ho	t-value	p-value	Decision on Ho	t-value	p-value	Decision on Ho
Integrity	-7.051	.000	reject	-8.793	.000	Reject	-15.490	.000	Reject	45.429	.000	reject
Fairness	-7.985	.000	reject	-10.121	.000	Reject	-16.981	.000	Reject	44.657	.000	reject
People Orientation	-7.869	.000	reject	-10.304	.000	Reject	-13.288	.000	Reject	41.681	.000	reject
Power Sharing	-8.286	.000	reject	-11.451	.000	Reject	-15.027	.000	Reject	40.331	.000	reject
Ethical Guidance	-7.519	.000	reject	-13.815	.000	Reject	-10.496	.000	Reject	31.224	.000	reject
Role Clarification	-7.990	.000	reject	-10.717	.000	Reject	-11.309	.000	Reject	37.406	.000	reject
Concern for Sustainability	-6.472	.000	reject	-8.398	.000	reject	-13.796	.000	Reject	47.472	.000	reject

Significant if P-value <0.05

Legend: Ho is rejected if Significant

Ho is accepted if Not Significant

This indicates that school leaders' capacity to lead their teachers with difficulties in the educational system can be affected by their demographic profile such as age, number of years in service, highest educational attainment, and designation. In addition, employees' faith in their leader, according to Schoorman et al. (2007), can be described as the willingness to put up with vulnerability in exchange for desired results. Honesty, kindness, charity, and acceptance are traits of a successful leader (Zeffane, 2010).

One factor that affects job performance is demographic changes. However, very few studies have examined how demographic traits affect productivity at work. Among the demographic parameters examined in terms of work performance were gender, age, and position (Tsui, 2017). Similarly, it is corroborated in a study by Marcano (2013) on Emotional Intelligence and Demographic Profile Variables as Predictors of Job Performance that factors like

age, civil status, educational attainment, and others in the demographic profile have no appreciable bearing on work performance. In addition, demographic information allows the researcher to better understand certain background characteristics that will help in better understanding the respondents. Researchers analyze the quantifiable statistics of a certain population in the discipline of demography (Vogt and Johnson, 2011). Statistics are used to define subsets of populations and characterize populations at a specific time. Typical demographics include age, sex, level of education, occupation, and socioeconomic standing (American Psychological Association, 2009).

4.0 Conclusion

As evidenced by the study's findings, school heads and teachers assigned in hinterland schools had a high regard for their roles and responsibilities because they were cooperating and working together in every way. Furthermore, because they were able to meet the requirements of the teachers and the schools, school heads were guided by moral principles. Additionally, the principals of the schools in the hinterlands must hone their ethical leadership skills because morally reclusive leaders encourage their staff to follow in their footsteps and because they model successful interactions with colleagues, which boosts morale and increases productivity.

The study also showed that factors such age, years of service, highest level of education attained, and designation can have an impact on a school leader's ability to support a teacher who is having difficulties in the educational system. Therefore, the demographic profile of school leaders, including age, years of service, highest level of education attained, and designation, may have an impact on their ability to support their teachers when they face challenges in the educational system.

The Department of Education could use the study's findings to create seminars and relevant programs on school ethical leadership practices . It is suggested that the division superintendent should provide avenue to raise awareness about how to improve ethical leadership practices of school heads not only in the hinterland schools but as well as schools along the way.

Moreover, it is recommended that supervisors have to implement and create a design of action plan which includes activities that would help improve ethical behavior of every personnel of the schools as well as the quality of teaching of every teaching personnel. Further, the findings of the study could be usefull guide and basis to assess all the school heads not only in the hinterland schools but also along the way. It is encouraged that school heads should create a plan or program together with the teachers to improve ethical leadership that would serve them as a guide for a daily bases and could turn into practice.

5.0 Contributions of Authors

Sheila Mae Allonar Sabello-Encoding, data gathering, supervising, data analysis, writing
Josephine Oxillo Oted- Data analysis, writing, editing

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7.0 Conflict of Interests

The author declares that upon the completion of this paper, there was no conflicting party or interest

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Factors Driving Male Violence Against Women in Intimate Relationships

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Abstract. Cases of male violence against women continue to grow. Therefore, this study aimed to examine the influencing factors that lead men to commit violence against their partners. Employing a descriptive research design, this study first identified the demographic profile of 50 identified aggressive men toward women with whom they have an intimate relationship. Subsequently, the influencing factors behind their aggressive behavior were identified. Respondents were selected from those with current cases of violence against women in the Philippines. Data were gathered through interviews, which were then analyzed and interpreted both quantitatively and qualitatively. Results showed that among the influencing factors that lead men to commit violence against women are the perpetrators' childhood learned behavior/conditioning, economic stress, and alcohol consumption. The results of this study will be used to further develop and improve a program aimed at the elimination of violence against women.

Keywords: Violence against women; Aggressive behavior; Influencing factors; Intimate partner violence; Gender-based violence.

1.0 Introduction

Violence against women (VAW) has been a problem in many places, particularly in the Philippines. Despite efforts and advocacy campaigns against violence towards women, cases of abuse have continued to rise. Furthermore, records from the Philippine National Police (PNP) show that the identified perpetrators are mostly intimate partners of the victims, affecting not only the victims but also their families. The World Health Organization's recent statistics show that out of every three women, one is prone to physical and sexual abuse. Yet, the United Nations reports that even with this high number of abuses toward women, only 40% of the victims seek guidance and help (Qaisarani et al., 2016). In the Philippines, according to PNP statistics, the most common perpetrators of violence against women are live-in partners or spouses (Bernarte et al., 2018).

Published research studies provide information on why men use violence against women; however, there is a need to delve into the influencing factors behind why men commit violent acts against their intimate partners. Understanding men's complex experiences within the framework of deep-rooted patriarchal processes and institutions that allow men to assert power and influence over women can aid in identifying the fundamental causes of violence against women and girls and in preventing violence before it occurs (Khuran, 2017). The only way to eliminate harmful gender roles and behaviors is for men and boys to get involved (Khuran, 2017).

It was found that family, economic, sociocultural, and sociopolitical factors exist in the Filipino community that contribute to the prevalence of violence against women in various settings (Bernarte et al., 2018). Furthermore, gender disparity and harmful, hegemonic masculinities within the relationship space were major drivers of intimate partner abuse (Fulu et al., 2013). Controlling behavior, quarreling, depression, transactional sex, multiple

sexual partners, and experiences of child abuse, among other factors, were all strongly linked to violence (Fulu et al., 2013). Though these factors were common in many studies, one, however, stood out as something that could shed light on what influenced men to commit violence against women. In 2013, a research study was conducted to determine the perpetrator's risk factors for violence against women. Results from the study showed that the age of the victim is linked to the commission of abuse, with younger perpetrators becoming more involved in women's violence. The same result was found in the study of Odalepo et al. (2011). The age of the perpetrator was seen as one of the factors that contribute to violence against women, aside from the breakup of relationships, income, and previous oppression. In some locations, especially Cambodia and Indonesia, a large percentage of men said they were under the age of 15 when they first committed rape. Forty-nine percent of the men who admitted to raping a woman did so for the first time while they were younger (Fulu et al., 2013).

Men's childhood experiences and family upbringing are also factors that influence men to commit violence against women. Supported by some psychological theories, men's childhood experiences or trauma of physical and verbal abuse from parents or family members are likely to affect men in their way of dealing with conflicts. Men who committed violence against women mostly were victims of abuse during their childhood (Fulu et al., 2013). Thirteen to 65 percent of the men polled said they had been physically abused as children. Before the age of 18, 6% to 37% of the respondents claimed to have been sexually abused (Fulu et al., 2013). Intimate partner violence is more closely linked to child abuse encounters. This means that perpetrators of intimate partner violence were also victims of child abuse during their childhood. Furthermore, male children witnessing their father's aggression toward his wife (and, in a few cases, mutual violence between both partners) could cause them to grow up to be violent husbands or fathers (Arisukwu et al., 2021).

In the past two years (2021-2022), a total of 450 cases of violence against women and girls, mostly sexual abuse and domestic violence, were handled by the Gender Watch Against Violence and Exploitation (GWAVE). The occurrence of VAW reflects social inequalities that support misogynistic characters and male-dominant culture (Fulu et al., 2013). Years of studies by scholars and researchers have shown that gender inequality, perceived women's inferiority to men, and types of environments usher a widespread acceptance of violence against women. Men in this context must be held liable for their socially unacceptable actions. But to fully understand the issue and to create preventive measures, men's perspectives on violence against women must be studied (Fulu et al., 2013). Their context and viewpoints will be used to fully understand what influences them to become violent towards women who happen to have intimate relationships with them. The results of this study are useful as bases for creating preventive programs and measures to realistically eliminate violence against women.

2.0 Methodology

2.1 Research Design

This study employed a descriptive research design. Firstly, the demographic and economic backgrounds of the respondents were established and described. Secondly, the reasons or influencing factors for violent behavior were analyzed and categorized.

2.2 Research Participants

The study participants were from Negros Oriental, Philippines. They were determined through the stratified sampling technique to ensure representations from each study site. From the list of those identified men with confirmed VAW cases, a sampling procedure with a random start and interval was conducted per study site. However, the sample size per site decreased since some sampled individuals refused to participate due to the sensitivity of the research topic. Thus, the final number of respondents who willingly participated in this study was fifty.

2.3 Research Instrument

This study used a semi-structured self-made questionnaire to gather data through interviews with the respondents.

2.4 Data Gathering Procedure

Coordination with the appropriate office of the local government unit was established before the actual interviews. A semi-structured survey interview questionnaire in Cebuano was already prepared to capture those data. The researchers personally interviewed because of the sensitivity of the questions to be asked.

2.5 Ethical Considerations

Before the conduct of the study, researchers secured approval from the University Research Ethics Committee of Silliman University. During the conduct of the study, a written consent was signed by all participants signifying their willingness to participate. The researcher meticulously ensured that participants comprehended the study's objectives, the nature of their participation, and their unequivocal right to withdraw at any point. Questions were posed using straightforward language, facilitating participants' comfortable expression in their own dialects. Upholding strict confidentiality, the researcher prioritized the privacy of participants' personal information. In addition, the researcher engaged with the funding agency to uphold ethical standards in our conduct of the study. Results were then forwarded to the funding agency and a thorough discussion were made to make sure they understood the outcome of the study and the researchers recommendations based on the result. Finally, the conduct of the study is free from any conflict of interest.

2.6 Data Analysis

The researcher utilized descriptive statistics analysis, such as frequency and percentage distribution, to analyze the data.

3.0 Results and Discussion

3.1 Childhood Experiences

Childhood experiences are considered one of the many factors to understand why men commit violence against women. This study examined the different childhood experiences of the respondents.

Experiences of Discipline

Table 1. Respondents' experiences of discipline

	FREQUENCY	PERCENTAGE
Kinds of Discipline		
Verbal corrective	44	88.00
Physical punishment	23	46.00
Verbal abuse	19	38.00
Persons Who Disciplined		
Father	28	56.00
Mother	25	50.00
Older brother	2	4.00
Grandmother	2	4.00
Grandfather	2	4.00
Older sister	1	2.00
Feelings When Disciplined		
Acceptance	42	84.00
Sad	20	40.00
Avoidance	18	26.00
Negative influence	1	2.00

Table 1 presents the respondents' childhood experiences with their families, focusing on the types of discipline they received at home and from whom they received it. It also includes the respondents' recollections of their feelings during the time they were disciplined. Regarding the types of discipline the respondents received at home, physical punishment, verbal abuse punishment, and verbal corrective discipline emerged as common themes. Physical abuse punishments involve the use of force directed towards the individual being disciplined. Verbal abuse punishments consist of hurtful words directed towards someone, while verbal corrective discipline is described as a positive form of discipline involving advice given with respect and without hurting others' feelings.

Descriptively, among the 46 percent of respondents who experienced physical punishment as discipline, forms of punishment included whipping, kneeling over mongo seeds, hanging, and the least severe being pinching. The 38 percent who encountered verbal abuse mostly endured hurtful comments and derogatory words from their parent/s. Parents often recalled past mistakes and misbehavior of the respondents. A significant 88 percent reported receiving verbal corrective discipline at home, indicating that instead of physical or verbal abuse, they received advice and guidance aimed at preventing future mistakes. Researchers believe that respondents likely experienced at least these three types of discipline at home due to the multiple choices provided. When asked about their feelings regarding the discipline received at home, 84 percent expressed acceptance, feeling okay with the discipline imposed, often rationalizing it with statements like “I accept it because I made a mistake.”

Relationship with Parents

Table 2. Quality of relationship with parents

	FREQUENCY	PERCENTAGE
Type of Relationships With Parents		
Close to both parents	28	56.00
Close with the mother	18	36.00
Close with the father	14	28.00
Not close to both parents	2	4.00
Close to the aunt	1	2.00
Close to the grandfather	1	2.00
Parents’ Relationship Dynamics		
Expressive (mostly verbal altercations)	44	88.00
Male Dominance	17	32.00
Healthy Interaction	13	26.00
Unfaithfulness	2	4.00
No assessment	2	2.00
Observed Situations When Parents Quarreled		
Usually, the father shouts during a quarrel	19	38.00
Usually, the mother shouts during a quarrel	18	36.00
Usually, the father is drunk during a quarrel	9	18.00
Usually, the mother just cries during a quarrel	8	16.00
Things are thrown around during quarrels.	1	2.00
Feelings After Parents Quarreled		
Pity (for the mother)	23	46.00
Embarrassed	22	44.00
Sad	18	36.00
Indifference	15	30.00
Pity (for the father)	1	2.00

Table 2 presents the respondents’ observed quality of relationships with their parents, parents’ relationship dynamics, situations when parents quarrel, and the respondents’ feelings during these quarrels. Descriptively, the majority of respondents (56 percent) reported being close to both parents. However, there is a slight difference as 36 percent of respondents reported being closer to their mothers compared to 28 percent to their fathers. A very small percentage reported being close to their aunt or grandfather.

Regarding the observed relationship dynamics of their parents, several common themes emerged. Most prevalent was an expressive relationship dynamic, with 88 percent of respondents reporting both parents freely expressing themselves, often involving verbal altercations with exchanges of hurtful words. Additionally, male dominance in the parent’s relationship dynamics scored higher, with 34 percent of respondents observing this dynamic.

In terms of observed situations when parents quarrel, 38 percent of respondents reported that during quarrels, the father usually shouts at the mother, while 36 percent observed the opposite, with the mother shouting at the father. This aligns with the 88 percent of respondents who assessed their parents’ relationship dynamics as expressive through verbal altercations. Interestingly, 18 percent observed that most quarrels happen when the

father is drunk. Additionally, 16 percent witnessed the mother crying and doing nothing during quarrels, which seems to align with the observation of the father being the dominant force in the household.

Moreover, the feelings of the respondents during these quarrels were mostly directed towards their mothers compared to their fathers. Forty-six percent of respondents felt pity for their mothers compared to 2 percent for their fathers, reinforcing the male dominance in the family, especially in the parents' relationship dynamics.

3.2 Role Performance at Home

Table 3. Role performance in the family

	FREQUENCY	PERCENTAGE
Kinds of Discipline Instilled on Own Children		
Verbal corrective	42	84.00
Avoidance	15	30.00
Physical punishment	10	20.00
Types of Feelings after the Incident		
Remorseful	49	98.00
Strained	24	48.00
How to Deal with Spousal Quarrels		
Discuss	47	94.00
Passivity	35	70.00
Persons Involved in Resolving Misunderstanding		
Collective	25	50.00
Depends on who is right	25	50.00
Wife	9	18.00
Husband	9	18.00
No one	3	6.00
Feelings Involved Towards the Cause of Quarrel		
Satisfied or contented	31	62.00
Dejected	21	42.00

Table 3 presents the respondents' perceptions and actual experiences in their roles at home as both husbands and fathers. Their feelings toward these roles were also taken into consideration for analysis and discussion. As fathers, respondents exercise their role as disciplinarians to their children, employing various forms of discipline including verbal corrective, avoidance, and physical punishment.

Descriptively, verbal corrective discipline, favored by 84 percent of the respondents, is characterized as a positive approach where parents talk to their children politely and give them advice. Thirty percent of respondents employ avoidance as their way of responding to children's misbehavior, choosing to walk away to avoid resorting to physical punishment. In situations deemed too severe, 20 percent of respondents use physical punishment, although they express reservations about it. Since respondents were given the freedom to choose multiple options, researchers believe that respondents employ all these types of discipline at home, with a notable reservation, especially concerning physical punishment.

Despite favoring verbal corrective discipline, respondents do not seem to connect with it emotionally, particularly when asked about their feelings after disciplining their children. Ninety-eight percent of respondents felt remorse after disciplining their children, indicating a sense of pity or regret. Forty-eight percent also expressed feeling strained, suggesting a desire to resort to physical punishment but refraining from doing so due to fear of potential issues that might arise.

In terms of dealing with spousal quarrels, two main approaches emerged as the most favored among respondents: being passive and being proactive. Seventy percent of the respondents stated that being passive helps them deal with spousal quarrels. This involves avoiding and getting away from unfavorable situations with their partners. One respondent recounted, "I just leave to avoid conflict." However, most respondents said that during quarrels, they are proactive about addressing issues. This means they find ways to discuss problems and

misunderstandings politely and courteously, as one respondent stated, "We just talk it out if there's a problem." Surprisingly, none of the respondents reported resorting to violence or uttering hurtful words towards their partner during quarrels. They believe it must be a collective effort (50.0%) between husband and wife to resolve misunderstandings. They are very content and satisfied (62.0%) with the collaborative effort between marital partners in resolving quarrels. However, considering that some respondents have current cases of abuse filed in their respective municipalities, this does not align with what they believe should be right and what they do.

3.3 Tensions in the Family

Table 4. Causes and feelings during tensions in the family

	FREQUENCY	PERCENTAGE
Causes of Tension in the Family		
Financial Instability	38	76.00
Husband's vices (alcohol)	17	34.00
Wife's failure in her duties	8	16.00
Jealousy	7	14.00
Misbehaving children	6	12.00
In-laws' involvement in family misunderstandings	4	8.00
Types of Feelings During Family Tension		
Helpless	30	60.00
Ashamed	16	32.00
Sad	13	26.00
Irritable	5	10.00
Responses Family Tension		
Nothing	39	78.00
I physically hurt my partner	23	46.00
Get drunk	9	18.00
Talk about solving the problem	3	6.00
Intimate Partners' Reaction to Husbands' Response		
Nothing	25	50.00
Mad	22	44.00
Reported to the police	19	38.00
Run Away	5	10.00
Worked hard to earn money	1	2.00
Sad	1	2.00

Table 4 presents the respondents' experiences regarding tensions in the family, which are situations that may lead to quarrels or misunderstandings. These tensions are believed to be influencing factors in how respondents respond, either violently or not. Upon careful examination, six common situations emerged as experiences that influenced tensions in the family: financial stability, jealousy, husband's vices, wife's failure to perform household duties, in-law's involvement, and misbehaving children.

Respondents' financial difficulties due to unstable work and lack of income were found to be the primary cause of tension in the family. This is consistent with the data in Table 4, which describes the respondents' monthly income as only 5,000 a month. This result is also consistent with the study by Schwab-Reese (2016), which shows that financial stress resulting from a lack of income and unpaid bills is significantly related to physical violence perpetration. Financial problems are often present before acts of intimate partner violence (Byun, 2012).

Considering that all respondents in this study had cases of violence against women (VAW) at the time the data were collected, researchers believe that the respondents' financial difficulties, which were the main reason for tension in the family (76.00%), may have been the reason for the acts of violence against intimate partners. It is also notable that the husband's vices, particularly alcohol consumption (34.00%), created tension in the family and eventually led to marital quarrels. This corroborates results from different research studies showing that alcohol consumption is significantly related to intimate partner violence (Berg et al., 2011; Pareck, 2021). Other causes of tension in the family included jealousy (14.00%), wife's failure to perform household duties (16.00%), in-laws' involvement in family problems (8.00%), and misbehaving children (12.00%).

The above-mentioned tensions are believed to be present prior to acts of violence against intimate partners. The researchers also examined the feelings of the respondents regarding the tensions experienced in the family. Using the idea of the cognitive triangle, where feelings mostly dictate actions if not properly processed, researchers believe that understanding the respondents' feelings toward certain tensions in the family is crucial.

Sixty percent of the respondents felt helpless about the mentioned tensions in the family. Respondents felt unable to change their financial situations, as most of them earned only 5,000 pesos or less, which was compounded by limited job options due to incomplete higher education. Twenty-six percent felt sad, 32 percent felt ashamed, and 10 percent felt irritable regarding the different tensions experienced in the family.

Examining actual responses to the different family tensions, 78 percent of the respondents did nothing. Researchers believe there might be reservations in their responses considering that they all had records in the barangay for physical abuse against their partners. Only 46 percent of the respondents honestly admitted to physically hurting their partners in response to prevailing tensions in the family. Regarding the intimate partners' response to the husbands' acts of violence against them, only 38 percent reported it to the police or the barangay.

3.4 Reasons for Violence Against Women

Table 5. circumstances of violence to partners

	FREQUENCY	PERCENTAGE
Reason for Being Violent		
Drunk	24	48.00
Retaliation	21	42.00
Nagging	19	38.00
Financial Situation	14	28.00
Embarrassed	13	26.00
Jealousy	13	26.00
Failed duties	5	10.00
Feelings After Showing Violence		
Apologetic	29	58.00
Remorseful	27	54.00
Regret	27	54.00
Delighted	17	34.00
Nothing	6	12.00
Husband's Idea How Spouse Should Behave		
Agreeable	26	52.00
Respectful	22	44.00
Calm	17	34.00
Responsible	16	32.00
Approachable	16	32.00

Table 5 presents the respondents' actual reasons for physically hurting their intimate partners. Seven common answers were identified: drunkenness, embarrassment, nagging, jealousy, failed duties, retaliation, and financial situation. Forty-eight percent of the husbands reported being drunk at the time they physically hurt their wives. This resonates with the results of Graham et al. (2011), which showed that men are more violent when intoxicated, and the severity of violence is higher compared to situations when men are not under the influence of alcohol. For the husbands, they believe that drinking alcoholic beverages provides relaxation and helps them forget their problems. However, this often leads to their intimate partners nagging them about drinking and spending their minimal income.

3.5 Discussion

The results of this study indicate that childhood learned behavior/conditioning, economic stress, and alcohol consumption are the prevailing influencing factors behind the respondents' violent behavior towards intimate

partners. It is observed that at least one of these influencing factors is present prior to the act of violence by the respondents.

Childhood Learned Behavior / Conditioning

Respondents of this study experienced abuse during their childhood, which manifested in the form of physical punishment, such as whipping, kneeling over mongo seeds, hanging, and pinching, as well as verbal abuse, where hurtful words were uttered by parents. Up to 84 percent of respondents received both verbal and physical abuse punishment, mostly administered by the father, who was viewed as the authority figure at home. The mother also participated in similar forms of punishment. These findings align with the research of Fulu (2013) and Arisuku (2021), which link violence to childhood experiences of abuse by perpetrators of violence. There appears to be a culture of violence at home, normalized by 84 percent of respondents who believe that the verbal and physical abuse they received from their parents was justified due to their misbehaviors. One respondent articulated this acceptance: "I accepted the punishment because I made a mistake."

It is also common for both parents to freely express themselves, often through verbal altercations, with husbands shouting at wives during quarrels. Witnessing their fathers' aggression towards their mothers contributed to respondents' violent behavior. This finding coincides with the research of Arisuku (2021), which showed that intimate partner violence is linked to child abuse encounters and witnessing a husband's aggression towards his wife. From a young age, respondents experienced gender disparity and hegemonic masculinities, with fathers exercising dominance as the source of discipline and income provider.

This childhood learned behavior/conditioning is seen as influencing factors behind respondents' violent behaviors towards intimate partners. This finding is consistent with other studies that have established the link between violence and perpetrators' childhood experiences, as demonstrated by Fulu (2013) and Arisuku (2021).

Economic Stress

The data from this study reveal that up to 70 percent of the respondents have a very minimal income of 5,000 pesos only. This is primarily because 94 percent of them never reached college or had the opportunity to obtain a degree, resulting in non-permanent work. This lack of opportunity was expressed by one respondent who said, "We don't have decent jobs, we just wait for someone to call us."

The respondents do not have a permanent income to provide for the needs of their families. The wives also have no source of income due to the absence of permanent work. Both husbands and wives rely on a maximum income of 5,000 pesos per month to meet the family's needs. However, with the continuing increase in prices of goods and services, this monthly income (if they are called for work) is certainly not sufficient.

This poor economic situation, or economic stress, creates tensions in the family, as 76 percent of the respondents identified that their financial instability mostly triggers tensions in the family and eventually leads to arguments between husband and wife, which can escalate to physical violence by the husband (46 percent). This finding aligns with the results of the study by Bernarte et al. (2018), which shows that difficult economic situations contribute to the prevalence of violence against women in various settings. Furthermore, most of the respondents (60%) feel very helpless with their situations, as they can only rely on whatever available work is accessible to them based on their level of education.

Alcohol Consumption

This study reveals that alcohol consumption is also considered one of the influencing factors in the commission of violence against intimate partners. Alcohol consumption by the respondents comprises 34 percent of the causes of tensions in the family, and in most cases, this tension leads to verbal and physical altercations. Getting drunk is a common response for respondents when problems occur in the family. Forty-eight percent of the husbands said that the actual reason why they physically hurt their partner is that they were drunk. This finding is consistent with that of Fonseca et al. (2009), whose study showed that perpetrators of intimate partner violence were under the influence of alcohol at the time of the commission of violence. Similar results were found in the study of Boden et al. (2012).

Alcohol is a risk factor for the commission of intimate partner violence because it affects the respondents' physical and cognitive abilities. It reduces one's self-control and impairs judgment and decision-making abilities.

4.0 Conclusion

This study identified several influencing factors behind the respondents' violent behavior towards intimate partners. Results showed that prevailing factors include childhood learned behavior/conditioning, characterized by experiences of physical and verbal abuse from both parents, with the father often being an authoritative figure at home; economic stress and financial instability due to lower educational levels, resulting in low income and inability to provide basic needs for the family; and alcohol consumption.

Respondents' childhood experiences of trauma from physical and verbal abuse, as well as their overall learned behavior from childhood, are seen as influencing factors for men to commit violence against women. This resonates with the Ecological framework by Donald Dutton (1994), which suggests that the culture of violence deeply ingrained in man's experiences in the family and environment. The respondents commonly shared experiences of abuse from parents and witnessed violence perpetrated by fathers towards mothers, which researchers believe influences them to act violently during tense situations with intimate partners.

Based on the study's findings, researchers recommend that men with VAW cases undergo training and seminars on tension management, as they often resort to alcohol consumption to manage tensions. Additionally, livelihood training should be provided to respondents and their partners to improve economic situations and reduce financial stress, potentially eliminating occurrences of violence against women. For future research, widening the study's scope and including men without violence cases could provide comparative insights into the presence of these factors among different groups.

5.0 Contributions of Authors

Tuason and Augusto equally contributed to this study. Augusto made the research instrument and facilitated the interview of the respondents while Tuason made the analysis of the data and wrote the results and discussions.

6.0 Funding

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7.0 Conflict of Interests

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Exploring Mental Wellbeing, Distress and Adjustment in a Blended Learning Environment

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Abstract. In the wake of the COVID-19 pandemic, the education landscape underwent a rapid transformation, with blended learning emerging as a predominant approach. This study employed explanatory sequential analysis to examine the impact of academic and familial distress, as well as adjustment, on students' mental health within the dual continua model. Quantitative results identified three mental health groups: flourishing (21.14%), languishing (39.72%), and moderately mentally healthy (39.14%). Students generally displayed moderate mental well-being, high academic distress, moderate familial distress, and strong adjustment to blended learning. Notably, the relationship between adjustment and academic stress, suggesting the effective adaptation to the demands of blended learning can mitigate academic related stressors. Explaining the quantitative area, qualitative exploration uncovers a deeper understanding of student's lived experiences, emotional states, ranging from resilience and adaptability to anxiety and frustrations. Moreover, it tackles the challenges faced by the students including technological barriers, time management dilemmas and exacerbation of isolation as the effects of pandemic. These revelations underscore the imperative need for educational interventions that seamlessly integrate mental health education into curricula, fostering a healthier and more inclusive blended learning environment. Prioritizing mental health education in the curriculum can enhance students' academic, emotional, and social success in the evolving educational environment.

Keywords: Academic distress; Adjustment; Blended learning environment; Dual continua model.

1.0 Introduction

The shift to online learning and technology-driven education has become a reality for many students, presenting both opportunities and challenges. While some students are tech-savvy and adapt easily, others grapple with navigating online platforms and troubleshooting technical issues. Proficiency with these tools tends to improve with practice and guidance, but this adjustment has not been without consequences. Notably, students have voiced negative effects on their physical and emotional health (Agarwal & Agarwal, 2022; Akpınar, 2021; Sathibabu & G, 2022; Sawhney et al., 2021; Sharma & Sharma, 2021). Prolonged screen time has led to issues like eye strain, neck stiffness, and poor posture. Additionally, mental health concerns, such as anxiety, anger, and hopelessness, have become increasingly prevalent (Ainamlin Dkhar & Grace Lalhlupuii Sailo, 2021; Li & Che, 2022; Mfidi, 2018; Schulte-Körne, 2016).

A key component of blended learning, which blends online and in-person components, is time management and prioritization skills. This change to a more independent learning environment can be intimidating for students who lack self-discipline and time management abilities. Time management abilities are acknowledged as essential for academic achievement in traditional contexts because time management directly affects grades. Conversely, poor time management can result in academic setbacks (Ahmad et al., 2019; Alias et al., 2019; halYazhini et al., 2021; Iqbal Amin Khan et al., 2020; Khan, 2015).

Blended learning entails students taking greater responsibility for their education, necessitating active participation in online discussions, completing assignments independently, and seeking clarification autonomously. While this increased autonomy can benefit self-motivated students, it may overwhelm others. Banditvilai (2016) highlights that a student's autonomy, or their ability to direct their own education, correlates with increased engagement, a positive emotional state, a preference for challenging tasks, improved academic performance, and longer school enrollment. Students that participate in blended learning are typically more focused and independent than their peers in traditional educational environments (Yuan & Kim, 2018). Abbacan-Tuguic (2021), further claims that blended learning improves student attitude towards study management which motivates them to organize their time to study online and collaborate with other students.

However, blended learning may limit possibilities for in-person communication and peer socialization, which may have an adverse effect on students' social and emotional health. Online courses have benefits, such as enhanced accessibility and participation in class activities. For instance, introverted students could discover that online communities encourage more open engagement. However, instances of decreased social engagement have also been reported. The sensation of isolation brought on the pandemic-related social distance measurements is made worse by the lack of in-person academic interactions (Barbieri & Mercado, 2022; Cooper et al., 2021; Hoffart et al., 2022; Pavin Ivanec, 2022). Giusti et al. (2021) found that university students identified the lack of direct face-to-face contact as the most significant drawback of distance education during the pandemic, followed by reduced interaction with instructors (Adnan & Anwar, 2020; Galusha, 1998). Prior research on remote education also underscores the importance of social interaction for students' well-being (Wallace, 2003).

Moreover, students experience stress due to the increased pressure of learning independently and adjusting to new routines (Jie, 2011; Kurniawan, 2022; Ya, 2010). Feelings of isolation, anxiety, and depression can manifest during the transition to blended learning and the broader pandemic-related stress. These emotional challenges can negatively affect various aspects of learning, including time management, concentration, study motivation, and learning methodologies, ultimately impacting academic performance (Idris et al., 2021; Turana et al., 2022).

The pandemic has prompted a surge in research examining its multifaceted effects on people's lives, including the economy, daily activities, academic performance, and physical and mental health. Concerns about the psychological implications of the pandemic on the mental health of children and young adults have been raised, as stress disorders and other mental health issues may emerge (Horesh & Brown, 2020; Schwartz et al., 2021). Understanding the mental well-being of students in these evolving educational environments is crucial for educators, policymakers, and mental health professionals to provide appropriate support and interventions.

This study is guided by the Dual Continua Model of Mental Health and Mental Illness proposed by Keyes (2002). This model distinguishes between mental health, encompassing emotional, psychological, and social well-being, and mental illness, which includes various forms of distress such as anxiety and depression (Keyes, 2002). Individuals can simultaneously experience both positive mental health and mental illness, highlighting the complexity of mental well-being.

The primary goal of this research is to investigate the impact of blended learning on students during the post-pandemic transition. It acknowledges that various contextual factors influence students' thoughts, emotions, and behaviors during this transition. The adjustments students make have been found to support their academic success, particularly for those with high levels of positive psychological adjustment, which reduces the likelihood of mental health issues such as depression, anxiety, stress, or burnout (Alharthi, 2020). This study aims to explore the relationship between distress and adjustment in the framework of the Dual Continua Model and provide

recommendations for educational institutions, instructors, and mental health practitioners to support students' mental well-being in blended learning environments.

To achieve these objectives, the study employs an exploratory sequential mixed-methods approach, combining quantitative surveys and qualitative interviews with students enrolled in blended learning programs across various educational levels and disciplines. The findings will contribute to the existing literature on mental health in educational settings, focusing on the emerging challenges and opportunities associated with blended learning.

This study addresses a critical gap in understanding how the transition to blended learning impacts students' mental well-being. Through the lens of a well-established psychological framework and a comprehensive research approach, it seeks to elucidate the intricate relationship between distress and adjustment in this context, ultimately providing insights for enhancing the educational experience and supporting students' mental health.

2.0 Methodology

2.1 Research Design

This study adopts explanatory sequential mixed method design to explore students' wellbeing, distress and adjustment and how they were impacted by blended learning transition. With this method, it starts with quantitative data collection, followed by qualitative analysis. The purpose of the initial quantitative phase is to explore the study and generate hypothesis and providing thick descriptive for the subsequent qualitative phase. The intent of this design is to find qualitative data to explain initial quantitative results (Creswell & Clark, 2007). Explanatory sequence designs allow researchers to use qualitative data analysis to inform quantitative research issues. Combining qualitative richness with quantitative rigor makes research more holistic and robust. Specifically, the first part of our study employs descriptive, regression, and multivariate analyses to assess the well-being, distress, and adjustment of students within the blended learning context. Subsequently, in the second part, we employed qualitative analysis to explore, from the students' perspective, how this blended learning approach has influenced their experiences and shed light on the underlying reasons for the quantitative findings.

2.2 Research Participants

Participants were three hundred fifty (350), 16-19 years old health-allied senior high school students surveyed from a private medical institution in an urbanized city in southern Luzon, Philippines. The sample was 287 (82%) females and 63 (18%) males. Majority of the participants (88%) reported that they fall into the income bracket of P76,670 and above representing a mix of middle and upper class. Also, majority of the participants (99%) have at least 2 or more gadgets that they can use in blended learning environment. These students had undergone the shift from traditional classroom-based education to fully online or blended learning, making their experiences essential to the study's investigation into distress and adjustment in blended learning environments.

2.3 Research Instrument

To validate the research instruments, a pilot study involved 30 senior high school participants. The pilot study assessed the reliability of instruments such as the Dual-Continua Model Scale (0.93), Academic Distress Scale (0.84), Familial Distress Scale (0.82), and Adjustment Scale (0.90). The Dual-Continua Model Scale, derived from the Mental Health Continuum Short Form (MHC-SF), measured affective, psychological, and social well-being (Keyes, 2002). The Academic Distress Scale assessed distress with a reliability score of 0.91. The Familial Distress Scale adapted from the Brief Family Distress Scale measured familial distress (Weiss & Lunsky, 2011). The Adjustment Scale examined student adjustment in cognitive, affective, and behavioral dimensions, with a reliability range of 0.88 to 0.91. These measures aimed to ensure the reliability and validity of the instruments in the Philippine setting, facilitating comprehensive data collection for the study.

2.4 Data Gathering Procedure

The data collection procedures for this research study began with obtaining formal authorization from the senior high school department's administration, and informed consent from the students in compliance with ethics guidelines. It was emphasized that student participation was voluntary and anonymous, ensuring strict confidentiality. In this study, various statistical techniques including mean, frequency and percentage distribution, standard deviation, regression model, and analysis of variance were applied to analyze the data. Multiple regression analysis, as suggested by Petchko (2018), was used to assess the strength of the relationship

between the dual continua model variables and student distress and adjustment (Eklund et al., 2010). Additionally, thematic analysis was conducted on data transcriptions (Braun & Clarke, 2006).

2.5 Ethical Considerations

This research study followed ethical guidelines. The researchers sought formal authorization from the senior high school department's management to initiate this research study. During this process, it was explicitly emphasized that students' participation was entirely voluntary and anonymous, ensuring that the responses they provided would be held in strict confidentiality. In order to proceed with the survey, students were required to provide informed consent, aligning with the prevailing regulatory guidelines. These guidelines, which are in accordance with current regulations, prioritize several critical principles: (1) safeguarding students from any potential harm, (2) obtaining unequivocal informed consent, (3) preserving the utmost confidentiality of all student-related information, (4) abstaining from any use of deceptive research methods, and (5) affording participants the option to withdraw from the study at any point.

3.0 Results and Discussion

3.1 Mental Health Continuum

Students' mental well-being is being assessed using the dual continua model. This model categorizes students into three groups: flourishing, languishing, and moderately mentally healthy based on their responses to questions related to emotional well-being and positive functioning.

Table 1. Dual Continua Model Classification

LEVEL OF MENTAL WELL-BEING	FREQUENCY	PERCENTAGE (%)
Flourishing	74	21.14%
Moderately Mentally Healthy	137	39.14%
Languishing	139	39.72%
Total	350	100.00

Flourishing students, constituting 21.14% of the sample, displayed high levels of mental well-being and positive functioning, excelling academically, and maintaining fulfilling emotional and social lives. While they are thriving, it's essential to continue nurturing their mental health through leadership roles, extracurricular activities, and mentorship. Moderately mentally healthy students, comprising 39.14% of the sample, demonstrated moderate well-being. They experienced occasional stress but generally coped well with the challenges of blended learning. These students, balancing academics and personal life, benefit from resources for stress and time management and strategies for maintaining mental health during challenging periods. Languishing students, making up 39.72% of the sample, exhibited signs of mental distress, including disinterest in coursework and a lack of motivation. They require immediate attention and support, such as counseling and stress management workshops, to regain their motivation and sense of purpose. Regarding emotional well-being, students reported moderate levels of happiness, interest, and life satisfaction. Positive functioning varied, with students feeling challenged to grow and become better individuals but expressing doubts about their contributions to society and the sensibility of societal workings.

In general, students had moderate well-being, characterized by balanced mental states, emotional resilience, and adaptability. Access to resources for stress and time management is crucial, along with proactive mental health initiatives. Monitoring changes in mental health status is essential, as moderate well-being often correlates with improved academic performance. Students with moderate well-being can progress toward flourishing with the right support, involvement in extracurricular activities, leadership roles, and mentoring programs, creating a positive learning environment.

3.2 Academic Distress Encountered

The level of academic stress was determined using the Academic Distress scale ranging from 1 to 4. Results showed that students had acquired an overall mean of 2.89 and a standard deviation of 1.02 which is interpreted as having a high level of academic distress. This was reflected in the statement "I experience periods of academic stress at least once a week" ($\bar{X}=3.34$, $SD = 0.89$). With these findings, students were having difficulty managing their workloads and task and experience cognitive, affective or behavioral stress which were the result of high demand and pressure experienced in their school. Moreover, students also high level on the statement "I generally

view myself as being stressed during this blended learning experience" ($\bar{X}=2.98$, $SD = 0.91$) and "It's hard to stay motivated in this blended learning environment," ($\bar{X}=2.98$, $SD = 1.01$) which were a key indicator that maybe external and conflicting factors arises as they go through on blended learning environment.

High levels of academic stress can significantly impact students' learning experience in a blended learning environment. It reduces focus since it will be challenging for them to concentrate may hinder their ability to engage effectively with the learning components of blended learning. Anxiety and stress have been observed to impact learning skills such as time management, concentration, study motivation, and learning methodologies, which can have a negative impact on student performance (Grubic et al., 2020). Academic stress often makes people feel bad things, like worry, anger, or self-doubt. These feelings can make it hard to learn, which can affect your general interest, enjoyment, and willingness to work hard on your studies. Consistent with previous research in terms of academic stress when it comes to high percentage on dealing with difficult subject, delivering class presentations, deadlines and academic workload and other related academic problem (Conwi, 2021). Given research showing that students are at particularly high risk of adverse mental health outcomes (Son et al., 2020), this study demonstrate that these concerns persist and in fact may be exacerbated by the pandemic. Moreover, it decreases their motivation since they feel overwhelmed with the workload and struggle to find their reason why they still need to pursue their career path and may create a negative effect on their wellbeing. Also, the pandemic related consequences such as the absence of interpersonal communication may have impacted them to limit their participation and social interaction and may be less likely to actively participate, engage in discussions or collaborate effectively with their classmates leading to diminished learning experience. In addition, students have a difficulty in balancing the demands of both face to face and online learning that leads to difficulties in completing assignments, studying and engaging with online learning materials.

3.3 Familial Distress Encountered

In terms of the level of familial distress, the students had acquired an overall mean of 1.72 and a standard deviation of 1.30 which is interpreted as having a moderate level in terms of level of familial distress. This was reflected in the statement "Things are very stress, but we are getting by with a lot of effort" ($\bar{X}=2.07$, $SD = 1.25$), and "We are currently in distress, but are dealing with it ourselves" ($\bar{X}=2.05$, $SD = 1.32$).

These findings suggest that students are having difficulty learning in blended learning because of familial factors that contribute to the academic stress they experienced. Stress experienced by students is multi-factorial and can be attributed to a variety of different factors. Moderate familial distress among students has multifaceted implications for their mental well-being and academic performance. Familial distress, stemming from various sources like family conflicts or financial difficulties, can evoke emotional turmoil, leading to feelings of anxiety, sadness, or frustration. Consequently, students may encounter challenges in maintaining a balanced mental state, potentially affecting their ability to concentrate on studies and engage effectively in their coursework.

In response to familial distress, students often develop coping mechanisms, ranging from seeking social support among friends to engaging in extracurricular activities. While some students adeptly adapt and sustain their academic performance, others may grapple with finding effective coping strategies. To bridge this gap, educational institutions must offer essential resources and support, such as counseling services and stress management workshops, empowering students to navigate familial distress more effectively.

The relationship between moderate familial distress and academic performance is variable. Some students channel their energy into academic pursuits as a coping mechanism, excelling in their studies. In contrast, others may find it challenging to focus on coursework, resulting in grade fluctuations. In this context, educators and counselors should vigilantly monitor students experiencing familial distress, intervening early with necessary support and accommodations to mitigate potential academic setbacks.

Moreover, students experiencing familial distress may not always seek assistance or divulge their challenges to others due to perceptions of manageability or reluctance to burden peers or mentors. Therefore, educational institutions must cultivate an environment where students feel comfortable seeking help. Promoting open communication and normalizing discussions about mental health and familial stress can reinforce the importance of seeking assistance when needed.

Moderate familial distress can also catalyze personal growth and strengthening family bonds through effective communication and problem-solving. To promote long-term well-being, educational institutions can contribute by offering resources for family counseling and support. Addressing the root causes of familial distress can enhance students' overall mental well-being and academic success.

The task of educating the learners has always been regarded as a shared responsibility. It calls for an active and dynamic participation of parents, guardians, teachers and other stakeholders. This shared responsibility is even more required considering the context of our learners who experienced the pandemic situation and may be suffering from familial distress.

3.4 Adjustment in a Blended Learning Environment

Understanding the level of adjustment among students in a blended learning environment is paramount as it impacts their overall academic success and well-being. In the study, the students' level of adjustment was determined through a student adjustment survey using a five-point Likert scale. Results showed that students had acquired an overall mean of 3.63 and a standard deviation of 1.04 which is interpreted as having a high level in terms of adjustment in blended learning.

This was reflected in the statement "Blended learning has taught me self-discipline and time management." ($\bar{X}=3.85$, $SD = 1.12$), and "I participate in blended learning online discussions and collaborations. ($\bar{X}=3.84$, $SD = 0.97$) and, "The adjustment to blended learning has required me to be more proactive and take initiative in my learning process ($\bar{X}=3.79$, $SD = 1.04$). These findings suggest that students are adjusting to the blended learning setup stipulated by the institution. They were able to express, take part, and be responsible in their learning. However, in the part of the institution, this statement was found "In the context of blended learning, my educational institution adequately supports my emotional wellbeing" ($\bar{X}=3.39$, $SD = 0.92$), which was the institution was actively enhancing student capabilities when it comes to teaching and learning but may not be proactively engaging activities that promote the enhancement of their emotional and mental wellbeing. Students were participating and adjusting instead of the need to survive the stress in academics, though their goal was not to thrive but merely to navigate the overwhelming challenges.

The finding simply indicates the need for the institution to be more proactive in promoting holistic students' well-being. Korn et al. (2023), claim that academic institutions that initiate social activities for students increase the chance that their students will develop social relationships and have a rich satisfying student experience which can have a positive effect in reducing feelings of distress.

3.5 Relationship between Variables

Table 2. Multiple Regression of Adjustment to Academic and Familial Distress

Adjustment on Blended Learning	Correlation Coefficient (r)	p	Remarks
Academic Distress	-0.116	0.025	Very weak negative; Significant
Familial Distress	0.050	0.154	Moderate; Not Significant

Furthermore, adjustment on blended learning and academic stress had a negative and significant relationship having the value of $r=-0.116$, $p= 0.025<0.05$ indicating that as students' ability to adjust to blended learning increases, their levels of academic distress tend to decrease. Conversely, when academic distress increases, students' adjustment to blended learning tends to decrease as well. This finding aligns with the common sense notion that students who feel more comfortable and confident in their learning environment are likely to experience less academic stress.

Several studies in the field of education and online learning have explored the relationship between adjustment to the learning environment and academic stress, supporting the findings of this study. Li et al. (2016) conducted research on online learners and found that students who reported higher levels of adjustment to the online learning environment also reported lower levels of academic stress. This study highlighted the importance of adapting to the unique demands of online learning to reduce academic stress. Meanwhile, several researchers investigated the experiences of college students in blended learning environments (Ellis et al., 2018; Nikolopoulou & Zacharis, 2023). They found that students who effectively adjusted to the blend of online and face-to-face

learning components reported lower levels of stress related to academic demands. Their study emphasized the role of adaptation in managing academic stress. Moreover, Wang and Hagston (2019) conducted research on university students during the COVID-19 pandemic, a period marked by a rapid transition to online learning. They observed that students who exhibited higher levels of adjustment to remote learning experienced less academic stress and better academic performance. This study emphasized the importance of adapting to unexpected changes in the learning environment. These studies collectively support the idea that students who can effectively adjust to the unique demands of blended learning, which often involves a combination of online and in-person components, are more likely to experience lower levels of academic stress. Conversely, students who struggle to adapt may find themselves experiencing higher levels of academic distress, reinforcing the negative relationship described in the statement. This underscores the importance of providing students with the necessary support and resources to facilitate their adjustment to blended learning environments, particularly during times of rapid transition.

On the other hand, no significant relationship was seen between adjustment on blended learning and familial distress with the value of $r=-0.050$, $p=0.154 < 0.05$. This indicates that as a construct familial distress may not directly influence the level of adjustment of senior high school students.

Table 3. Multivariate analysis of variance

	ACADEMIC DISTRESS	FAMILIAL DISTRESS	ADJUSTMENT
Groups	F(14.08)<.001	F(20.06)<.001	F(20.42)<.001

The researchers assessed the group that differed significantly by conducting a multivariate analysis of variance in dual continua groups (Flourishing, Languishing, Moderate mentally healthy) which was the independent variable to the level of academic distress, familial distress, and adjustment in blended learning setting. The results showed significant effects of the MANOVA on all three dependent variables, indicating that there were notable differences among these mental health groups in how they perceived and experienced academic distress $F(14.08) < .001$, familial distress $F(20.06) < .001$, and their ability to adjust to blended learning $F(20.42) < .001$.

These findings align with the broader body of research that examines the relationship between mental health and academic outcomes, including academic stress and adaptation. Keyes (2002), who developed the Dual Continua Model of Mental Health and Mental Illness, conducted research showing that individuals with higher levels of mental well-being (Flourishing) tend to experience fewer stressors and better adaptation to various life circumstances, including academic challenges. Hence, this study supported the central premise of Keyes' model. This suggests that promoting mental well-being and positive mental health among students can be a valuable strategy for reducing academic distress and enhancing adaptation in blended learning environments. Implications for education include the need for comprehensive mental health support programs within educational institutions to foster well-being and reduce distress, ultimately improving students' learning experiences and outcomes.

The findings of this study, which show that mental health groups significantly differ in terms of academic distress and adjustment, corroborate the results of Hyseni Duraku & Hoxha, (2020). Their study emphasized that higher levels of distress hindered students' academic performance and adaptation, which aligns with the notion that students with poorer mental health may struggle more in blended learning environments. To address this, educational institutions should prioritize the provision of mental health services and resources to help students manage distress and improve their ability to adapt to changing learning environments.

Moreover, Suldo et al., (2016) conducted a study on the relationship between positive mental health and academic achievement. They found that students with higher levels of positive mental health were better able to manage stressors and adapt to academic challenges, leading to improved academic outcomes. This aligns with the result of our study as it was found that students with higher levels of positive mental health were better equipped to manage stressors and adapt to academic challenges.

The results of these studies collectively suggest that an individual's mental health status plays a significant role in their perception of academic stress, familial distress, and their ability to adapt to new learning environments like blended learning. Flourishing individuals tend to perceive less distress and exhibit better adjustment, while those languishing or moderately mentally healthy may struggle more with these aspects of the educational experience.

In practical terms, these findings emphasize the importance of addressing students' mental health and well-being as an integral part of their educational journey. Institutions and educators should consider providing support services and resources to help students manage stress, promote positive mental health and enhance their adaptation skills among students, particularly for those in the languishing or moderately mentally healthy categories, to improve their overall educational experience and outcomes.

3.6 Qualitative Findings

The section serves as a complementary component to the quantitative analysis in the first part of this study, delving into students' adjustment experiences within the blended learning context. This provides insights and themes that may emerge, such as the difficulties the students encounter, how they are able to overcome obstacles and what has enabled them to do so thus far. Twenty participants were asked to describe their challenges and coping strategies in order to develop appropriate systems, interventions, and strategies to enhance the overall integrated learning experience for incoming students and for the institution's benefit.

Theme 1: Emotional States and Experiences

Students expressed stress and academic pressure related to finals, assessments, and research, but some also felt pride and accomplishment after completing tasks. Others reported emotional well-being and relaxation, especially after finishing the academic year or graduating, highlighting the importance of self-care and family time. Some experienced mixed emotions, simultaneously feeling happy and sad, while others described physical and mental exhaustion, including burnout and decreased productivity. Graduation was a significant event that brought both excitement and relief.

These findings suggest that students often navigate a delicate balance between academic demands, emotional well-being, and personal life. Institutions and educators should consider the holistic well-being of students, providing support for managing academic stress and promoting self-care to maintain a healthy balance between academic and personal life.

Theme 2: Student Challenges in Blended Learning Environment

Students confronted several challenges within the blended learning environment, with their experiences revealing key insights. Transitioning between online and face-to-face learning modes proved difficult for many, requiring smoother transitions. Some students struggled to concentrate and absorb lessons during synchronous online classes. This adjustment challenge aligns with previous research findings, which indicate that students transitioning between online and face-to-face learning can face difficulties due to variations in course design, expectations, and communication styles (Means et al., 2009).

Furthermore, the frequent shifts between learning modes posed a considerable hurdle. Students found these constant transitions disorienting, consistent with findings from other studies indicating that such shifts in blended or hybrid courses can be challenging for students (Allen & Seaman, 2013).

Delayed teacher responses in the online setup emerged as a significant issue. Students grappled with delayed feedback from teachers, leading to confusion. Expressing concerns in the online environment also proved challenging, echoing research indicating that delayed responses and a lack of immediate feedback can hinder the learning experience (Liu et al., 2020).

Transportation and dormitory challenges disrupted students' living arrangements and daily routines, stemming from the necessity of staying in dorms due to the blended learning setup. Logistical issues related to transportation and living arrangements can significantly affect students' overall experiences and well-being, as confirmed by related studies (Shea et al., 2012).

Effective time and stress management were highlighted as critical during transitions between online and face-to-face learning modes. A study by Miertschin et al. (2015) explored the role of stress and time management in online learning. It found that effective time and stress management strategies are essential for students to succeed in blended and online courses. The findings of this study underscore the importance of addressing adjustment challenges, facilitating smoother transitions, and providing timely support to students navigating the blended

learning environment. These findings provide insights into the challenges students face during blended learning. They highlight the need for smoother transitions, improved communication with teachers, effective time, and stress management, and addressing logistical issues related to transportation and living arrangements.

Theme 3: Students' Coping Mechanism & Strategies with Distress

Students in the study demonstrated various coping mechanisms in response to the challenges of blended learning. Self-evaluation and faith emerged as prominent strategies. Many students stressed the importance of self-evaluation for assessing their own progress and emotional well-being. Blended learning calls for a high level of self-regulation and may pose a major challenge for those who are poor for those with poor self-regulation (Van Laer and Elen, 2017). Faith and prayers played a crucial role in providing them with emotional strength and stability during difficult times. A study by Diener & Ryan (2009) explored the role of self-evaluation and self-reflection in promoting well-being. It found that individuals who engage in self-evaluation tend to have a better understanding of their emotional states and are more resilient in the face of challenges. This supports the idea that self-evaluation is a valuable coping mechanism. In a study by Pargament et al. (2013), researchers investigated the role of faith and spirituality in coping with stress and adversity. The findings suggest that faith and prayer can provide individuals with a sense of comfort and emotional support during difficult times, aligning with the students' reliance on faith in the qualitative findings.

Peer support and collaboration were also highlighted as significant coping mechanisms. Students valued sharing notes and helping each other academically. Collaborating with peers, whether through online research or seeking clarification on assessments, was considered essential for addressing academic challenges. The students' reliance on classmates for academic help aligns with the principles of the Zone of Proximal Development (ZPD). In a study by Abraham (2016), the importance of peer support in higher education was highlighted. It was found that peer interactions and collaborative learning experiences contribute to students' sense of belonging and academic success, which supports the students' emphasis on peer support in the qualitative findings.

Personal growth and adaptation were acknowledged by students as outcomes of their challenges in the blended learning environment. Students noted increased independence and improved time management skills as products of their experiences. This aligns with the concept of a growth mindset, suggesting that individuals who believe in their potential for growth are more resilient in the face of challenges. The works of Wang et al. (2007) indicate that improving resilience can reduce the adverse effect of stress and improve the ability to adjust the environment. Additionally, the idea of positive reappraisal, where challenges are seen as opportunities for personal growth, resonated with the students' experiences. Dweck's research on growth mindset suggests that individuals who believe in the potential for personal growth and development are more likely to adapt positively to challenges (Yeager & Dweck, 2012). This aligns with the students' acknowledgment of personal growth as a result of facing challenges. A study by Hanley & Garland (2014) on coping mechanisms proposed the concept of "positive reappraisal," where individuals reinterpret challenges as opportunities for personal growth. This concept supports the idea that challenges can lead to personal growth, as mentioned by the students in the qualitative findings.

Moreover, students demonstrated a diverse range of coping strategies to effectively manage distress in their lives. These strategies encompassed various dimensions of their daily experiences. Many students sought solace in creative outlets, such as reading, drawing, and pursuing hobbies, recognizing the therapeutic effects of these activities. Rest and relaxation during their free time emerged as a crucial coping strategy, with students acknowledging the stress-reducing and well-being-enhancing benefits of relaxation practices. Seeking social support, particularly through conversations with friends, was underscored as a significant coping strategy, aligning with research emphasizing the protective nature of social support against stress. Additionally, some students adopted a stoic mindset, consciously avoiding overthinking as a strategy to cope with distress, drawing from the philosophy's association with emotional resilience. Spending quality time with loved ones and engaging in self-reflection were also emphasized as essential coping mechanisms, in line with existing research highlighting their positive impact on emotional well-being. Finally, students incorporated their faith and personal values into their coping strategies, with previous studies supporting the role of faith and values in enhancing resilience and emotional well-being.

In summary, students employed a range of coping strategies, including self-awareness, faith, personal beliefs, peer support, personal growth, and adaptation, to navigate the challenges of blended learning. These findings underscore the importance of holistic support systems that address emotional, social, and academic dimensions to promote student well-being and success in educational settings.

Theme 4: Proposed Programs for Managing Academic Stress

Several proposed programs have been outlined to effectively manage academic stress in blended learning environments. One key initiative is the adoption of technology enhanced education, integrating advanced educational technologies to improve the blended learning experience. This includes providing user-friendly platforms and tools that empower students to navigate their coursework more efficiently. Additionally, there's an emphasis on the appreciation of socio-emotional learning, with the integration of programs into the curriculum that focus on nurturing emotional intelligence, resilience, and interpersonal skills among students.

Another critical aspect is the development of a tailored curriculum that considers the unique challenges of blended learning, ensuring it remains flexible, engaging, and aligned with the diverse needs of student populations. Creating a positive environment within educational institutions is vital, where students feel valued and supported, reducing stressors associated with social isolation. Furthermore, Conscientious training for educators and staff is proposed to raise awareness of the mental health challenges students may face and equip them with strategies to offer appropriate support.

Involving parents, students, and educators in collaborative events to discuss the challenges and benefits of blended learning is also recommended, fostering a collective approach to addressing student stressors. Clear guidelines for student mental health, including resources like counseling services, hotlines, and self-help materials, can provide essential support. Establishing safe spaces within the institution allows students to openly discuss their concerns, seek guidance, and connect with peers who share similar challenges. Additionally, coaching sessions for teachers are suggested to help educators adapt their teaching methods to the unique demands of blended learning, with a focus on reducing academic stress. Finally, mentorship programs with experienced advisers or educators guiding students through their blended learning journey offer both academic and emotional support. These programs collectively form a comprehensive support system aimed at enabling students to effectively manage academic stress and thrive in blended learning environments.

4.0 Conclusion

This study comprehensively investigated students' well-being, distress, and adjustment within a blended learning environment, employing a mixed-methods approach. It aimed to gain insights into the emotional experiences of students during the transition from traditional to blended learning environments, using both quantitative and qualitative data. The research revealed substantial insights into students' emotional states and experiences in blended learning. Quantitatively, a significant proportion of students fell into the "languishing" category, highlighting lower emotional well-being. Students demonstrated moderate mental well-being, coupled with high academic distress, moderate familial distress, and strong adaptation to blended learning. The study unveiled a notable negative relationship between adaptation and academic stress, indicating that improved adaptation correlated with reduced academic distress. MANOVA results further underscored significant differences among these mental health groups in terms of their experiences with academic and familial distress and adaptation to blended learning. Qualitative findings shed light on diverse emotional states and experiences, the challenges students faced in the blended learning environment, and the coping mechanisms they employed. These insights emphasize the importance of recognizing students' emotional diversity in blended learning environments and the need for tailored support and orientation programs. Educational institutions should prioritize timely communication, stress and time management resources, and peer support to foster a supportive learning environment. Further research is necessary to explore the long-term effects of blended learning on student well-being and academic outcomes.

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LC - conceptualization, editing, writing, supervising. FP - data analysis, editing, writing. JD- editing

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7.0 Conflict of Interests

The authors affirm that the research was conducted without any commercial and financial affiliation that might pose a conflict of interest

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Additional Workloads of Teachers in Public Secondary Schools and their Performance

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Abstract. The research explored the impact of additional workloads on public secondary school teachers and their performance. It investigated how administrative, community-related, and unrelated tasks assigned to teachers affect their teaching effectiveness, as measured by the Individual Performance Commitment and Review Form (IPCRF). The study employed a quantitative research design, focusing on teachers in the Districts 1 and 2 of Ayungon, Negros Oriental, and it utilized structured questionnaires for data collection. Pearson Product Moment Coefficient of Correlation, weighted mean, and mean were used in treating the data. The study revealed that the teachers' additional workload assignment is at a "Low Extent" across various categories these shows that teachers are not heavily burden in their task as teachers. Administrative task, such as paperwork and school monitoring are prevalent but manageable, while more complex responsibilities like handling personnel issues are less commonly assigned. Similarly, community-related tasks, including community outreach and school improvement projects, are rated as "Low Extent", suggesting that teachers can engage in these activities without being overwhelmed. Tasks unrelated to teaching are also minimally assigned. The researcher also found that there is a significant positive relationship between teachers' additional workloads and performance. These underscores that despite the presence of additional workloads, this manifest a positive attitude towards job.

Keywords: Public school teachers; Workloads; Teaching performance.

1.0 Introduction

The teaching profession is regarded as the noblest of all. Being a professional teacher gives a wonderful sense of pride (Mallillin, 2021). Teachers play a critical role in implementing curriculum and fostering classroom learning. However, they often encounter numerous job demands leading to a perception of heavy workloads, which can affect their productivity, morale, and classroom performance (Jomud et al., 2021; Bottiani et al., 2019; Wijaya & Prastuti, 2020). Such overwhelming workload can result in burnout characterized by fatigue, low productivity, and absenteeism (Gituriandu, Mwaura, & Mukolwe, 2022). As cited by Herman, Hickmon-Rosa, and Reinke (2020). Teacher burnout is a common occurrence, stemming from various factors. Different components of school atmosphere were linked to the three dimensions of burnout identified by Herman et al., (2020) emotional weariness, depersonalization, and feelings of poor personal accomplishment. According to Agyapong et al. (2023), stress and burnout can have a bad impact on teachers and, very frequently, the children they educate. A significant contributor to this problem is the overwhelming daily workloads they must contend with, impacting not only their physical and emotional well-being but also depleting their energy levels (Akhtar Malik, 2019).

The Magna Carta for Public School Teachers - Section 13 of RA 4670 limits teachers to six hours of classroom teaching per day, allowing time for preparation and other duties. However, teachers can be required to teach up to eight hours a day with extra pay if necessary. This law ensures that teachers have a regular workload and teaching time, but also acknowledges additional responsibilities like administration, community engagement, and

student support. In the study of David, Albert, and Vizmanos (2019), found out that public school teachers are facing challenges in performing well due to additional administrative tasks, such as student guidance, budget management, disaster response, and student health care. This can lead to teachers decrease performance and burnout. The workload of public-school teachers extends beyond classroom instruction to encompass various non-teaching responsibilities.

Admittedly, there are various research inquiries made into the teachers' additional workloads. Previous local studies, such as those conducted by Ancho and Bongco (2019), David et al. (2019), and Barrios et al. (2023), predominantly examined the correlation between increased workloads, teaching efficacy, and teacher welfare. In addition, the study of David, Albert, and Vizmanos (2019) focused on the pressures on public school teachers and implications on quality. They also emphasized that reducing teacher workload needs to be systematic and evidence based. Thus, the current research would like to delve deeper as to how these workloads influence the quality of classroom instruction.

In light to this, the aim of the study is to find out as to the extent of assignment of additional workloads to teachers in terms of administrative, community, and unrelated workloads and how these impact their performance. Additionally, the study aims to explore and investigate how these additional workloads of teachers influence their performance, as evaluated through the Individual Performance Commitment and Review Form (IPCRF).

2.0 Methodology

2.1 Research Design

The descriptive-correlational type was used in the study. The following schools of Ayungon Districts 1 and 2 in the Division of Negros Oriental was used for the study: Ayungon Science High School, Ayungon National High School, Tambo National High School, Mabato National High School, and Carol-an National High School.

2.2 Research Participants

The respondents of this study comprised of teachers from the five public secondary schools in Ayungon Districts 1 and 2. A total of 113 teachers from Ayungon Science High, Ayungon National High School, Tambo National High School, Mabato National High School, and Carol-an National High School. The teachers were sampled and distributed proportionately in the different high schools and the designed number of respondents from each school were randomly picked.

2.3 Research Instrument

The study made use of a structured questionnaire to gather information about the teachers' additional workloads. The statistical instruments utilized by the researcher for data analysis included the weighted mean for presenting the extent of additional workloads assigned to teachers in terms of administrative, community, and unrelated tasks, and the mean for evaluating the average performance of teachers based on the IPCRF. Additionally, the Pearson Product-Moment Correlation Coefficient (Pearson r) was employed to assess the relationship between the extent of additional workloads given to teachers and their level of performance. The researcher used a structured questionnaire and was validated.

2.4 Data Gathering Procedure

After the design hearing, the researcher perused all the panel members' comments and ideas. Upon approval by the Dean of the Graduate School of Foundation University, a letter of request to conduct the study was delivered to Ayungon Districts 1 and 2. The signed and approved request was given to the principals of the respective schools. Afterwards, the Public School Supervisors of Ayungon Districts 1 and 2 endorsed the researcher to the Division of Negros Oriental for final approval of the study. During the distribution, the researcher explained the intention and importance of the study to the teachers. The questionnaires were retrieved immediately after the teachers completed the questionnaires.

2.5 Ethical Considerations

Throughout the duration of the study, the researcher was steadfast in adhering to all essential ethical considerations. As the study involves human participants, the confidentiality of their provided information was diligently maintained. The study's approach had upheld the dignity and privacy of all respondents while striving

to minimize any potential risks they might face. The researcher followed strictly to the ethical protocols laid out by the Ethics Committee of Foundation University. In order to ensure that the research topic is relevant, significant, and ethically sound, consultations were sought. Furthermore, respondents were asked to read the disclosure statement before responding to the questionnaire, thereby confirming their voluntary involvement and comprehension of the research purpose and methods.

3.0 Results and Discussion

3.1 Additional Workloads

Administrative Workloads

Table 1. Extent to which teachers are assigned with additional administrative workloads (n=113)

INDICATORS	MEAN	INTERPRETATION
1. Doing administrative paperworks and documentation	2.40	LE
2. Conducting of School Monitoring, Evaluation, and Adjustment (SMEA)	2.35	LE
3. Checking of personnel attendance and punctuality	2.21	LE
4. Record keeping of School Data (EBEIS)	2.17	LE
5. Planning of School Maintenance	2.08	LE
6. Allocating and budgeting of school resources (MOOE)	1.89	LE
7. Facilitating non-teaching staff meetings (ADAS and School Personnel)	1.88	LE
8. Handling of School Personnel	1.80	VLE
9. Resolving conflicts and issues towards faculty and staff	1.80	VLE
10. Keeping school financial record	1.79	VLE
AVERAGE	2.04	VLE

Legend:

4.21-5.00	Very High Extent	(VHE)
3.41-4.20	High Extent	(HE)
2.61-3.40	Moderate Extent	(ME)
1.81-2.60	Low Extent	(LE)
1.00-1.80	Very Low Extent	(VLE)

Table 1 demonstrates the extent to which teachers are assigned with additional administrative workloads. The table depicts that in terms of administrative workloads, the teachers are assigned at a “Low Extent” evident in the low average weighted mean ($w\bar{x}$) of 2.04. This indicates that while teachers do take on extra administrative duties, these are not typically overwhelming or highly time-consuming. The findings resonate with Ortan, Simut, and Simut (2021), which suggests that although administrative workloads and teaching tasks impact teacher job satisfaction and well-being, they do not necessarily lead to a decline in these areas.

It can also be seen from Table 1 that administrative responsibilities like paperwork, school monitoring, and record-keeping are rated slightly higher but remain in the “Low Extent” category, suggesting that they are more common but manageable. On the other hand, there is a “Very Low Extent” of use of complex task in handling personnel issues, resolving conflicts, and financial record-keeping which are rated with $w\bar{x}$ of 1.80, 1.80, and 1.79, respectively, indicating that they are less assigned to teachers.

Therefore, tasks that extend beyond traditional teaching responsibilities are given less and not frequent. The study of Arañas (2023) aligns with these findings, highlighting that while ancillary tasks can enhance professional growth for teachers, they also present challenges in balancing instructional responsibilities with personal life. This underscores the need for a well-managed distribution of tasks to ensure that teachers can maintain a balance between their professional and personal lives while fostering job satisfaction and effectiveness.

Community Workloads

Table 2 shows the extent to which teachers are assigned with additional community workloads. The findings show that teachers generally have a “Low Extent” in their additional community workloads, indicated by an average $w\bar{x}$ score of 2.38. Despite having responsibilities for community involvement, it is not demanding for teachers. The study supports the idea that teachers can engage in community activities without being overwhelmed, aligning with data on teachers’ roles in the community. This is consistent with McMullen and Walton-Fisette’s (2022) research on incorporating family and community involvement in education. It is notable that organizing PTA meetings is moderately emphasized, with a weighted mean of 3.31, highlighting the importance of connecting

families with schools. Other tasks with low involvement levels include community outreach, school improvement projects, and organizing community events ($\bar{w}$ ranging from 1.86 to 2.55).

Table 2. Extent to which teachers are assigned with additional community workloads (n=113)

INDICATORS	MEAN	INTERPRETATION
1. Organizing and leading Parent-Teacher Association (PTA) meetings	3.31	ME
2. Participating in community outreach and collaboration efforts	2.55	LE
3. Initiating and participating in projects to improve the physical environment of the school	2.54	LE
4. Participating in community clean-up initiatives	2.51	LE
5. Hosting community events or meetings	2.30	LE
6. Organizing community sport teams and events	2.20	LE
7. Coordinating in town festivals and events	1.85	LE
8. Serving as a school's liaison during community meetings and events	1.80	VLE
AVERAGE	2.38	LE

While these activities are important for community engagement and environmental stewardship, they are assigned less among teachers' responsibilities. According to Tarraya (2023), teachers are entrusted with a profound social obligation, as they are expected to devote themselves to the education and well-being of their students, the school community, and society as a whole. David et al. (2019) added that teachers are also responsible for collaborating in the implementation of various government-led initiatives such as feeding program, deworming, and community development.

Unrelated Workloads

Table 3. Extent to which teachers are assigned with additional unrelated workloads (n=113)

INDICATORS	MEAN	INTERPRETATION
1. Assisting in the deworming of students	3.15	ME
2. Submitting of report materials to District Office	2.81	ME
3. Keeping inventory of educational resources	2.02	LE
4. Acting as task force unrelated to classroom instruction, such as event planning or accreditation committees	1.99	LE
5. Implementing Feeding Program in School	1.73	VLE
6. Performing bookkeeping tasks	1.59	VLE
7. Serving as an Officer in an Alumni Association	1.57	VLE
8. Managing the School Canteen or as a Canteen Manager	1.45	VLE
AVERAGE	2.04	LE

Table 3 displays the extent to which teachers are assigned with additional workloads. At the higher end of the scale, tasks such as "Assisting in the Deworming of Students" and "Submitting of Report Materials to District Office" fall under the "Moderate Extent" category, with weighted means of 3.15 and 2.81, respectively. This indicates a significant, though not overwhelming, involvement in activities essential for student welfare and administrative compliance. It suggests that teachers are recognized for their versatility, capable of handling varied responsibilities that surpass traditional classroom teaching.

On the other hand, tasks like keeping inventory of educational resources, acting as task force unrelated to classroom instruction, implementing feeding program in school, performing bookkeeping tasks, serving as an officer in an alumni association, and managing the school canteen or as a canteen manager are categorized as "Low Extent" to "Very Low Extent". These lower ratings, with weighted means ranging from 2.02 to 1.45, indicate that such tasks are less assigned to teachers. The overall average weighted mean of 2.04, in the "Low Extent" category, supports the notion that teachers are generally not overburdened with unrelated tasks. Supporting this, the study of Hayat (2023) highlights the impact of these additional duties on the academic environment. According to head teachers' perspectives in the study, while these non-teaching duties are peripheral to direct classroom instruction, they significantly contribute to the broader educational framework. They influence the overall efficacy and functioning of schools, reinforcing the notion of teachers as multifaceted personnel adept at managing a broad spectrum of responsibilities, extending beyond conventional classroom teaching roles.

Summary

Table 4. Summary table on the extent to which teachers are assigned with additional workloads (n=113)

INDICATORS	MEAN	INTERPRETATION
1. Administrative Workloads	2.04	LE
2. Community Workloads	2.38	LE
3. Unrelated Workloads	2.04	LE
AVERAGE	2.15	LE

Table 4 presents the summary on the extent to which teachers are assigned with additional workloads. Findings revealed that the additional workloads fall within “Low Extent” across various categories. The average weighted mean of Administrative Workloads is 2.04. This suggests that while teachers are assigned administrative tasks beyond their teaching responsibilities, the extent of these tasks is not significantly high. Similarly, Community Workloads, with an average score of 2.38, also fall at “Low Extent”, suggesting that teachers are not heavily burdened with community-related tasks. Unrelated Workloads, which include tasks not directly related to teaching, also have an average weighted mean of 2.04, further supporting the notion that such workloads are perceived to be “Low extent”.

The overall average weighted mean of 2.15 across all workload categories supports the finding that teachers, on average, experience additional workloads to a “Low Extent”. This implies that, despite teachers are assigned additional workloads, these responsibilities have no significant impact on their classroom performance. Solania et al. (2023) also revealed that teachers are likewise not given and also not assigned with additional workloads.

3.2 Teaching Performance

Table 5. Teachers’ performance based on the IPCRF (n=113)

IPCRF PERFORMANCE	ADJECTIVAL RATING	F	%
4.500–5.000	Outstanding	14	12.39
3.500–4.999	Very Satisfactory	99	87.61
2.500–3.499	Satisfactory	-	-
1.500–2.499	Unsatisfactory	-	-
Below–1.499	Pool	-	-
Average Rating = 4.292			

Based on CSC Memorandum Curricular No. 06, s. 2012

Table 5 displays the teachers’ performance based on the IPCRF. It showcases the performance of teachers as assessed using the IPCRF, with 87.61% receiving a ‘Very Satisfactory’ rating and 12.39% rated as ‘Outstanding’. This suggests that the teachers are performing well above average. As emphasized by the study of Gragasini et al. (2023), a positive attitude towards teaching, coupled with high job satisfaction and managed anxiety levels, correlates with higher IPCRF ratings, indicating superior teaching performance. With an average IPCRF rating of 4.292, which is closer to ‘Outstanding’, the data underscore the effectiveness and high teaching quality of the group.

4.0 Conclusion

In conclusion, result of the findings revealed that school management learned how to balance already teachers’ workload assignments. As revealed in the result teachers are not heavily burden in their task as teachers. This shows a positive step that can have significant implications for teacher retention and well-being, as emphasized by Churches and Fitzpatrick (2023). Moreover, the study revealed that teachers’ performance in the classroom, as evaluated through the Individual Performance Commitment and Review Form (IPCRF) remained consistently high despite of the different types of additional workloads and this manifest a positive attitude toward job. Despite the challenges of additional workloads, teachers have demonstrated a commendable level of commitment and passion for their profession. Their perseverance in facing demanding working conditions is a testament to their dedication to teaching and their willingness to embrace additional workloads or tasks as opportunities for professional growth.

5.0 Contributions of Authors

The author has reviewed and approved the final version of this work.

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7.0 Conflict of Interests

The author declared that he has no conflicts of interest as far as this study is concerned.

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The Roles of Teachers' Knowledge and Implementation of School-Based Feeding Program on Pupils' Academic Performance

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Abstract. This study aimed to assess the extent of knowledge and implementation of the School-Based Feeding Program (SBFP) and its impact on pupils' academic performance during the school year 2022–2023. The data covered the different areas of SBFP in terms of physical facility, management of funds, supervision, food preparation and distribution, children's knowledge of health and nutrition, and community participation. The study also examined the pupils' academic performance, the coordinators' profile, and the pupils' profile. The respondents were the SBFP coordinators at the elementary level. The study applied the descriptive–correlational method of research. For the statistical treatment of data, the tools utilized were frequency distribution, percentage, weighted mean, Pearson Product–Moment Correlation Coefficient, and Kruskal–Wallis H Test. Here are the salient findings extracted from the study: (a) Teachers are very knowledgeable of the SBFP and they implement it very well; (b) Pupils' academic performance falls on the satisfactory level; (c) A significant relationship is present between the teachers' extent of knowledge of the SBFP and their extent of implementation of the program; (d) A relationship exists between the teachers' extent of implementation of the program and the pupils' academic performance; and (e) Teachers' profile in terms of age, educational qualification, and training cannot account for the differences in the pupils' performance.

Keywords: school-based feeding program (sbfp), academic performance, implementation, knowledge, pupils

1.0 Introduction

Malnutrition poses a widespread challenge, impacting individuals of all ages across the globe. It is not only a public health issue but also a barrier to eradicating poverty, hindering productivity, and impeding economic progress. This health crisis affects various segments of the population, with particular vulnerability observed among impoverished individuals, young children, adolescents, the elderly, those suffering from illnesses or weakened immune systems, and expectant or lactating women. The spectrum of malnutrition encompasses deficiencies—such as wasting, stunting, underweight, and deficiencies in minerals and vitamins—and excesses, including overweight, obesity, and diet-related noncommunicable diseases. Dealing with malnutrition leads to escalated healthcare expenses, reduced productivity, and hindered economic advancement, perpetuating the cycle of poor health and poverty. The critical phase to address malnutrition is within the initial 1000 days of life, offering a strategic opportunity for implementing interventions aimed at enhancing child growth and development (Dukhi, 2020).

Nutrient intake significantly impacts malnutrition in Filipino children, especially concerning the quality of protein consumed. To effectively address child malnutrition, interventions, and policies need to focus on increasing the

quantity of protein and enhancing its quality. According to Dominguez and Halili (2018), malnutrition remains a prevalent challenge among Filipino children. The Enhanced Basic Education Information System (EBEIS) 2019 Nutritional Assessment also revealed that 13.2% of the 12.7 million kids assessed did not fulfill the criteria for wasting or stunted children. Without intervention, these children are at continued risk of undernutrition or more severe malnutrition, leading to potential academic struggles and diminished adult productivity. A healthy diet is essential for school-age children's development, health, and academic success. To meet these demands, initiatives such as the SBFP must be established, providing undernourished K–6 public school learners with wholesome meals and milk. The objectives encompass encouraging enrollment, improving classroom attendance, supporting growth and development, enhancing immune systems, and fostering better nutritional status. The SBFP aims to help learners actively participate in education, complete their elementary schooling, and improve their overall nutritional well-being (Agriculture in the News, Dairy, and Products, Administrative, 2023).

In 2021, the SBFP was implemented in cooperation with several organizations by the DepEd allotting P6 billion in funding. Feedback and evaluation surveys of the SBFP in 2021 reflected positive responses from participants. However, in 2022, the General Appropriations Act significantly decreased the total fund allocation for the SBFP to P3.3 billion, a significant decrease from the initial P6 billion due to budget transfers to local government units. The amount allocated for 2023 is P5.7 billion. This substantial reduction raises concerns about the program's ability to cater to the growing 1.6 million beneficiaries experiencing stunted growth (United States Department of Agriculture, 2023).

Numerous studies have explored the effects of the SBFP, but not much research has been done at the district level, especially in the aspect of evaluating the SBFP coordinators' awareness level. Amidst the SBFP, challenges arise as program coordinators frequently change, burdening newly hired teachers and affecting the program's efficacy. Additionally, beneficiaries often express dissatisfaction with the nutritional quality of distributed food, highlighting the need for a balanced diet. Thus, this study aimed to delve into teachers' knowledge and practices within the SBFP and how these influence pupils' academic achievements. The researchers believed that examining educators' impact on program success would provide actionable insights for policymakers and school administrators to enhance educational outcomes through robust feeding initiatives. Hence, this inquiry serves as a subsequent evaluation conducted at the district level to assess the progress of SBFP implementation and its influence on educators, especially in relation to learners' academic achievement. Moreover, this evaluation aims to determine the program's effectiveness despite the reduced budget allocation for its operations.

2.0 Methodology

2.1 Research Design

The descriptive-correlational method of research was employed in this undertaking. Using this method, the study determined the SBFP coordinators' knowledge of the program and the extent of implementation of the SBFP in the selected schools. It also shed light on the correlation between the extent of implementation of the SBFP and the pupils' academic performance.

2.2 Research Participants

The research participants included SBFP coordinators from Valencia District, while the subjects comprised SBFP beneficiaries randomly selected from various classes. The random sampling technique used in this inquiry ensures the representation of diverse demographics and minimizes selection bias. The sample represented 40% of the total beneficiary population. In this district, 21 schools were involved in the distribution of respondents, encompassing 41 SBFP coordinators and 210 sampled beneficiaries.

2.3 Research Instrument

The research used a questionnaire crafted from Division Memorandum 189, s. 2021, with modifications. To assess the questionnaire's reliability, a dry run was conducted among a cohort of teaching staff involved in feeding programs. This trial utilized a test-retest methodology, allowing for a span of two to three weeks between the initial and subsequent administrations to ensure consistency. Notably, the coefficients of stability were high: 0.96 for Physical Facility, 0.93 for Fund Management, 0.96 for Supervision, 0.94 for Food Preparation and Distribution, 0.94 for Children's Knowledge of Health and Nutrition, and 0.95 for Community Participation.

2.4 Data Gathering Procedure

Before commencing the study, the researcher diligently pursued the requisite permissions and endorsements from authoritative figures. This included securing permission from the Schools Division Superintendent of the province. Moreover, recognizing the significance of the local context, explicit authorization was sought from the Public Schools District Supervisor (PSDS) of the target district, which served as the primary research setting, alongside the respective elementary school administrators enlisted for participation in the study. To ensure transparency and accountability, the final iteration of the questionnaire was meticulously appended to the request letter for scrutiny and endorsement. Subsequently, the researcher personally administered the instrument, providing a comprehensive elucidation of the study's objectives and procedural instructions to all respondents involved.

2.5 Ethical Considerations

In upholding ethical standards throughout the study, the researcher took several key measures. Firstly, before administering the questionnaire, the researcher made sure that all necessary approvals were obtained, including those from the Schools Division Superintendent, Public School District Supervisor, and Principal. The approved requests were attached to the questionnaire. Additionally, a letter of intent was provided to the teacher-respondents, outlining the purpose of the study and seeking their voluntary participation. Moreover, to safeguard the confidentiality of the respondents, strict measures were implemented to ensure that individual responses remained anonymous and that data would be handled with the utmost discretion and privacy.

3.0 Results and Discussion

The study focused on the data pertaining to the teachers' extent of knowledge and implementation of the SBFP across the different areas of the program, namely: Physical Facility; Management of Funds and Supervision; Food Preparation and Distribution; Children's Knowledge of Health and Nutrition; and Community Involvement and Participation.

Teachers' Knowledge of the SBFP

Table 1 data show that the teachers' knowledge of the program's physical facilities, fund management and supervision, food preparation and distribution, children's knowledge of health, and community involvement and participation falls in the Very Knowledgeable Category, although the extent of knowledge of all areas have varying magnitude.

Table 1. The extent of teachers' knowledge of SBFP

AREAS	MEAN	INTERPRETATION
A. Physical Facility	4.34	Very Knowledgeable
B. Fund Management and Supervision	4.57	Very Knowledgeable
C. Food Preparation and Distribution	4.52	Very Knowledgeable
D. Children's Knowledge of Health	4.45	Very Knowledgeable
E. Community Involvement and Participation	4.46	Very Knowledgeable

Implementation of the SBFP

Table 2 presents the extent of teachers' implementation of the SBFP. The data reveal that overall, the areas of fund management and supervision, food preparation and distribution, children's knowledge of health, and community involvement and participation are all very well implemented by the teachers with an average weighted mean ranging from 4.32 to 4.57. Only the aspect of the physical facility is well-implemented by the teachers, as signified by the average weighted mean of 3.97.

Table 2. The extent of teachers' implementation of SBFP

AREAS	MEAN	INTERPRETATION
A. Physical Facility	3.97	Well Implemented
B. Fund Management and Supervision	4.57	Very Well Implemented
C. Food Preparation and Distribution	4.67	Very Well Implemented
D. Children's Knowledge of Health	4.42	Very Well Implemented
E. Community Involvement and Participation	4.32	Very Well Implemented

Summary: Extent of Knowledge and Implementation of the Different Areas of the SBFP

Table 3 summarizes the extent of the knowledge and implementation of the SBFP, wherein it is reflected that the program coordinators are very knowledgeable (average weighted mean of 4.48) and the different areas are very well-implemented (average weighted mean of 4.38). The data further show that the indicators fall in the same descriptive category, although they vary in terms of magnitude.

Table 3. Extent of teachers' knowledge and implementation of the different areas of the school-based feeding program (SBFP) (n=41)

AREAS	EXTENT OF KNOWLEDGE		EXTENT OF IMPLEMENTATION	
	Mean	Interpretation	Mean	Interpretation
A. Physical Facility	4.34	VK	3.97	WI
B. Management and Funds	4.52	VK	4.35	VWI
C. Supervision	4.57	VK	4.57	VWI
D. Food Preparation and Distribution	4.52	VK	4.67	VWI
E. Children's Knowledge of Health	4.45	VK	4.42	VWI
F. Community Involvement & Participation	4.46	VK	4.32	VWI
OVERALL RESULT	4.48	VK	4.38	VWI

Academic Performance of SBFP Beneficiaries Based on Average Grades

Table 4 presents the academic performance profile of the SBFP beneficiaries. Out of the 210 beneficiaries, 59 (28.10%) obtained a "Very Satisfactory" rating, and a great majority of 151 (71.90%) fall on the "Satisfactory" level. On average, the beneficiaries got a mean rating of 83.64% (Satisfactory).

Table 4. Academic performance profile of SBFP beneficiaries (n=210)

RATING	VERBAL DESCRIPTION	FREQUENCY	PERCENT
90% – 100%	Outstanding	0	
85% – 89%	Very Satisfactory	59	28.10
80% – 84%	Satisfactory	151	71.90
75% – 79%	Fairly Satisfactory	0	
AVERAGE GRADE: 83.64%			

It should be noted that the SBFP beneficiaries are those pupils considered as undernourished public school learners. The SBFP is intended to encourage enrolment, improve classroom attendance, provide nourishment for growth and development, and contribute to the improvement of the beneficiaries' nutrition status to help boost their immune system.

Relationship Between Extent of Knowledge and Extent of Implementation

Table 5 data show the relationship between the extent of the teachers' knowledge and the extent of their implementation of the different areas of the SBFP.

Results of the test revealed a "Strong" to "Very Strong" relationship between the teachers' knowledge of SBFP and their manner of implementing the program as indicated by the obtained r-values of 0.6611 (physical facility), 0.5166 (management of funds), 0.8526 (supervision), 0.7205 (food preparation and distribution), 0.7112 (children's knowledge on health), and 0.6827 (community involvement and participation), values of which are very much greater compared to the r significant level of 0.3204 at 0.05, with 39 degrees of freedom. As a whole, the overall value of r is 0.7762, signifying a "Very Strong" relationship between the teachers' knowledge of the SBFP and their implementation of the program.

Table 5. Correlation between extent of teachers' knowledge and implementation of the SBFP (n=41)

AREAS OF SBFP	R	DEGREE OF RELATIONSHIP	DECISION RULE	REMARKS
A. Physical Facility	0.6611	Strong	Reject H_0	Significant
B. Management of Funds	0.5166	Strong	Reject H_0	Significant
C. Supervision	0.8526	Very Strong	Reject H_0	Significant
D. Food Preparation & Funds	0.7205	Very Strong	Reject H_0	Significant
E. Children's Knowledge on Health	0.7112	Very Strong	Reject H_0	Significant
F. Community Involvement/Participation	0.6827	Strong	Reject H_0	Significant
Overall	0.7767	Very Strong	Reject H_0	Significant

Relationship Between the Extent of Implementing SBFP and the SBFP Beneficiaries' Academic Performance

Table 6 presents the data determining the correlation between the extent to which SBFP is implemented and the beneficiaries' academic performance. It has been reflected in Table 3 that a significant number of the beneficiaries have a "very satisfactory" performance and a great majority fall on the "satisfactory" level. Also, nobody was categorized below the average level. In Table 5, the data reveal a significantly strong relationship between the two aforementioned variables as signified by the obtained r value of 0.4559, the value of which is greater than the r significant level of 0.3204, at 0.05, with 39 degrees of freedom.

Table 6. Correlation between the extent of SBFP implementation and the beneficiaries' academic performance (n=210)

AREAS OF SBFP	R	DEGREE OF RELATIONSHIP	DECISION RULE	REMARKS
Extent of SBFP Implementation and Beneficiaries' Performance	0.4559	Strong	Reject H_0	Significant

Based on the results, there exists a relationship between the extent of implementation and the SBFP beneficiaries' academic performance.

Difference in the Extent of SBFP Coordinators' Implementation of the SBFP in terms of their Profile

Table 7 reflects how the extent of the SBFP coordinators' implementation varies when grouped according to their age, education, and relevant training attended. The data reflect the extent of the coordinators' implementation of the feeding program is not affected by their age, their educational qualification, and the relevant training they have attended. This is supported by p -values of 0.1919 (age), 0.3093 (educational qualification), and 0.1454 (relevant training), all greater than the 0.05 level of significance, suggesting uniform implementation regardless of these factors.

Table 7. Difference in the extent of SBFP coordinators' implementation of the SBFP according to their profile (n=41)

VARIABLES	N	MEAN	H	DF	P-VALUE	DECISION RULE	REMARKS
Age							
Below 30	6	4.55	4.74	3	0.1919	Do not reject H_0	No significant difference
30-39	13	4.12					
40-49	10	4.50					
50-up	12	4.47					
Average		4.40					
Education/Qualification							
Baccalaureate	11	4.29	3.59	3	0.3093	Do not reject H_0	No significant difference
With MA Units	16	4.42					
Full-fledged MA	9	4.56					
With EdD Units	5	4.32					
Average		4.40					
Relevant Training							
Without	9	4.17	5.39	3	0.1457	Do not reject H_0	No significant difference
8 hours	17	4.30					
16 hours	7	4.48					
24 hours-up	8	4.66					
Average		4.40					

0.05 level of significance

Test on Significant Difference in the Beneficiaries' Academic Performance in terms of their Profile

Table 8. Difference in the beneficiaries' academic performance according to their profile (n=210)

VARIABLES	N	MEAN	H	DF	P-VALUE	DECISION RULE	REMARKS
Sex							
Male	138	83.48	1.31	208	0.1916	Do not reject H_0	No significant difference
Female	72	83.80					
Average		83.64					
Grade Level							
Kinder	64	83.25	5.11	4	0.2762	Do not reject H_0	No significant difference
Grade I	124	83.50					
Grade II	6	83.86					
Grade III	9	83.89					
Intermediate	7	83.69					
Average		83.64					

0.05 level of significance

Shown in Table 8 are data indicating the difference in the beneficiaries' academic performance when grouped according to their sex and grade level. Based on the data, the beneficiaries' sex and grade level have significantly nothing to do with their academic performance within the SBFP. Statistical tests failed to reject the null hypothesis, suggesting no significant difference in academic performance based on sex ($p = 0.191648$) and grade level ($p = 0.2762$), both above the 0.05 significant level.

Discussions

The SBFP coordinators showed a remarkably high level of awareness of the SBFP and all aspects related to its implementation. First, the coordinators are highly cognizant of the necessary physical facilities, as outlined by RA 110037 for the 2023-2024 school year. These measures aim to ensure cleanliness, hygiene, and adequate nutrition for beneficiaries, aiming to increase annual attendance rates to above 85% and disseminate health and nutrition knowledge through alternative teaching methods and the K-12 curriculum. Encouraging backyard gardening and the Gulayan sa Paaralan Program (GPP) further align with government nutrition and poverty reduction efforts. Iddrisu (2018) did emphasize that teachers, pivotal to student growth and development, require adequate SBFP knowledge to effectively implement the program, enhancing efficiency and contributing to its success.

Moreover, the school's authority in managing the SBFP funds and supervision aligns with DepEd Order 31, s. 2021, encompassing procurement, disbursement, and liquidation processes. The school heads oversee daily operations, while the Schools Division Technical Working Group (SDTWG) supervises deworming, food production, waste management, hygiene integration, procurement compliance, and health assessments. The establishment and maintenance of the GPP are mandated to support SBFP ingredient provision. Also, DepEd emphasizes flexible procurement procedures, including collaboration among School Division Offices (SDOs) for transparency. Regional Directors approve school-level procurement, with coordination between DepEd and the National Dairy Authority (NDA) or Philippine Carabao Center (PCC) for milk procurement. Cooling equipment acquisition follows COA budget guidelines to ensure accountability.

The teachers' fundamental role in food preparation and distribution for the SBFP is likewise stipulated by DepEd Order No. 31, s. 2021, emphasizing the need for organized distribution and adherence to hygiene standards, including the use of necessary gear like trays, aprons, and hair bands. Strict adherence to the 120 feeding days is vital to ensure consistent nutritional support for beneficiaries, with rigorous food safety measures during Nutritious Food Products (NFP) repacking, as outlined by DepEd. Parents or guardians are also encouraged to supervise food consumption to maximize nutritional benefits, particularly for items like milk. To streamline operations and support teachers, Parent-Teacher Associations (PTAs) and volunteers are enlisted, as mandated by DepEd Order No. 31, s. 2021. Furthermore, maintaining meticulous records of distributed items by schools, submitted to School Division Offices (SDOs) for accountability, is vital for program success and resource allocation efficiency, per DepEd directives.

The SBFP for the A.Y. 2021–2022 targets kindergarten and Grades 1 through 6 students classified as wasted (W) or severely wasted (SW) in the SBFP report of SY 2020–2021, excluding those progressing to Grade 7, as outlined in DepEd Order 31, s. 2021. Sanefuji et al. (2021) emphasize the significance of assessing children's nutrition, providing insights into their diet and overall health, and determining if their nutritional needs are being met. This evaluation not only aids individual health but also identifies community-wide malnutrition risks, informs healthcare program development by governmental and non-governmental organizations, and evaluates the effectiveness of dietary interventions and treatments (Sanefuji et al., 2021).

Meanwhile, Solania and Cubillas (2020) advocate for collaborative engagement and robust partnerships among stakeholders in the School-Based Feeding Program (SBFP), a sentiment echoed by Sahagun (2022) who emphasizes enhanced parental involvement to restructure program administration and implementation. To optimize impact and operational efficiency, a comprehensive school improvement plan for the SBFP is deemed necessary. Engaging diverse organizations, including national government agencies, NGOs, LGUs, partners in the Enhanced Partnership Against Hunger and Poverty (EPAHP), and the private sector, at all levels of DepEd governance is crucial.

As far as SBFP implementation is concerned, the result implies that the SBFP coordinators are doing their job well in implementing the SBFP, which is just fitting. According to Dimaculangan (2019), the school feeding program has a big impact on learners' performance in class and is essential to their education. It helps children succeed academically as well as improve educational outcomes by encouraging learners' overall wellness. To properly meet the DepEd-established goals of reducing or eliminating learner malnutrition, the SBFP must be implemented effectively and conform to best practices. Dimaculangan further asserted that following the right procedures in the school feeding program helps achieve the objectives stated in the SBFP. Moreover, the DepEd Services Manual (2010) maintains that the efficiency and effectiveness of the services that the educational system offers to the public depend largely on the quality of its human resources, which, in the case of SBFP, refers to the teachers or SBFP coordinators.

Also, the coordinators have made sure the program beneficiaries are aware of what health and nutrition are all about. According to Robertson (2021), education about nutrition during the early developmental years, especially in preschool, significantly shapes an individual's lifelong health. Early exposure to nutritional learning influences dietary habits carried into adulthood, underscoring the importance of continuous and effective nutrition education aimed at all family members. Overall, the results suggest that the SBFP coordinators exhibit an impressive dedication to implementing SBFP, making sure that the community is involved in carrying out the activities and objectives of the program. According to Solania and Cubillas (2020), effective implementation of the SBFP hinges on collaborative engagement and strong partnerships among stakeholders.

Furthermore, the results also revealed that a very strong relationship exists between the extent of teachers' SBFP knowledge of SBFP and the extent of their program implementation. In other words, the teachers' knowledge of the SBFP greatly helps them in the implementation of the school feeding program. To recall, the preceding table showed that the SBFP is very well-implemented and that the teachers are very knowledgeable about the program. It can also be seen that all the results are positive, providing a favorable image of the SBFP coordinators in how well they understand their role as implementers and how they deliver the SBFP services.

Moreover, the data depicted a significantly strong relationship between the extent of SBFP implementation and the beneficiaries' academic performance. This means the implementation of the SBFP greatly influences the pupils' or beneficiaries' grades. In a study conducted by Aguilar, Villanueva, and Santos (2020) relative to the School-Based Feeding Program at Culiati High School, they found that of the 50 students involved in the study, 74% of the student respondents improved their general average by 1–5 points. It was concluded that the SBFP had an important part in improving the academic performance of the beneficiaries. Taylor and Ogbogu (2016) likewise support the current study. They disclosed that the SBFP has increased pupil enrolment (78.4%), retention rate (44.8%), regularity (58.6%), and punctuality (69%) in school attendance. They stated that the program has also enhanced pupils' performance in curricular and extra-curricular activities by 55.2%. In the same stance, Sahagun (2022), in her evaluation study on the implementation of the SBFP, unveiled that the program has an excellent impact on the key indicators of school performance.

In addition, the study findings indicate that age, educational qualification, and relevant training do not significantly influence the extent of implementation of the School-Based Feeding Program (SBFP) among coordinators. This conclusion aligns with the coordinators' self-reported high level of knowledge about the SBFP, as depicted in Table 1. Campus (2018) corroborates this, reporting a consistently high level of SBFP implementation across planning, coordination, budgeting, and monitoring. Solania and Cubillas (2020) stress the importance of collective involvement and strong partnerships in SBFP implementation, advocating for comprehensive training for all involved stakeholders. Furthermore, studies by Suyo (2021) and Graciadas (2020) support the notion that age, educational qualification, and relevant training do not significantly impact job performance, consistent with Bandura's theory of work engagement as cited in Suyo (2021).

On the part of the program, beneficiaries, the findings further signify that the pupils' profile, in terms of sex and grade level, does not significantly affect their academic performance within the SBFP. Regardless of sex or grade level, a majority of beneficiaries perform satisfactorily, with none falling below average despite previous stunted or wasted status. While some studies, such as that by Dendup, Wangmo, and Yangchen (2011), align with these findings, others, like Parajuli and Thapa (2017), Balkis and Duru (2017), and Palacios, Lahidalga, and Lasarte

(2018), suggest gender differences in academic performance, with females often outperforming males. This discrepancy may stem from factors like academic procrastination or maturity differences, which influence performance variation. DepEd policies on age-based grouping aim to create homogeneous classes to cater to similar developmental levels, as supported by Ünal (2019).

4.0 Conclusion

The findings make it clear that teachers are undeniably critical to the development and growth of students. The results demonstrate that SBFP coordinators possess substantial knowledge of the program, which is highly promising. Teachers must enhance their knowledge and skills to perform their duties efficiently and effectively. The SBFP program, which alleviates short-term hunger among public elementary pupils, must be sustained as it has a significant impact on school performance and student participation, particularly in terms of academic performance. The health and nutrition of the learners, therefore, should be given primordial importance as these areas play a vital part in their total development in terms of their physical, mental, emotional, and social aspects. Also, according to the evaluation, the physical facility of the SBFP received the lowest mean score among other areas. Although it is still considered to be "well implemented," this suggests that there is room for improvement and more effort may be required to enhance this aspect. Moreover, the study's findings underscore the robustness of the School-Based Feeding Program (SBFP), revealing that age, educational qualification, and relevant training do not substantially impact its implementation among coordinators. Similarly, the profile of SBFP beneficiaries, in terms of sex and grade level, does not significantly influence their academic performance within the program. These results suggest that the SBFP is effective in delivering its intended benefits to students, irrespective of demographic factors. As such, the SBFP demonstrates its resilience in addressing malnutrition and supporting academic achievement among beneficiaries, which emphasizes its importance in promoting holistic student well-being and educational success.

Based on the findings and conclusions presented, the researcher recommends the following:

- a) Teachers should prioritize enhancing their knowledge and skills to better fulfill their roles in the SBFP, given their crucial role in student development.
- b) The SBFP should be sustained and supported due to its significant impact on student performance and participation.
- c) Health and nutrition should be prioritized in the education system, recognizing their essential role in students' overall development across physical, mental, emotional, and social aspects.
- d) Efforts should be directed towards improving the physical facilities of the SBFP, as indicated by the evaluation's findings.

5.0 Contributions of Authors

Jesiel Mae B. Claros – writing, data gathering, data analysis, encoding, and supervising; Yvonne P. Cruz – data analysis, data treatment, and data interpretation; Angela Gabrielle B. Bacang – writing, proofreading, editing, and revising.

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7.0 Conflict of Interests

This study does not have any conflict of interest.

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Assessment of Organizational Management Capacity of Public Higher Education Institutions: The Case of Sulu State College

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Abstract. This study investigated the organizational management skills of Sulu State College for fiscal year 2023. A purposive sample of 100 people was selected, and several statistical procedures such as weighted mean, standard deviation, t-tests, ANOVA, and Pearson's r were used. According to the findings, the majority of surveyed employees were female, under the age of 30, had less than five years of work experience, had permanent employment, and possessed bachelor's degrees. According to the findings, Sulu State College had a significantly high degree of adaptation, particularly in strategic and operational planning, resource mobilization, communication management, and knowledge development. Interestingly, demographic variables such as gender, age, tenure, job status, and educational background had no significant influence on employees' perceptions of the institution's capacity for management. In addition, those who approved of the organizational management ability for strategic planning had similar perspectives on operational planning, resource mobilization, communication strategy, and knowledge management. This further means that employees from different demographic groups perceived SSC's management capacity similarly. This suggests that the college's practices are viewed as consistent and effective across all employee segments. The study also supported Frederic W. Taylor's Scientific Management Theory, highlighting its importance in improving organizational effectiveness through systematic work processes, task allocation, optimum procedures, performance evaluation, and incentivization. It offers a framework for directing and inspiring employee performance.

Keywords: Organizational management capacity; Public higher education institutions; Sulu State College; Scientific Management Theory; Philippines.

1.0 Introduction

Government organizations are supposed to be proficient in executing policies and providing services that are comparatively standardized, routine, and large volume in relation to their vision, purpose, and goals. In other words, they carry out duties like providing entitlements and, for the most part, do so while showing consideration and responsiveness to the stakeholders they support (Head, 2009; Alford, 2015). In other words, government organizations need to be capacitated because, while intra-organizational management is still necessary for the effective delivery of public services, the governance of relationships between organizations and stakeholders is now also necessary for the successful delivery of these services (Osborne, 2018).

Organizational capacity pertains to the degree to which an organization possesses essential attributes necessary for achieving its objectives (Horton et al., 2003; Misener & Doherty, 2009, as cited in Clutterbuck & Doherty, 2019). These attributes are typically classified into capacities related to finance, structure, and human resources.

Structural capacity encompasses planning and development capabilities, as well as infrastructure and operational efficiency (Hall et al., 2003, as mentioned in Clutterbuck & Doherty, 2019).

Building on measures of organizational effectiveness, Hall et al. (2003) developed a framework for organizational capacity that takes into account a variety of elements that influence the achievement of organizational goals. The framework was developed with consideration for the different sectors in mind, drawing on the body of research on the importance of structural, financial, and human capital in this wide-ranging context. It is claimed that each of the five capacity dimensions related to these affects, in different ways, an organization's capability to fulfill its mission (Hall et al., 2003 as quoted by Clutterbuck & Doherty, 2019).

The framework's underlying assumption is that dimensions shouldn't be taken into account apart from one another. Furthermore, there is a myriad of ways in which the broad capacity dimensions can influence each other due to their inherent interconnectedness (Hall et al., 2003; Misener & Doherty, 2009; Svensson & Hambrick, 2016; Svensson et al., 2017). Crucially, it is anticipated that the precise components inside each dimension would differ according on the unique charity setting. According to Doherty et al. (2014), referenced by Clutterbuck & Doherty (2019), there is agreement that each dimension's components are context-specific, even while what is important in one situation might not be in another. Therefore, before making any attempts to address capacity building, it is crucial to understand the specific nature of capacity in a certain type of organization.

In the Philippines, government agencies that fall under the purview of universities, in particular Sulu State College, are subject to a quarterly evaluation of their mandates concerning academics, research, extension, and financial problems. The amount to which academic programs follow predetermined agendas, the results of research and extension, funding allocations, and performance are the most often utilized criteria.

As a result, this study evaluated Sulu State College's organizational capacity in defiance of common wisdom, driven by the extensive and expanding corpus of research on organizational capacity for government organizations. By expanding its inquiry to take into account a variety of government entities that provide services in various settings, it aimed to add to the body of literature. This study also looked at aspects of operational planning, resource mobilization, communication strategy, knowledge management, and strategic planning that are being used to reflect the variety of organizational endeavors. These aspects were selected because they demonstrate an organization's structural capacity, which is vital for government organizations to efficiently provide services. Successful service delivery depends on strong relationships with stakeholders, in addition to internal management. Efficient daily operations, resource acquisition, clear communication, knowledge sharing, and establishment of long-term goals are all essential for an organization to accomplish its objectives. By evaluating these five elements, the study reveals how well Sulu State College is organized to fulfill its mission. The knowledge and comprehension of the crucial capacity components in this context are expanded by this study, strengthening the foundation for government organization assistance and capacity building. Thus, this study assessed the following research questions: 1. What is the demographic profile of employee-respondents in terms of gender, age, length of service, status of appointment, and educational attainment?; 2. What is the level of organizational management capacity of Sulu State College in the context of strategic planning, operational planning, resource mobilization, communication strategy, and knowledge management?; 3. Is there a significant difference in the level of organizational management capacity of Sulu State College when data are grouped according to the demographic profile?; and 4. Is there a significant correlation among the sub-categories subsumed under the level of organizational management capacity of Sulu State College?

2.0 Methodology

2.1 Research Design

This study used a descriptive-correlational research approach. According to Higson-Smith and Bless (2019), a research design is "a program that guides a researcher in collecting, analyzing, and interpreting observed facts." Similarly, Babbie and Mouton (2001) define research design as the roadmap or blueprint for conducting research and achieving its goals and objectives. As a result, this study used a descriptive research design technique with the goal of describing, measuring, inferring, and discovering correlations between variables among employees, allowing for the prediction of future occurrences based on present information or phenomena.

2.2 Research Respondents

The respondents of this study were Sulu State College employees assigned at the different academic departments and administrative support offices during the Academic Year 2023-2024. Using a purposive sample technique, this study selected one hundred (100) participants depending on employee availability. Purposive sampling was used to ensure representation of different demographics, such as age, gender, appointment status, and educational background.

2.3 Research Instrument

The primary study tool used to collect information on the level of organizational management capability was a survey questionnaire. The Scientific Management Theory by Frederic W. Taylor, as published in Tompkins, J.R. (2005), served as the model and inspiration for this questionnaire. There are 27 items in total in this questionnaire, divided into 5 categories: communication strategy (6 items), operational planning (7 items), strategic planning (6 items), resource mobilization (4 items), and knowledge management (4 items). Using a five-point Likert scale, respondents had to indicate how much they agreed or disagreed (1 being strongly disagreed, 2 disagreed, 3 uncertain, 4 disagreed, and 5 strongly agree). There were two components to the research tool employed in this study. The purpose of Part I of the questionnaire was to gather information about the respondents' gender, age, length of service, appointment status, and level of education. The purpose of Part II was to gather information about the level of organizational management capability as evaluated by the staff in relation to knowledge management, resource mobilization, communication strategy, operational planning, and strategic planning. Standardized questionnaires from the last study served as the model and inspiration for the research employed in this one. However, the questionnaire was reviewed by at least two specialists from the Graduate Studies faculty at Sulu State College in order to ensure that it was appropriate for the current study and its local contexts.

2.4 Data Gathering Procedure

The researcher launched, administered, and retrieved the questionnaire personally. The following actions were taken during the data collection process: the researcher requested permission from the Sulu State College's Office of the President and the Dean of Graduate Studies to administer the questionnaire.

2.5 Data Analysis

The data analysis for this study used a combination of descriptive and inferential statistical techniques to answer different research questions. Firstly, frequency counts and percentages were used to profile the respondents (question 1). Secondly, means and standard deviations were calculated to assess the overall organizational management capacity (question 2). To investigate potential variations based on demographics (question 3), a one-way Analysis of Variance (ANOVA) was used to identify group differences across factors such as age, tenure, appointment status, and educational background. Moreover, a t-test for independent samples specifically examined gender-based variations in perception of management capacity. Finally, the Pearson Product Moment Correlation Coefficient (Pearson's r) was used to explore relationships between subcategories of management capabilities (question 4) and identify statistically significant associations.

3.0 Results and Discussion

3.1 Demographic Profile of the Respondents

Table 1 presents the demographic distribution of employee-respondents based on gender. Out of the 100 surveyed employees, 40 (40.0%) are male, while 60 (60.0%) are female. These results indicate that a slightly larger proportion of female participants, constituting a majority, took part in this study compared to their male counterparts. Thus, the findings suggest that the employee population at Sulu State College for Fiscal Year 2023 is predominantly comprised of female employees. The table also displays the breakdown of employee-respondents by age group. From the analysis, the researcher found that out of the 100 employees surveyed, 43 (43.0%) are aged 30 and below, 26 (26.0%) are aged between 31 and 40, 27 (27.0%) are aged between 41 and 50, and 4 (4.0%) are aged 51 and above. This suggests that a significant portion, possibly the majority, of participants fall within the middle-age range, indicating a stage of vibrancy and energy. It also presents the demographic breakdown of employee-respondents based on their length of service. Upon examining the table, it can be seen that out of the 100 employees surveyed, 46 (46.0%) have accumulated 5 years or less of service, 33 (33.0%) have served between 6 and 10 years, 11 (11.0%) have served between 11 and 15 years, and 10 (10.0%) have served 16 years or more.

Table 1. Demographic profile of the teacher-respondents		
PROFILES	FREQUENCY	PERCENTAGE
Gender		
Male	40	30.0%
Female	60	70.0%
Age		
30 years old & below	43	43.0%
31-40 years old	26	27.0%
41-50 years old	27	27.0%
51 years old & above	4	4.0%
Length of Service		
5 years & below	46	46.0%
6-10 years	33	33.0%
11-15 years	11	11.0%
16 years & above	10	10.0%
Status of Appointment		
Permanent	63	63.0%
Temporary	18	18.0%
Casual/Contract of Service	19	19.0%
Educational Attainment		
Bachelor's degree	34	34.0%
With master's units	17	17.0%
Master's degree	23	23.0%
With doctoral units	11	11.0%
Doctorate degree	15	15.0%

This data indicates that almost half of the participants in this study have 5 years or less of work experience, suggesting that many of these respondents are beginners in their respective roles. In addition, for the distribution of employee-respondents based on their appointment status, it is evident that out of the 100 employees surveyed, 63 (63.0%) have permanent positions, 18 (18.0%) have temporary positions, and 19 (19.0%) are employed on a casual or contract basis. This reveals that the majority, or more than half, of the study participants have permanent employment status. Moreover, the table shows the demographic distribution of employee-respondents based on their educational achievements. Upon analyzing the table, it is evident that out of the 100 surveyed employees, 34 (34.0%) hold bachelor's degrees, 17 (17.0%) have bachelor's degrees in addition to master's units, 23 (23.0%) possess master's degrees, 11 (11.0%) hold master's degrees along with doctoral qualifications, and 15 (15.0%) have obtained doctoral degrees. This data indicates that nearly half of the participants in this study have bachelor's degrees, which fulfills the minimum requirement for employment in the public higher education sector.

3.2 Organizational Management Capacity *Strategic Planning*

Table 2. Level of organizational management capacity of Sulu State College in the context of strategic planning

INDICATORS	MEAN	SD	INTERPRETATION
1. SSC has comprehensive, written strategic plan that reflects its mission, vision and values.	4.6400	.50292	Strongly Agree
2. SSC has based the plan on a review of strengths and weaknesses, and client needs including people with disabilities.	4.5700	.55514	Strongly Agree
3. SSC has included priority areas, measurable objectives, and clear strategies.	4.6400	.48242	Strongly Agree
4. SSC has referred the plan for management decisions and operational planning.	4.6300	.52522	Strongly Agree
5. SSC has reviewed the plan.	4.6300	.56237	Strongly Agree
6. SSC has resource needs and corresponding budget.	4.6500	.51981	Strongly Agree
Total Weighted Mean	4.6267	.43559	Strongly Agree

Legend: (5) 4.50-5.0=Strongly (SA); (4) 3.50 – 4.49=Agree (A); (3) 2.50 – 3.49=Undecided (U); (2) 1.50 – 2.49=Disagree (D); (1) 1.00 – 1.49=Strongly Disagree (SD)

Table 2.1 shows Sulu State College's organizational management capabilities with regard to strategic planning. This subcategory received a rating of Strongly Agree or at a Very High Level, as shown in the table, with a total weighted mean score of 4.6267 and a standard deviation of .43559. The opinion expressed by employee respondents was unanimous: Sulu State College showed a very high degree of organizational management competency in terms of strategic planning. Generally speaking, Sulu State College is thought to have very good written strategic planning that is in line with its mission, vision, and values. The plan is based on an evaluation of the college's assets and weaknesses as well as the needs of its clients, which includes people with disabilities. It also includes specified strategies, quantifiable goals, and priority areas.

Employees who took part in the survey clearly expressed strong agreement or very high satisfaction with the following statements: "SSC has a written strategic plan that is in line with its mission, vision, and values;" "The plan has been developed after evaluating strengths, weaknesses, and the needs of clients, including those with disabilities;" "It includes well-defined strategies, measurable goals, and key focus areas;" "It has been presented for managerial decisions and operational planning;" and "It has undergone thorough review."

Operational Planning

Table 3. Level of organizational management capacity of Sulu State College in the context of operational planning

INDICATORS	MEAN	SD	INTERPRETATION
1. SSC has a complete annual operational plan.	4.5300	.57656	Strongly Agree
2. SSC has included goals, measurable objectives and strategies, timelines, responsibilities, and indicators.	4.5500	.53889	Strongly Agree
3. SSC has linked the plan to program/project work plans and budget.	4.5400	.53973	Strongly Agree
4. SSC has developed the plan with staff participation.	4.6300	.52522	Strongly Agree
5. SSC has set dates for quarterly reviews.	4.6200	.50812	Strongly Agree
6. SSC has submitted the plan on time to the Board of Trustees.	4.6300	.50562	Strongly Agree
7. SSC has used the plan for management decision-making.	4.5600	.57419	Strongly Agree
Total Weighted Mean	4.5800	.44058	Strongly Agree

The organizational management competence of Sulu State College about operational planning is shown in Table 3. This table shows that the sub-category in question received a rating of Strongly Agree or at a Very High Level, with a total weighted mean score of 4.5800 and a standard deviation of .44058. When it came to operational planning, employee respondents overwhelmingly agreed that Sulu State College showed a very high degree of organizational management capability. In summary, Sulu State College is thought to have a highly developed annual operational plan that is completed, with goals, quantifiable objectives, strategies, deadlines, roles, and indicators; the plan was created with staff participation and is connected to program/project work plans and budgetary considerations.

Workers who took part in the survey clearly indicated that they strongly agreed or were extremely satisfied with the following statements: "SSC has an annual operational plan that is comprehensive," "The plan includes goals, measurable objectives, strategies, timelines, responsibilities, and indicators," "It is linked to program/project workplans and budget," "It was created with staff involvement," and "Quarterly review dates have been set."

Resource Mobilization

Table 4. Level of organizational management capacity of Sulu State College in the context of resource mobilization

INDICATORS	MEAN	SD	INTERPRETATION
1. SSC has a business plan based on an analysis of its programs and resource needs.	4.5600	.55632	Strongly Agree
2. SSC has identified resource providers.	4.5700	.53664	Strongly Agree
3. SSC has successfully bid for resources from one or more resources.	4.6500	.50000	Strongly Agree
4. SSC has sufficient funds to support its activities.	4.6400	.50292	Strongly Agree
Total Weighted Mean	4.6050	.45806	Strongly

The organizational management ability of Sulu State College concerning resource mobilization is shown in Table 4 with a weighted mean score of 4.6050 overall and a standard deviation of .45806, this particular subcategory was rated as Strongly Agree or at a Very High Level, as can be seen in the table. In terms of resource management, employee respondents unequivocally said that Sulu State College had an extremely high degree of organizational management capability. Sulu State College is generally regarded as having a high degree of preparedness for a business plan that is based on an examination of its programs and resource needs; it has located sources of resources, won resources through one or more bids, and has sufficient funding to continue operating.

The following statements were clearly strongly agreed upon or expressed very high levels of satisfaction by employees who took part in the survey: "SSC has a business plan derived from an assessment of its programs and resource requirements," "SSC has pinpointed sources of resources," "SSC has effectively secured resources through one or more successful bids," and "SSC has adequate funds to sustain its operations."

Table 5. Level of organizational management capacity of Sulu State College in the context of communication strategy

INDICATORS	MEAN	SD	INTERPRETATION
1. SSC has a comprehensive communication strategy, including objectives, responsibilities, timelines, dissemination mechanism, and attention to attracting additional resources.	4.6100	.51040	Strongly Agree
2. SSC has staff members with communication strategy management, including documentation development and oversight.	4.6000	.53182	Strongly Agree
3. SSC has a process for testing and revising materials/ messages based on test results.	4.5700	.59041	Strongly Agree
4. SSC has developed its own branding policy, oriented staff, and instituted a system to monitor compliance.	4.5900	.55222	Strongly Agree
5. SSC has created templates and style guides and trained staff on their use.	4.5900	.53362	Strongly Agree
6. SSC has a communication strategy that is sensitive to disability inclusion.	4.5600	.53786	Strongly Agree
Total Weighted Mean	4.5867	.45101	Strongly Agree

The organizational management capability of Sulu State College with regard to communication strategy is shown in Table 5. This particular subcategory, as shown in the table, received a rating of Strongly Agree or at a Very High Level, with a total weighted mean score of 4.5867 and a standard deviation of .45101. Employee respondents overwhelmingly agreed that Sulu State College showed an exceptionally high degree of organizational management competency in terms of communication strategy. In general, Sulu State College is thought to be highly prepared and has a well-thought-out communication plan that includes goals, roles, deadlines, distribution channels, and an emphasis on drawing in more funding. The college also has staff members who are responsible for managing the communication strategy, which includes creating and supervising documentation and developing testing and revision procedures depending on test findings. Sulu State College has also created its own branding guidelines, trained employees, and put in place a mechanism to keep an eye on compliance.

Evidently, those who took part in the survey reported complete agreement or outstanding satisfaction with the following points: "SSC possesses a thorough communication strategy, encompassing goals, designated responsibilities, timelines, distribution mechanisms, and a focus on resource augmentation," "SSC has team members tasked with managing communication strategy, including the creation and oversight of documentation," "SSC has established procedures for evaluating and refining materials and messages based on testing outcomes," "SSC has formulated its own branding guidelines, educated staff on them, and implemented a monitoring system to ensure adherence," alongside "SSC has developed templates and a style guide and provided training to staff on their utilization."

Knowledge Management

Table 6. Level of organizational management capacity of Sulu State College in the context of knowledge management

INDICATORS	MEAN	SD	INTERPRETATION
1. SSC has active links with appropriate organizations to share best practices or program experiences.	4.5300	.54039	Strongly Agree
2. SSC has a process for routinely sharing technical expertise and experience with staff and stakeholders.	4.5800	.53522	Strongly Agree
3. SSC has applied best practices to its program.	4.6300	.52522	Strongly Agree
4. SSC has annual planning that includes reviews and integration of new/current knowledge and best practices.	4.6500	.47937	Strongly Agree
Total Weighted Mean	4.5975	.45072	Strongly Agree

Table 6 shows Sulu State College's organizational management capability concerning knowledge management. This particular sub-category received a grade of Strongly Agree or at a Very High Level, as indicated by the weighted mean score of 4.5975 overall with a standard deviation of .45072, as displayed in the table. Employee respondents unequivocally said that Sulu State College showed an exceptionally high degree of organizational management competency in the area of knowledge management. In essence, Sulu State College is thought to be excellent at actively connecting with relevant organizations to share best practices or program experiences, regularly exchanging technical knowledge and experiences with staff and stakeholders, integrating reviews and the integration of new/current knowledge and best practices into its annual planning, and putting best practices into its programs.

The results of the survey clearly show that the following aspects were highly valued by employees, who either strongly agreed with them or expressed a high degree of satisfaction with them: "SSC has implemented best practices in its programs;" "SSC has established a systematic approach to regularly disseminate technical knowledge and experiences to both staff and stakeholders;" and "SSC maintains strong connections with relevant organizations to exchange best practices and program insights."

3.3 Differences in the Level of Organizational Management Capacity *In terms of Gender*

Table 7. Differences in the level of organizational management capacity according to gender

VARIABLES	GROUPING	MEAN	S. D.	MEAN DIFFERENCE	T	SIG.	DESCRIPTION
Strategic Planning	Male	4.5458	.42195	-.13472	-1.525	.130	Not Significant
	Female	4.6806	.43967				
Operational Planning	Male	4.5571	.42894	-.03810	-.422	.674	Not Significant
	Female	4.5952	.45112				
Resource Mobilization	Male	4.5750	.43926	-.05000	-.533	.595	Not Significant
	Female	4.6250	.47278				
Communication Strategy	Male	4.6208	.42195	.05694	.617	.539	Not Significant
	Female	4.5639	.47150				
Knowledge Management	Male	4.5250	.45924	-.12083	-1.318	.190	Not Significant
	Female	4.6458	.44219				

*Significant at alpha 0.05

Table 7 shows the differences in Sulu State College's organizational management capacity when data is grouped by respondent gender. This table shows that the mean differences for all sub-categories within Sulu State College's organizational management capabilities are not statistically significant at the alpha .05 level. This suggests that male and female employee-respondents had similar ratings of Sulu State College's organizational management competence. As a result, being a male or female employee-respondent does not necessarily provide an advantage or disadvantage in assessing the college's organizational management competence. As a result, it can be inferred that the gender variable has no substantial impact on how employees perceive Sulu State College's organizational management competence.

As such, it can be inferred that the gender variable has no substantial impact on how employees perceive Sulu State College's organizational management competence. Thus, the hypothesis "There is no significant difference in the organizational management capacity of Sulu State College when data is grouped according to gender" is accepted.

In terms of Age

Table 8 depicts the differences in Sulu State College's organizational management capacity when data is grouped according to respondents' ages. This table shows that, with the exception of "Strategic Planning," the F-ratios and P-values for all other sub-categories under Sulu State College's organizational management capability are not statistically significant at the alpha.05 level. This suggests that, despite age differences among staff respondents, there is no substantial difference in their opinions of Sulu State College's organizational management capability. As a result, being older or within the age range of 51 years and above does not always give an advantage when judging the college's organizational management competence compared to those aged 30 years and below, 31-40 years old, and 41-50 years old, and vice versa.

However, it can be inferred that the age variable has no substantial impact on how employee-respondents assess Sulu State College's organizational management competence. Thus, the hypothesis that "there is no significant difference in the organizational management capacity of Sulu State College when data is grouped according to age" is accepted.

Table 8. Differences in the level of organizational management capacity according to age

SOURCES OF VARIATION		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.	DESCRIPTION
Strategic planning	Between Groups	1.622	3	.541	3.024*	.033	Significant
	Within Groups	17.162	96	.179			
	Total	18.784	99				
Operational planning	Between Groups	.908	3	.303	1.587	.198	Not Significant
	Within Groups	18.309	96	.191			
	Total	19.217	99				
Resource mobilization	Between Groups	1.253	3	.418	2.054	.112	Not Significant
	Within Groups	19.520	96	.203			
	Total	20.772	99				
Communication strategy	Between Groups	.956	3	.319	1.594	.196	Not Significant
	Within Groups	19.182	96	.200			
	Total	20.138	99				
Knowledge management	Between Groups	.607	3	.202	.997	.398	Not Significant
	Within Groups	19.504	96	.203			
	Total	20.112	99				

*Significant alpha .05

In terms of Length of Service

Table 9. Differences in the level of organizational management capacity according to length of service

SOURCES OF VARIATION		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.	DESCRIPTION
Strategic Planning	Between Groups	.517	3	.172	.906	.441	Not Significant
	Within Groups	18.267	96	.190			
	Total	18.784	99				
Operational Planning	Between Groups	.965	3	.322	1.691	.174	Not Significant
	Within Groups	18.253	96	.190			
	Total	19.217	99				
Resource Mobilization	Between Groups	.927	3	.309	1.495	.221	Not Significant
	Within Groups	19.845	96	.207			
	Total	20.773	99				
Communication Strategy	Between Groups	1.294	3	.431	2.197	.093	Not Significant
	Within Groups	18.844	96	.196			
	Total	20.138	99				
Knowledge Management	Between Groups	.701	3	.234	1.155	.331	Not Significant
	Within Groups	19.411	96	.202			
	Total	20.112	99				

Table 9 shows the differences in Sulu State College's organizational management capacity when data is classified by respondent length of service. This table shows that the Mean Differences values and P-values for all subcategories within Sulu State College's organizational management ability are not statistically significant at the alpha.05 level. This suggests that, despite differences in length of service among teacher respondents, their evaluations of Sulu State College's organizational management capabilities are not significantly different.

As a result, having 16 years or more of work experience does not necessarily provide an advantage in assessing the college's organizational management capacity when compared to individuals with fewer years of service, such as those with 5 years or less, 6-10 years, and 11-15 years of service, and vice versa.

However, it can be stated that the duration of service variable has no substantial impact on how employee-respondents assess Sulu State College's organizational management competence. As a result, the hypothesis that "There is no significant difference in the organizational management capacity of Sulu State College when data is grouped according to respondents' length of service" is accepted as true.

In terms of the Status of the Appointment

Table 10. Differences in the level of organizational management capacity according to the status of appointment

SOURCES OF VARIATION		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.	DESCRIPTION
Strategic Planning	Between Groups	1.093	2	.546	2.996	.055	Not Significant
	Within Groups	17.692	97	.182			
	Total	18.784	99				
Operational Planning	Between Groups	.745	2	.372	1.956	.147	Not Significant
	Within Groups	18.472	97	.190			
	Total	19.217	99				
Resource Mobilization	Between Groups	.936	2	.468	2.289	.107	Not Significant
	Within Groups	19.836	97	.204			
	Total	20.773	99				
Communication Strategy	Between Groups	1.429	2	.714	3.703*	.028	Significant
	Within Groups	18.709	97	.193			
	Total	20.138	99				
Knowledge Management	Between Groups	.196	2	.098	.478	.622	Not Significant
	Within Groups	19.916	97	.205			
	Total	20.112	99				

Table 10 shows the differences in Sulu State College's organizational management capabilities when data is categorized by responder status of appointment. This table clearly shows that except for "Communication Strategy," the F-ratios and P-values for all other sub-categories under Sulu State College's organizational management capability are not statistically significant at the alpha.05 level. This shows that, despite differences in appointment positions among staff respondents, their evaluations of Sulu State College's organizational management capabilities are not significantly different. As a result, having a permanent status does not always give a benefit when evaluating the college's organizational management capabilities compared to those with temporary, casual, or contractual appointments, and vice versa.

However, it can be inferred that the appointment status variable has no substantial impact on how employees view Sulu State College's organizational management competence. As a result, the hypothesis that "There is no significant difference in the organizational management capacity of Sulu State College when data is grouped according to respondents' demographic profile in terms of status of appointment" is accepted as true.

In terms of the Educational Attainment

Table 11. Differences in the level of organizational management capacity according to educational attainment

SOURCES OF VARIATION		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.	DESCRIPTION
Strategic Planning	Between Groups	.353	4	.088	.454	.769	Not Significant
	Within Groups	18.432	95	.194			
	Total	18.784	99				
Operational Planning	Between Groups	.681	4	.170	.872	.484	Not Significant
	Within Groups	18.536	95	.195			
	Total	19.217	99				
Resource Mobilization	Between Groups	1.033	4	.258	1.243	.298	Not Significant
	Within Groups	19.739	95	.208			
	Total	20.772	99				
Communication Strategy	Between Groups	.356	4	.089	.428	.788	Not Significant
	Within Groups	19.782	95	.208			
	Total	20.138	99				
Knowledge Management	Between Groups	.607	4	.152	.738	.568	Not Significant
	Within Groups	19.505	95	.205			
	Total	20.112	99				

Table 11 shows the differences in Sulu State College's organizational management capacity when data is grouped by respondents' educational level. This table shows that the F-ratios and P-values for all subcategories within Sulu State College's organizational management capabilities are not statistically significant at the alpha.05 level. This suggests that, despite differences in educational attainment across employee respondents, there is no substantial difference in their perceptions of Sulu State College's organizational management competence. As a result, having a doctorate does not always provide you an edge when evaluating the college's organizational management competence compared to those with bachelor's degrees, master's units, master's degrees, master's degrees with doctoral units, and vice versa.

However, it can be inferred that the educational attainment variable has no substantial impact on how employee respondents assess Sulu State College's organizational management competence. As a result, the hypothesis that "There is no significant difference in the organizational management capacity of Sulu State College when data is grouped according to respondents' demographic profile in terms of educational attainment" is accepted as true.

3.4 Relationship Among Sub-Categories

Table 12. Correlation among the sub-categories

VARIABLES		PEARSON R	SIG	N	DESCRIPTION
Dependent	Independent				
Strategic Planning	Operational Planning	.737**	.000	100	Very High
	Resource Mobilization	.842**	.000	100	Very High
	Communication Strategy	.738**	.000	100	Very High
	Knowledge Management	.650**	.000	100	High

*The Correlation Coefficient is significant at alpha .05

Correlation Coefficient Scales Adopted from Hopkins, Will (2002):

0.0-0.1=Nearly Zero; 0.1-0.30=Low; .3-0.5 0=Moderate; .5-0.7-0=High; .7-0.9= Very High; 0.9-1=Nearly Perfect

Table 12 illustrates the correlation among the sub-categories subsumed under the level of organizational management capacity of Sulu State College. It can be gleaned from this table that the computed Pearson Correlation Coefficients (Pearson r) among these variables are indeed significant at alpha .05. Specifically, the degrees of correlations among the sub-categories subsumed under the level of organizational management capacity of Sulu State College can be illustrated as follows:

- 1) Very high positive correlation between Strategic Planning and Operational Planning;
- 2) Very high positive correlation between Strategic Planning and Resource mobilization;
- 3) Very high positive correlation between Strategic Planning and Communication Strategy; and
- 4) High positive correlation between Strategic Planning and Knowledge Management.

These results indicate that the group of employee-respondents who assessed the level of organizational management capacity of Sulu State College in terms of Strategic Planning as "Strongly Agree" or with "Very High Level" is probably the same group of employee-respondents who assessed the level of organizational management capacity of Sulu State College in terms of Operational planning, Resource mobilization, Communication strategy, and Knowledge management as "Strongly Agree" or with "Very High Level", respectively.

For the time being, it is safe to say that, generally the sub-categories subsumed under the level of organizational management capacity of Sulu State College in terms of Strategic Planning, Operational planning, Resource mobilization, Communication strategy, and Knowledge management Communication, Leadership Styles, and Decision-making is very highly correlated.

Therefore, the hypothesis which states that, "There is no significant correlation among the sub-categories subsumed under the level of organizational management capacity of Sulu State College in terms of Strategic Planning, Operational planning, Resource mobilization, Communication strategy, and Knowledge management Communication, Leadership Styles, and Decision-making" is rejected.

4.0 Conclusion

The study comes to the following conclusions based on the previously given findings:

- a) The gender, age, length of service, appointment status, and educational background of the employee-respondents from Sulu State College are sufficiently diverse.
- b) Sulu State College exhibits an exceptional capacity to accomplish its goals by skillfully utilizing Resource Mobilization, Communication Strategy, Operational Planning, Strategic Planning, and Knowledge Management. The definition of organizational management capacity is the ability of an organization to effectively use resources to accomplish its goals while also being flexible, growing, and improving over time (Biden, 2023).
- c) Employees' evaluations of Sulu State College's organizational management competence are not substantially influenced by gender, age, length of service, appointment status, or educational background. This finding is consistent with Frederic W. Taylor's Scientific Management Theory, which argues for increasing productivity by systematizing work processes, breaking down jobs into particular components, determining the best procedures for each activity, and other measures.
- d) Employees who evaluated Sulu State College's organizational management capabilities highly for Strategic Planning tend to have given similarly high evaluations for Operational Planning, Resource Mobilization, Communication Strategy, and Knowledge Management. Almamari and Kolluru (2020) emphasized the importance of organizational management ability in assuring organizational success, highlighting the close link between management and communication, which complements one another.
- e) This study appears to back up Frederic W. Taylor's Scientific Management Theory, which advocates for increasing productivity through systematic work processes, task division, identifying the most efficient methods, training employees appropriately, measuring performance, and offering incentives for exceeding production quotas. This theory provides a framework for directing, motivating, and managing job performance (Tompkins, 2005).
- f) Employees generally have a positive perception of management across various aspects. This indicates that the SSC might be well-organized and effective in utilizing resources, which could result in high employee morale, trust, and productivity. However, the study's focus on employee perceptions and the lack of specific details on strengths and weaknesses within management categories limit its scope. In summary, the study suggests that the SSC functions well from an employee standpoint, but further research is needed to gain a more holistic understanding of its management capacity and identify potential areas for improvement.

Based on the facts and conclusions presented above, this study makes the following recommendations:

- a) Administrative officials can use the findings of this study as additional data to improve strategic and operational planning, resource mobilization, communication strategy development, and knowledge management at Sulu State College, resulting in more effective and efficient management and operations.
- b) Employees, including professors and non-teaching staff, can benefit from learning about the elements that influence the planning and implementation of college administration and operations. This information can help them accomplish their administrative obligations more successfully.
- c) Student-researchers in public administration are urged to duplicate this study in various settings, expanding it to incorporate additional factors such as administrators' leadership qualities, workers' dedication to work, and working atmosphere. This greater breadth can give useful insights into organizational dynamics other than those examined in this study.

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The author solely written this article. Thus, there are no co-authors for this study.

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Pantawid Pamilyang Pilipino Program in the Municipality of Omar: The Case of Student Beneficiaries

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Abstract. Since 2007, the Philippine government has implemented the Pantawid Pamilyang Pilipino Programme (4Ps), a conditional cash transfer (CCT) initiative aimed at reducing poverty and fostering human capital development among the nation's poorest households. This study investigates student perceptions of the program in Omar, Sulu, using a descriptive design with 100 student beneficiary-respondents selected via purposive sampling. Findings indicate that student beneficiaries at Capual National High School, mostly aged 16-19 and evenly split by gender, predominantly come from low-income families with parents earning 5,000 pesos or less monthly. They have been beneficiaries for 4 to 7 years. Results show high agreement among respondents regarding the program's implementation in financial assistance, health benefits, and education, with mean scores above 3.9. While there are no significant differences based on demographic profiles, positive correlations exist between financial assistance, health benefits, and education. Notably, variations are observed in financial assistance perceptions between genders and beneficiary tenure.

Keywords: Pantawid Pamilyang Pilipino Program; Student beneficiaries; Sulu.

1.0 Introduction

One economic issue that has long persisted in many nations, especially developing ones, is poverty. In an effort to alleviate poverty, numerous political and socioeconomic reforms have been implemented with the goal of addressing the issue of poverty reduction. Poverty is a social condition characterized by the lack of resources necessary for basic survival or necessary to meet a certain minimum level of living standards expected for the place where one lives (Crossman 2017).

The kind of social concern affects several nations worldwide due to varied causes. However, the leaders of the governments in these impacted nations are making every effort to end poverty as a social issue. The United Nations Declaration for the Millennium Development Goals (MDGs) has actually brought together heads of state and government to adopt the UN statement. The MDGs center on eliminating extreme poverty and hunger, attaining universal primary education, advancing gender equality, empowering women, decreasing child mortality, enhancing maternal health, fighting HIV/AIDS, malaria, and other diseases, maintaining environmental sustainability, and creating a global partnership for development (Millennium Development Goals, 2022).

In addition, several countries have employed the conditional cash transfer (CCT) programme as a tool for poverty-reduction policies. Programs that provide Conditional Cash Transfers (CCTs) use an integrated strategy to reduce poverty and build human capital. These initiatives provide low-income households with financial transfers as long as they follow the guidelines. These demands, which are typically linked to social development, education, and health and nutrition, are meant to end the intergenerational cycle of poverty in many communities. People

who fall under the multidimensional poverty line are being left behind across the following key dimensions: health, education, and standard of living. Under health, it can be classified as deprived if in a household there is an adult under 70 years of age or a child who is undernourished and, if there is any child who has died in the family in the five-year period preceding the survey. With education, the indicators are as follows: no household member aged 10 years or older has completed six years of schooling and any school-aged child is not attending school up to the age at which he/she would complete class 8 (United Nations Development Program, 2020).

The Philippine Statistics Authority's (PSA) 2021 report states that during the same period in 2018, the country's incidence of poverty climbed to 23.7 percent; by the first half of 2021, it had reached 21.1 percent. According to Chua (2021) this implies that 3.9 million more Filipinos live in poverty. The Pantawid Pamilyang Pilipino Programme (4Ps) is a human development project and a poverty reduction plan. With an emphasis on children ages 0 to 18, it provides grants in the form of conditional cash transfers (CCTs) to extremely poor families in an effort to enhance their health, nutrition, and educational opportunities. Both social development and social assistance are the two main objectives of the previously mentioned programme. While social assistance offers cash support to the impoverished in order to meet their immediate needs, social development seeks to break the cycle of intergenerational poverty through investments in human capital.

In 2007, Pantawid Pamilyang Pilipino Program (4ps) was enacted into law by Gloria Macapagal Arroyo, which was then continuously implemented by President Benigno Aquino III in 2008. According to the most recent assessments, the Pantawid program is having a positive effect on the issues that the conditionalities are directly targeting, such as children's health and education (more mothers are visiting health centers for general health advice and professional maternal health services, more children are receiving vaccinations and routine deworming, and households are eating more food).

It is necessary to evaluate any modifications that go beyond households adhering to the Pantawid conditionalities and how the program's beneficial effects will continue even after its beneficiaries have "graduated" from it. It is mentioned that ending the intergenerational cycle of poverty is one of the objectives of the conditional cash transfer program. It is even more important that the positive changes that result from the program are not dependent on the cash grant that is currently being received because the program's beneficiaries are already equipped to create environments where their rights to development, health, and education are realized – whether at home or in their community.

This is because there has not been any research done on the subject before, especially in the municipality of Omar, Sulu. Instead, a study on the viewpoints of the student-beneficiaries on the Pantawid Pamilyang Pilipino Program (4PS) would be conducted.

2.0 Methodology

2.1 Research Design

The study employed a descriptive methodology to elucidate the students' perspectives regarding the Financial, Health, and Education aspects of the Pantawid Pamilyang Pilipino Program (4ps). Additionally, the quantitative research method was applied, which investigates social issues and explains phenomena by collecting numerical data and analyzing it using techniques derived from mathematics, specifically statistics (Glunderson & Aliaga, 2002).

2.2 Research Participants

The participants in this study were Omar municipality students. A sample of one hundred (100) students who were beneficiaries at both the junior high and senior high school levels were selected. In this study, a purposive sample technique was applied. Based on the availability of the junior high and senior high school recipients, one hundred (100) representatives were selected. Purposive sampling was employed to make sure that the age, gender, average monthly income of the parents, and year of the beneficiary were all represented.

2.3 Research instrument

The data were gathered using a modified survey questionnaire by Montilla, et al. (2015). A redesigned survey includes subcategories including education (10 things), health (10 items), and finance (10 items). There were two

(2) portions of the survey that was used in this investigation. Part I presents the demographic profile of the respondents, which includes details about the age, gender, average monthly income, and year of benefits received by the recipients. Part II presents the opinions of the Pantawid Pamilyang Pilipino Program's student recipients in the municipality of Omar, Sulu. The research instrument is considered highly reliable and valid. However, it was somewhat modified to fit the current context, and at least two (2) specialists from the Sulu State College Graduate Studies faculty were asked to review it.

2.4 Data Gathering Procedure

The researcher conducted personally the launch, administration, and retrieval of the questionnaire.

2.5 Ethical Consideration

The author emphasized the student's confidentiality, ensuring data was used solely for research purposes. The research was conducted with ethical principles that prioritize the rights, well-being, and confidentiality of the participants involved.

2.6 Data Analysis

The statistical instruments employed in this study included frequency counts and percentages, means and standard deviations, one-way ANOVA, independent samples t-tests, and Pearson Product Moment Correlation Coefficient (Pearson's r).

3.0 Results and Discussion

3.1 Demographic Profile of the 4Ps Beneficiaries

In terms of Age

Table 1. Student beneficiary-respondents' demographic profile in terms of age

AGE	FREQUENCY	PERCENTAGE
15 years old and below	22	22%
16-19 years old	67	67%
20 years old and above	11	11%

The age distribution of the student beneficiaries who responded at Capual National High School is shown in Table 1. The table indicates that out of 100 student beneficiary-respondents, the majority is between 16 and 19 years old making up 67% (67), while 15 years old and below, and 20 years old and above account for 22% (22) and 11% (11) respectively. This means that the majority of the student beneficiary-respondents are aged 16-19, with an age gap of not more than 45% between the other groups. This implies a high skewed age distribution with majority of them in their adolescence age. According to Canare (2017) In the Philippines, there are a lot of social protection programs which are offered by the government to help alleviate people from poverty, improve the education of the children, increase the health and nutrition of households especially pregnant women and children aged 0-18 years old.

In terms of Gender

Table 2. Student beneficiary-respondents' demographic profile in terms of gender

GENDER	FREQUENCY	PERCENTAGE
Male	50	50%
Female	50	50%

The demographic profile of the Capual National High School student beneficiaries who responded is shown in Table 2, with regard to gender. The table shows that the demographic profile of the student beneficiary-respondents in terms of gender is evenly distributed. There are 50 male and 50 female beneficiaries, each constituting 50% of the total number of student beneficiary-respondents. This implies an even representation of male and student beneficiary-respondents in the surveyed group.

In terms of Parent's Average Monthly Income

The demographic profile of Capual National High School student beneficiaries/respondents is shown in Table 3, with regard to the average monthly income of their parents. The table indicates that out of 100 student beneficiary-

respondents, the majority have a parent's average monthly income of 5,000 and below, making up 84% (84). This is followed by those with parent's average incomes of 5,001–10,000, and 10,001 and above, accounting for 10% (10) and 6% (6) respectively. This means that most of the student beneficiary-respondents have a parent's average monthly income of 5,000 and below, with a gap of not more than 74% between the other groups. This implies a high skew distribution of income among the student-beneficiary-respondents, with most of them concentrated towards the lower income bracket.

Table 3. Student beneficiary-respondents' demographic profile in terms of parent's average monthly income

PARENT'S AVERAGE INCOME	FREQUENCY	PERCENTAGE
5,000 and below	84	84%
5,001-10,000	10	10%
10,001 and above	6	6%

In terms of the Number of Years as a Beneficiary

Table 4. Student beneficiary-respondents' demographic profile in terms of the number of years as a beneficiary

NUMBER OF YEARS	FREQUENCY	PERCENTAGE
3 years and below	35	35%
4-7 years	41	41%
8-10 years	15	15%
11 years and above	9	9%

Considered in terms of years as beneficiaries, Table 4 displays the demographic profile of the Capual National High School student beneficiaries who responded. The table indicates that out of 100 student beneficiary-respondents, the majority have been beneficiaries for 4-7 years, making up 41% (41). This is followed by those who have been beneficiaries for 3 years and below, 8-10 years, and 11 years and above, accounting for 35% (35), 15% (15), and 9% (9) respectively. This means that majority of the student beneficiary-respondents have been beneficiaries for 4-7 years, with a gap of not more than 6% between the other groups. This implies a relatively skewed years as a beneficiary distribution, with a majority of them slightly skewed towards the intermediate stage of the program.

3.2 Extent of Implementation of 4Ps *In the Context of Financial Assistance*

Table 5. The extent of implementation of the pantawid pamilyang pilipino program in the context of financial

INDICATOR	MEAN	SD	INTERPRETATION
1. My parents can give me a daily school allowance.	4.15	.892	Agree
2. My parents can afford to provide me the school projects.	4.09	.842	Agree
3. 4ps boosting my confidence in going to school with complete school supplies.	4.02	.953	Agree
4. I can immediately pay my school contributions.	3.93	.902	Agree
5. Parents can buy their basic needs (food, clothing, etc.)	4.08	.961	Agree
6. I now have lesser financial worries or burden.	3.83	.900	Agree
7. 4ps improved my life economically.	4.08	.918	Agree
8. I have sufficient resources for my personal and school needs.	3.99	.859	Agree
9. 4ps helped me in sustaining my transportation weekly.	3.80	.932	Agree
10. I have the means to provide my internet connection in surfing.	4.00	.899	Agree
Total	3.997	.5296	Agree

Legend: 4.50-5.00 = Strongly Agree (SA), 3.50-4.49 = Agree (A), 2.50-3.49 = Moderately Agree (MA), 1.50-2.49 = Disagree (D), 1.00-1.49 = Strongly Disagree (SD)

Table 5 shows the extent of implementation of Pantawid Pamilyang Pilipino Program (4ps) among the students' beneficiaries at Capual National High School in the municipality of Omar, Sulu in the context of Financial Assistance. The result shows that the total mean score is 3.997, which indicates an overall rating of "Agree". The total standard deviation is 0.5296, which indicates that there is some variation among the student beneficiary-respondents in their agreement with the statements. This means that the student beneficiary-respondents agree on the implementation of the Pantawid Pamilyang Pilipino Program (4Ps) on their financial situation.

The mean scores indicate that the student beneficiary-respondents agree that their parents are able to give them daily school allowance, can afford to provide them the school projects, can buy their basic needs. They also agree that they have lesser financial worries or burden, can immediately pay their school contributions, have sufficient resources for their personal and school needs, and have the means to provide their internet connection in surfing. Furthermore, they agree that 4ps boosts their confidence in going to school with complete school supplies, improves their life economically, and helps them in sustaining their transportation weekly. This implies that the Pantawid Pamilyang Pilipino Program (4Ps) has a positive effect on the financial well-being of the student beneficiaries and their families.

In the Context of Health Benefits

Table 6. The extent of implementation of the pantawid pamilyang pilipino program in the context of health benefits

INDICATOR	MEAN	SD	INTERPRETATION
1. My family able to provide for my mother's medical checkup (for pregnant women).	3.99	1.020	Agree
2. Eat meals three (3) times a day and more.	4.10	.937	Agree
3. Have a healthy lifestyle and healthy foods.	3.95	.936	Agree
4. Cannot be easily infected by diseases due of having a complete health service.	3.85	.845	Agree
5. nutritious foods are served in the family through 4ps.	3.96	.994	Agree
6. 4ps helped us in providing our medicines in the family.	3.98	1.005	Agree
7. I can now eat more healthy vegetables.	3.95	.989	Agree
8. We have free checkup and vitamins from our health clinic.	3.74	1.055	Agree
9. My family is provided discount for hospital bills as beneficiary of 4ps.	3.85	.936	Agree
10. I am now more conscious for my body daily lifestyle.	3.99	.927	Agree
Total	3.997	.5296	Agree

Table 6 shows the extent of implementation of Pantawid Pamilyang Pilipino Program (4ps) among the students' beneficiaries at Capual National High School in the municipality of Omar, Sulu in the context of Health Benefits. The result shows that the total mean score is 3.935, which indicates an overall rating of "Agree". The total standard deviation is 0.5806, which indicates that there is some variation among the student beneficiary-respondents in their agreement with the statements. This means that the student beneficiary-respondents agree on the implementation of the Pantawid Pamilyang Pilipino Program (4Ps) on their health situation.

Based on their mean scores, the student beneficiaries who responded agreed to the following: they eat three (3) meals a day or more; they have a healthy lifestyle and eat healthy foods; they are less likely to contract diseases because they have access to complete health services, free checkups, and vitamins from their health clinic; they are more aware of their daily lifestyle choices; and they can now eat healthier vegetables. They also agree that 4ps provides for their mother's medical checkup (for pregnant women), provides discount for hospital bills, serves nutritious foods in their family, and helps them in providing their medicines for the family. This implies that the Pantawid Pamilyang Pilipino Program (4Ps) has a positive effect on the health and nutrition of the student beneficiaries and their families.

In the Context of Education

Table 7. The extent of implementation of the pantawid pamilyang pilipino program in the context of education

INDICATOR	MEAN	SD	INTERPRETATION
1. 4ps Provides me with the learning materials for schooling.	3.98	.910	Agree
2. 4 Ps helped me with my expenses in school.	4.08	.929	Agree
3. I am socially active physically and mentally in learning.	4.09	.954	Agree
4. I am motivated to study in all subjects.	3.99	.927	Agree
5. I have the means to provide access to the different sources for my subjects with the help of 4ps.	3.82	.989	Agree
6. I have been given the chance to be a scholar	4.10	.916	Agree
7. 4 Ps helped me improve my academic performance.	4.09	.933	Agree
8. I am more excited to participate in school activities.	4.11	.909	Agree
9. I realized the value of education as one of the investments for a brighter future.	4.25	.903	Agree
10. My parents allow us to learn through seminars with the help of 4ps.	4.54	4.191	Agree
Total	4.105	.7496	Agree

Table 7 shows the extent of implementation of the Pantawid Pamilyang Pilipino Program (4ps) among the students' beneficiaries at Capual National High School in the municipality of Omar, Sulu in the context of Education. The result shows that the total mean score is 4.105, which indicates an overall rating of "Agree". The

total standard deviation is 0.7496, which indicates that there is some variation among the student beneficiary-respondents in their agreement with the statements. This means that the student beneficiary-respondents agree on the implementation of the Pantawid Pamilyang Pilipino Program (4Ps) on their education situation.

The mean scores indicate that the student beneficiary-respondents agree that 4ps provides them the learning materials for schooling, helps them with their expenses in school, and helps them in improving their academic performance. They also agree that they are socially active physically and mentally in learning, are motivated to study in all subjects, have their means to provide their access in the different sources for their subjects, have given the chance to be a scholar, are more excited to participate in school activities, and realized the value of education as one of the investments for brighter future. Further, they agree that their parents give them an opportunity to learn through seminars with the help of 4ps. This implies that the Pantawid Pamilyang Pilipino Program (4Ps) has a positive effect on the educational outcomes and aspirations of the student beneficiaries and their families.

A study conducted by (dela Torre, 2016) revealed that 4Ps contributed greatly to the school's performance indicators. This study also raised the awareness of the school personnel and the recipients of the program's strengths, weaknesses, opportunities and threats. Furthermore, the study concludes that 4Ps certainly helped its recipients and the school with 4Ps enrollees. It is therefore recommended that the program be continued but improved to ensure the attainment of its objectives.

3.3 Difference in the Extent of Implementation of 4Ps

In terms of Age

When data is categorized based on age demographics, Table 8 shows the variations in the degree of Pantawid Pamilyang Pilipino Programme (4ps) implementation among student beneficiaries in the municipality of Omar, Sulu. The variables include Financial Assistance, Health Benefits, and Education. The table shows that the F-values and probability values for all variables are not significant at alpha 0.05. This means that the perceptions of student beneficiary-respondents aged 15 years and below on the extent of these variables do not differ from those of student beneficiary-respondents aged 16-19 years, and 20 years and above, or vice versa. This implies that the student beneficiary-respondents perceive the extent of implementation of the Pantawid Pamilyang Pilipino Program (4ps) in the municipality of Omar, Sulu in the same way regardless of their age. Therefore, the hypothesis states that "There is no significant difference in the extent of implementation of Pantawid Pamilyang Pilipino Program (4ps) among students' beneficiaries in the municipality of Omar, Sulu when data classified according to the demographic profile in terms of age." is accepted.

Table 8. The difference in the extent of implementation of 4Ps in terms of age.

SOURCES OF VARIATION		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.	DESCRIPTION
Financial Assistance	Between Groups	0.719	2	0.359	1.289	0.280	Not Significant
	Within Groups	27.05	97	0.279			
	Total	27.77	99				
Health Benefits	Between Groups	0.435	2	0.218	0.641	0.529	Not Significant
	Within Groups	32.94	97	0.340			
	Total	33.37	99				
Education	Between Groups	2.166	2	1.083	1.965	0.146	Not Significant
	Within Groups	53.46	97	0.551			
	Total	55.63	99				

*Significant at alpha 0.05

In terms of Gender

When data is categorized based on gender demographics, Table 9 shows the variations in the degree of Pantawid Pamilyang Pilipino Programme (4ps) implementation among students who get benefits in the municipality of Omar, Sulu. The variables include Financial Assistance, Health Benefits, and Education. The table shows that the mean difference and probability values for all variables, except for Financial Assistance, are not significant at alpha 0.05. This means that the extent of these variables does not affect the perceptions of male and female student beneficiary-respondents differently. However, on the extent of financial assistance, male student beneficiary-respondents perceive differently than those of female student beneficiary-students, or vice versa. This implies that the student beneficiary-respondents perceive the extent of implementation of the Pantawid Pamilyang Pilipino Program (4ps) in the municipality of Omar, Sulu in the same way regardless of their gender, except for the

financial assistance variable. Thus, the hypothesis reads, "When data is classified according to the demographic profile in terms of gender, there is no significant difference in the extent of implementation of Pantawid Pamilyang Pilipino Programme (4ps) among students' beneficiaries in the municipality of Omar, Sulu." is accepted.

Table 9. The difference in the extent of implementation of the 4Ps in terms of gender

VARIABLES	GROUPING	MEAN	SD	MEAN DIFFERENCE	T	SIG.	DESCRIPTION
Financial Assistance	Male	4.1100	.54031	0.226	2.173*	0.032	Significant
	Female	3.8840	.49872				
Health Benefits	Male	3.9678	.58437	0.065	0.565	0.574	Not Significant
	Female	3.9020	.58081				
Education	Male	4.1900	.82394	0.170	1.136	0.259	Not Significant
	Female	4.0200	.66455				

*Significant at alpha 0.05

In terms of Parent's Average Monthly Income

Table 10. The difference in the extent of implementation of the 4Ps in terms of parent's average monthly income

SOURCES OF VARIATION		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.	DESCRIPTION
Financial Assistance	Between Groups	0.179	2	0.090	0.315	0.730	Not Significant
	Within Groups	27.59	97	0.284			
	Total	27.77	99				
Health Benefits	Between Groups	0.018	2	0.009	0.026	0.975	Not Significant
	Within Groups	33.35	97	0.344			
	Total	33.37	99				
Education	Between Groups	0.013	2	0.006	0.011	0.989	Not Significant
	Within Groups	55.62	97	0.573			
	Total	55.63	99				

In the municipality of Omar, Sulu, Table 10 shows the variation in the degree of Pantawid Pamilyang Pilipino Programme (4ps) implementation among students' beneficiaries when data is categorized based on the average monthly income of the parents. The variables include Financial Assistance, Health Benefits, and Education. The table shows that the F-values and probability values for all variables are not significant at alpha 0.05. This means that the perceptions of student beneficiary-respondents with a parent's average monthly income of 5,000 and below on the extent of these variables do not differ from those of student beneficiary-respondents with a parent's average monthly incomes of 5,001-10,000, and 10,001 and above, or vice versa. This implies that the student beneficiary-respondents perceive the extent of implementation of the Pantawid Pamilyang Pilipino Program (4ps) in the municipality of Omar, Sulu in the same way regardless of their parent's average monthly income. Thus, the hypothesis reads, "When data is classified according to the demographic profile in terms of parent's average monthly income, there is no significant difference in the extent of implementation of Pantawid Pamilyang Pilipino Programme (4ps) among students' beneficiaries in the municipality of Omar, Sulu." is accepted.

In terms of the Number of Years as a Beneficiary

Table 11. The difference in the extent of implementation of the 4Ps in terms of the number of years as a beneficiary

SOURCES OF VARIATION		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.	DESCRIPTION
Financial Assistance	Between Groups	3.004	3	1.001	3.882*	0.011	Significant
	Within Groups	24.77	96	0.258			
	Total	27.77	99				
Health Benefits	Between Groups	1.402	3	0.467	1.403	0.247	Not Significant
	Within Groups	31.97	96	0.333			
	Total	33.37	99				
Education	Between Groups	3.673	3	1.224	2.262	0.086	Not Significant
	Within Groups	51.96	96	0.541			
	Total	55.63	99				

Table 11 shows the variation in the degree of Pantawid Pamilyang Pilipino Programme (4ps) implementation among students who get benefits in the municipality of Omar, Sulu, based on data categorized based on the number of years the beneficiary has been a beneficiary. Education, health benefits, and financial assistance are some of the variables. Except for financial aid, the table demonstrates that all F-values and probability values are

not significant at alpha 0.05. Accordingly, there is no difference in the perceptions of student beneficiary respondents who have been beneficiaries for three years or less from those who have been beneficiaries for four to seven years, eight to ten years, and eleven years or more regarding the extent of these variables, or vice versa. However, on the extent of financial assistance, student beneficiary-respondents who have been beneficiaries for 3 years and below perceive differently than those who have been beneficiaries for 4-7 years, and 8-10 years, or vice versa, as shown in table 11. This suggests that, except for the financial aid variable, the student beneficiary respondents see the level of Pantawid Pamilyang Pilipino Programme (4ps) implementation in the municipality of Omar, Sulu in the same manner regardless of the number of years they have been beneficiaries. Thus, the hypothesis that reads, "When data is classified according to the demographic profile in terms of number of years as beneficiary, there is no significant difference in the extent of implementation of Pantawid Pamilyang Pilipino Programme (4ps) among students' beneficiaries in the municipality of Omar, Sulu." is accepted.

When data are grouped according to student beneficiary-respondents' demographic profile in terms of number of years as beneficiary, a Post Hoc Analysis using Tukey test (Table 12) is performed to determine which among groups classified according to number of years as beneficiary have different levels of mean in the extent of Financial Assistance.

On financial assistance, it demonstrates that, among student beneficiary respondents who have been beneficiaries for three years or less, the mean difference was -.32202* with a standard error of .11689 and a p-value of .035 compared to those who have been beneficiaries for four to seven years; among those who have been beneficiaries for eight to ten years, the mean difference was -.45714* with a standard error of .15674 and a p-value of .022, all of which are significant at alpha 0.05.

Table 12. Multiple comparisons of the extent of implementation of 4Ps by number of years as beneficiary

DEPENDENT VARIABLE	(I) GROUPING BY AGE	(J) GROUPING AGE	MEAN DIFFERENCE (I - J)	STD. ERROR	SIG.
Financial Assistance	3 years and below	4-7 years	-0.32202*	0.11689	0.035
		8-10 years	-0.45714*	0.15674	0.022
		11 years old and above	-0.15048	0.18982	0.858

* At the 0.05 level, the mean difference is significant.

3.4 Correlation among The Sub-Categories

Table 13. Correlation among the sub-categories

VARIABLES		PEARSON R	SIG.	N	DESCRIPTION
Dependent	Independent				
Financial Assistance	Health Benefits	.740*	.000	100	Very High
	Education	.553*	.000	100	High
Health Benefits	Education	.640*	.000	100	High

*At alpha.05, the correlation coefficient is significant.

Dimensions of Correlation Coefficients Taken from Hopkins, Will (2002):

0.0-0.1 = Nearly Zero; 0.1-0.3 = Low; 0.3-0.5 = Moderate; 0.5-0.7 = High; 0.7-0.9 = Very High; 0.9-1 = Nearly Perfect

The correlation between the subcategories included in the Pantawid Pamilyang Pilipino Programme (4ps) implementation level among pupils who get benefits in the municipality of Omar is displayed in Table 13. The table shows that the computed Pearson correlation coefficients (Pearson r) between these variables are significant at alpha 0.05. In particular, the degree of correlations between the beneficiaries of students in the municipality of Omar who fall under the sub-categories covered by the amount of implementation of the Pantawid Pamilyang Pilipino Program (4ps). Specifically, how closely the following subcategories of students in the municipality of Omar benefit from the extent to which the Pantawid Pamilyang Pilipino Programme (4ps) is implemented:

- 1) Strong favorable relationships were found between financial aid and health benefits, as well as between financial aid and schooling.
- 2) A strong favorable relationship between education and health advantages.

This indicates that these associations are probably not random and that as one variable rises, the other tends to rise as well. Financial help and health benefits have the strongest connection ($r = 0.740$, $p < 0.01$). This indicates

that there is a strong positive association between the student beneficiaries' health outcomes – such as nutrition, immunization, and access to healthcare – and the amount of financial aid they receive. Financial aid and education have the smallest connection ($r = 0.553$, $p < 0.01$). This indicates that there is a strong positive relationship between the recipients' educational results, including academic achievement, and the amount of financial aid they receive. As a result, the hypothesis that "among students' beneficiaries in the municipality of Omar, there is no significant correlation among the sub-categories subsumed under the extent of implementation of Pantawid Pamilyang Pilipino Programme (4ps)" is rejected.

4.0 Conclusion

The study concludes that:

- a) 4ps targets mostly adolescent students who need educational assistance. It does not discriminate by gender and ensures equal opportunities for both male and female students. The program also reaches out to the poorest students and provides them with financial support and helps them stay in school for several years.
- b) 4ps is effective in providing financial assistance, health benefits, and education to the student beneficiary-respondents. It has a positive impact on the well-being and academic performance of the student beneficiary-respondents. The program meets the expectations and needs of the student beneficiary-respondents.
- c) 4ps is consistent and fair in its implementation across different groups of student beneficiary-respondents, regardless of their demographic characteristics, except for the financial assistance variable.
- d) 4ps is successful in enhancing the financial, health, and educational aspects of the student beneficiary-respondents. It has a holistic and integrated approach in addressing the needs and challenges of the student beneficiary-respondents.
- e) 4ps is an avenue in helping the students achieving their careers that they wanted in the future and shaping the economy for the coming generations.

This study recommends the following:

- a) The government in the municipality of Omar, Sulu may continue to support and fund the Pantawid Pamilyang Pilipino Program (4Ps) as it is a valuable and effective intervention for improving the lives of the poor and vulnerable students.
- b) The school head of Capual National High School may provide guidance and support to the teachers and the parents in facilitating the academic and personal development of the student beneficiary-respondents.
- c) The teachers Capual National High School may motivate and inspire the student beneficiary-respondents to pursue their dreams and aspirations.
- d) The parents may use the financial assistance wisely and responsibly for the benefit of their children and their family.
- e) The student beneficiaries may comply with the program conditions, such as attending school regularly, maintaining good health and nutrition, and avoiding risky behaviors.

5.0 Contributions of Authors

The author solely written this article. Thus, there are no co-authors for this study.

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7.0 Conflict of Interests

The author declared that he has no conflicts of interest as far as this study is concerned.

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Scaffolding Students' Difficulties in Addition and Subtraction of Integers through Game-Based Instruction

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Abstract. This study aimed to determine the effectiveness of the Integer Math Maze and Intego Card Game in teaching and learning the addition and subtraction of integers. The study also covered the level of the students' enjoyment of utilizing these game-based instructions. The subjects of the study were the 41 Grade 10 students who were grouped into two based on their prior knowledge of mathematics and were randomly assigned to different interventions. The study utilized the Cluster Randomized Trial (CRT) under the experimental type of research. Mean, Spearman Rank Order Correlation, and a t-test for independent and dependent data were used as statistical tools. The researchers used a validated questionnaire to gather data. The findings of the study indicate that the students lack the foundational skills in integer operations. However, a significant improvement in their performance was observed after the utilization of the game-based instructions. The study further revealed that the level of the students' enjoyment of the game-based instructions was "very high." The data from this study indicated that, to scaffold students' difficulties with the various operations of integers, educators and curriculum implementers should examine how well students perform when given game-based instruction.

Keywords: Scaffolding student' difficulties; Game-based instruction; Addition and subtraction; Integer math maze; Intego card game.

1.0 Introduction

Everyday living requires the ability to use numbers (Davis-Kean et al. 2022; Szabo et al., 2020). Literacy in mathematics entails comprehending and synthesizing mathematical fundamentals, such as concepts, terminology, facts, and skills, following the demands of real-world situations (Tallud & Caballes, 2023). However, studies have shown that students struggle with math globally, making it crucial to find solutions to these problems and close learners' numeracy gaps (Morrison & McLafferty, 2018). According to Camera (2019), U.S. students are somewhat below average in mathematics when seen from a worldwide viewpoint. Many nations around the world are quite concerned about low math achievement. Fiji is one of the South Pacific countries experiencing the same trends, pressures, and worries, as stated by Chand et al. (2021). Kosovar pupils also do worse than average in science and math (Shala & Grajevci, 2023).

Based on the 2018 international assessment, the performance of Filipino students in Mathematics continuously showed a decline. They scored 297 in math and this figure is substantially lower than that of any other country that joined the TIMSS (Magsambol, 2020). Only 19% of Filipino students met the "low standard" in math, indicating they had "some basic mathematical knowledge," while 81% did not even make it to this level. In addition, the study by Bulangis (2021) revealed that students' Basic Education Exit Assessment (BEEA) performance particularly in problem solving is at the "low proficient" level. The purpose of BEEA performance is

to evaluate students' academic growth and gauge whether or not the students have mastered the set of learning requirements.

Researchers discovered that the COVID-19 pandemic impeded learners' academic growth (Omang & Angioha, 2021; Isiaka, 2021). Thus, mathematics researchers identified the challenges encountered by the students during the pandemic (Meniano & Tan, 2022; Fernandez & Benavides, 2022; Bayucca, 2021). Other researchers also tried to explore the difficulties of the teachers in teaching the subject after the pandemic (dela Cruz & Hernandez, 2023; Fickermann & Edelstein, 2020; Villarreal et al., 2022; Atweh et al., 2022). Nonetheless, the current research intends to scaffold students' difficulties in the addition and subtraction of integers. These topics in mathematics are very useful in higher and advanced mathematics learning. As Sahat et al. (2018) stressed, integers are topics that are crucial to understanding other higher mathematical ideas. Due to their close connection to daily life, integer operations are an extremely essential subject.

The researchers, being mathematics teachers were challenged to find effective ways to teach addition and subtraction of integers given the subject's perceived difficulty. So, they decided to use game-based instruction to motivate the learners to comprehend the concepts of integers. Hakim et al. (2019) contend that using tangible objects enables students to learn through practical application, which might be more engaging and readily remembered than learning through purely abstract notions. Chong et al. (2022) also indicated that using games in teaching can be a helpful tool in imparting concepts. This prompted the researchers to use game-based instructions to scaffold students' difficulty in adding and subtracting integers. With this in mind, the researchers also would like to identify the level of students' enjoyment and if it relates to their performance.

Generally, this study determined the effectiveness of game-based instruction in teaching and learning addition and subtraction of integers. Specifically, it (a) assessed the pretest and posttest results of the students in adding and subtracting integers; (b) identified difficulties of students in adding and subtracting integers; (c) examined students' level of enjoyment of the game-based instruction in scaffolding their difficulties in adding and subtracting integers; (d) explored the difference between the pretest and posttest results of the students in addition and subtraction of integers; (e) evaluated the difference in the posttest results of the two groups of students in addition and subtraction of integers; and (f) examined the relationship between the level of students' enjoyment of the game-based instruction and their posttest performance. Its findings will be helpful not just to math teachers but also to any educational institution that wants to improve students' numeracy skills, especially when it comes to addition and subtraction of integers.

2.0 Methodology

2.1 Research Design

This study utilized the Cluster Randomized Trial (CRT) under the experimental type of research. In CRT, participants are not individually randomized to different groups. Instead, clusters of participants (two sections of students) are randomly assigned to different interventions—the Integer Math Maze and Intego Card Game. The researchers ensured that the two groupings of students had the same level of prior knowledge in Mathematics 9.

2.2 Research Participants

The respondents of this study were the Grade 10 students of Leon Parami High School (LPHS), Po-o, Lazi, Siquijor, enrolled during the school year 2023-2024. The researchers employed the one-stage cluster sampling method in choosing the respondents. The assignment of activity was done at random by tossing a coin. To ensure that the two groupings have equal knowledge of Mathematics, their prior performance in Mathematics 9 was identified. The t-test for independent data was then employed and the results showed a p-value greater than 0.05. This validated the assumption that the knowledge of the two groupings is the same.

2.3 Research Instrument

The entire questionnaire was presented to three experts in the field of mathematics for content validity. The experts were properly selected by the researchers. To ensure item reliability, a dry run was conducted with 30 selected students as the respondents. These students participating in the dry run were also the participants in the trial of the game-based instruction for them to thoroughly evaluate their level of enjoyment. The Cronbach's Alpha

Test was utilized and revealed an item reliability of 0.870 and 0.810 for the Integer Math Maze and Intego Card Game, respectively.

2.4 Data Gathering Procedure

Before the administration of the questionnaires, both for the initial experiment/dry run and the final experiment, the researchers asked permission from the Schools Division Superintendent of Siquijor. The signed and approved request was presented to the school principal of Leon Parami High for formal permission to conduct the study. Before conducting the experiment, the researchers conducted first a trial experiment in another section. The game was introduced first to every group and was tested afterward. The questionnaire on students' enjoyment of the game-based instruction was also distributed to identify the reliability of the items. After the initial experiment, the researchers evaluated their strengths and weaknesses during the conduct of the activity. The students' behavior was also considered. The Grade 10 students are composed of two sections with 20 students in Grade 10 Aguinaldo and 21 students in Grade 10 Bonifacio. After having proof that these two sections of students have equal knowledge in mathematics, the assignment of activity was done in random through the tossing of a coin. The students were then briefed on what to expect during the conduct of the activity. For the final experiment, each group was given a pre-test to be answered for 20 minutes. Afterward, they were made to play two different games (Integer Math Maze and Intego Card Game). The concepts introduced through games served as enrichment activities in adding and subtracting integers. After each game, the students answered the post-test for 20 minutes. This determines if the activities are effective in the teaching-learning process.

2.5 Ethical Considerations

The researchers observed all the necessary ethical considerations during the entire duration of the study. Since the data involved the performance of the students, confidentiality of information was assured to those concerned such that their privacy would not be encroached upon. The researchers also followed the ethical protocols stipulated in the Ethics Committee of Foundation University. Before the conduct of the study, permission was sought from the proper authorities.

3.0 Results and Discussion

3.1 Pretest Results of the Students in Adding and Subtracting of Integers

Table 1 displays the pretest results of the two groups of students in adding and subtracting integers. The data show that the students' mean performances fall within the "did not meet expectations" category with ratings of 73.33% for the Integer Math Maze Group and 74.13% for the Intego Card Game Group. These ratings imply that the students struggle with their understanding of the concepts or rules of adding and subtracting integers.

Table 1. Pretest results of the students in adding and subtracting of integers

RATING	INTEGER MATH MAZE GROUP (N = 21)		INTEGO CARD GAME GROUP (N = 20)	
	F	%	F	%
90% - 100%	0	0.00	0	0.00
85% - 89%	1	4.76	1	5.00
80% - 84%	3	14.29	5	25.00
75% - 79%	5	23.81	5	25.00
≤ 74%	12	57.14	9	45.00
Mean	73.33 (Did Not Meet Expectations)		74.13 (Did Not Meet Expectations)	
SD	5.55		6.25	

Addition and subtraction of integers were discussed in Grade 6 and the students in Grade 10 were unable to fully comprehend the rules resulting in a failing performance. These students might have been affected by the implementation of modular distance learning. The shift to modular distance learning started in the year 2020 and these groups of students were in Grade 7. Teachers in the study of Muthuprasad et al. (2021) claimed that the pandemic caused students to struggle with concretizing some mathematical concepts. This was also affirmed in the study of Fernandez and Benavides (2022) that the students' numeracy skills have declined since the implementation of modular distance learning.

3.2 Difficulties of Students in Adding and Subtracting Integers (n=41)

Table 2 reflects the items that students found difficult in adding and subtracting integers. Based on the result of their pretest, it was found that the students had difficulty in subtracting and adding integers. To verify the results concerning the students' incorrect responses, the researchers interviewed with randomly selected students.

Table 2. Difficulties of students in adding and subtracting integers (n = 41)

RULES	PROBLEM	FREQUENCY OF STUDENTS WITH CORRECT RESPONSES	%
Subtraction			
1. Form of the Integers: (+) - (-) Rule: change the sign of the subtrahend; change the operation to addition; and proceed to the rules of adding integers.	(+4) - (-9)	2	4.88
2. Form of the Integers: (-) - (+) Rule: change the sign of the subtrahend; change the operation to addition; and proceed to the rules of adding integers.	(-6) - (+9)	2	4.88
3. Form of the Integers: (-) - (-) Rule: change the sign of the subtrahend; change the operation to addition; and proceed to the rules of adding integers.	(-9) - (-4)	12	29.27
4. Form of the Integers: (+) - (+) Rule: change the sign of the subtrahend; change the operation to addition; and proceed to the rules of adding integers.	(+1) - (+5)	13	31.71
Addition			
1. Form of the Integers: (-) + (-) Rule: add the numbers then copy the common sign.	(-9) + (-4)	8	19.51
2. Form of the Integers: (-) + (+) Rule: get the difference and copy the sign of the greater number.	(-2) + (+8)	14	34.15

In terms of subtracting a positive integer from another negative integer, only 4.88% of the students got the correct answer. Meanwhile, in subtracting a negative integer from another positive integer, only 4.88% of them got it right. Most students solve $(+4) - (-9) = -5$ and $(-6) - (+9) = 3$ because they fail to recognize that the negative sign after 4 and (-6) is operational, while the one attached to (-9) and (9) makes it an integer. In an interview, students said that instead of adding the numbers, they subtracted them and then copied the sign of the bigger number and this made their answers incorrect. On the other hand, in subtracting a negative integer from another negative integer, there are 29.27% of students correctly answered the item. Still, this percentage is low. They opened up that it is difficult for them to deal with negative numbers, especially in operation that involves subtraction. They further added that since the subtrahend and minuend have a common sign of negative, they would simply add the integers.

Concerning subtracting a positive integer from another positive integer, 31.71% of students got a correct answer. According to them, they found it hard to answer because they were dealing with different signs – the positive and negative integers. In this rule, the students should change the sign of the subtrahend, change the operation to addition, and proceed to the rules of addition. The students followed the rule but got confused when proceeding to the rule of addition. On the other hand, in adding two negative integers, only 19.51% of them got the correct answer. Some students got the correct operation to be used, but they forgot to copy the common sign.

Moreover, in adding a negative and a positive integer, 34.15% were can get the correct answer. In this rule, the students were confused because of the different signs. It was also found out that some of them correctly followed the rule by subtracting the numbers but they failed to copy the sign of the bigger number. Those students who subtracted the numbers but forgot to copy the sign of the bigger number were then asked why they did it the wrong way. They explained that they have difficulty identifying the bigger value because for them all negative numbers have smaller values than positive numbers.

The above findings expose the difficulty of the students in applying the different rules in integer operations due to their misconceptions and low foundation on how the different rules are applied. It was emphasized by Isa (2022) that number-related concepts are the main source of mathematical misconceptions. Furthermore, Khalid and Embong (2019) pointed out that the two potential causes for this misconception are the lack of knowledge of integer rules and the negative sign was misinterpreted. Khalid et al. (2019) have divulged that students scored lowest in the subtraction of integers.

3.3 Posttest Results of the Students in Adding and Subtracting of Integers

Table 3 reveals the posttest results of the students after the utilization of the following game-based instructions: Integer Math Maze and Intego Card Game.

Table 3. Posttest results of the students in adding and subtracting of integers

RATING	INTEGER MATH MAZE GROUP (N = 21)		INTEGO CARD GAME GROUP (N = 20)	
	F	%	F	%
90% - 100%	12	57.14	11	55.00
85% - 89%	3	14.29	4	20.00
80% - 84%	4	19.05	2	10.00
75% - 79%	0	0.00	1	5.00
≤ 74%	2	9.52	1	5.00
Mean	87.02 (Very Satisfactory)		88.88 (Very Satisfactory)	
SD	7.48		8.30	

The data reflect that the group of students who utilized the Integer Math Maze has a mean rating of 87.02% and those groups who used the Intego Card Game have a mean rating of 88.88%. These ratings are both in the “very satisfactory” classification. This means that the students have developed the fundamental knowledge and skills in adding and subtracting integers. These ratings are both in the “very satisfactory” classification. This means that the students have developed the fundamental knowledge and skills in adding and subtracting integers. With this, the students can transfer knowledge and perform the task independently. The study of Jasni et al., (2019) revealed that students can be indirectly exposed to the idea that learning can occur more engagingly and effectively with the teacher's guidance in the classroom.

The current results run parallel with that of Adedigba (2023) who emphasized that implementing game-based instructions in the classroom can greatly enhance numeracy skills. Rebollo et al. (2022) likewise found that students who study mathematics utilizing a game-based approach are more likely to comprehend the content presented in class and as a result, perform better academically.

3.4 Level of Students’ Enjoyment of the Game-Based Instruction in Scaffolding Their Difficulties in Adding and Subtracting Integers

Table 4. Level of students’ enjoyment of the game-based instruction in scaffolding their difficulties in adding and subtracting integers

I ENJOY THE GAME-BASED INSTRUCTION BECAUSE...		INTEGER MATH MAZE GROUP (N = 21)			INTEGO CARD GAME GROUP (N = 20)		
		w $\bar{x}$	VD	LoE	w $\bar{x}$	VD	LoE
1.	The goals of the game were presented at the beginning of the game.	4.90	SA	VH	4.70	SA	VH
2.	It helps me understand more concepts in adding and subtracting integers.	4.90	SA	VH	4.75	SA	VH
3.	It improves my knowledge of adding and subtracting integers.	4.90	SA	VH	4.90	SA	VH
4.	It is interesting.	4.86	SA	VH	4.75	SA	VH
5.	It is enjoyable.	4.81	SA	VH	4.85	SA	VH
6.	It engages me with the lesson.	4.81	SA	VH	4.70	SA	VH
7.	It generally makes learning math concepts in adding and subtracting integers fun.	4.81	SA	VH	4.85	SA	VH
8.	It encourages me to improve my skills in adding and subtracting integers.	4.76	SA	VH	4.95	SA	VH
9.	It motivates me to apply the knowledge taught in adding and subtracting integers.	4.71	SA	VH	4.75	SA	VH
10.	Its challenges are adequate - neither too difficult nor too easy.	4.62	SA	VH	4.75	SA	VH
11.	It excites me to join the class every day.	4.62	SA	VH	4.80	SA	VH
12.	It makes me temporarily forget my worries about everyday life.	4.48	SA	VH	4.65	SA	VH
13.	It eliminates boredom and anxiety.	4.38	SA	VH	4.45	SA	VH
Composite		4.74	SA	VH	4.76	SA	VH

Table 4 displays the data identifying the level of students' enjoyment of the game-based instruction in scaffolding their difficulties in adding and subtracting integers. The data reflect that the composite means are 4.74 and 4.76 for the Integer Math Maze group and the Intego Card Game group, respectively. These figures indicate that the level of enjoyment of the two groups of students is "very high."

Specifically, the data expose that all indicators have ratings between 4.21 – 5.00, which signify a "very high" level of enjoyment. The students divulged that the goals of the games were presented before they started ($w\bar{x}$ = 4.90 and 4.70). They also claimed that the games helped them to understand more concepts in adding and subtracting integers ($w\bar{x}$ = 4.90 and 4.75) and their knowledge improved ($w\bar{x}$ = 4.90 and 4.90).

The above findings are enough to point out that students find game-based learning enjoyable since it facilitates greater interaction between them and their teachers. Game-based instruction is a student-centered method that requires the student's active participation throughout the lesson. This instruction allows the students to experience playing while learning, which is more enjoyable than traditional learning methods that cause the students to become bored (Rebollo et al., 2022). The study of Yang and Chen (2021) supported the current findings that game-based learning is an excellent method for teaching and mastering numeracy skills. Games are engaging and can make learning fun and interactive, which can increase motivation and retention.

3.5 Difference Between the Pretest and Posttest Results of the Students in Addition and Subtraction of Integers

Table 5 exposes the data showing the difference between the pretest and posttest results of the students in addition and subtraction of integers.

Table 5. Difference between the pretest and posttest results of the students in addition and subtraction of integers

GROUP	N	PRETEST	POSTTEST	D	T-VALUE	P-VALUE	REMARK
Integer Math Maze	21	73.33	87.02	13.69	7.458	<.001	Significant
Intego Card Game	20	74.13	88.88	14.75	7.458	<.001	Significant

Level of significance = 0.05

Using the Integer Math Maze game, a numerical difference in the students' pretest (73.33%) and posttest (87.02%) results is apparent. To statistically test the difference, a t-test for dependent data was applied, showing that the p-value (<.001) is less than the level of significance (0.05). This means that there is a significant difference between the student's pretest and posttest results. In other words, the utilization of the Integer Math Maze enables the students to comprehend the concepts of addition and subtraction of integers.

Furthermore, the game-based instruction improves their performance from "did not meet expectation" to the "very satisfactory" category. This result clarifies the issue that games are just merely recreational and time-wasting activities. The study found that game-based learning does improve students' numeracy abilities. The results of Siong and Osman (2018) also support the idea that game-based learning positively impacts students' academic performance. Andika et al. (2019) also confirmed that early numeracy skills development in young children may be supported by playing board games with a mathematical self-concept and that this considerably enhances the learners' mathematical self-concept and early numeracy abilities. Ompok and Teng's (2021) study provided additional evidence in favor of this claim on the influence of games on young children's mathematics knowledge.

Table 5 further indicates a significant difference ($p < .001$) in the pretest (74.13%) and posttest (88.88%) results of the students who utilized the Intego Card Game. This connotes that the utilization of the game allows the students to effectively grasp the concepts of addition and subtraction of integers. The students' performance improved from "did not meet expectation" to "very satisfactory" classification. The findings of this study are consistent with earlier research on the value of games in enhancing student performance in math lessons (Bayeck, 2020; Kobayashi, 2021). According to Alonso-Fernández et al. (2020), educational games increase students' attention and focus, which enhances their learning.

3.6 Difference in the Posttest Results of the Two Groups of Students in Addition and Subtraction of Integers

Table 6 presents the data identifying the difference in the post-test results of the two groups of students. Using a t-test for independent data, the study found that the p-value (0.458) is greater than the level of significance (0.05).

This result means no significant difference can be seen between the posttest performances of the two groups of students who utilized the Integer Math Maze and Intego Card Game.

Table 6. Difference in the posttest results of the two groups of students in addition and subtraction of integers

GROUP	POSTTEST	D	T-VALUE	P-VALUE	REMARK
Integer Math Maze (n = 21)	87.02	1.86	0.749	0.458	Not significant
Intego Card Game (n = 20)	88.88				
Level of significance = 0.05					

This result signifies that the Integer Math Maze is as effective as the Intego Card Game in learning the addition and subtraction of integers. Similarly, Chong et al. (2022) found that non-digital card games are effective in improving students' performance in the operations of integers. They further added that non-digital card games can help students perform better when it comes to integer operations. The increase in the performance of the students after the utilization of the Integer Math Maze and Intego Card Game might have resulted from the kind of cooperation, motivation, and group activities experienced by the students, which encourage student-centered learning. According to Lasut and Bawengan (2020), game-based instruction is a method of teaching mathematics that enhances learning efficiency through student-centered learning activities and provides a balance between traditional classroom instruction and educational games.

3.7 Relationship between the Level of Students' Enjoyment of the Game-Based Instruction and Their Posttest Performance

Table 7 reveals a significant relationship ($p = 0.047 < \alpha = 0.05$) between the level of students' enjoyment of using the Integer Math Maze and their post-test performance. This means that students who enjoy the Integer Math Maze tend to perform better in addition and subtraction of integers. This signifies that game-based instructions can stimulate and motivate the students to participate more actively in the learning process which leads to more effective comprehension (Khairuddin & Mailok, 2019). The game-based strategy creates an engaging, dynamic, and fun environment while learning (Alonso-Fernández et al., 2020).

Table 7. Relationship between the level of students' enjoyment of the game-based instruction and their post-test performance

POSTTEST PERFORMANCE AND LEVEL OF ENJOYMENT IN USING...	R _s	P-VALUE	REMARK
Integer Math Maze (n = 21)	0.438	0.047	Significant
Intego Card Game (n = 20)	0.233	0.321	Not significant
Level of significance = 0.05			

Meanwhile, no significant relationship was found ($p = 0.321 > \alpha = 0.05$) between the level of students' enjoyment of using the Intego Card Game and their post-test performance. This connotes that regardless of the level of enjoyment of the students in learning addition and subtraction of integers through the Intego Card Game, their post-test performance does not vary. This finding, however, does not have a negative connotation considering that the level of the students' enjoyment is generally "very high," as indicated in Table 4. Due to the less variation in the students' responses, a non-significant correlation appears. However, Singh et al.'s (2021) findings indicated that as a result of students' enjoyment of the use of the card game, they improved their numeracy abilities. Hence, learning proceeds more effectively when there is joy, fun, and involvement in the process.

4.0 Conclusion

Mathematical concepts introduced through games increase students' engagement, enhance their motivation to learn, and enrich their collaboration and social interaction. Students who exhibit these traits tend to pay more attention to the lessons, so they grasp the concepts of integers embedded in the mechanics of the game. Everyone desires to win, motivating the students to become familiar with the various rules of integers. Every time they lose, the more they strive to understand how the game works, which leads them to the mastery of the different operations. This learning process further facilitates long-term retention of knowledge and reinforces learning over time. Moreover, games can become sustainable tools for teaching and learning integer operations by providing engaging and effective learning experiences for students while supporting teachers in their instructional efforts. Once both teachers and learners grasp the indispensability of the game, they will love it thereby ensuring that they will continue to use it to simplify the teaching and enjoy the learning. With the information provided by this

study, it is time for educators and curriculum implementers to look at students' performance with game-based instruction to scaffold students' difficulties in the different operations of integers.

5.0 Contributions of Authors

The authors of this study have equal contributions to the completed version of the manuscript.

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7.0 Conflict of Interests

When it comes to this study, the authors have no conflicts of interest.

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The Spiral Progression Approach in Learning Mathematics: Advantages and Disadvantages

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Abstract. This study aimed to identify students' perspectives on the advantages and disadvantages of the Spiral Progression Approach (SPA) in learning mathematics. This topic interests the researchers due to the lack of current literature focusing on it. The study utilized a descriptive and explanatory survey and employed a systematic sampling technique to identify the 277 Senior High School students who served as respondents. A validated questionnaire was used, with the following Cronbach's Alpha coefficients: 0.701 for repetition, 0.702 for improved prior knowledge, 0.713 for age-appropriate learning, 0.704 for limited time, 0.723 for prior knowledge dependence, and 0.720 for broad curriculum. The study revealed that students have "high" perceptions of the advantages of the SPA in terms of repetition, prior knowledge, and age-appropriate learning. However, students also have "high" perceptions of the disadvantages of the SPA in terms of limited time, prior knowledge dependence, and broad curriculum. Moreover, the results indicate that students' academic performance in General Mathematics is "very satisfactory" and significantly correlated with their perceptions of the advantages of the SPA.

Keywords: Age-appropriate learning; Broad curriculum; Concept repetition; Prior knowledge dependence; Spiral progression approach.

1.0 Introduction

Jerome Bruner, a well-known psychologist who made significant contributions to the field of education, developed the concept of a spiral curriculum (Borkala, 2022), a type of curriculum that emphasizes revisiting and building upon previously taught content in a cyclical manner. The SPA allows for a deeper understanding and mastery of the content over time (Davis, cited in Bartolome, 2023). However, the education system has been facing many issues, one of which is curriculum adaptation, according to Lynch (2023). That is why Van Werven et al. (2021) believe in the need for a greater focus on education since many of the competencies taught show a significant overlap with global teaching competencies at all educational levels. Moreover, a discrepancy has been observed between what is taught and what is deemed important in basic schools.

The Philippine educational system has undergone developmental stages, along with government efforts to revise the curriculum for quality education (De Ramos-Samala, 2018). The country's curriculum follows a Spiral Progression Approach (SPA) to guarantee mastery of information and skills at each grade or year level (Republic Act No. 10533 | GOVPH, 2013). However, if the spiral is broken or if students are unable to gain mastery of the prior lessons and are introduced to new and more complex lessons, they will encounter difficulty in learning the subject (Orale & Uy, 2018). Igcasama (2021) pointed out that teachers, students, and schools were not ready for the change as it caused a high level of adjustment. Yap (2019) found that it is uncertain whether the basic principles of mathematics are adequately conveyed by teachers and thoroughly absorbed by students during the primary years. Moreover, Futralan and Mamhot (2018) revealed in their study that some topics at the higher year level are not adequately pre-spiralled at the prior-year level, resulting in students developing mathematical anxiety.

Yap (2019) and Alvarez (2022) both tackled the gaps in learning Patterns and Algebra. However, the former considered the teachers as respondents while the latter covered the students. Both researchers claimed that teachers and students experienced problems at the higher year level because some topics are not covered in the discussion during their lower years. The studies of Bueno (2023) and Igcasama (2021) identified how mathematics teachers and students perceive the implementation of SPA. Although numerous studies have already explored SPA, there is still a lack of current literature focusing on the advantages and disadvantages of the implementation of the K-12 curriculum.

Given this scenario, the author believes that this study could provide enlightenment, insights, and awareness to people in the education sector, especially teachers who implement the SPA. Knowing the students' perception of the advantages and disadvantages of SPA in learning mathematics would enable the authorities to proactively address issues, maintain instructional effectiveness, accommodate individual student needs, and contribute to continuous improvement in education. Students would also be driven to actively participate in the learning process and become less dependent on their teachers' input. With these, gaps in learning would be addressed along with careful planning and ongoing assessment to ensure that all students are effectively learning and progressing.

This study aimed to examine how students perceived the advantages and disadvantages of the SPA in mathematics education. Specifically, the study sought to answer how much students valued the advantages of repetition, improved prior knowledge, and age-appropriate learning, as well as the disadvantages of time limitations, dependence on prior knowledge, and a broad curriculum. It also aimed to assess students' general mathematics skills academically and explore any connections between their performance and their perceptions of the benefits and drawbacks of SPA.

2.0 Methodology

2.1 Research Design

The study is a descriptive and explanatory type of survey that describes how students feel about using SPA in math class and how well they perform academically. It is explanatory because it examines the link between these variables and descriptive since it describes perceptions and performance.

2.2 Research Participants

The respondents of the study are the Senior High School students enrolled in Siquijor State College for the school year 2023-2024. They were selected using the systematic sampling technique, where every 2nd student in the list is a respondent. This means that the researchers chose students from the lists given by the teachers at regular intervals and it was done with a random start. If the random start is 1, all odd-numbered students in the lists are selected as respondents.

2.3 Research Instrument

The self-made questionnaire has four parts. Part I includes a consent statement. Part II asks for the students' self-disclosed General Mathematics grades, chosen because it's taught every first semester and integrates previously learned math concepts. Parts III and IV cover indicators for the advantages and disadvantages of SPA in math learning. The indicators were collected from various sources and validated by three experienced master's degree math teachers. A trial with 30 students ensured reliability using the Cronbach's Alpha Test, showing good results: 0.701 for repetition, 0.702 for prior knowledge improvement, 0.713 for age-appropriate learning, 0.704 for limited time, 0.723 for prior knowledge dependence, and 0.720 for broad curriculum. Below is the legend used for the result per table.

2.4 Data Gathering Procedure

With the endorsement of the Dean of the Graduate School of Foundation University, submitted a formal request letter to the President of Siquijor State College. The signed and approved request was presented to the school principals and respective advisers of the students. With the permission of the respective advisers, the researchers clarified to the students the objectives of the research and that their participation could help in attaining the objectives of the study. The data were gathered through a validated questionnaire which was distributed to

randomly selected students applying the systematic sampling technique. The researchers waited and collected the answered survey questionnaires after the respondents were done. Throughout the process, the students were assured that any information would be treated with strict confidentiality.

The responses of the students were then tallied using MS Excel, analyzed using JAMOWI software and interpreted. Weighted mean was used in presenting the extent of students' perceived advantages and disadvantages of SPA. The percent and mean were utilized to show the academic performance of the students while the Multiple Regression Analysis was employed to identify the explanatory variables that may predict the academic performance of the students.

2.5 Ethical Considerations

Research ethics were upheld and adhered to consistently throughout the entirety of the study. The researchers did not ask for the names of the respondents to protect their privacy. They were assured that their identity would be held anonymous. The respondents were also not forced to participate in the study and were given the freedom to withdraw from the study anytime they felt uncomfortable.

3.0 Results and Discussion

3.1 The Extent to Which Students Perceived the Advantages of the SPA in Learning Mathematics

In terms of Repetition

Table 1 indicates the extent to which students perceived the advantages of the SPA in learning Mathematics in terms of repetition. Generally, the student's perception is "high," as shown by the composite $w\bar{x}$ of 3.59. Specifically, the students have "high" perceptions that (a) the discussions are fun because they learn the lessons gradually, from easy to hard topics ($w\bar{x} = 3.82$), and (b) they feel comfortable learning new things because they already learned a little bit about every mathematical concept ($w\bar{x} = 3.64$). Moreover, the students have "moderate" perceptions that the lessons are easier to understand because teachers teach the same concepts in every grade level ($w\bar{x} = 3.30$). These findings suggest that students highly value a gradual learning approach and feel comfortable with prior knowledge when it comes to discussions in the SPA.

Table 1. The extent to which students perceived the advantages of the SPA in learning mathematics in terms of repetition (n =277)

Indicators	$w\bar{x}$	VD	EoA
1. The discussions are more fun because I learn things in the right order, starting with the easier lessons and gradually getting harder.	3.82	A	H
2. I feel more comfortable learning new things because I have already learned a little bit about every mathematical concept.	3.64	A	H
3. The lessons are easier to understand because teachers teach the same concepts at every grade level.	3.30	MA	M
Composite	3.59	A	H

The above findings are affirmed in the study of Cabansag (2014), as cited in De Ramos-Samala (2018), that students find the subject matter easy at first and eventually grow difficult. However, they learn the concepts because they are taught at an individual pace and over a longer period. This is also attested by Martin (cited in Amirul, 2021) that the same topics are offered again throughout the curriculum, but with increasing complexities. Hence, repetition of the concepts would result in mastery and adequate learning, which is a very sustainable method of surviving and conquering educational problems (Boladola, 2018). However, according to Maed (n.d.), the "one size fits all" method of instruction is faulty because it assumes that every student learns differently. Differentiation in the curriculum is necessary to meet the demands of every single student. Students will not be able to get the best education and be ready for success in the future until then.

In terms of Prior Knowledge Improvement

Table 2 stipulates the extent to which students perceived the advantages of the SPA in learning mathematics in terms of prior knowledge improvement. The results expose that, generally, students have a "high" perception as shown in the composite weighted mean of 3.84. To specify, the students have "high" perceptions that: (a) when they go over what they learned, it helps them understand the new lessons better ($w\bar{x} = 3.94$); (b) starting easy math and moving to hard math problems helps them become a better thinker ($w\bar{x} = 3.89$); (c) they use concepts or ideas they learned in the past to help them in the current learning ($w\bar{x} = 3.83$); and (d) re-learning the same Math ideas made the subject easier to understand ($w\bar{x} = 3.69$).

Table 2. The extent to which students perceived the advantages of the SPA in learning mathematics in terms of prior knowledge improvement

Indicators	$w\bar{x}$	VD	EoA
1. When we go over what we learned before, it helps us understand new lessons better.	3.94	A	H
2. Starting with easy math and moving to hard math problems helps me become a better thinker.	3.89	A	H
3. I use concepts or ideas I learned in the past to help me with what I am learning now.	3.83	A	H
4. Learning about the same math ideas in one grade and then learning more about them in the next grade, made the subject easier to understand.	3.69	A	H
Composite	3.84	A	H

The findings connote that students highly prefer reinforcement and progression in their learning experiences. They particularly appreciate the effectiveness of revisiting previously learned material, transitioning from easy to difficult concepts, and applying past knowledge to current learning tasks. This emphasis on continuity and building upon existing foundations can inform teaching strategies aimed at enhancing student understanding and critical thinking skills.

The construction of new ideas that are based upon previously learned knowledge is mentioned not only in Gagne's Hierarchical Theory but also in Bruner's Constructivists Theory. In teaching new concepts, it is necessary to activate one's prior knowledge. According to Panggabean and Tamba (2020), to come up with new knowledge or respond to new information, students will draw on previous knowledge. Lack of knowledge will cause problems because there is a conflict between prior knowledge and new knowledge. Furthermore, Boladola (2018) stated that teachers should ensure that students can explore previously encountered topics when planning classes. This serves to connect the students' existing knowledge to their current learning, resulting in more meaningful and integrated learning for the students. Thus, the majority of teachers expressed frustration upon finding that students were not prepared to tackle written difficulties because they had not mastered the material from earlier lessons (Yap, 2019).

In terms of Age-Appropriate Learning

Reflected in Table 3 is the extent to which students perceived the advantages of the SPA in learning mathematics in terms of age-appropriate learning. The table reveals that the students generally have a "high" perception on this area as indicated in the composite weighted mean of 3.90. It is specifically presented in the table that the students have "high" perceptions that: (a) learning the concepts of math is tailored to one's age levels ($w\bar{x} = 4.05$); (b) math can be easy or hard depending on the grade level they are in ($w\bar{x} = 3.95$); and (c) they learn math that matches how their brains grow ($w\bar{x} = 3.70$). The students "highly" consider these as advantageous in learning math. These findings indicate that students highly recognize the alignment of math learning with their age and developmental stage. Additionally, the recognition that math learning matches their brain's growth suggests an understanding and appreciation of developmental appropriateness in the learning process.

Table 3. The extent to which students perceived the advantages of the SPA in learning mathematics in terms of age-appropriate learning

Indicators	$w\bar{x}$	VD	EoA
1. Learning the concepts of Math is tailored to one's age level.	4.05	A	H
2. Math can be easy or hard depending on what grade we are in.	3.95	A	H
3. We learn math that matches how our brains grow.	3.70	A	H
Composite	3.90	A	H

The lessons and tasks that are crafted to match students' abilities and readiness benefit them as different age groups have varying levels of cognitive development. Writer (2022) and Borkala (2022) believed that during the child's formative years in school, the spiral curriculum assists in teaching children new topics at their age-appropriate understanding while also improving what they previously learned.

In terms of Limited Time

Table 4 shows the extent to which students perceived the disadvantages of the SPA in learning mathematics in terms of limited time. It presents that the students have generally "high" perceptions of its disadvantages as reflected in the composite weighted mean of 3.65. To point out, the students have a "high" belief that: (a) reviewing old lessons hinders them from covering new topics ($w\bar{x} = 4.18$); and (b) they spend the same amount of time in learning easy and difficult math topics ($w\bar{x} = 3.41$). Moreover, the students "moderately" acknowledge that not all concepts are discussed due to limited time ($w\bar{x} = 3.35$).

Table 4. The extent to which students perceived the disadvantages of the SPA in learning mathematics in terms of limited time

Indicators	w $\bar{x}$	VD	EoD
1. Reviewing old lessons hinders us from covering new topics in a particular grading period.	4.18	A	H
2. We spend the same amount of time learning easy and difficult Math topics.	3.41	A	H
3. Not all new concepts are discussed due to limited time.	3.35	M	M
Composite	3.65	A	H

These findings imply that students perceive certain factors as potentially hindering their learning experiences. Specifically, the belief that reviewing old lessons may impede progress in covering new topics highlights a concern about time management and efficiency in the learning process. Additionally, the perception that equal time is spent on both easy and difficult math topics may indicate a need for strategies to optimize learning time and prioritize areas that require more attention. Furthermore, the acknowledgment of limited time for discussing all concepts underscores the importance of curriculum planning and instructional strategies that effectively address key learning objectives within constrained timeframes.

The same issues are seen in the study of Yap (2019) on time allocation. Consequently, in situations where there is little time, teachers choose to exclude some competencies or limit their discussion to easy or fundamental concepts. This was confirmed throughout the interview in Yap's study when the participants mentioned how difficult it was to allocate time. In addition, the respondents stressed that there were a lot of competencies in the first part of the grading period alone and they had difficulty in budgeting their time to dwell on each competency.

In terms of Prior Knowledge Dependence

Reflected in Table 5 is the extent to which students perceive the disadvantages of the SPA in terms of prior knowledge dependence. It shows that the students have "high" perceptions of its disadvantages as manifested in the composite weighted mean of 3.62. It is indicated in the table that the students have "high" perceptions that: (a) learning new things and remembering old lessons are overwhelming ($w\bar{x} = 3.95$); and (b) unable to recall concepts needed for the new lessons is frustrating and leads to a loss of interest in learning ($w\bar{x} = 3.78$). Furthermore, the students "moderately" perceived that re-teaching the lessons that they do not have enough foundation disinterest them ($w\bar{x} = 3.20$).

Table 5. The extent to which students perceived the disadvantages of the spa in learning mathematics in terms of prior knowledge dependence

Indicators	w $\bar{x}$	VD	EoD
1. When I keep learning new things and have to remember old lessons too, it overwhelms me.	3.95	A	H
2. When I can't recall the concepts needed for a new math lesson, it makes me feel frustrated and not interested.	3.78	A	H
3. I feel that re-teaching the lessons that I do not have enough foundation disinterest me.	3.20	MA	M
Composite	3.62	A	H

These findings highlight significant challenges that students face in managing their learning experiences. The perception of feeling overwhelmed by the simultaneous demands of learning new material while remembering old lessons proposes a need for strategies to support memory retention and cognitive load management. The frustration stemming from the inability to recall necessary concepts emphasizes the importance of reinforcement and review practices to strengthen foundational knowledge and maintain engagement.

It is apparent that if the foundational concepts are not mastered, there will be difficulty in building advanced knowledge. The current K-12 curriculum supposedly helps students learn more by building on what they already know. However, if the basic concepts are not thoroughly understood, it creates confusion on the part of the students. In the study of Batidor and Casinillo (2021), they found that SPA is ineffective, as teachers tend to proceed to more advanced mathematical concepts without ensuring the necessary mastery. Orale and Uy (2018) also stated that about 71% of students who are about to move to Grade 11 are still beginners in Grade 10 Math. With this scenario, Boladola (2018) believed that if teachers attentively facilitate learning by eliciting past knowledge and allowing the students to repeat some basic concepts, they will maximize their learning. This will be further strengthened if the students also actively participate in the learning process.

3.2 The extent to which Students Perceived the Disadvantages of the SPA in Learning Mathematics

In terms of a Broad Curriculum

Table 6 reveals that a broad curriculum is an issue in the SPA for learning mathematics. Students have generally “high” perceptions of its disadvantages, as made evident in the composite weighted mean of 3.60. As presented, the students “highly” perceived that: (a) it is tough when lessons keep changing every grading period ($w\bar{x} = 3.70$); (b) there is less mastery of the subject since it is taught again on the next year's level ($w\bar{x} = 3.65$); and (c) there is so much to learn that students do not master the concepts ($w\bar{x} = 3.45$). These findings signify that students perceive challenges related to continuity and mastery in their learning experiences. The difficulty arising from frequent changes in lessons across grading periods hinders the students from maximizing their learning.

Table 6. The extent to which students perceived the disadvantages of the spa in learning mathematics in terms of broad curriculum

Indicators	$w\bar{x}$	VD	EoD
1. It is tough when lessons keep changing every grading period.	3.70	A	H
2. There is less mastery of the subject since it is taught again at the next year level.	3.65	A	H
3. There is so much to learn that students do not master the concepts.	3.45	MA	M
Composite	3.60	A	H

According to Borkala (2022), for students to master the lesson, the teachers will have to teach and re-teach the concepts, which may be too demanding and time-consuming. Thus, teachers may only briefly touch on the subject, anticipating that they will return to it later. Yap (2019) also found that some topics in the higher year level are affected when concepts in the lower year level are not fully discussed. It then leads to a domino effect, and later learning will be jeopardized if prerequisite knowledge is not fully gained.

3.3 Students' Academic Performance in General Mathematics

Table 7 exposes the students' academic performance in General Mathematics. The data show that 55.23% of them are in the “fairly satisfactory” classification. It also presents that 41.16% of them have “very satisfactory” ratings and better. Generally, their overall performance is 88.64%, which is labeled as “very satisfactory.” Based on DepEd Order No. 73, s. 2012, this classification indicates that the students can develop the fundamental knowledge and skills in performing problems in General Mathematics.

Table 7. Student's academic performance in general mathematics (n = 277)

Rating	Verbal Description	Frequency	Percent
90% - 100%	Outstanding	66	23.83
85% - 89%	Very Satisfactory	48	17.33
80% - 84%	Satisfactory	10	3.61
75% - 79%	Fairly Satisfactory	153	55.23
Mean = 88.64% (very satisfactory)			
sd = 4.60			

This is in line with the findings of Bueno (2023) that the student's performance in the spiral progression curriculum was computed to be 85.17% (very satisfactory) with a standard deviation of 2.44. However, Orale and Uy (2018) have opposing findings wherein they exposed that the majority of the students entering Grade 11 lack the necessary knowledge in the fundamentals of mathematics.

3.4 Relationship between the Students' Academic Performance and Their Extent of Perception on the Advantages and Disadvantages of the SPA

Table 8 discloses the data in identifying the relationship between the student's academic performance and the extent of their perception of the advantages and disadvantages of the SPA. Employing the Multiple Linear Regression Analysis, the data show that the F-test significance or overall p-value (0.000) is less than the level of significance (0.05). This finding will guarantee the rejection of the null hypothesis. This means that one of the explanatory or independent variables is a significant determinant of the student's academic performance. Evaluating the regression output, it was revealed that the student's perception of the advantages of SPA ($p = 0.000$) is the only predictor of their academic performance in Mathematics. On the other hand, the students' perceptions of the disadvantages of the SPA cannot be considered as a determinant of their academic performance ($p = 0.899 > \alpha = 0.05$).

Table 8. Multiple Linear regression analysis

Variables	Coefficients	SE	t Stat	P-value
Intercept	81.607	1.807	45.153	0.000
Advantages of SPA	1.828	0.472	3.872	0.000
Disadvantages of SPA	0.068	0.533	0.127	0.899
R = 0.268				
R ² = 0.072				
adjusted R ² = 0.065				
F-ratio = 10.62				
p-value = 0.000 (significant)				
Level of significance = 0.05				

The adjusted coefficient of determination (R^2) means that 6.5% of the variations in the performances of the students can be explained by their perceptions on the advantages and disadvantages of the SPA. Removing the variable that is not a significant predictor of the students' academic performance, the regression equation is given by the equation: $Y = 81.731 + 1.860 \cdot \text{Rating on Advantages of SPA}$.

The findings can be related to the attribution theory, wherein an individual's perception or attribution of situations significantly affects their behavior or performance (Sanders, 2024). In other words, how the students perceive the advantages of the SPA has something to do with how they embrace the approach, which is later manifested in their behavior, as they choose whether to exert efforts to learn or leave the situation as is.

4.0 Conclusion

The Spiral Progression Approach, if implemented or used, helps in the reinforcement of learning since repetitive exposure to the concepts can solidify foundational knowledge and facilitate deeper understanding over time. The success of the SPA depends on its proper execution. When implemented correctly, it enables students' strong understanding of mathematical ideas. Meanwhile, when the implementation of the approach is half-baked, it results to gaps in students' conceptual understanding, which later affects their overall learning and performance in mathematics. Thus, to optimize the benefits and minimize any potential drawbacks of the SPA, educators must make sure that it is well integrated and applied.

5.0 Contributions of Authors

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7.0 Conflict of Interests

The authors declared no conflicts of interest as far as this study is concerned.

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Reading Interest and Proficiency of Grade 7 Learners

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Abstract. This descriptive-correlational study aimed to assess the reading interest and proficiency of 170 randomly selected Grade 7 learners. It utilized two sets of research instruments—the Learner’s Reading Interest Survey (RIS) and the Philippine Informal Reading Inventory (PHIL-IRI). Specifically, a self-made questionnaire was used to assess the respondents’ reading interest, while the PHIL-IRI assessment tool was employed to gauge their reading proficiency. Statistical tools such as percentage, weighted mean, Linear Regression Analysis, and Multiple Linear Regression Analysis were used to analyze the data. The results indicated that the majority of learners have a favorable attitude toward reading, with a preference for social media platforms as their primary reading resource. Overall, the learners’ reading proficiency, in terms of word reading score and comprehension score, is at the “frustration” level. The data further revealed that the frequency of (a) reading fiction and books, (b) utilizing online learning tools like social media posts, and (c) watching social media platforms like Facebook, Twitter, Instagram, and TikTok is positively and significantly related to the learners’ reading proficiency in terms of reading score. Conversely, the frequency of (a) reading magazines and (b) watching TV programs like Food Network Asia is negatively and significantly related to the learners’ reading proficiency in terms of reading score. In conclusion, this inquiry sheds light on the complex relationship between students’ reading preferences and their proficiency levels. While there is a prevalent inclination towards reading among learners, a noteworthy segment demonstrates restrained enthusiasm, primarily due to time constraints. Therefore, addressing obstacles such as limited time and harnessing digital tools are essential for devising effective approaches to improve reading engagement and skill levels.

Keywords: Reading interest; Reading proficiency; Word reading score; Comprehension score; Social media; Online learning; Digital tools.

1.0 Introduction

In a groundbreaking study highlighted by Spector (2021), researchers at Stanford Graduate School of Education have unveiled a compelling narrative on the impact of the pandemic on the educational journey of young learners. Delving into the academic landscape of the school year 2019-2020, the study illuminated profound shifts in the foundational reading skills of students. Through a comprehensive reading assessment spanning grades one to four nationwide, the research blatantly revealed a disruption in the development of oral reading fluency among students in 2020, directly attributed to the unforeseen closures of educational institutions amid the COVID-19 crisis (Spector, 2021).

Correspondingly, the abrupt shift in the Philippine education system due to the pandemic has left an indelible mark on students’ reading proficiency, as noted by DepEd Assistant Secretary Malcolm Garma (cited by Hernando-Malipot, 2022) in his comprehensive study of limited face-to-face classes. Garma’s findings not only revealed behavioral challenges but also illuminated the alarming disparities in reading and writing abilities among students. Furthermore, as observed by educators, Filipino children persist in missing out on critical

educational opportunities (Chin, et al., 2021). Adding to the complexity, a comparative analysis conducted by the United Nations Children's Fund (UNICEF) predicts that fifth-grade Filipino pupils are likely to encounter hurdles in secondary school due to a lack of essential skills in mathematics, writing, and reading (Balinbin, 2020). These insights collectively highlight the urgent need for targeted interventions to address the widening educational disparities exacerbated by the pandemic.

Numerous researchers, such as Macandili (2019) and Maramag (2022), have delved into oral reading difficulties and reading behaviors, shedding light on the challenges faced by learners in grasping reading comprehension. Ludewig et al. (2022) further emphasized these struggles, particularly evident in poor exam results across subjects taught in English, exacerbated by the extended learning restrictions imposed during the COVID-19 pandemic. While these studies aimed to comprehend students' reading performance and its implications, they primarily focused on assessing reading achievements both before and during the pandemic, leaving a notable gap in understanding post-pandemic dynamics. To address this gap, the current study centers on Grade 7 learners, scrutinizing their reading interests and proficiency in the aftermath of the pandemic. By honing in on this critical phase, the research aims to pinpoint the nuanced effects of the pandemic on reading habits and skills.

One of the researchers has taken the responsibility to teach English to Grade 7 students at a public school located in a remote area. These students belong to less privileged families where access to learning materials and internet connectivity is limited. They have also been severely affected by the COVID-19 pandemic, considering their location. Therefore, the researchers believe that by assessing the factors that influence students' reading preferences and evaluating their reading skills, educators can devise targeted remediation programs to overcome potential deficiencies, enhance reading abilities, and encourage a strong culture of literacy. With this intention, the researchers have conducted an inquiry to determine the reading interests and proficiency levels of the Grade 7 learners.

2.0 Methodology

2.1 Research Design

This quantitative investigation employed the descriptive-correlational method of research because it attempts to, first, identify the reading interest and level of reading proficiency of the learners and then find the correlation between these two variables.

2.2 Research Participants

The Grade 7 learners enrolled in the three junior high schools for the school year 2023-2024 were the research respondents. Out of the total 291 learners, 170 were selected using the systematic sampling design, wherein every second learner in the list was chosen to participate in the study.

2.3 Research Instrument

The researchers employed two main sets of research instruments: the Learner's Reading Interest Survey (RIS) and the Philippine Informal Reading Inventory (Phil-IRI). The Phil-IRI serves as a graded assessment tool aimed at determining a student's reading level, starting with the Phil-IRI Group Screening Test (GST), which assesses comprehension based on passages tailored to each grade. Students scoring below 14 (74%) on the GST undergo further evaluation to pinpoint potential reading difficulties. Subsequently, the Phil-IRI Graded Passages, employing the Oral Reading Test, provides a detailed analysis of reading proficiency by identifying miscues, recording words per minute, and assessing comprehension. The Phil-IRI-Oral Test measures reading levels using predetermined criteria outlined in the Phil-IRI Manual (2018), as per DepEd Order 14, s. 2018.

Concurrently, the researcher utilized a self-made questionnaire to gauge reading interest and this tool is divided into two parts covering learner profiles and reading preferences. To ensure reliability, a dry run was conducted with selected learners, testing item consistency using Cronbach's alpha, with a score of 0.70 considered acceptable for internal consistency. For the frequency of reading materials, the following Cronbach's Alpha Coefficients were identified: print reading is 0.701; online reading is 0.723; and exposure to TC programs and social media platforms is 0.766.

2.4 Data Gathering Procedure

Regarding the data gathering process, authorization to conduct the study was obtained from the Schools Division Superintendent on October 6, 2023. Upon approval, the requests were then presented to the respective student advisors of the Grade 7 learners. Subsequently, data collection commenced through the dissemination of questionnaires, with the entire process finalized by October 16, 2023. The research's purpose and significance were elucidated to the learners during the distribution of questionnaires, followed by the retrieval of completed questionnaires immediately afterward.

During the proficiency assessment phase, students were tasked with orally reading a passage while the researcher and Phil-IRI coordinator meticulously noted any errors or deviations using the Miscue chart. This tool facilitated the identification of various types of errors, including insertions, mispronunciations, omissions, repetitions, reversals, substitutions, and transpositions. Following the oral reading test, students engaged in silent reading of passages and subsequently answered comprehension questions. The assessment involved tallying observed miscues, recording reading duration, and evaluating comprehension accuracy. The cumulative results from both word recognition and comprehension assessments determined each student's reading proficiency level for the respective passages, categorized as independent, instructional, or frustration levels.

2.5 Ethical Considerations

Confidentiality of information was strictly observed, especially since students were involved in this research. The researchers ensured to safeguard the respondents' dignity and privacy and to minimize possible risks they might experience. Ethical approval was also obtained from the Ethical Committee. Moreover, the respondents were made to sign a consent form along with a full understanding of the risks and benefits of this study.

3.0 Results and Discussion

3.1 How Much Grade 7 Learners Like Reading

Table 1. presents proof that the learners find great pleasure in reading, as indicated by a weighted mean of 2.36. The data further reveal that 40% of the learners derive immense pleasure from reading, while the remaining 55% enjoy it occasionally. Notably, a small percentage of learners (4%) expressed their complete disinterest in reading. Overall, these data suggest that the majority of learners hold a favorable attitude towards reading, with only a minority exhibiting a lack of interest.

Table 1. Learners' degree of liking reading (n=170)		
Degree of Liking Reading	Frequency	Percent
I enjoy reading a lot	68	40.00
I only like reading sometimes.	95	55.88
I don't like reading at all.	7	4.12
$\bar{w}\bar{x} = 2.36$ (I enjoy reading a lot.)		
Legend: Scale	Verbal Description	
2.34 – 3.00	I enjoy reading a lot	
1.67 – 2.33	I only like reading sometimes	
1.00 – 1.66	I don't like reading at all	

The Grade 7 learners' reading interest in terms of the degree of liking is generally "high." This corresponds to the findings of Zur, Hestiana, and Zulkifli (2022) that learners had a strong desire to read and that their reading interest is dominantly affected by the motivation to read English texts because they have a goal and purpose in developing themselves through English language learning. However, Wijayanti (2020) had an opposite claim that not all learners are fond of reading, particularly in the digital era because most of the learners make use of their leisure time by using social media to interacting with their peers. Kafusha, Mwelwa, Mkandawire, and Daka (2021) support this statement saying that learners like reading not for fun or pleasure, but only for compliance with the requirement for them to pass certain courses.

3.2 Why Grade 7 Learners Lack Reading Interest

Table 2 shows that the learners' disinterest in reading is primarily due to a lack of time, accounting for 42.35% of the responses. The second most common reason is the perception that reading is a tiresome activity, cited by 35.29% of the respondents. Other factors include a lack of reading materials (31.18%) and insufficient motivation from parents or guardians (21.76%).

Table 2. Learners' reasons for lack of reading interest (n=170)

*Reasons	Frequency	Percent
I do not have the time to read.	72	42.35
I find reading a tiresome activity.	60	35.29
I do not have sources of reading materials.	53	31.18
I get less motivation from my parents/guardians.	37	21.76

*multiple response

These findings stress the importance of encouraging learners to carve out more time for reading and to find enjoyment in it. Equally important is the role parents can play in boosting their children's interest in reading by providing them with adequate reading materials and motivating them to read. Kasáčová and Babiaková (2019) also found that pupils who quit reading state the following reasons: 1) reading is boring; 2) it causes suffering; and 3) it is a loss of time. Similarly, Teksan (2019) posited that several factors contribute to the waning of reading motivation, including school, social engagements, and a general loss of interest in reading. Furthermore, parents' limited understanding of the importance of reading can impede their ability to help their children develop this skill. Rather than prioritizing home-based learning, many parents tend to focus on domestic tasks and responsibilities.

3.3 How Grade 7 Learners View Themselves as a Reader

Table 3 data indicate that over one-third (36.47%) of the respondents prefer reading alone, signifying that solitary reading helps maintain focus and eliminate distractions. About 23% of the respondents enjoy listening to stories or being read to, highlighting the benefits of auditory learning in terms of both entertainment and improved understanding. Moreover, 20% of the respondents prefer discussing their reading materials, emphasizing the value of collaborative thinking and knowledge sharing. On the other hand, a smaller but significant percentage (11.18%) of the respondents adopt an analytical approach to reading by asking questions and critically evaluating content while reading, indicating a deeper level of understanding beyond mere memorization. Additionally, only 9.41% described themselves as open-minded readers, indicating their willingness to adjust their perspectives in response to new information.

Table 3. Learners' description as a reader (n = 170)

Variables	Frequency	Percent
1. I prefer to read by myself. It makes me focus better on what I'm reading without any distractions.	62	36.47
2. I prefer listening to stories or being read to. Listening to others read stories is entertaining. It also helps me understand the topic better.	39	22.94
3. I prefer talking about what I've read. It helps me reflect on the ideas better and I want others to also learn from me.	34	20.00
4. I raise questions in my mind while reading. I evaluate facts and solve issues rather than simply memorizing information.	19	11.18
5. I am an open-minded reader. I reassess my views when new information is introduced to me during reading.	16	9.41

This is affirmed by Erbeli and Rice (2022) who believe that silent independent reading yields favorable outcomes across various aspects of reading. Scholars, researchers, and practitioners widely agree that promoting extensive individual reading among children and adolescents correlates with improved reading achievement. A recent empirical study conducted by Vadiraja, Santhosh, Moulay Dengel, and Ishimaru (2021) supports this notion, revealing that undistracted readers demonstrate heightened interest levels. This suggests that engaged silent reading may serve as a buffering mechanism against the challenges posed by complex texts, ultimately enhancing reader engagement.

On the contrary, Anderson (2023) expressed that listening to others exposes students to novel vocabulary and aids in the pronunciation of new words, a benefit not typically acquired through silent reading. Additionally, this active listening engages their minds in processing both the auditory aspects and meanings of words, offering them a rigorous cognitive exercise that enhances their comprehension. Similarly, Tanrikulu (2020) discovered that digital storytelling fosters students' listening skills, ultimately boosting their motivation.

3.4 Print Materials Grade 7 Learners Read

Table 4 shows that "Books" received the highest rating ($w\bar{x}=3.56$), indicating that the learners read books frequently. The data also revealed that the respondents sometimes read magazines and comics ($w\bar{x}=2.56$ and 2.52 , respectively), but seldom read fiction ($w\bar{x}=2.46$), non-fiction stories ($w\bar{x}=2.41$), newspapers ($w\bar{x}=2.36$), and journals ($w\bar{x}=1.89$). The overall composite score ($w\bar{x}=2.54$) suggests that, on average, learners rarely engage in reading print materials.

Table 4. Learners' frequency of reading print materials

Print Materials	$w\bar{x}$	Verbal Description
1. Books	3.56	Frequent
2. Magazine	2.56	Sometimes
3. Comics or Graphic Novels	2.52	Sometimes
4. Fiction (novels, short stories)	2.46	Seldom
5. Non-fiction (biographies, informational books)	2.41	Seldom
6. Newspaper	2.36	Seldom
7. Journal	1.89	Seldom
Composite	2.54	Seldom

This result is consistent with the data presented in Table 1, indicating that most respondents only like to read sometimes. Johnston and Ferguson (2019b) emphasized that compared to prior generations, youngsters today read less frequently and are less interested in reading than young people were in the past. As published by the National Literacy Trust in 2019, 26% of individuals below 18 allocate a portion of their daily routine to reading. Additionally, the study revealed a decline in the enjoyment of reading among children, with this decline becoming more pronounced as they grew older. Nearly twice as many five to eight-year-olds expressed enjoyment in reading compared to 14 to 16-year-olds. In total, only 53% of children reported enjoying reading "very much" or "quite a lot," marking the lowest level since 2013.

Guo (2023) likewise added that young people are becoming less focused and less patient in reading lengthy paragraphs. Teenagers believe they do not need to read paper books because of the internet summaries of the book's contents. Moreover, adolescents struggled to find a book that suited their interests (Wilkinson, et al. 2020). However, Loh and Sun (2022) postulated that adolescents still prefer printed books. They mentioned that secondary school students exhibit a preference for reading physical books as opposed to digital ones. This preference is primarily attributed to the strain caused by prolonged digital reading, the increased distractions present while reading on a digital device, and the absence of the tactile experience provided by hardcopy books.

3.5 Online Reading Tools Grade 7 Learners Utilize

The data in Table 5 shows how often the respondents use online reading tools. According to the data, most of the respondents frequently use social media posts as reading tools (mean score = 3.61). However, the respondents only sometimes read online articles or blog posts (mean score = 2.67), and seldom use Wattpad (mean score = 2.35) and Webtoon (mean score = 1.92). The data also revealed that the respondents never utilized E-library (mean score = 1.54). Overall, the composite mean of 2.42 suggests that the respondents' use of online reading tools is described as "sometimes."

Table 5. Learners' frequency of utilization of online reading tools

Online Reading Tools	$w\bar{x}$	Verbal Description
1. Social media posts	3.61	Frequent
2. Online articles or blog posts	2.67	Sometimes
3. Wattpad books	2.35	Seldom
4. Webtoon	1.92	Seldom
5. E-library	1.54	Never
Composite	2.42	Seldom

Analyzing the data, one could say that, among the various online reading tools available, social media is the most popular among learners. It is currently the trend, something that most learners find more interesting to read. This result coincides with the claim of Dimacangun and Guillena (2023) that social media has a ubiquitous presence in contemporary society, which is why it has entrenched itself deeply into the fabric of people's daily lives. Consequently, the results of their investigation unveiled the multifaceted ways in which students employ social media, spanning from research endeavors and problem-solving to peer engagement, curriculum comprehension,

and cooperative learning. Students concurred that social media exerted a positive impact on their academic pursuits, social interactions, entertainment preferences, and acquisition of information.

Similarly, Tus (2021b) in their study concluded that a significant proportion of the survey participants utilize their social media platforms to engage in academic activities. However, it is worth noting that despite the informative potential of social media, respondents were less likely to use these platforms for research purposes. In contrast, many respondents reported using social media for entertainment purposes, but not necessarily to conduct research. As for socialization, the majority of the respondents reported using social media platforms to communicate and interact with others.

Correspondingly, Calunsag and Calunsag (2023) exposed that people use social media for educational reasons. A considerable number of students engage in daily utilization of social networking sites (SNS) as a means to augment their educational pursuits. This entails activities such as accessing instructional content via YouTube tutorials, engaging in discussions with peers on platforms like Facebook and Twitter, as well as sourcing information from diverse academic and social forums such as Blogspot, Yahoo Answers, and Wikipedia.

3.6 TV Programs and Social Media Platforms Grade 7 Learners Watch

As reflected in Table 6, the learners tend to frequently engage in watching TV shows and browsing social media platforms. The data indicate that the respondents most commonly view Facebook, Twitter, Instagram, and TikTok, with a rating of "always" ($w\bar{x}= 4.22$). Conversely, TV news, Brain Games, Animal Planet, and Planet Earth are viewed "sometimes," while Discovery Science, Asian Food Channel, The World Tonight, and Food Network Asia are hardly ever viewed. The respondents have never watched "The Source," a current affairs and talk show program of CNN Philippines. Overall, the composite mean of the learners' frequency of watching TV programs and social media platforms is described as "sometimes" (2.69).

Table 6. Learners' frequency of watching TV programs and social media platforms

TV Programs & Social Media Platforms	$w\bar{x}$	Verbal Description
1. Facebook/Twitter/ Instagram/Tiktok	4.22	Always
2. TV News	3.35	Sometimes
3. Brain Games	3.21	Sometimes
4. Animal Planet	3.09	Sometimes
5. Planet Earth	2.67	Sometimes
6. Discovery Science	2.50	Seldom
7. Asian Food Channel	2.24	Seldom
8. The World Tonight	1.95	Seldom
9. Food Network Asia	1.94	Seldom
10. The Source	1.68	Never
Composite	2.69	Sometimes

These findings suggest that most learners prefer using social media platforms, particularly Facebook, Twitter, Instagram, and TikTok, which is consistent with the data shown in Table 1.5 illustrating the learners' preference for reading social media posts. As stressed by Ortiz-Ospina and Roser (2023), One out of every three individuals worldwide utilized social media platforms, constituting over two-thirds of the total internet user population. Also, Paliktzoglou et al., as cited by Koranteng, Wiafe, and Kuada (2018), acknowledged that the majority of students are familiar with and are active in using social networking platforms.

A similar finding was also obtained by Kafusha, Mwelwa, and Mkandawire (2021) who revealed that the reading culture of their respondents has shown tremendous progress with a bias on social media. They also emphasized the rise or increase in the amount of reading and writing on social media, especially WhatsApp, Facebook, Twitter, and LinkedIn, in houses that have phones and other internet-connected devices. Reading of phone messages was also reported to occur daily. Nonetheless, print media reading remains remarkably low.

Furthermore, Twenge, Martin, and Spitzberg (2019) argued that teenagers consume less traditional media, such as books, television, and periodicals, as increasingly they allocate more time to digital media. Between the mid-2000s and the widespread availability of cell phones and high-speed Internet connection, this trend has been more noticeable. The significant amount of time iGen teenagers spend on digital media—about six hours a day on average as of 2016—indicates a discernible shift in their focus away from print sources and traditional media.

3.7 Reading Proficiency of Grade 7 Learners

Table 7 shows that a significant proportion of respondents, specifically 76%, are in the frustration level. A mere 9% of respondents are classified as independent readers, while approximately 15.30% are instructional readers.

Table 7. Learners' reading proficiency (n = 170)

Classification	Word Reading Score		Comprehension Score		Reading Proficiency	
	f	%	f	%	f	%
Independent	7	4.12	15	8.82	15	8.82
Instructional	19	11.18	39	22.94	26	15.30
Frustration	144	84.71	116	68.24	129	75.88
Total	170	100.00	170	100.00	170	100.00

The data revealed that the majority of the learners are at the "frustration" level both in terms of their word reading score and their comprehension score. These results underscore the importance of enhancing reading proficiency among learners. The high percentage of respondents experiencing frustration highlights the need for effective intervention strategies to tackle this issue.

Similarly, Abril, Acerbo, and Abocejo (2022) maintained that one of the issues plaguing the Philippine educational system is the high percentage of Filipino children who struggle with reading, which is strongly connected to low accomplishment levels, especially in public schools. The low achievement results are further attributed to the poor development of reading skills among the learners. Rivera and Aggabao (2020) also that fifth-grade students encountered challenges related to word recognition and comprehension while engaging in reading activities. Tomas, Villaros, and Galman (2021) also agreed with the current results, as they found that the majority of the students experienced frustration.

3.8 Connecting Reading Interest with Reading Proficiency

Table 8 illustrates the relationship between the learners' reading interest and proficiency, as measured by word reading and comprehension scores. The F-test significance, or p-values, for both variables (word reading score: $p = 0.078$; comprehension score: $p = 0.287$) are greater than the level of significance (0.05), indicating that there is no significant relationship between the learners' reading interest and reading scores. Therefore, changes in reading interest did not impact word reading or comprehension scores. These findings suggest that there is insufficient evidence to support the notion that reading interest affects these variables on a population level.

Table 8. Relationship between reading interest and reading proficiency

Variables	Coefficients	SE	t Stat	P-value
Word Reading Score				
Intercept	33.38	7.18	4.65	0.000
Degree of Reading Interest	5.25	2.96	1.77	0.078
R = 0.1355				
R ² = 0.0184				
adjusted R ² = 0.0125				
F-ratio = 3.14				
p-value = 0.078				
Comprehension Score				
Intercept	72.58	5.82	12.47	0.000
Degree of Reading Interest	2.57	2.40	1.07	0.287
R = 0.0822				
R ² = 0.007				
adjusted R ² = 0.001				
F-ratio = 1.142				
p-value = 0.287				

Contrary to the results, the research conducted by Fitria (2019) and Despita (2020) showed that there is a clear correlation between children's propensity for reading and their ability to understand written content. Fitria (2019) supports this claim by emphasizing that students' reading interest has a strong relationship with their reading comprehension. Analyzing the data stresses how important reading preferences are in determining comprehension competency because most children had excellent ratings in both reading interests and reading comprehension. Despita (2020) strengthens this claim by concluding that if students have a high interest in

reading, they also have a good ability to comprehend text. Thus, the students' ability to translate an intralingual text is also good.

Even so, it can be implied that, although the two variables have a significant correlation, the nature of the relationship tends to be weak. Therefore, it is possible that the relationship between the two variables does not have a strong influence because it is caused by other factors that occur in the learning activities (Alfatihah & Tyas, 2022).

3.9 Connecting Frequency in Print Reading with Reading Proficiency Level (Word Reading Score)

According to Table 9, the overall F-test is significant ($p = 0.000 < \alpha = 0.05$), which means that the sample data provide sufficient evidence to reject the null hypothesis for the entire population. This implies that some of the explanatory or independent variables have a significant impact on the learners' proficiency in terms of word reading scores. The regression output shows that the frequency of reading print materials, namely, fiction stories ($p = 0.006$), magazines ($p = 0.003$), and books ($p = 0.000$), are significant predictors of their word reading score.

Table 9. Relationship between the learners' frequency in print reading and level of reading proficiency in terms of word reading score

Variables	Coefficients	SE	t Stat	P-value
Intercept	65.66	4.18	15.71	0.000
Fiction	2.75	0.99	2.78	0.006
Non-Fiction	1.23	1.18	1.05	0.297
Magazine	-2.93	0.99	-2.97	0.003
Books	4.67	1.05	4.47	0.000
Journal	-1.56	1.14	-1.37	0.174
Newspaper	-1.64	1.09	-1.52	0.132
Comics/Graphic Novels	0.36	0.96	0.37	0.709
R = 0.4623				
R ² = 0.2137				
adjusted R ² = 0.1798				
F-ratio = 6.291				
p-value = 0.000				

This finding is supported by the fact that the learners' reading habits, both academic and non-academic, enhance their capacity for critical thought, language fluency, and conceptual understanding. Consequently, these improvements contribute to better academic achievement (Balan, Katenga, & Simon, 2019). Throughout history, printed materials have been the primary means for both acquiring literacy skills (reading to learn) and gaining knowledge through reading (learning to read). Additionally, according to Kathryn Starke in her online article "Developing a Love of Reading in Students" (2020), the first step in enticing kids to read is letting them choose the books they want to read. Students who take ownership of their reading become proficient, independent readers.

Additionally, reading skills encompass competencies associated with an individual's capacity to comprehend, interpret, decode, and understand written language and textual content, according to Herrity (2023). Reading fiction, news articles, magazines, or any other type of print material is one of the best methods to build reading skills. Nonetheless, Mohammed and Amponsah's (2018) research indicated that the lack of pre-reading materials and other resources in the classroom are among the factors that contribute to students' subpar reading proficiency.

3.10 Connecting Frequency in Print Reading with Reading Proficiency Level (Comprehension Score)

The statistical analysis presented in Table 10 reveals that the overall F-test is not statistically significant, as the p-value obtained (0.053) is greater than the predetermined significance level (α) of 0.05. The data imply that the relationship between the frequency of reading print materials and the learners' reading proficiency, as measured by their comprehension score, is not significant. Thus, one can conclude that changes in the frequency of reading print materials do not result in significant shifts in the comprehension scores of the learners. This finding is crucial, as it suggests that other factors, such as the learners' background, motivation, and learning strategies, may play a more critical role in determining their reading proficiency.

According to Sari and Fitriisa (2022), Reading offers individuals a wealth of information and knowledge. Those who grasp the material they read can adequately address questions about it, emphasizing that comprehension serves as the fundamental aim of reading. By exposing students to new words, they can expand their vocabulary.

Table 10. Relationship between the learners' frequency in print reading and level of reading proficiency in terms of comprehension score

Variables	Coefficients	SE	t Stat	P-value
Intercept	37.60	5.61	6.70	0.000
Fiction	2.75	1.33	2.07	0.040
Non-Fiction	2.03	1.58	1.29	0.199
Magazine	-0.04	1.33	-0.03	0.976
Books	0.53	1.40	0.38	0.704
Journal	1.87	1.53	1.22	0.225
Newspaper	-3.12	1.46	-2.14	0.034
Comics/Graphic Novels	-0.58	1.29	-0.45	0.652
R = 0.2845				
R ² = 0.0809				
adjusted R ² = 0.0412				
F-ratio = 2.038				
p-value = 0.053				

The result presented above, however, contradicts the findings of Danaei et al. (2020), which revealed a significant difference between respondents in terms of overall reading comprehension. The latter found that children who experienced augmented storybooks performed better while recounting stories and responding to comprehension questions. The aforementioned respondent also received a higher score for implicit question answers.

3.11 Connecting Frequency in Utilizing Online Learning Tools with Reading Proficiency Level (Word Reading Score)

Table 11 shows that the F-test is significant with a p-value of 0.001, which confirms that some of the independent variables can be considered significant determinants of the learners' reading proficiency. However, upon examining the regression output, it is determined that only the learners' frequency of utilizing social media posts ($p = 0.001$) is significantly related to their word reading score.

Table 11. Relationship between the learners' frequency in utilizing online learning tools and level of reading proficiency in terms of word reading score

Variables	Coefficients	SE	t Stat	P-value
Intercept	62.89	3.83	16.41	0.000
e-Library	-0.15	1.29	-0.12	0.905
Webtoon	0.07	1.12	0.06	0.953
Wattpad	0.49	1.06	0.46	0.648
Online Articles/Blog Posts	1.17	1.00	1.17	0.245
Social Media Posts	3.21	0.92	3.49	0.001
R = 0.3459				
R ² = 0.1196				
adjusted R ² = 0.0928				
F-ratio = 4.457				
p-value = 0.001				

Regular engagement with social media content can enhance word-reading skills among learners, highlighting the significance of specific online activities in shaping academic proficiency. Conversely, tools like e-libraries, webtoons, Wattpad, and online articles do not significantly impact learners' word-reading scores, emphasizing the predominant influence of social media use frequency. These findings carry implications for educators and policymakers aiming to enhance language skills, suggesting the integration of social media into learning strategies.

This aligns with Ahmed et al.'s (2021) discovery that web-based social networking facilitates comprehensive English language learning, particularly through activities like messaging, posting, or gaming. Namaziandost and Nasri (2019) further contend that engaging and enjoyable materials, such as those found on social media, stimulate student learning in the 21st century. Similarly, Çakmak (2020) demonstrates how social networking enhances English as a Foreign Language (EFL) learners' speaking proficiency. Contrary to this, Permatasari, Wijayanto, and

Kristina (2020) argue for the benefits of extensive reading on Wattpad, emphasizing its role in developing writing, speaking, listening, and vocabulary skills.

3.12 Linking Frequency in Utilizing Online Reading Tools to Proficiency Level (Comprehension Score)

Table 12 displays the results of the F-test, indicating that the p-value is 0.084, which is higher than the pre-determined significance level of 0.05. This implies that there is no statistical evidence to suggest a significant relationship between the frequency of using online reading tools and the learners' level of reading proficiency in terms of comprehension scores.

Table 12. Relationship between the Learners' Frequency in Utilizing Online Reading Tools and Level of Reading Proficiency in terms of Comprehension Score

Variables	Coefficients	SE	t Stat	P-value
Intercept	33.31	4.92	6.764	0.000
e-Library	1.06	1.66	0.64	0.523
Webtoon	0.63	1.45	0.44	0.661
Wattpad	2.26	1.36	1.66	0.099
Online Article/Blog Posts	-0.69	1.29	-0.53	0.593
Social Media Posts	1.69	1.18	1.43	0.154
R = 0.2385				
R ² = 0.0569				
adjusted R ² = 0.0281				
F-ratio = 1.979				
p-value = 0.084				

Level of significance = 0.05

Therefore, changes in the frequency of utilizing online reading tools have no significant impact on the learners' comprehension scores. In other words, the learners' proficiency in reading comprehension is not influenced by how often they use online reading tools. A similar finding was also manifested in the study of Stiegler-Balfour et. al. (2023) as they claimed that although on-screen reading is considered a viable substitute for print by some individuals, those who do not possess adequate reading strategies may experience a perceived disadvantage when reading from screens, known as the screen inferiority effect. Considering the prevalence of digital devices in educational settings, these observations highlight the challenges that less proficient readers face when engaging with text on digital platforms. As emphasized by Park and Lee (2021), printed materials excelled in facilitating thorough and immersive reading experiences, while digital texts proved more conducive to rapid and superficial learning.

This result, however, opposes the findings of Al Khazaleh (2021), which revealed that the reading comprehension of the participants who employed digital reading outshined that of the participants who employed the conventional system of reading. In essence, it was established that digital reading significantly contributed to enhancing learners' reading comprehension skills, both within educational settings and beyond.

3.13 Linking Frequency of Watching TV and Social Media to Reading Proficiency Level (Word Reading Score)

Table 13 reveals that the overall F-test is statistically significant ($p = 0.012 < \alpha = 0.05$), an indication that some of the independent variables are significant predictors of the learners' reading proficiency in terms of word reading score. Further analysis of the regression output shows that the frequency of watching Food Network Asia ($p = 0.012$) and social media platforms like Facebook, Twitter, Instagram, or TikTok ($p = 0.005$) are significantly related to the learners' word reading score. Interestingly, watching Food Network Asia shows an inverse relationship with the learners' word reading score, which implies that the more they watch this program, the lower their word reading score becomes.

It is possible that the content of Food Network Asia is not effective when it comes to improving word reading skills. If the programs are entertaining but lacking in educational value related to language skills, learners may not be gaining much in terms of word reading. On the contrary, learners who are more engaged in reading or watching TikTok, YouTube, Instagram, Facebook, and Twitter are likely to have a higher word reading score. Social media has a lot of words to read, like captions, comments, and articles. When learners spend more time reading these things, they encounter more words. This can help them get better at reading words.

Table 13. Relationship between the learners' frequency of watching TV programs and social media platforms and level of reading proficiency in terms of word reading score (n=170)

Variables	Coefficients	SE	t Stat	P-value
Intercept	64.56	5.27	12.26	0.000
TV News	-0.23	1.13	-0.21	0.836
Animal Planet	1.26	1.28	0.98	0.326
Planet Earth	-1.51	1.19	-1.27	0.206
Asian Food Channel	1.81	1.05	1.72	0.087
Food Network Asia	-2.94	1.16	-2.54	0.012
Discovery Science	2.08	1.14	1.82	0.071
Brain Games	-0.17	1.05	-0.16	0.876
The World Tonight	-0.58	1.29	-0.45	0.651
The Source	-0.66	1.49	-0.44	0.661
FB, Twitter, Instagram, Tiktok	3.36	1.18	2.86	0.005
R = 0.3598				
R ² = 0.1295				
adjusted R ² = 0.0747				
F-ratio = 2.365				
p-value = 0.012				

Correspondingly, Adelakun et al. (2023) acknowledged the use of social media in education as a cutting-edge technology that significantly affects students' academic success. Moreover, platforms such as Facebook, YouTube, Twitter, and Instagram have progressed past their original use as communication tools to serve as platforms for education and collaboration (Adelakun et al., 2023). The distinction between formal education and unofficial internet connections is being eroded by students' familiarity and expertise with these platforms.

These claims are affirmed by Muftah (2022), who asserted that students could improve their communication and language skills by using interactive social media platforms for language study. Their findings indicated that approximately 41% of students experienced advancement in their writing proficiency, with about 39% demonstrating progress in reading comprehension. Additionally, gains in listening comprehension and vocabulary were observed among nearly 32% of participants. Speaking skills exhibited improvement in about 31% of students, while grammar proficiency showed enhancement in only around 22% of learners. Furthermore, Shahini and Shahamirian (2021) likewise asserted that in terms of naturalness and authenticity, the main sources including movies and TV series, news programs, shows, and cartoons provide language learners with huge amounts of authentic words, idioms, and expressions, and help them pick up pronunciation, intonation, speech rate, gestures, and facial expressions.

3.14 Linking Frequency of Watching TV Programs and Social Media to Reading Proficiency Level (Comprehension)

The statistical results presented in Table 14 indicate that the overall F-test is not statistically significant ($p = 0.346 > \alpha = 0.05$). This means that there is no significant relationship between the frequency of watching TV programs and social media platforms among the learners and their level of reading proficiency in terms of comprehension scores.

The data indicate that changes in TV viewing frequency and social media usage don't significantly correlate with learners' reading comprehension scores, suggesting minimal impact on comprehension abilities. Social media multitasking's influence on academic performance remains understudied. Lau (2017) found that using social media for non-academic purposes and multitasking negatively predicted academic performance. Supper, Guay, and Talbot (2021) observed that TV viewing time and reading achievement had no direct or indirect link. However, there was a negative relationship between leisure reading frequency and TV viewing time.

However, Tarekegn and Endris (2019) found no meaningful correlation between TV watching and academic achievement. Conversely, Muftah (2022) reported social media's positive impact on English language learning, with most students acknowledging its beneficial effects. Desta et al. (2021) highlighted social media's advantages in improving medical learners' English proficiency, with no significant gender differences in its perceived influence. Overall, while social media appears to positively impact language learning, its effect on academic performance remains uncertain, contrasting with TV's limited influence on reading achievement.

Table 14. Relationship between the Learners' Frequency of Watching TV Programs and Social Media Platforms and Level of Reading Proficiency in terms of Comprehension Score (n=170)

Variables	Coefficients	SE	t Stat	P-value
Intercept	36.26	6.77	5.35	0.000
TV News	-0.62	1.45	-0.43	0.669
Animal Planet	-0.47	1.64	-0.29	0.773
Planet Earth	-1.93	1.53	-1.26	0.208
Asian Food Channel	2.23	1.35	1.65	0.100
Food Network Asia	0.13	1.49	0.09	0.928
Discovery Science	2.39	1.47	1.63	0.107
Brain Games	0.31	1.36	0.23	0.820
The World Tonight	-1.54	1.66	-0.93	0.354
The Source	1.67	1.92	0.87	0.386
FB, Twitter, Instagram, Tiktok	1.46	1.51	0.97	0.334
R = 0.23572				
R ² = 0.0661				
adjusted R ² = 0.0074				
F-ratio = 1.126				
p-value = 0.346				

4.0 Conclusion

This investigation reveals the complex relationship between learners' reading interests and proficiency levels. Despite a generally high interest in reading, a significant portion expresses limited enthusiasm due to time constraints, particularly in rural areas where household responsibilities and long commutes to school pose challenges. Many learners fall into the "frustration" category for reading proficiency, indicating a potential impact on their academic experience. Teachers in remote areas face additional challenges, which necessitate creative solutions and extra support. The study observes a disconnect between reading interest and proficiency, likely due to limited access to diverse reading materials in rural areas. Online learning tools, especially social media, show a positive correlation with higher word reading scores, emphasizing the potential benefits of incorporating digital resources in education. The time spent on reading correlates positively with both interest and proficiency, highlighting the importance of fostering dedicated reading habits from an early age. In conclusion, addressing challenges like time constraints, leveraging digital resources, and recognizing demographic differences are crucial for effective strategies to enhance reading interest and proficiency. In implementing and sustaining effective literacy interventions, especially in rural or underserved areas, collaboration between educators, policymakers, parents, and communities is paramount. By working together, these stakeholders can leverage their unique perspectives, resources, and expertise to ensure that interventions are tailored to the specific needs of the learners, thereby fostering a more successful and inclusive literacy education for all.

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The authors confirm their equal contribution to every part of this research. All authors reviewed and approved the final version of this paper.

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Looking at Tuberculosis Through the Lens of the Vulnerable Population in Parañaque City

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Abstract. This study aimed to support Tuberculosis (TB) advocacy and demand generation initiatives by documenting the experiences of selected population groups in Parañaque City, Philippines. It explored vulnerable populations' perspectives on tuberculosis, health promotion activities, challenges in maintaining health, and access points to health services and information. Through focus group discussions and key informant interviews, 22 elderly individuals, 18 tricycle drivers, 12 barangay health workers, and two public health nurses participated in the study. The findings highlighted various aspects of TB knowledge and awareness, including identification, risk factors, lifestyle, and treatment. The themes that emerged around understanding TB identification included perceived susceptibility, misconceptions, and treatment approaches. Participants' experiences underscored access to information and services, health-seeking behavior, and emotional responses regarding TB. Challenges identified included household situations, perceived stigma, and discrimination, shedding light on community attitudes. Varying perceptions of healthcare services were noted, with some valuing free services at health centers while others found access challenging. The study also underscores the importance of community TB knowledge, tailored healthcare, stigma reduction, and ensuring access to health programs, particularly for vulnerable groups. Advocacy recommendations include maximizing community-based information sharing through training, developing tailored health education approaches, and enhancing health literacy materials. Furthermore, advocating for flexible healthcare service delivery options, stigma reduction activities, and increased community engagement efforts are crucial. These measures are vital for effective TB control and improving overall community wellbeing, particularly in addressing the unique needs of vulnerable populations.

Keywords: Tuberculosis; Vulnerable population; Community engagement; Public health; Health promotion.

1.0 Introduction

Tuberculosis (TB) is a bacterial infection that causes a disease that most often affects the lungs. An infectious disease can spread through the air when a TB-infected person coughs, sneezes, or spits. According to the World Health Organization (WHO), in 2021, an estimated 10.6 million people across the globe fell ill to TB (WHO, 2023). It is the 13th leading cause of mortality worldwide, and until the emergence of coronavirus disease 2019 (COVID-19), TB was the leading infectious cause of global morbidity and mortality (WHO, 2023; WHO Philippines, 2023).

In the Philippines, WHO estimated that about 591,000 Filipinos have active TB disease. The Department of Health (DOH) report in 2019 identified TB at-risk or vulnerable populations as the urban poor, immunocompromised like people living with HIV (PLHIV), with diabetes, people deprived of liberty (PDL or prisoners), recent contacts of TB patients, smokers, the elderly, and the healthcare workers (DOH, 2020). To address TB in the country, the DOH organized the National TB Control Program (NTP), and operates within the devolved health care delivery system. The country's direction along TB is to reduce the burden by decreasing TB mortality by 95% and TB

incidence by 90% through a wide range of strategies, such as the utilization of TB care and prevention services by patients and communities, equitable access to directly observable therapy short-course (DOTS) facilities; adequate and competent human resources for TB elimination efforts; evidence-based and data-driven TB elimination efforts; quality TB care and prevention services, and; political commitment to implement localized TB programs.

While the senior citizens or elderly 60 and older are vulnerable to TB infection. According to studies, most cases of TB in older people are linked to the reactivation of lesions that have remained dormant. The awakening of these lesions is attributable to changes in the immune system related to aging (Caraux-Paz P. et al., 2021). Due to senescence or the process of deterioration with age, seniors are most at risk of TB due to compromised immune systems, underlying illnesses, and increased frequency of adverse drug reactions (Olmo-Fontánez A. et al., 2022).

On the other hand, the prevalence of TB among drivers in the public transportation sector has been the topic of research efforts. Such occupational groups may include risk factors like long working hours, prolonged exposure to outside environments, exposure to several passengers, and poor access to healthcare services. According to studies, several TB infections are tagged on regular commuters using public transportation (Teeter L., 2011; Andrews J. et al., 2013). In addition, one study found that TB transmission is possible through casual contact in extra-domiciliary settings, such as taking public transportation like mini-buses and aircraft (Zamudio C. et al., 2015), along with other risk factors such as vices, age, work, and lifestyle (Teeter L., 2011). A local study in Baguio City by the Department of Science and Technology revealed that there is an existing prevalence of TB among public utility jeepney drivers.

Moving forward, the Philippine NGO Council on Population Health & Welfare Inc. (PNGOC) is working with Parañaque City in a health advocacy campaign supported by the TB Platforms program funded by USAID. In pursuit of an evidence-based and data-driven approach to address TB in the communities, especially in community awareness-raising and advocacy activities, a deep understanding of the perspective of at-risk and vulnerable groups is important. This study sought the perspectives on TB of the elderly population and those in the transportation sector, the tricycle drivers, in two villages in Parañaque City – Barangay San Antonio and Barangay San Dionisio. In particular, to look into the vulnerable populations' perspectives on tuberculosis, health promotion activities, challenges in maintaining health, and access points to health services and information.

2.0 Methodology

2.1 Research Design

This descriptive qualitative study used a focus group discussion (FDG) and key information (KI) interviews as its primary approach to gathering data or information. To have a deeper understanding of the perspectives and experiences of at-risk population groups to TB infections, specifically the elderly and tricycle drivers in Barangays (villages) San Antonio and San Dionisio, FGDs were conducted to facilitate an in-depth discussion on their perspectives of TB; outline their health promotion activities; identify the challenges they experienced by the to maintain health; and draw their situation along access to health services and information. The researchers did KI interviews to facilitate in-depth discussions with people who know what is happening in the community.

2.2 Research Participants

The participants were identified using convenience sampling, a non-probability sampling method where individuals were selected using a predetermined inclusion criterion. The participants were elderly and tricycle drivers (22 elderly and 18 tricycle drivers) from Barangay San Antonio and Barangay San Dionisio, Parañaque City. For elderly participants, they are those who are 60 years old and above. Tricycle drivers are identified members of the Tricycle Operators and Drivers Association (TODA) operating within the identified villages. While the KIs were identified through purposive sampling. They comprise Barangay Health Workers and public health nurses (12 barangay health workers and two nurses).

2.3 Research Instrument

A question guide was created for this study. With due permission, it was adapted from University Research Co. (URC) Knowledge Attitude and Practice (KAP) Survey tool. Several processes were used to ensure the reliability of the question guide. Firstly, the researchers participated in the training provided in using the KAP survey tool. Local partners participated in the development of the question guide. Lastly, the instrument was reviewed by an

external consultant, representatives from the PNGOC, and local partners in the project sites. Thematic analysis was used to make sense of the study's results and findings. The findings were coded, categorized, and thematized according to patterns that surfaced out of the set of data.

2.4 Data Gathering Procedure

The data-gathering process for this study involved a series of coordinated efforts to engage with the local community and ensure ethical conduct throughout the research endeavor. Initially, the researchers collaborated with the local government of Paranaque City and the City Health Office to introduce the research project and secure the necessary permissions for its implementation. Following this, approval to conduct the study was sought from local officials in the targeted villages, with a focus on fostering transparency and community involvement in the research process. Venues within the community were carefully selected and arranged for the conduct of FGDs and KIIs, with the primary aim of ensuring participants' comfort and safety during the sessions. The team, comprising the primary researchers, a commissioned documenter, and a co-facilitator, played integral roles in facilitating data collection and documentation throughout the process. Audio recording devices were employed during FGDs and KIIs to capture participant responses accurately, facilitating subsequent transcription and analysis. Additionally, participants were provided with a detailed briefing on the study's purpose, and informed consent was obtained to uphold their privacy and confidentiality throughout the research endeavor. By meticulously following these procedural steps, the research team ensured the comprehensive collection of data while prioritizing the welfare and rights of the participants involved in the study.

2.5 Ethical Considerations

The data-gathering process described above was conducted with meticulous attention to ethical considerations to safeguard the rights and wellbeing of the participants involved. Before their participation, thorough informed consent procedures were implemented, ensuring that each individual had a comprehensive understanding of the research objectives, procedures, and potential risks and benefits. Privacy and confidentiality were paramount throughout the research process, with measures taken to protect participants' personal information and ensure that their responses remained confidential. Respect for participants was upheld at all times, with efforts made to create a supportive and non-judgmental environment during data collection. Collaboration with local authorities and community leaders facilitated community engagement, fostering a sense of partnership and trust within the community. Additionally, the principles of beneficence and non-maleficence guided the research, with a commitment to maximizing benefits while minimizing potential harm to participants. The participants were made well aware that they may choose to withdraw their participation at any time, ensuring that the rights, autonomy, and dignity of the participants were upheld throughout the process.

3.0 Results and Discussion

3.1 Perspectives of the Participants on Tuberculosis

This describes the participant's knowledge about TB, its signs and symptoms, risk factors, and treatment. Some participants describe TB as a serious health problem faced by families with members who have TB. However, they can recognize that TB is treatable and that the transmission of the infection can be controlled. While participants in the study can share correct information based on their experience, current knowledge, and understanding of TB, some misconceptions may need to be corrected.

Table 1. Thematic analysis of perspectives of the participants on tuberculosis

THEMES	SUBTHEMES
TB Identification and Treatment of TB	Knowledge in identifying TB
	Importance of early detection and treatment of TB
Perceptions of TB	Perception of individuals susceptible to TB
	Misconceptions surrounding TB

Table 1 shows the themes and the following subtheme that describes the participants' knowledge about TB, which are about the knowledge of identifying TB, the lifestyle of susceptible individuals to TB disease, the importance of early detection and treatment of TB, physical aspects of susceptible individuals to TB disease, and; misconceptions about who may get TB.

Along the theme of TB Identification and Treatment of TB, the findings showed that the vulnerable population has basic knowledge of identifying TB and is aware of the importance of early detection and seeking immediate treatment. They can enumerate cardinal signs of active TB. CDC (2011) outlined the general symptoms of TB disease: it includes feelings of sickness or weakness, weight loss, fever, night sweats, coughing, chest pain, and coughing up blood. It is also notable that the vulnerable groups are aware of the common transmission of infection. According to WHO (2023), TB is spread primarily from person to person through infected air during close contact. The bacteria get into the air when someone infected with TB of the lung coughs, sneezes, shouts, or spits.

One tricycle driver participant shared that TB infection can be acquired from someone who coughs persistently, who may have TB but is unaware of it, *"...we can get TB from people who keep on coughing, but they may not know that they already have TB"*. Some elderly participants shared that some had cardinal signs, which may seem to have TB, but die without knowing it, *"We know some people who seem to have TB, but they just passed away."* A study in forensic autopsies underscores the presence of undiagnosed instances of active Tuberculosis, such cases may serve as potential sources of transmission to the broader public (Sangma T. et al., 2014).

Many participants identified signs and symptoms of TB infection, such as persistent cough, sudden weight loss, weakness and fatigue, and intermittent fever, while some participants pointed out coughing out of blood. However, there are several elderly and tricycle drivers who claimed that apart from cough and general weakness, they do not have a comprehensive understanding of TB, *"...to be honest, I don't know anything about TB"*. This finding shows that the participants have basic knowledge about TB disease manifestations in an ill individual.

The following are some of the other testimonies from the participants: *"The sudden weight loss and persistent fever that doesn't improve..." "Feeling sick, constant coughing, feeling weak..." "Recurring fever, then continuous coughing..." "Sometimes there's blood when coughing."*

Most participants identified the following as being at high risk of contracting TB: smokers, alcoholics, people who use illegal substances, *"those who smoke and drink excessively,"* and *"those who drink alcohol and use (referring to drug use)."* Additionally, those who work in street occupations, such as vendors and drivers, and those in construction industries, especially site workers, welders, and painters, were mentioned. *"...those whose jobs involve exposure are often affected by TB," "street vendors, painters,"* and *"those in construction work."*

On the other hand, most participants are aware that TB can be treated. Similarly, it can be prevented by ensuring adequate rest, managing stress, and eating healthy and nutritious food. One participant stated, *"...even if you're extremely tired from work, you should strengthen your body with proper rest, enjoy yourself to reduce stress... and eat nutritious food."* At the same time, few are aware of and can discuss early detection and treatment, and a patient's willingness to complete the treatment is important for recovery from TB disease. *"There is treatment available for TB unlike in the past... the problem is if you don't seek medical attention, how can you be treated? And if you're undergoing treatment, you should complete it..."* This puts other family members and people they come into contact with at risk of contracting the disease, especially those with weaker immune systems, such as the elderly, those with existing illnesses, and very young children. *"It's difficult if I or my family members have TB, and we don't know, we might infect each other..." "Seniors like us could also get infected..." "It's unfortunate for the young ones at home."*

About the vulnerable population's Perception of TB, the findings highlighted their current understanding of who is susceptible to TB and their misconceptions about TB. They see individuals who may be most vulnerable and at risk of TB as those lacking healthy lifestyles, such as substance abuse, over-exhausting due to lack of rest and self-care, and lack of nutritious food intake. Attested by a study on lifestyle changes and the risks of Tuberculosis revealed that vices, especially heavy smoking and lack of physical wellness activities, increase the risk of developing TB disease (Park J. et al., 2022). The findings also highlighted that apart from aging, the vulnerable groups see that a certain nature of work can put a person at a higher risk, such as workplaces that put a person in a hazardous position of being exposed to an environment conducive to TB spread or contracting infection. According to the literature, aging and work-related stresses can reduce the optimal function of the immune system (Delves P. 2022 & Olson E. 2018). However, a notable misconception is that only those with poor physiologic constitution or bad health are at high risk of getting TB.

While TB infection can affect everyone, it is more likely to occur in individuals with weakened immune systems, those who engage in vices such as drinking and smoking, and those who lack adequate rest and sleep. *"You won't get TB if you're strong and don't have vices,"* as some would say. While it is true that risk factors for Tuberculosis include anything that weakens a person's immune system or puts them in frequent, close contact with someone who has active TB (Goldman R., 2023), the risk also increases for fit and healthy individuals who live with someone with an active TB case, or who live or travel in places where TB is common, or share spaces with individuals with active TB, such as at work, in prison, nursing homes, and shelters (Mayo Clinic, 2023).

Furthermore, some participants shared that people who lack sleep and are in stressful situations are susceptible to TB, *"...those who never stop working... your body will weaken from exhaustion, you could be hit by TB..."* *"Stress and many problems in life..."* Some elderly participants are aware that they are vulnerable to contracting TB due to their age. Tricycle drivers describe their occupation as somewhat risky, as they interact with several people daily, *"...we drivers who are always on the road."*

In addition, health workers serving as Key Informants (KIs) described their efforts to disseminate health education and information to the community, families, and individuals through various activities. These include conducting health campaigns to raise awareness about the cardinal signs of TB, its risk factors, and where to access services if needed. One Barangay Health Worker (BHW) mentioned, *"Before COVID-19, the BHWs regularly conducted information dissemination and also conducted home visits."* Such efforts vary depending on the occasion and purpose of the activity. Examples include providing health education to family members of individuals diagnosed with TB or during community health forums. However, the reach of health information dissemination is limited to those who participate in the activities, visit the health center, or are reached through home visits. Another health worker stated, *"Health workers cannot reach everyone... we focus more on those who come to the center or those who are with the patient at home"*.

3.2 Health Promotion Activities of the Participants

Table 2 delineates a comprehensive thematic analysis elucidating the health promotion activities undertaken by participants. Within the overarching theme of Health Promotion and TB Prevention, the subthemes underscore the efficacy of community-based knowledge dissemination strategies, a robust awareness regarding TB treatment modalities, adherence to infection control protocols, and cognizance of risk management imperatives. Next is, under the thematic domain of Perceptions on TB, the subthemes illuminate nuanced perceptions regarding susceptibility to TB among individuals, alongside prevalent misconceptions surrounding the disease.

Table 2. Thematic analysis of health promotion activities of the participants	
THEMES	SUBTHEMES
Health Promotion and TB Prevention	Community-based knowledge sharing
	High awareness about TB treatment
	Knowledge of infection control
	Recognizing the importance of managing risks
	Perception of individuals susceptible to TB
Perceptions on TB	Misconceptions surrounding TB

The narrative presents the experiences of community participants regarding their access to information and services related to TB, as well as their behaviors and emotional responses toward TB as both a health and social concern. It also underscores the significance of ensuring that comprehensive health information about TB, including its causes, prevention, and treatment, is readily available within the community. Such understanding of the disease can then be shared among neighbors, friends, and individuals. Notably, an intriguing revelation emerged from a tricycle driver who successfully recovered after receiving TB treatment. His personal experience with TB now serves as a common source of information about the disease for his family and colleagues, highlighting its importance in public health interventions and educational campaigns. For instance, one tricycle driver shared, *"...to be honest, I knew nothing about TB before. I learned about TB from * (referring to a colleague) because*

he had TB". Additionally, an elderly participant recounted, "...no one taught us about TB. I learned about it from my sister-in-law who had TB but has since passed away... the treatment takes a long time, but there is a cure."

The findings underscore the pivotal role of community members in disseminating information about TB. Community members, such as neighbors and friends, play a significant part in raising awareness about TB, including its symptoms, transmission, and treatment options. Most participants indicated that they learned about TB from within their community, whether through conversations with neighbors or friends or from individuals who had personal experiences with TB. For example, one participant shared, "We just talked about it when someone in the neighborhood had TB," and another mentioned, "We learned about it from * (referring to a colleague), that's why we stopped inviting him to drinking sessions because he keeps coughing."

Interestingly, only a few participants mentioned learning about TB from healthcare workers, with two individuals specifically mentioning acquiring knowledge from a doctor who creates content on the internet. This highlights the importance of community engagement and peer education in addressing TB. As one participant expressed during the FGD, "I learned about TB from the health center..." while another stated, "I watched Dr. *'s (name of the vlogger) vlogs about TB on YouTube."

Furthermore, many participants shared that their understanding of TB was shaped by the experiences of others, with one participant who had TB recounting, "I had TB myself, but I'm better now. At first, I didn't know what to do, and I thought I was going to die. My wife insisted I see a doctor, and that's when I found out I had TB..." This indicates the significant impact of personal experiences in shaping awareness and knowledge about TB within the community.

The findings also suggest that only a small number of participants mentioned obtaining information about TB from healthcare workers. This highlights a potential gap in the dissemination of knowledge through formal healthcare channels. Although many participants are aware of the available treatment options, including where to seek treatment and the duration of treatment, there is a need to strengthen the role of healthcare workers in providing accurate and comprehensive information about TB. This is crucial to ensure that reliable information reaches the community. Some participants expressed sentiments such as, "I know there's a program; I see it in the health center, but people should be aware of it..." and "The treatment for TB takes a long time, but you will get better..." and "treatment for TB is free from the government." Community-based TB activities encompass a broad range of initiatives aimed at preventing, diagnosing, and improving treatment adherence and care, all of which positively impact the outcomes of TB programs (WHO, 2023).

Moreover, some unconventional methods are used by community members to address symptoms such as coughs and colds by using a mixture of gin and calamansi or Philippine lime (*gincalamansi* – as the community would refer to it). Participants who practice this tonic shared, "...nothing beats *gincalamansi*; it can even cure COVID-19."; "When you have a cough, sore throat, or runny nose, just drink gin with calamansi immediately." This tonic combines one round bottle of gin with a piece of calamansi. "You can make it anywhere, just one bottle of gin and calamansi," shared by a KI BHW who has directly observed the behaviors of people in the community. Participants attributed this practice to communal knowledge passed down within the community, highlighting the importance of cultural context in healthcare practices.

Most participants are aware that TB can be acquired by being exposed too closely to a person with TB, and they listed several ways to prevent infection. These include wearing masks, consuming healthy foods to boost the immune system, ensuring adequate rest to keep the body strong, and managing household spaces if living with a household member with TB. An elderly participant shared an example, saying, "I took care of someone with TB when I was young... you need to strengthen your body; there were no masks back then, masks only became popular with COVID... but I avoid staying in the same room... the important thing is not to be weak so you won't get infected." However, some participants believe that items belonging to a person with TB should be separated from those of other household members, such as eating utensils. One participant stated, "as far as I know, their belongings should be separated and not mixed with others'..." Another said, "they have their plates, spoons, and other items..." These findings underscore the need for targeted educational interventions that address the knowledge gaps and preferences of the community. TB preventive treatment halts TB infection from progressing to disease in those infected and can protect both the individual and the community from TB (WHO, 2023). However, individuals who are already

undergoing treatment, including those with TB who are not actively transmitting the disease, cannot transmit it (Goldman, 2023).

All participants agreed that indulging in vices such as smoking, drinking, and using illegal substances can increase the risk of contracting TB. Some participants emphasized this point, with one elderly participant sharing, “...smoking is hazardous...” and another recounting, “I work as a gravedigger in that cemetery, and many of those I buried there were heavy smokers before they died, so it's highly likely they had TB.” Additionally, many participants asserted that being near a person with TB can also pose a risk of infection. One participant explained, “I know it's airborne, so if you're with someone at home, you can get infected.” Furthermore, most participants highlighted that individuals working or living in poor environments with inadequate ventilation or exposure to dust and fumes are also at risk. Engaging community members as educators and drawing from their experiences in educational campaigns can enhance the effectiveness of TB awareness programs, particularly when the information shared aligns with their own experiences and context (WHO, 2023).

Overall, the findings emphasized the importance of community engagement and peer education in raising awareness about TB. Utilizing community members as educators and leveraging their experiences in educational campaigns can enhance the effectiveness of TB awareness programs, particularly when aligned with their lived experiences and cultural context.

3.3 Challenges Experienced by the Participants to Maintain Health

The findings are information about the participants' activities and attitudes towards Tuberculosis as a health concern, and their lived experiences in their homes and their community. Healthy activities play a pivotal role in maintaining overall health and well-being Findings highlighted the participants' living conditions and their perception of Tuberculosis.

Table 3. Thematic analysis of challenges experienced by the participants to maintain health

THEMES	SUBTHEMES
Household situation	Cramped houses (household crowding) More than one householder
Perceived stigma and discrimination	Feeling of shame Fear of maltreatment
Perceived self-care to prevent TB	Healthy lifestyle Early detection and treatment

Table 3 encapsulates a thematic analysis illustrative of the challenges encountered by participants in sustaining optimal health. Within the thematic realm of Household Situation, subthemes delineate the prevalence of cramped living conditions, denoting household crowding and multiple householders' presence, reflecting complexities in domestic arrangements. The thematic domain of Perceived Stigma and Discrimination unveils the participants' experiences of shame and apprehension of maltreatment, underscoring the pervasive impact of societal attitudes on health-seeking behaviors. Furthermore, within the theme of Perceived Self-care to Prevent TB, subthemes elucidate the participants' endorsement of healthy lifestyle practices and the imperative of early detection and treatment, portraying a proactive stance toward disease prevention. These insights emphasize the multifaceted nature of challenges impeding health maintenance and the necessity of tailored interventions addressing social determinants of health.

Household situations were a common concern among participants, with many describing their living conditions as cramped. One participant explained that their household was overcrowded, with too many family members sharing limited space. They expressed, “There is nothing we can do if we do not have a large living space, my children, their children.” This overcrowding leads to adverse living conditions, where the number of occupants exceeds the capacity of the available dwelling space, as defined by the World Health Organization (WHO, 2018). Such conditions can result in physical and mental health issues.

Since TB is primarily transmitted through the air when an infected person coughs, sneezes, or speaks, overcrowded households pose a higher risk of exposure to TB bacteria. This risk is exacerbated by poor ventilation, inadequate natural light, and lack of hygiene. Research has shown that TB incidence is closely linked to crowded

living conditions, emphasizing the importance of well-ventilated homes to prevent the spread of the disease (Baker M. et al., 2008; Du C. et al., 2019). Therefore, ensuring adequate ventilation in households is strongly recommended to reduce the risk of TB transmission.

According to the Philippine Statistics Authority (PSA) Census of 2020, the average household crowding index of Filipino households ranges from 4 to 5 persons per household. Health workers described that families in poor neighborhoods in their barangays typically have an average of five persons per household. In some cases, the increase in the number of households is due to multiple households sharing the same physical house. Some participants mentioned that it is common for more than two extended families to share a single house. One elderly participant mentioned that they reside in the household of their relative due to convenience, as they work in San Dionisio, while their actual residence is in Naic, Cavite. They said, *"I am staying with my cousin... My child and I work here, so we live there. We only go home to Naic occasionally."* The participants' narratives shed light on the housing situations of vulnerable families in the two areas.

Perceived stigma and discrimination were prevalent among all participants, with many expressing feelings of shame in the event of developing TB. Most participants identified healthcare workers from the health center and their spouses or family members as the first individuals they would confide in if they were to contract TB. However, some participants admitted that they would still feel uncomfortable sharing their condition if they were to contract TB.

Excerpts from the FGD include statements such as: *"...if possible, I will just keep it to myself, but if someone finds out, it might be the doctor or my wife,"* shared by a tricycle driver; *"It is difficult because if others find out, they will avoid you, I have experienced that feeling of being avoided by people,"* shared by a participant who had TB; *"I will tell my family so I do not infect them, but not others, especially if the neighbors find out, we will all be shunned..."* shared by an elderly participant; *"...maybe I will feel pity for someone with TB, but if you find out that someone I am with has TB, you might not be disgusted, but you will still avoid them,"* shared by another tricycle driver.

Stigma and discrimination surrounding Tuberculosis (TB) are significant challenges that affect individuals, families, and communities. Most especially to prevent the incidence of TB. One study concurs with the participants' perceived stigma and discrimination. According to Chen (2021), stigma among TB patients is high, hence resulting in anxiety, poor social support, and less patience among health workers. With the persistence of stigma relevant to the experiences of communities in Pampanga, delayed seeking of medical treatment was due to expectations to be discriminated against, shunned, and isolated in the event they are diagnosed with TB disease (Zimmerman et al., 2022).

The participants discussed perceived self-care practices to prevent TB. Most participants emphasized the importance of maintaining a healthy diet as a preventive measure against TB. Among elderly participants, many highlighted the significance of dietary choices, specifically mentioning fruits and vegetables as essential sources of nutrition. They emphasized the importance of consuming whole foods rather than relying on instant options. Additionally, several participants mentioned the importance of achieving work-life balance, managing stress, and dedicating sufficient rest, sleep, and recreation time. For instance, a tricycle driver stated, *"...times have changed; you need to focus on work if you want to provide for your family's needs, but it's still important to make time for rest..."* An elderly participant shared, *"The problem is, stress can weaken the body, so it's important to also have time for enjoyment..."*

Several elderly participants concurred that engaging in physical activities to maintain both physical and mental health is crucial for preventing TB. *"You know, even though we're old, we shouldn't be lacking in things to do... for exercise, we go out for walks,"* one elderly participant remarked, while another highlighted the importance of remaining active despite age, stating, *"...her (while referring to a co-participant), even though she uses a cane, still goes out for walks... it is important to keep moving even for us seniors."* Additionally, one participant noted that elderly individuals who lack mobility are more susceptible to TB, stating, *"You will get sick too if you're a senior and can't move anymore... bedridden."* On the other hand, the majority of elderly individuals and tricycle drivers agreed that quitting smoking can significantly reduce the risk of contracting TB. One participant emphasized that quitting smoking not only benefits the smoker but also those around them. In terms of lifestyle factors, the literature

identifies various activities that can lower the risk of TB, including practicing good hygiene, maintaining a healthy diet, getting enough sleep, managing stress, engaging in regular exercise, refraining from smoking and receiving vaccinations (Singh M., 2023; CDC, 2011; & DOH, 2023).

Along with early detection and treatment – while participants expressed fear of the stigma associated with TB if they were to contract the disease, they strongly emphasized the importance of seeking early medical care. Most participants highlighted the significance of seeking medical assistance upon experiencing signs and symptoms. *“If you feel something, you should see a doctor,”* shared one elderly participant, while another stated, *“TB is not as scary now as it used to be. Unlike cancer and diabetes, TB treatment is free and can be cured.”*

The experience of a tricycle driver who had TB illustrates the importance of early detection and treatment. Seeking medical attention earlier when one is still strong is the best option, but in the participant’s case, they sought medical care when it was already late. *“I thought, maybe if I had sought medical attention when I first had symptoms, I wouldn’t have deteriorated... looking at me now, I’ve gained weight (referring to their previously skinny build); I lost so much weight when I had TB... I could not even move. They had to carry me to the hospital.”*

Many participants agree that visiting the health center should be a regular activity, especially for those susceptible to TB infection. One elderly individual emphasized, *“It is a big help for us seniors to be able to go to the health center, especially since we have various health concerns.”* Conversely, there are a few participants who shared that knowledge about TB can help individuals make better decisions about their health. One tricycle driver expressed their thoughts, saying, *“For me, it is important that we have this kind of meeting today, where we talk about TB. I think it’s a big help to everyone if more people can participate in these meetings.”*

On the healthcare service side, early detection of TB, especially among TB contacts, is a strategy to identify TB cases at an earlier stage and to prevent transmission. Early detection through TB contact investigation can lead to the identification of additional cases, particularly among vulnerable groups such as the elderly and children. Discussions with health workers revealed a focus on case finding, with one stating, *“We prioritize case finding... The patient and their contacts must be screened promptly.”* Another emphasized the importance of early detection for prompt treatment and prevention of further transmission, *“the earlier, the better, so they can be treated promptly and not spread the disease.”* Despite challenges like non-compliance, community health workers diligently conduct house-to-house visits. Similarly, comprehensive education, covering both cognitive and psychological aspects, is needed to encourage TB contacts to fully participate in early detection efforts until their diagnosis is confirmed (Putra W., 2019).

3.4 Access Points to Health Services and Information

Table 4 presents the thematic analysis of access points to health services and information. Under the Perception of Support Structure in the Barangay theme, subthemes include participants' perceptions of accessibility to health services, feelings of exclusion, and trust in health workers. Moreover, participants highly value the availability of free TB treatment. Access to health services and information prevents TB and maintains overall health. This presentation presents the participants' perceptions of the health programs and services available in their barangays. The overall theme from the findings is the participants' perceptions of support structure in the Barangay.

Table 4. Thematic analysis of access points to health service and information

THEME	SUBTHEMES
Perception of support structure in the Barangay	Accessible but not for “me”
	Trust and confidence towards the health workers
	High regards to available free treatment for TB

Participants' perception of the support structure in the Barangay varies, particularly regarding healthcare services. Many of the participants who work to earn a living expressed a preference for visiting the health center due to its accessibility and the fact that services are free. One tricycle driver emphasized, *“...given the hardships of life, it’s okay to have something free at the health center... it’s expensive to seek treatment at private facilities.”* This sentiment was especially strong among the elderly, who highly appreciated the availability of free services and commodities for

senior citizens at the health centers. One participant remarked, *"I no longer have a job – it is a big help that services at the center are free,"* another mentioned, *"...medicines, check-ups, and vitamins, everything is free."*

However, for those working in the informal sector, particularly the tricycle drivers, queuing at the health center is not feasible. Instead of waiting in line, they prefer to spend their time driving their tricycles to earn income. Additionally, the operating hours of the health center often conflict with their schedules. Two participants also mentioned the health center's cut-off time as another reason for choosing not to visit. A study conducted by the Philippine Institute of Development Studies (PIDS) identified access as one of the major barriers to early TB diagnosis among the poor in highly urbanized areas in the country (Reyes K., 2014). While TB programs and services are available, the limited time available to access them poses a challenge for participants.

Some of the sharing by tricycle drivers during the FGD included: *"Instead of lining up, we just opt to go out and drive..."* *"They also have cut-offs, so even if we go there after saving up for the day's fare, we can't line up anymore because it's already past the cut-off."* *"If you just waste your time lining up and then get cut off, your chance for earnings for the day will also go to waste; it's just a waste, right?"*

Participants who frequently visit or have engaged with the health center, mostly the elderly or those who have interacted with health workers, are confident that health workers are a good source of support regarding their health concerns. One barangay health worker shared that there are instances when people in the community refer to them as doctors, *"Sometimes, people call us BHWs, 'doctors.'"* BHWs serve as frontline workers on the ground in providing essential health services. They play a crucial role in the fight against TB and in promoting the primary healthcare approach to health empowerment by offering accessible and acceptable health services at the barangay level.

As they are aware of the TB program offered by the local health department, most participants expressed satisfaction with the availability of free TB treatment, stating, *"It's a big help."* Some participants mentioned a preference for receiving health check-ups from private providers due to convenience but acknowledged that it can be expensive. For instance, one tricycle driver participant shared, *"...in private clinics, you still have to wait, but not as long, and there's air conditioning."* Therefore, free treatment, check-ups, and medications are highly beneficial for long-term treatments like TB. Health workers also noted that several TB patients were initially referred from private facilities. *"We have patients who left us and went to private facilities, but we let them go because they will eventually come back to our center,"* mentioned by a BHW, recounting that TB patients will eventually access the free treatment as private services are costly. In Paranaque City, private care facilities refer TB patients to TB Directly Observed Therapy Shortcourse (TB DOTS) for laboratory tests and treatment.

4.0 Conclusion

Elderly residents and tricycle drivers in San Antonio and San Dionisio possess basic TB knowledge sourced largely outside of local health programs, necessitating action from health authorities. Empowering these communities with TB awareness enables early detection, prevention, and active participation in local TB control efforts. Specific contexts, like the household crowding in areas like San Antonio and San Dionisio, can exacerbate TB transmission and limit access to healthcare due to financial constraints. Discrimination against TB patients further compounds social and economic challenges, necessitating a community-wide effort to combat stigma. While the community values health centers and workers for primary health needs, addressing barriers like busy schedules requires accessible and flexible health programs. Bridging gaps through remote and onsite options can encourage individuals to prioritize their health and well-being. Understanding diverse factors such as culture, socioeconomic status, and education informs healthcare providers in tailoring services to meet the unique needs of vulnerable populations, necessitating culturally sensitive care, enhanced health literacy, and strategies to overcome access barriers, while also leveraging community-based information-sharing to disseminate accurate health information and address misconceptions.

5.0 Contributions of Authors

Kevin de Vera led the conception and design of the study, data collection and analysis, and writing the research report. Christine Censoro assisted in the conception and design of the study, data collection, and coordination work to ensure the success of data collection. The authors reviewed and approved the final work.

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7.0 Conflict of Interests

The authors declare no conflicts of interest about the publication of this paper.

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Management Support and Acceptance of the Implementation of Classroom Technology Integration Among Private School Teachers

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Abstract. This study evaluated the level of support provided to teachers in leadership, instructional practices, technology infrastructure, and professional development, and measured the extent of technology integration in classrooms. It also investigated the correlation between classroom technology integration, management support, and teachers' acceptance of technology. The study employed a quantitative, descriptive analytical approach. Findings indicate that teachers have a positive perception of technology integration, particularly when they receive robust support from school leaders, have access to adequate resources, and possess sufficient technological knowledge. Furthermore, the study reveals a significant relationship between management support and teachers' acceptance of technology integration in the classroom, underscoring the crucial role of administrative support in facilitating technology adoption in education. Based on these results, the study offers recommendations for policymakers, school leaders, and educators to enhance technology integration. Recommendations include developing comprehensive ICT policies, ensuring adequate support and resources for teachers, implementing mentorship and training programs, and fostering a culture of continuous professional development. The study highlights the importance of aligning management support with teachers' acceptance to effectively integrate technology and improve educational outcomes in private secondary schools.

Keywords: Classroom technology integration; Management support; Teacher acceptance; Private secondary schools; Educational technology.

1.0 Introduction

Technology integration has become an essential tool inside the classroom. As 21st-century learners adapt to the new way of learning, methodologies of teaching with ICT integration have also been widely used. It also shows that education has evolved from the traditional way of teaching. Teaching with technology is far way different from the old way of teaching since teachers have to incorporate technology in the class in such a way that the learners will also have to engage also to technology to make learning more possible. Research conducted by Hussain, Iqbal, & Akhtar (2010), determined the effectiveness of technology integration in the classroom towards learners' academic achievement. Allowing learning to have access to electronic whiteboards and software applications like Google Classroom helps learners to learn complex concepts and at the same time experience the world of technology advancement.

The 21st-century learners are so used to digital media, that teachers should also maximize the use of Information Communication Technology (ICT) so that teachers can gain the attention of the learners. These learners are curious by nature, and so teachers must fill in the gaps of their curiosity about concepts with the help of technology. Teachers' proficiency in using technology can deliver quality education and make their learners compete with the global standards of education. Integration of technology in the school relies on support from school Leaders, ICT

equipment availability, instructional materials, and adequate teacher training. Mirzajani et al. (2016) stated that teacher knowledge of ICT facilitates the learning of the learners. Additionally, DepEd has mandated the use of ICT in both public and private schools. It also emphasizes collaborative instruction and assessment processes.

The transition stage of technology-based instruction is crucial for teachers especially since they need to acquire this new skill (Tripple, 2010) to be able to deliver the lessons well to the learners. Due to the pandemic brought by COVID-19 great importance of technology was realized. This research was conducted by the ICT teachers in the divisions of Misamis Oriental and Valencia City. This study aims to widen the understanding of technology integration and acceptance among teachers in the Division of Valencia. Results from this study will provide information to administrators, teachers, and policymakers in guiding them on the crafting of training programs and support systems to facilitate effective technology integration and acceptance in private schools.

2.0 Methodology

2.1 Research Design

This study employed a quantitative research design. The data were collected from the sample in this study to assess their relative opinions and perceptions. This method required not just data collection, tabulation, and computation, but also data analysis and interpretation. Furthermore, the survey approach was utilized to determine management support and teachers' technology acceptance which influenced the implementation of technology integration in the classroom.

2.2 Research Participants

The respondents of this study were 176 private secondary school teachers in the division of Valencia City. To obtain the sample size, the researchers used Cochran's equation and arrived at the recommended sample size of 176 from 321 total population. Proportionate stratified random sampling was employed to get the appropriate number of respondents in every school. Then simple random sampling was applied in every school.

2.3 Research Instrument

The tool utilized in this study was a survey questionnaire which comprises three parts. Respondents' demographic profile was measured in the first part of the questionnaire. On the other hand, the adapted and modified survey questionnaire from Anup Kumar Das's "Survey Questionnaire Technology-Enabled Learning in Educational Institutions" was the second part. This second part of the survey questionnaire aimed to assess the degree of managerial backing on technology integration in the classroom on the aspects of leadership, instructional, technology equipment and facilities, and training. The third part was also an adapted and modified instrument from Ghavifekr and Rosdy's (2015) research on "Teaching and Learning with Technology: Effectiveness of ICT Integration in School". It was used to measure the extent of technology integration in the classroom. The last part was also an adapted and modified instrument from Agrupamento de Escolas de Atougua da Baleia – Portugal "Teacher Questionnaire on the Use of Information and Communication Technology (ICT)". This was used to assess the level of teachers' acceptance of technology.

2.4 Data Gathering Procedure

A letter of request to research the Division of Valencia was sent to the Schools Division Superintendent. Once the letter was approved, the permission letter was sent to the school principals of private secondary schools in the said division. The data was gathered through Google Forms. Although Google Forms were used by the researchers, consent was also provided to them. Their rights as respondents were also stated on the Google form and their act of volunteerism for this research will not have any effect on their performance as teachers. A Google form link was sent to the school heads. They were the ones who forwarded the link to the respondents. They were also given an assurance of the privacy of the data that they would provide.

2.5 Data Analysis

This study used multiple statistical methods to examine correlations between management support, teachers' technology acceptance, and classroom technology integration in private secondary schools. Descriptive statistics were also used to summarize how much management support was available and what the average level of acceptance among teachers was as well as classroom technology integration by providing mean scores and standard deviations for each indicator. Inferential statistics namely correlation analysis were then carried out to

probe these variables' relationships. Pearson correlation coefficients were then performed to determine the strength and direction of the relationships which indicated significant positive relationships between management support with classroom technology integration, as well as teacher's acceptance with management support.

2.6 Ethical Considerations

This research followed ethical guidelines to ensure the safety and confidentiality of the respondents' data. Before data collection, informed consent was obtained from all participants, who were provided with a consent form outlining the study's objectives and their voluntary participation. The researchers modified the survey questionnaires to fit the research context. The acknowledgment and citation of this adjustment were properly made in the research paper. All participants who agreed to participate in this study gave their consent to have their responses used for only scientific purposes without any doubt on how the researcher would protect confidentiality. More so, participants were assisted by guidance that helped them comprehend what was needed from them throughout the process of conducting a survey. This study has adhered to ethical standards and maintained credibility, transparency, and integrity as regards research ethics and conduct.

3.0 Results and Discussion

3.1 The Extent of Management Support in the Implementation of Classroom Technology Integration

In terms of Leadership

Table 1 shows teachers' perception of the extent of management support in the implementation of classroom technology integration in terms of Leadership.

Table 1. Descriptive statistics for management support in the implementation of classroom technology integration in terms of leadership

INDICATORS	MEAN	SD	INTERPRETATION
1. The leadership of the organization is active in participating in the implementation of Technology-Enabled Learning.	3.77	0.935	Large Extent
2. The senior management of the organization routinely evaluates the advancement of Technology-Enabled Learning.	3.63	1.011	Large Extent
3. The senior management of the organization consistently oversees and assesses the advancement of Technology-Enabled Learning.	3.63	1.011	Large Extent
4. The highest leadership within the organization is supportive of enabling faculty and staff to utilize technology for learning to accomplish academic objectives.	3.81	0.982	Large Extent
5. The top leadership of the organization actively encourages and motivates the faculty and staff to work to achieve academic goals..	3.81	0.982	Large Extent
Overall	3.73	0.984	Large Extent
Legend: 3.26 – 4.00 Large Extent 1.76 – 2.50 Small Extent			
2.51 – 3.25 Moderate Extent 1.00 – 1.75 Very Small Extent			

The result in Table 1 shows that support from school leaders is necessary for integrating technology to achieve quality learning experiences. The overall mean of 3.73 (SD-0.984) indicates a large extent of support contributed by the school leaders in integrating technology into the teaching-learning process. The respondents believed the significance of support given by the school leaders and its positive impact on the teaching and learning process. Teachers need more time and preparation for incorporating activities that would improve students' abilities with technology. The support from school leaders would motivate the teachers, thus tirelessly improving the quality of education through technological integration. On the other hand, table 2 shows teachers' perception of the extent of management support in the implementation of classroom technology integration in terms of Instruction

In terms of Instruction

Table 2. Descriptive statistics for management support in the implementation of classroom technology integration in terms of instruction

INDICATORS	MEAN	SD	INTERPRETATION
1. A comprehensive Technology-Enabled Learning curriculum is thoroughly documented.	3.53	1.019	Large Extent
2. The Vision and Mission of the Technology-Enabled Learning program are harmonized with the organization's overarching mission.	3.70	1.016	Large Extent
3. The Vision and Mission of the Technology-Enabled Learning program are widely comprehended throughout the organization.	3.73	1.010	Large Extent
4. Institutional leaders are dedicated to leveraging technology to accomplish key academic objectives.	3.82	0.914	Large Extent
Overall	3.70	0.990	Large Extent

Table 2 presents the mean and standard deviation of management support levels regarding classroom technology integration, specifically focusing on Instruction. It has an overall mean of 3.70 (SD=0.990) which belongs to the range of Large Extent. The level of management support shows the success of technology integration in the classroom. Teachers may possess the necessary tools and training to integrate technology into their lessons only if they receive support from the district's leadership and school administration.

In terms of Technology Equipment and Facilities

Table 3 shows teachers' perceptions on the extent of management support in the implementation of classroom technology integration in terms of technology equipment and facilities.

Table 3. Descriptive statistics for management support in the implementation of classroom technology integration in terms of technology equipment and facilities

INDICATORS	MEAN	SD	INTERPRETATION
1. Sufficient hardware infrastructure is available for teaching and learning purposes, including student and learner access to computers.	3.31	0.935	Large Extent
2. Adequate online and offline applications and software are always accessible for teaching and learning needs. It includes the availability of the appropriate software, intranet access, and a Learning Management System.	3.32	1.011	Large Extent
3. The organization acquires adequate networking infrastructure that ensures sufficient access to bandwidth for its operations.	3.27	1.011	Large Extent
4. Robust policies and procedures are in place to safeguard privacy and organizational data, providing adequate protection for sensitive information.	3.52	0.982	Large Extent
Overall	3.36	0.982	Large Extent

The findings in Table 3 show the overall mean of 3.36 (SD=0.982), which is described as a Large Extent. Providing adequate resources like technology funds, infrastructure and equipment, regular maintenance, and technical support, should be part of management support. Teachers' preparation is essential in the fulfillment of the goal of technology integration in the classroom instructions. This would not be possible without access to equipment and facilities. Fortunately, the private schools are doing their best to provide the needed equipment and facilities, as shown in the table above. Lack of computers, poor internet connectivity, printer and computer malfunctions, computer virus attacks, and other difficulties were identified as major barriers to technology integration (Pelila et al., 2022). This is also supported by the studies of (Dela Rosa, 2016; Ghavifekr & Rosdy, 2015; Noori, 2019) that schools with a lack of computers, printers, and other learning and teaching tools is one of the major issues.

In terms of Training

Table 4 shows teachers' perceptions on the extent of management support in the implementation of classroom technology integration in terms of training.

Table 4. Descriptive statistics for management support in the implementation of classroom technology integration in terms of training

INDICATORS	MEAN	SD	INTERPRETATION
1. Faculty members possess qualifications and receive training to effectively utilize technology for teaching and learning.	3.61	1.031	Large Extent
2. To keep faculty and staff updated on technological advancements, they are provided with regular training.	3.30	1.088	Large Extent
3. To provide support for Technology-Enabled Learning initiatives, sufficient staff members are available.	3.30	1.123	Large Extent
4. A structured framework was established by the organization to create teams who are responsible for content development and delivery of Technology-Enabled Learning	3.34	1.052	Large Extent
5. Faculty members have adequate confidence in the support provided by instructional designers and technology support staff during the development and delivery of courses.	3.39	1.106	Large Extent
6. The IT staff members are highly skilled and they receive ongoing training to provide necessary support effectively.	3.58	1.108	Large Extent
Overall	3.42	1.084	Large Extent

Table 4 illustrates the level of management support regarding classroom technology integration, particularly in training, with an overall mean of 3.42 (SD=1.084). It belongs to the range of Large Extent. Effective use of technology in the classroom is effective if teachers have enough knowledge of the use of technology equipment. Pelila et al. (2022) underscored the importance of enhancing digital pedagogies, implementing policies to foster digital literacy, revising school curricula, and conducting more ICT development training sessions and seminars

to facilitate technology integration in classrooms. Technology plays a vital role in the classroom. Its use is no longer optional, rather, it is a requirement to unlock possibilities of ineffective teaching and learning processes. Training emerges as an essential in technology integration in the classroom. Teachers' knowledge is an essential element in integrating well technology in class discussions. Their comfort in using it comes from, training, seminars, and workshops. Their computer skills, capabilities, and attitudes required in using ICT come from the knowledge that teachers gain from their training. (Singhavi & Basargekar, 2019).

3.2 The Extent of Classroom Technology Integration of Private School Teachers

Table 5 shows teachers' perceptions of the extent of the classroom technology integration of private school teachers.

Table 5. Descriptive statistics for classroom technology integration of private school teachers

INDICATORS	MEAN	SD	INTERPRETATION
1. I feel optimistic about acquiring new technology skills.	3.56	0.541	Large Extent
2. I find it more convenient to use ICT in teaching.	3.52	0.565	Large Extent
3. I know that ICT offers a lot of potential opportunities for more efficient teaching and learning.	3.64	0.515	Large Extent
4. I think that teaching with the use of ICT can make learning more effective.	3.65	0.512	Large Extent
5. I think that using ICT aids in the improvement of teaching with more updated materials.	3.65	0.512	Large Extent
6. I think that using ICT leads to a more developed quality of teaching.	3.60	0.546	Large Extent
7. I think that using ICT helps prepare efficient teaching resources and materials.	3.65	0.512	Large Extent
8. I think that using ICT allows students to be more dynamic and involved in the lesson.	3.59	0.548	Large Extent
9. I think that using ICT gives me more time to address my students' needs.	3.35	0.641	Large Extent
10. I am still capable of teaching effectively even without ICT.	3.21	0.722	Moderate Extent
Overall Mean	3.54	0.561	Large Extent

Table 5 shows that the respondents had a large extent in classroom technology integration, as indicated by the overall mean of 3.54 (SD=0.561). This means that respondents are more engaged in technology integration in their classrooms. They must know how to use ICT in promoting higher-order thinking skills in all subject areas. This requires extensive and ongoing exposure to ICTs to evaluate and select the most appropriate resources to be integrated into every topic. If teachers integrate well ICTs in their classes, they have the great possibility of developing globally competitive students.

3.3 The Extent of Acceptance on Classroom Technology Integration of Private School Teachers

Table 6. Descriptive statistics for acceptance on classroom technology integration of private school teachers

INDICATORS	MEAN	SD	INTERPRETATION
1. I utilize online browsing and searching to gather pertinent information in preparation for my lessons.	3.53	0.622	Very High Acceptance
2. I utilize internet browsing and searching to gather articles, as well as video and audio clips, for incorporation into my lessons.	3.54	0.649	Very High Acceptance
3. I create my lesson presentation using Canva, Keynote, and others.	3.30	0.704	Very High Acceptance
4. I consistently make my digital learning materials for my students.	2.82	0.798	High Acceptance
5. I assess and evaluate students using a variety of activities such as (Kahoot, Notability, Popplet, etc.)	2.74	0.907	High Acceptance
6. I post homework on Google Classroom and other social networking platforms.	2.49	0.974	Low Acceptance
7. I require my students to submit their assignments through email or other networking platforms.	2.51	1.008	High Acceptance
8. I evaluate my students' progress and/or provide feedback via email and other social networking sites.	2.24	0.968	Low Acceptance
9. I carefully select digital learning resources (graphics images, video/audio clips, slides, animations, etc.) in the subject that I teach.	3.13	0.873	High Acceptance
10. I communicate online (Messenger, Skype, Viber, etc.) with parents to raise concerns about their child's performance in my class and/or in school.	3.12	0.870	High Acceptance
11. I download/browse materials from educational websites and platforms.	3.31	0.770	Very High Acceptance
12. I extend my classroom activities using social networking sites like Facebook, Twitter, Instagram, and others.	2.61	0.950	High Acceptance
13. I allow my students to use their smartphones to access topics discussed in class.	2.76	0.975	Low Acceptance
14. To reinforce my lesson, I use audio and video clips..	3.07	0.842	High Acceptance

15. To allow my students to post their journal entries, reflections, and journals, I require them to make a Blog account (Blogger, Tumblr, Pinterest).	2.28	1.014	Low Acceptance
Overall	2.90	0.862	High Acceptance

Table 6 shows that the overall mean is 2.90 (SD=0.862). It indicates a high level of acceptance of classroom technology integration among the respondents. Technology acceptance is very great importance to teachers, especially in the teaching-learning process. This claim is confirmed by Andoh's (2012) research, in which he states that the positive attitude of teachers towards the use of technology plays a large role in the success of its integration in the class.

3.4 Relationship between Classroom Technology Integration and Management Support

Table 7 shows the correlation result between the extent of classroom technology integration on management support.

Table 7. Correlation analysis between classroom technology integration and management support

INDICATORS	r-value	p-value	DESCRIPTION
Leadership	0.226**	.003	Significant
Instruction	0.201**	.007	Significant
Technology equipment and facilities	0.192*	.011	Significant
Training	0.285**	.000	Significant

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

The data in Table 7 revealed a significant correlation between classroom technology integration and management support. The null hypothesis then is rejected. This indicates that increased support from higher management enhances the probability of teachers integrating technology into their classrooms. This is supported by Chiu's (2022) study revealing that teachers' motivation to integrate technology in the classroom, leadership, and peer support is essential. Meanwhile, table 8 shows the correlation result between the level of teachers' acceptance and management support.

3.5 Relationship between Acceptance of Classroom Technology Integration and Management Support

Table 8. Correlation analysis between acceptance of classroom technology integration and management support

INDICATORS	r-value	p-value	DESCRIPTION
Leadership	0.424**	.000	Significant
Instruction	0.407**	.000	Significant
Technology equipment and facilities	0.342**	.000	Significant
Training	0.400**	.000	Significant

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

The data in Table 8 revealed that there is a significant relationship between classroom technology integration and management support with a p-value of .000. The null hypothesis, is therefore rejected. It implies that higher levels of support from management are associated with greater acceptance of technology integration among teachers. These findings were supported by the research conducted by Mirzajani et al. (2015), which underscored the essence of leadership support, sufficient knowledge of the teachers in using ICT in their classroom, and maximizing its use to make lessons more enjoyable. Further, the study highlighted the influence of technical support and quality equipment availability in the school. The support that the teachers gain will enable them to have sufficient courage to accept the implementation of the use of ICT.

3.6 Relationship between Classroom Technology Integration and Acceptance

Table 9 shows the correlation result between the extent of classroom technology integration and level of acceptance among teachers. The data in Table 9 revealed a significant relationship between classroom technology integration and the level of acceptance among private school teachers. The null hypothesis was rejected. This finding is connected with research conducted by Fathema et al. (2015), regarding the extension of the technology acceptance model to measure how teachers use learning management systems the use of structural equation modeling

showed a positive correlation between teachers' perception of the ease of use on technology and attitudes toward it.. Similarly, Hero (2020) observed a significant correlation between teachers' preparedness and acceptance of ICT integration and their actual ICT integration practices.

Table 8. Correlation analysis between the extent of classroom technology integration and level of acceptance

INDICATORS	r-value	p-value	DESCRIPTION
Test of the relationship between the extent of classroom technology integration and level of acceptance among private school teachers	.379**	.000	Significant
**Correlation is significant at the 0.01 level (2-tailed).			
*Correlation is significant at the 0.05 level (2-tailed).			

4.0 Conclusion

The study's findings showed that the private school teachers in Valencia City had positive attitudes toward incorporating technology integration into their classrooms. This result is based from the guidance and support that teachers receive from their school leaders, access to all technology resources, and the opportunities they receive for professional development. The study's theoretical framework helped in understanding the level of acceptance of technology integration. It indicates that teachers are more inclined to embrace technology when they see it as beneficial in developing the job performance of the teachers and in delivering quality education to students. Moreover, this study underscored the impact of management support and teachers' acceptance on the success of technology integration incorporated by teachers in the classroom. These findings underscore that the linkages of teachers and leaders are essential especially since teachers need the support and the school leaders for them to have the confidence to promote the positive effect of technology on learners' outcomes. Additionally, the study also highlights that teachers need to have sufficient knowledge on handling the use of technology in the classroom to maximize its use, especially on the applications and software that are essential in delivering the class discussion.

5.0 Contributions of Authors

The authors affirm that each section received equal input from all contributors, and collectively reviewed and endorsed the final manuscript.

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The authors have no conflicts of interest regarding the publication of this paper.

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Assessing Teachers' Readiness for Mathematics Instruction: Insights from Student Perspectives

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Abstract. This study evaluated the perceived readiness of Mathematics teachers at Luuk National High School from the perspective of their students. Utilizing a descriptive-correlational research design, the study included 100 student respondents selected through purposive sampling. Key findings are as follows: The majority of the 100 student respondents are female, within the typical age range for junior high school, and evenly distributed across the four grade levels. Their parents generally have average educational attainment and low-income levels. Students perceive their teachers as frequently prepared to teach Mathematics across three main areas: understanding of student needs in Mathematics, strategies for engaging students, and the implementation of instructional practices. No significant differences were observed in perceived teacher readiness based on students' age, gender, parental education, or family income, except grade level. There is a significant positive correlation among the subcategories of teacher readiness, except between understanding student needs in Mathematics and engagement strategies. The study offers several recommendations: School administrators should enhance support and resources for Mathematics teachers through professional development, mentoring, feedback, and recognition. Mathematics teachers are encouraged to deepen their understanding of student needs, refine their instructional strategies, and collaborate with colleagues to share best practices. Parents should actively support their children's Mathematics education, especially given the low income and educational levels within the community. Students should value and leverage the readiness and resources provided by their teachers. Future research should investigate additional factors influencing teacher readiness, such as school culture, curriculum, assessment methods, and technological integration.

Keywords: Teachers' readiness; Mathematics teaching; Mathematics knowledge; Instructional practices.

1.0 Introduction

Being a teacher in a public school has several challenges. Numerous tasks need to be completed. Completing paperwork is one thing; delivering high-quality instruction is quite another. This study examines how students perceive their teachers' preparedness to teach mathematics. Teachers in elementary schools need to be proficient in the fundamentals of science, math, reading, and social studies. High school instructors need to be extremely knowledgeable about their field of specialization because they typically only focus on one or two subjects. Teachers must understand how kids learn as well (Deal, 2022).

While the mastery of Mathematics is far-fetched, learning some of its basic concepts is beyond someone's reach (Talikan, 2021). The issues facing instructors in the twenty-first century are growing exponentially, even with the rising importance that Information and Communications Technology (ICT) gained in the teaching and learning of mathematics in the last quarter of the twentieth century. Instructors now have to deal with a generation of pupils that grew up in a digital age, using a variety of gadgets and having access to the internet from a young age (Sanchez et al., 2020).

Education is essential to the growth of individuals and society as a whole, and mathematics is a cornerstone of the academic domain (Talikan, 2024). In addition to imparting knowledge, teachers are now expected to support their students' holistic development, which includes developing digital literacy. This concept has multiple definitions, some of which connect it to other forms of literacy including media literacy, data literacy, reading literacy, or mathematics literacy (Muniz-Rodriguez et al., 2020).

To effectively target instruction toward kids' learning requirements, teachers must be aware of the distinct skills that each child brings to the classroom. Lesson planning should take into account students' medical and/or learning needs, and the teacher should have an updated record-keeping system. An evaluation of the pupils' cognitive growth is made by the teacher (Perth, 2022). Educators must be aware of factors including a student's variances in appearance, IQ, perception, gender, ability, and learning style. Taking into account the specific variations of each student can help plan an efficient and fruitful learning and teaching process (Dunn, 2023).

Based on the initial review of the literature, it was found that there is a limited study conducted on this topic. Thus, this study investigated the perception of the students on the teachers' readiness towards teaching mathematics at Luuk National High School.

2.0 Methodology

2.1 Research Design

This study utilized a descriptive-correlational research design to gather and analyze quantifiable data from a sample population. Descriptive-correlational research is effective for identifying patterns, connections, and trends over time using statistical analysis of data obtained from surveys, polls, and experiments (Kohn, 2023). Surveys, in particular, are a quantitative method for collecting information from respondents by asking structured questions (Braun, 2022).

2.2 Research Participants

The study was conducted at Luuk National High School in the Sulu II District, which has 26 faculty members and a total enrollment of 2,360 students across all grade levels. Purposive sampling was employed to select participants for the study. This non-probability sampling technique relies on the researcher's judgment to choose participants who are most likely to provide relevant and reliable information. It is also known as judgmental or expert sampling (Braun, 2022).

2.3 Research Instrument

The research instrument consisted of two parts. Part I collected demographic information from the respondents, including their name (optional), age, gender, grade level, parents' highest educational attainment, and parents' average monthly income. Part II comprised 10 statements designed to gauge students' perceptions of their teachers' readiness to teach Mathematics. These statements assessed three areas: teachers' knowledge of students in Mathematics, strategies for engaging students, and application of instructional practices. Respondents rated each statement on a five-point scale ranging from "always ready" to "not ready."

2.4 Data Gathering Procedure

The survey questionnaire was distributed to the selected respondents and subsequently collected by the researcher.

2.5 Data Analysis

The data were analyzed using both descriptive and inferential statistical tools. Descriptive statistics included frequency, percentage, mean, and standard deviation. Inferential statistics involved the use of t-tests, Analysis of Variance (ANOVA), and Pearson product-moment correlation to determine relationships and differences within the data.

3.0 Results and Discussion

3.1 Demographic Profile of Respondents

Table 1. Descriptive statistics of student respondents' demographic profile

	FREQUENCY	PERCENTAGE
Age		
13 years old and below	34	34%
14-15 years old	26	26%
16-17 years old and above	35	35%
18 years old and above	5	5%
Gender		
Male	33	33%
Female	67	67%
Grade Level		
Grade 7	25	25%
Grade 8	25	25%
Grade 9	25	25%
Grade 10	25	25%
Parents' Highest Educational Attainment		
No formal education	29	29%
Elementary graduate	38	38%
High school graduate	20	20%
College Graduate	13	13%
Parents' Average Monthly Income		
5,000 and below	68	68%
5,001 to 10,000	20	20%
10,001 to 15,000	7	7%
15,001 and above	5	5%

Table 1 presents the demographic profile of the student-respondents in Luuk National High School in terms of age, gender, grade level, parents' educational attainment and parents' average monthly income. The table indicates that out of 100 student-respondents, the majority are either 13 years old and below or 16 to 17 years old, with 34% (34) and 35% (35) respectively, followed by 14 to 15 years old, with 26% (26). Only a few are 18 years old and above, with 5% (5) only. This implies that most of the student-respondents are in the typical age range for junior high school and that there are fewer students who are older than the average. The table also indicates that out of 100 student-respondents, it highly concentrated toward females who make up 67% (67), while males account for 33% (33). This implies a higher participation or representation of female student-respondents in the surveyed group. Moreover, out of 100 student-respondents, they are evenly distributed across the four grade levels, with each grade level having 25 respondents or 25% of the total. This means that the sample is balanced and representative of the population of the school. Furthermore, the table indicates that out of 100 student-respondents, the majority of the student-respondents' parents are elementary graduates who make up 38%, followed by those with no formal education (29%), high school graduates (20%), and college graduates (13%). This means that most of the student-respondent' parents have not completed secondary or tertiary education which may influence their perceptions on teachers' readiness towards teaching Mathematics. In addition, the table indicates that out of 100 student-respondents, the majority of the student-respondents' parents have an average monthly income of 5,000 and below, followed by those parents earning from 5,001 to 10,000. Only a few parents are earning 10,001 to 15,000, with 7% (7), and 15,001 and above, with 5% (5). This implies that most of the students come from households with a monthly income of 5,000 and below, which belong to the low-income class. In summary, of the 100 student-respondents, mostly are female, in the typical age range for junior high school, and evenly distributed across the four grade levels. Their parents have average levels of educational attainment and low level of income.

3.2 The Extent of Teachers' Readiness Towards Teaching Mathematics as Perceived by Students

In terms of Knowledge of the Students

Table 2 shows the extent of teachers' readiness towards teaching Mathematics at Luuk National High School as perceived by the students in the context of Knowledge of the Students in Mathematics. The result shows that the total mean score is 4.458, which indicates an overall rating of "Often Ready". This means that on average, the student-respondents' perceptions are that their teacher's knowledge of the students in mathematics is often ready for the extent of teachers' readiness towards teaching Mathematics. The total standard deviation is 0.5564,

which indicates that there is some variation among the student respondents in their agreement with the statements.

Table 2. Descriptive statistics of teacher's readiness towards teaching mathematics in terms of knowledge of the students

INDICATORS	MEAN	SD	RATING
1. Our teacher knows how each topic will be taught.	4.69	0.748	Always Ready
2. Our teacher is very knowledgeable about the subject.	4.61	0.815	Always Ready
3. Our teacher makes productive use of assessment.	4.25	0.947	Often Ready
4. Our teacher has a mastery of the content of the subject.	4.58	0.831	Always Ready
5. Our teacher has a thorough knowledge and understanding of his/her area of specialty.	4.53	0.881	Always Ready
6. Our teacher tries his/her best to apply the lesson in real-life situations.	4.22	0.970	Often Ready
7. Our lessons are well organized and in sequence.	4.55	0.857	Always Ready
8. Our teacher connects the subject with the student's previous knowledge.	4.04	1.100	Often Ready
9. Our teacher is effective and efficient at organizing the subject matter.	4.49	0.948	Often Ready
10. Our teacher has a deep understanding of the subject he/she teach.	4.62	0.826	Always Ready
Total	4.46	0.556	Often Ready

Legend: 4.50-5.00 = Always Ready (AR), 3.50-4.49 = Often Ready (OR), 2.50-3.49 = Sometimes Ready (SR), 1.50-2.49 = Rarely Ready (RR), 1.00-1.49 = Not Ready (NR)

The mean scores indicate that student-respondents perceive that their teacher is often ready to make productive use of assessment, to apply the lesson in real-life situations, to connect the subject with the student's previous knowledge, and to organize the subject matter. They also perceive that their teacher is always ready to teach the topic, organizes the lesson well, is knowledgeable about the topic, has a mastery of the content of the subject, has a thorough knowledge of his/her area of specialty, and has a deep understanding of the subject he/she teaches. The highest mean score is 4.69, which corresponds to the statement "Our teacher knows how each topic will be taught." This implies that the student-respondents think that their teachers know how to teach each topic effectively. The lowest mean score is 4.04, which corresponds to the statement "Our teacher connects the subject with the student's previous knowledge." This implies that the student-respondents think that their teachers are often ready to connect the subject with their previous knowledge.

In terms of Strategies for Dealing with Students

Table 3. Descriptive statistics of teacher's readiness towards teaching mathematics in terms of strategies in dealing with the students

INDICATORS	MEAN	SD	RATING
1. Our teacher maintains an updated student records.	4.27	0.920	Often Ready
2. Our teacher incorporates medical and/or learning needs into lesson plans.	3.43	0.844	Sometimes Ready
3. Our teacher creates an assessment of the student's level of cognitive development.	3.73	1.221	Often Ready
4. Our teacher considers the individual differences of the students.	3.54	1.480	Often Ready
5. Our teacher takes time to know the learning styles of the students.	3.49	1.432	Sometimes Ready
6. Our teacher takes time to learn the cultural background of the students.	3.70	1.078	Often Ready
7. Our teacher demonstrates a genuine interest in learning about each student.	4.07	1.148	Often Ready
8. Our teacher helps establish trust and form a bond with the students.	4.06	1.196	Often Ready
9. Our teacher provides an equitable learning environment for all students.	3.97	1.210	Often Ready
10. Our teacher keeps a subject knowledge notebook for reference purposes.	4.52	0.904	Always Ready
Total	3.88	0.501	Often Ready

Table 3 shows the extent of teachers' readiness towards teaching Mathematics at Luuk National High School as perceived by the students in the context of strategies for dealing with the students. The result shows that the total mean score is 3.878, which indicates an overall rating of "Often Ready". This means that on average, the student-respondents' perceptions are that their teacher's strategies for dealing with students are often ready for the extent of teachers' readiness towards teaching Mathematics. The total standard deviation is 0.5008, which indicates that there is some variation among the student-respondents in their interest level.

The mean scores indicate that student-respondents perceive that their teacher is often ready to maintain an updated student records, to create an assessment of student's level of cognitive development, to consider individual differences of the students, to take time to learn the cultural background of the students, to demonstrates genuine interest in learning about each student, to helps establish trust and form a bond with the students, and to provide an equitable learning environment for all students. They also perceive that their teacher is always ready to keep a subject knowledge notebook for reference purposes, but sometimes ready to incorporate medical and/or learning needs into lesson plans, and to take time to know the learning styles of the students. The

highest mean score is 4.52, which corresponds to the statement “Our teacher keeps a subject knowledge notebook for reference purposes.” This implies that the student-respondents think that their teacher is always ready to update and review his/her subject knowledge. The lowest mean score is 3.43, which corresponds to the statement “Our teacher incorporates medical and/or learning needs into lesson plans.” This implies that the student-respondents think that their teacher is sometimes ready to accommodate the diverse needs of the students.

In terms of Application of Instructional Practices

Table 4. Descriptive statistics of teacher’s readiness towards teaching mathematics in terms of application of instructional practices

INDICATORS	MEAN	SD	RATING
1. Our teacher creates an effective teaching and learning environment for all students.	4.07	1.191	Often Ready
2. Our teacher has a specialized knowledge in creating effective teaching and learning environments for all students.	4.53	0.771	Always Ready
3. Our teacher has a mastery of the facts, theories, and principles in Mathematics.	4.37	0.906	Often Ready
4. Our teacher knows the principles of effective teaching and training practices.	4.52	0.858	Always Ready
5. Our teacher focuses on the prior experiences and knowledge of students.	2.86	1.700	Sometimes Ready
6. Our teacher focuses on the student learning styles and the developmental levels of the learner.	3.38	1.384	Sometimes Ready
7. Our teacher actively listens by encouraging students to ask open-ended questions.	4.73	0.694	Always Ready
8. Our teacher ensures that students learn academic content.	4.57	0.844	Always Ready
9. Our teacher facilitates discussions in the Mathematics classroom based on the thinking of students.	4.47	0.937	Often Ready
10. Our teacher gets the student's full attention before starting the lesson.	4.72	0.668	Always Ready
Total	4.22	0.392	Often Ready

Table 4 shows the extent of teachers’ readiness towards teaching Mathematics at Luuk National High School as perceived by the students in the context of the Application of Instructional Practices. The result shows that the total mean score is 4.222, which indicates an overall rating of “Often Ready”. This means that on average, the student-respondents’ perceptions are that their teacher’s application of instructional practices is often ready for the extent of teachers’ readiness towards teaching Mathematics. The total standard deviation is 0.392, which indicates that there is less variation among the student respondents in their interest level.

The mean scores indicate that student-respondents perceive that their teacher is often ready to create effective teaching and learning environments for all students, facilitate discussions in Mathematics classroom based on the thinking of students, has a mastery of the facts, theories, and principles in Mathematics. They also perceive that their teacher is always ready to listen by encouraging students to ask open – ended questions, to get the students full attention before starting the lesson, to ensure that students learn academic content, has a specialized knowledge in creating effective teaching and learning environments for all students, has knowledge on the principles of effective teaching and training practice, but sometimes ready to focus on the prior experiences and knowledge of students, and on the student learning styles and the developmental levels of the learner. The highest mean score is 4.73, which corresponds to the statement “Our teacher actively listens by encouraging students to ask open – ended questions.” This implies that the student-respondents think that their teacher is always ready to engage the students in meaningful dialogue and inquiry. The lowest mean score is 2.86, which corresponds to the statement “Our teacher focuses on the prior experiences and knowledge of students.” This implies that the student-respondents think that their teacher is sometimes ready to connect the new content with the existing knowledge of the students.

3.3 Difference in Teachers’ Readiness Towards Teaching Mathematics when According to Age Group

Table 5 presents the difference in the extent of teachers’ readiness towards teaching Mathematics at Luuk National High School as perceived by the students when they are grouped according to age. The variables include Knowledge of the Students in Mathematics, Strategies for dealing with Students, and Application of Instructional Practices. With the exception of students’ knowledge, the table demonstrate that all F-values and probability values are not significant at alpha 0.05. Thus, it follows that the perceptions of student respondents aged 13 and below on the extent of these variables do not differ from those of student respondents aged 14–15, 16–17, and 18 and above, or vice versa.

Table 5. Difference in teachers' readiness towards teaching mathematics when grouped according to age (ANOVA)

Sources of Variation		Sum of Squares	Df	Mean Square	F	Sig.	Description
Knowledge of the Students in Mathematics	Between Groups	5.853	3	1.951	7.555*	.000	Significant
	Within Groups	24.790	96	.258			
	Total	30.644	99				
Strategies for Dealing with Students	Between Groups	.878	3	.293	1.174	.324	Not Significant
	Within Groups	23.953	96	.250			
	Total	24.832	99				
Application of Instructional Practices	Between Groups	.965	3	.322	2.168	.097	Not Significant
	Within Groups	14.247	96	.148			
	Total	15.212	99				

*Significant at alpha 0.05

However, the perceptions of student-respondents aged 14-15 differ from those of student-respondents aged 13 and below, and 16-17, or vice versa when it comes to knowledge of the students in Mathematics, as shown in Table 6. This implies that the student-respondents perceive the extent of teachers' readiness towards teaching Mathematics at Luuk National High School in the same way regardless of their age, except for knowledge of the students in Mathematics. As a result, the hypothesis that reads, "when students are grouped according to age, there is no significant difference in the extent of teachers' readiness towards teaching Mathematics at Luuk National High School as perceived by the students," is accepted.

Table 6. Multiple comparisons of teachers' readiness towards teaching Mathematics by age (Tukey test)

Dependent Variable	(I) Grouping by Age	(J) Grouping Age	Mean Difference (I - J)	Std. Error	Sig.
Knowledge of the Students in Mathematics	14-15 years old	13 years old and below	-.39186*	.13239	.020
		16-17 years old	-.62396*	.13157	.000
		18 years old and above	-.43538	.24815	.302

*The mean difference is significant at the 0.05 level

When data are grouped according to students'/respondents' demographic profile in terms of age, a Post Hoc Analysis using the Tukey test is performed to determine which groups classified according to age have different levels of mean in the extent of teachers' readiness to teach mathematics. Regarding the student's mathematical knowledge, the data indicates that the mean difference between the 14 15 years old student respondents and the 13-17 years old student respondents was -.39186* with a Standard Error of .13239 and a p-value of .020, and the mean difference between the 16-17 years old student respondents and the Standard Error of .13157 and a p-value of .000, both significant at alpha 0.05.

According to Gender

Table 7. Difference in teachers' readiness towards teaching mathematics when grouped according to gender (T-test)

Variables	Grouping	Mean	SD	Mean Difference	T	Sig.	Description
Knowledge of the Students in Mathematics	Male	4.32	0.58	-0.204	-1.743	0.084	Not Significant
	Female	4.53	0.54				
Strategies for Dealing with Students	Male	3.92	0.45	.0554	.5190	0.605	Not Significant
	Female	3.86	0.53				
Application of Instructional Practices	Male	4.23	0.36	.0124	0.148	0.883	Not Significant
	Female	4.22	0.41				

*Significant at alpha 0.05

Table 7 presents the difference in the extent of teachers' readiness towards teaching Mathematics at Luuk National High School as perceived by the students when they are grouped according to age. The variables include Knowledge of the Students in Mathematics, Strategies for dealing with Students, and Application of Instructional Practices. The table shows that the mean difference and probability values for all variables are not essential at alpha 0.05. This means that the extent of these variables does not affect the perceptions of male and female student-respondents differently. This implies that the student-respondents perceive the extent of teachers' readiness

towards teaching Mathematics at Luuk National High School in the same way regardless of their gender. Thus, the hypothesis that reads, “when students are grouped according to gender, there is no significant difference in the extent of teachers’ readiness towards teaching Mathematics at Luuk National High School as perceived by the students.” is accepted.

According to Grade Level

Table 8. Difference in teachers’ readiness towards teaching mathematics when grouped according to grade level (ANOVA)

Sources of Variation		Sum of Squares	df	Mean Square	F	Sig.	Description
Knowledge of the Students in Mathematics	Between Groups	2.101	3	.700	2.356	.077	Not Significant
	Within Groups	28.542	96	.297			
	Total	30.644	99				
Strategies for Dealing with Students	Between Groups	4.252	3	1.417	6.611*	.000	Significant
	Within Groups	20.580	96	.214			
	Total	24.832	99				
Application of Instructional Practices	Between Groups	1.669	3	.556	3.944*	.011	Significant
	Within Groups	13.542	96	.141			
	Total	15.212	99				

Table 8 presents the difference in the extent of teachers’ readiness towards teaching Mathematics at Luuk National High School as perceived by the students when they are grouped according to grade. The variables include Knowledge of the Students in Mathematics, Strategies for dealing with Students, and Application of Instructional Practices. The table shows that the F-values and probability values for all variables, except for the knowledge of the students, are significant at alpha 0.05. This means that the perceptions of grade 8 student-respondents on the extent of these variables differ from those of grade 7, grade 9, and grade 10 student-respondents, or vice versa, as shown in Table 8. However, the perceptions of student-respondents do not differ when it comes to knowledge of the students in Mathematics. This implies that the student-respondents perceive the extent of teachers’ readiness towards teaching Mathematics at Luuk National High School differently depending on their grade level, except for knowledge of the students in Mathematics. Accordingly, the hypothesis that reads, “When students are grouped according to grade level, there is no significant difference in the extent of teachers’ readiness towards teaching Mathematics at Luuk National High School as perceived by the students.” is rejected.

Table 9. Multiple comparisons of teachers’ readiness towards teaching Mathematics by grade level (Tukey test)

Dependent Variable	(I) Grouping by Age	(J) Grouping Age	Mean Difference (I - J)	Std. Error	Sig.
Strategies for Dealing with the Students	Grade 8	Grade 7	.38800*	.13096	.020
		Grade 9	.16800	.13096	.576
		Grade 10	.54000*	.13096	.000
	Grade 9	Grade 7	.22000	.13096	.340
		Grade 8	-.16800	.13096	.576
		Grade 10	.37200*	.13096	.028
Application of Instructional Practices	Grade 8	Grade 7	.30800*	.10623	.024
		Grade 9	.12000	.10623	.672
		Grade 10	.30000*	.10623	.029

*The mean difference is significant at the 0.05 level

When data are grouped according to students’ demographic profile in terms of grade level, a Post Hoc Analysis using the Tukey test (Table 9) is performed to determine which groups, classified according to grade level, have different levels of mean in the extent of teachers’ readiness to teach mathematics. On strategies dealing with students, it demonstrates that, compared to grade 7 student respondents, grade 8 student respondents acquired a mean difference of .05400* with a standard error of .13096 and p-value of .000, and a mean difference of .38800* with the standard error of .13096 and p-value of .020, over grade 10 student-respondents, which are both significant at alpha 0.05. It also shows that grade 9 student-respondents obtained a mean difference of .37200* with a Standard Error of .13096 and p-value of .000 over grade 10 student-respondents which is significant at alpha

0.05. On application of instructional practices, it shows that grade 8 student-respondents obtained the mean difference of .30000* with a Standard Error of .10623 and p-value of .029 over grade 10 student-respondents, which is significant at alpha 0.05.

According to Parents' Highest Educational Attainment

Table 10. Difference in teachers' readiness towards teaching mathematics when grouped according to parents' highest educational attainment (ANOVA)

Sources of Variation		Sum of Squares	df	Mean Square	F	Sig.	Description
Knowledge of the Students in Mathematics	Between Groups	.161	3	.054	.169	.917	Not Significant
	Within Groups	30.482	96	.318			
	Total	30.644	99				
Strategies dealing with Students	Between Groups	.481	3	.160	.632	.596	Not Significant
	Within Groups	24.351	96	.254			
	Total	24.832	99				
Application of Instructional Practices	Between Groups	.380	3	.127	.819	.486	Not Significant
	Within Groups	14.832	96	.154			
	Total	15.212	99				

Table 10 presents the difference in the extent of teachers' readiness towards teaching Mathematics at Luuk National High School as perceived by the students when they are grouped according to parents' highest educational attainment. The variables include Knowledge of the Students in Mathematics, Strategies dealing with Students, and Application of Instructional Practices. The table shows that the F-values and probability values for all variables are not significant at alpha 0.05. This means that the perceptions of student-respondents whose parents are college graduates on the extent of these variables do not differ from those whose parents are elementary graduates, high school graduates, college graduates, and have no formal education, or vice versa. This implies that the student-respondents perceive the extent of teachers' readiness towards teaching Mathematics at Luuk National High School in the same way regardless of their parents' highest educational attainment. As a result, the hypothesis that reads, "When students are grouped according to parents' highest educational attainment, there is no significant difference in the extent of the teachers' readiness towards teaching Mathematics at Luuk National High School as perceived by the students." is accepted.

According to parents' average monthly income

Table 11. Difference in teachers' readiness towards teaching mathematics when grouped according to parents' average monthly income (ANOVA)

Sources of Variation		Sum of Squares	df	Mean Square	F	Sig.	Description
Knowledge of the Students in Mathematics	Between Groups	.161	3	.054	.169	.917	Not Significant
	Within Groups	30.482	96	.318			
	Total	30.644	99				
Strategies for Dealing with Students	Between Groups	.481	3	.160	.632	.596	Not Significant
	Within Groups	24.351	96	.254			
	Total	24.832	99				
Application of Instructional Practices	Between Groups	.380	3	.127	.819	.486	Not Significant
	Within Groups	14.832	96	.154			
	Total	15.212	99				

Table 11 presents the difference in the extent of teachers' readiness towards teaching Mathematics at Luuk National High School as perceived by the students when they are grouped according to parents' average monthly income. The variables include Knowledge of the Students in Mathematics, Strategies dealing with Students, and Application of Instructional Practices. The table shows that the F-values and probability values for all variables are not significant at alpha 0.05. This means that the perceptions of student-respondents whose parents' average monthly income ranges from 5,000 and below on the extent of these variables do not differ from those whose parents' average monthly income ranges from 5,001 to 10,000, 10,001 to 15,000, and 15,001 and above, or vice versa. This implies that the student-respondents perceive the extent of teachers' readiness towards teaching Mathematics at Luuk National High School in the same way regardless of their parents' average monthly income. Thus, the

hypothesis that reads, “When students are grouped according to parents’ average monthly income, there is no significant difference in the extent of teachers’ readiness towards teaching Mathematics at Luuk National High School as perceived by the students.” is accepted.

3.4 Relationship among Sub-Categories Subsumed under Teachers’ Readiness

Table 12 presents the correlation among the sub-categories subsumed under the extent of extent of the teachers’ readiness towards teaching Mathematics as perceived by the students. The table shows that the computed Pearson correlation Coefficients (Pearson r) between these variables, except between Knowledge of the Students in Mathematics and Strategies dealing with Students, are significant at alpha 0.05.

Table 12. Pearson correlation analysis among sub-categories subsumed under teachers’ readiness

Variables		Pearson r	Sig.	N	Description
Dependent	Independent				
Knowledge of the Students in Mathematics	Strategies for Dealing with Students	.121	.229	100	Low
	Application of Instructional Practices	.384*	.000	100	Moderate
Strategies for Dealing with Students	Application of Instructional Practices	.453*	.000	100	Moderate

*The correlation coefficient is significant at alpha .05

Specifically, the degree of correlations among the sub-categories subsumed under the extent of teachers’ readiness towards teaching Mathematics as perceived by the students are: a) moderate positive correlations between Knowledge of the Students in Mathematics and Application of Instructional Practices, and b) moderate positive correlations between Strategies dealing with Students and Application of Instructional Practices.

This means that as one variable increases, the other variable also tends to increase, and that these relationships are not likely to be random. The strongest correlation is between Strategies dealing with Students and Application of Instructional Practices ($r = 0.453$, $p < 0.01$), which implies that student-respondents perceive their teachers as more ready to apply effective instructional practices when they use appropriate strategies to deal with different student needs and situations.

The weakest correlation is between Knowledge of the Students in Mathematics and Application of Instructional Practices ($r = 0.384$, $p < 0.01$), which implies that student-respondents perceive their teachers as less ready to apply effective instructional practices when they have more knowledge of the students’ prior knowledge and needs in mathematics. The other correlations are not significant which means that there is no linear relationship between the variables. As a result, the hypothesis is that claims, “There is no significant correlation among the sub-categories subsumed under the extent of teachers’ readiness towards teaching Mathematics as perceived by the student,” is rejected.

4.0 Conclusion

Student-respondents are mostly typical junior high school students who come from low-income families with parents who are elementary graduates. Teachers at Luuk National High School have a high level of readiness for teaching Mathematics, as perceived by the students. The student-respondent perceive that their teachers are able to demonstrate their knowledge of the students’ prior knowledge, interests, abilities, and needs in mathematics, use appropriate strategies to deal with different student needs and situations, and apply effective instructional practices to enhance student learning. The student-respondents’ age, gender, parents’ highest educational attainment, and parents’ average monthly income have no significant influence on how they perceive the extent of teachers’ readiness towards teaching Mathematics, except for their grade level. Teachers’ knowledge of the students in mathematics and application of instructional practices, and strategies dealing with students and application of instructional practices are interrelated and influence each other in the readiness towards teaching mathematics. the only exception is knowledge of the students in mathematics, which do not show a significant relationship with strategies dealing with students. The findings of this study suggest various ways to improve. Teachers can benefit from professional development focused on differentiated instruction to meet the varying needs of students within a grade level. Additionally, incorporating student feedback on specific topics can help teachers identify areas for improvement. School administrators can target professional development programs based on student perceptions and consider implementing a peer coaching program to share best practices. Furthermore, curriculum developers can incorporate strategies for addressing diverse learning needs. Future

research should explore the role of parental involvement and conduct longitudinal studies to establish the connection between perceived teacher readiness and student achievement. By implementing these recommendations, schools can create a more positive and effective learning environment for all mathematics students.

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The author indicates an equal contribution to each part. The author examined and approved the completed work.

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Tracer Study of Education and Graduate Program Alumni (2016–2022) at Surigao Del Norte State University

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Abstract. Educational institutions strive to produce graduates who are competent and competitive both domestically and globally. This graduate tracer study investigated the employment outcomes of graduates from the College of Teacher Education (CTE) and Graduate School (GS) Programs from SY 2016–2022. Data collection methods included Google forms, surveys, and phone calls. Of the 2846 CTE graduates, 2491 (87.75%) were traced, and of the 659 GS graduates, 550 (83.45%) were traced. Findings revealed that CTE graduates were predominantly single females aged 24 or younger, who typically began working as permanent teachers at the Department of Education (DepEd) 2–3 years post-graduation, earning a base salary of P15,000–25,000. They generally served in these roles for 4–6 years. Conversely, GS alumni were primarily married men in their 30s, employed in permanent supervisory or managerial roles at DepEd, with monthly earnings between P25,000 and P50,000. Graduates reported that their university degrees were economically relevant and provided significant financial advantages. CTE graduates indicated that job satisfaction was more influenced by workplace interactions and environment than salary. The study suggests enhancing the use of social media to encourage graduate participation in tracer studies and recommends ongoing professional development for faculty to improve educational programs and prepare graduates with highly employable skills. Addressing job satisfaction disparities may require targeted interventions to improve educational programs, expand career development opportunities, and foster supportive work cultures tailored to each graduating class's needs.

Keywords: Graduate tracer study; Teacher education graduates; Employment outcomes.

1.0 Introduction.

Assessing the results and career paths of graduates is critical to determining the efficacy and applicability of academic programs in the dynamic world of higher education. Tracing the career paths, employment statuses, further education pursuits, and overall satisfaction of these graduates offer invaluable insights into the impact and outcomes of the educational offerings of the institution during this period. Through systematic data collection and analysis, this study aims to inform institutional decision-making, identify areas for program improvement, and contribute to the broader discourse on teacher education and graduate programs in higher education.

It is crucial to comprehend alumni's post-graduation trajectories to assess the value and efficacy of educational initiatives. This sets the stage for a tracer study focused on the graduates of the CTE and GS Programs at Surigao del Norte State University (SNSU) spanning the years 2016 to 2022. By examining the career paths, employment statuses, further education pursuits, and overall satisfaction of graduates, this study aims to provide insights into the impact and outcomes of the educational offerings at SNSU during this period. Through systematic data collection and analysis, the study seeks to inform institutional decision-making processes, contribute to program enhancement initiatives, and advance knowledge in the fields of teacher education and higher education.

One of the most important factors in adjusting to the changes brought about by the increasingly complex nature and problems of the twenty-first century is advanced higher education. For a considerable time, graduate education has been seen as a proactive and compassionate tool in the country's efforts to combat poverty and promote socioeconomic advancement. Instilling and fostering the relevant information, skills, attitudes, and values that each person needs to become a productive and valued member of society, as well as developing and cultivating the national development workforce, are its main goals (Daguplo et al., 2019). The investment in education will be viewed as "wasted" if graduates do not go on to play important social roles that allow them to financially support a government (de Ocampo et al., 2012).

The Philippine government is particularly concerned about underemployment and unemployment when compared to other Asian nations. The nation has been dealing with these same problems for many years. The ongoing labor force expansion and population boom constantly outpace the official generation of jobs. This issue has spread as more and more graduates from Philippine HEIs are graduating with degrees in business, engineering, health, science, agriculture, and many other fields; nevertheless, jobs are not produced at the same rate as the universities are awarding degrees (de Ocampo, Bagano, & Tan, 2012). Considering this disparity, educational establishments ought to collaborate with both the public and private sectors to ensure that recent graduates are placed in jobs that suit their qualifications. A successful transfer from school to the labor market will be achieved by emphasizing particular and well-targeted skills and effective coordination between universities and enterprises (Drine, 2017).

Academic instructors in the Philippines view graduate education as essential. A primary focus of the Department of Education (DepEd) is enhancing the quality of education by enabling teachers to retrain and upskill through professional development programs. In the meantime, the Commission on Higher Education (CHED) has implemented updated policies, standards, and guidelines (PSG) for graduate programs to fulfill 21st-century expectations while also helping to improve the quality of graduate education in the Philippines. To run educational programs, provide student services, and continuously enhance teaching and learning, education professionals must enhance their skills and competencies, as highlighted by the new PSG for graduate studies. Knowledge and technical skills, communication, leadership, research, and information and communication technology skills are only a few of these abilities. Graduate students gain these abilities and are self-assured in their ability to make decisions in a challenging job setting. By gaining these abilities, individuals can assess, explain, and identify more effective ways to carry out their duties and obligations (CHED, 2019). In their study, Gentova et al., (2023) found that graduate studies contributed significantly, that the delivery was highly satisfactory, and the graduate attribute practice contributed significantly. Meanwhile, important discoveries were revealed by qualitative data. Their talents, knowledge, skills, and qualities are developed through graduate education experiences, opening them to more career opportunities. Additionally, their contentment fosters the qualities of humility, Christian values, integrity, love, and the pursuit of perfection, all of which create ideals fundamental to both professional practice and life in general. This study also confirmed that the graduate school may use tracer studies to help them meet the accreditation and quality assurance measure requirements for a quality management system. Additionally, graduates' satisfaction promotes ongoing efforts to include alumni in transparent, mutually beneficial ways and disseminate knowledge to empower others and constructively use their influence to benefit the nation, the world, and the community.

The study conducted by Cuadra et al., (2019) revealed that most of the graduates were in their early 20s and had just recently graduated from the university. Furthermore, they were able to find a job through someone they knew. Most of the graduates work in fields connected to their individual degree programs. One of the key advantages of the undergraduate curriculum was its applicability to professional requirements for the degree program. Extracurricular activities and other optional classes were noted by the report as areas that require development. The school must prioritize student mobility, credit transfers, quality assurance, and research clusters to align with the ASEAN higher education system and enhance the current degree programs.

Surigao del Norte State University (SNSU), a higher learning institution, offers various programs and is established as the only state university under Republic Act 10600. It is now envisioned as a thriving, caring university that transforms communities and lives. By providing high-quality instruction, innovations,

productivity initiatives, industry- and environment-friendly technologies, resource mobilization, and outreach programs and services that alter communities, SNSU works to realize this vision.

As stressed by Gines (2014), the Philippine Qualifications Framework requires agencies such as DepEd, CHED, TESDA, PRC, and DOLE to assess, analyze, and suggest learning standards for higher education, technical skills development, and elementary education as well as for the alignment of licensing exams. The Commission on Higher Education of the Philippine Higher Education states that all HEIs should set up a method to guarantee the socioeconomic status of every graduate.

According to Ramanick et al., (2015), the graduates' achievement and realization of their specific goals and plans are crucial for assessing and upgrading training programs. Tracking of graduates will assist Colleges and universities update the current subjective evidence—"because the graduates and their parents tell them they have succeeded"—with the "hard data" those external evaluators are increasingly seeking. To guard off intrusive state thrusts, all universities and colleges need to develop a system of acquiring "hard data" as evidence.

A suitable topic for assessing the outcomes of the training and education given in the academic setting is graduate tracer study. It provides basic details regarding the whereabouts and work status of the graduates. The findings of this kind of research can give enough insight into how well education and training work for both companies and graduates.

A tracer study is an essential instrument for gathering information about alumni from any curriculum plan at higher education institutions, including Surigao del Norte State University. It provides valuable information for evaluating college outcomes, which can be used as a starting point for continuous quality assurance and development programs at educational institutions (Tutor et al., 2021). According to Woya (2019), these studies are excellent tools for assessing and improving the outcomes of graduate education programs, as well as their marketability and sustainability. Graduate programs and services need to be updated often to satisfy the demands of the global economy. This is because graduates' employability and job advancement in the global market are becoming increasingly important (Abulencia et al., 2021; Burke et al., 2017; Rowe, 2017).

Information regarding graduates of academic programs at higher education institutions (HEIs) is crucial, and this is provided via tracer studies. The results of tracer studies can be used to clarify or redefine the mission and market niche of a higher education institution (HEI) and to demonstrate how courses and programs can be tailored to meet institutional objectives. The outcomes can also be used by stakeholders to determine where to get experts. Ultimately, the assessment will create a framework for developing new and creative procedures and substantive curricula to complement the ones that already exist. These factors make this study prominent. Further, this tracer study aims to describe the outcomes and experiences of graduates after completing their degree programs at SNSU based on insights from comprehensive data.

2.0 Methodology

2.1 Research Design

This investigation employed a cross-sectional research design, enabling broader conclusions and informing policies or interventions in academia. It is instrumental in understanding and guiding evidence-based decision-making across various disciplines within academic institutions.

2.2 Research Participants

The study targeted graduates from the College of Teacher Education and the Graduate School of Surigao del Norte State University, spanning academic years 2016–2022. Population distributions of the graduates are detailed in Tables 1 and 2. Data were collected using the Graduate Tracking Survey (GTS) questionnaire, developed by the researcher.

2.3 Research Instrument and Data Gathering Procedure

Data collection involved a researcher-developed questionnaire assessing demographics (age, sex, marital status, degree program, graduation year), economic and industry relevance of the degree, and job satisfaction. A random sample of 50% of graduates per program was drawn from the Registrar's Office list. Respondents received the

Google Form questionnaire link via email from the ICT Office. Some graduates were contacted directly by researchers to ensure questionnaire completion, with additional follow-ups conducted via phone calls.

2.4 Ethical Considerations

Participation in the study was entirely voluntary. Respondents were assured of confidentiality, with personal information protected and used solely for research purposes. No identifiable information was disclosed.

2.5 Data Analysis

Data were analyzed using the following methods:

Frequency Count and Percentage. To describe the demographic profiles of respondents (age, sex, marital status, degree program, graduation year).

Mean and Standard Deviation. To assess respondents' job satisfaction.

Thematic Analysis. To evaluate the economic and industry relevance of the degree programs completed at SNSU.

3.0 Results and Discussion

3.1 Demographic Profile of Graduates

Figure 1 provides a demographic breakdown of CTE graduates across four degree programs (BSE, BEEd, BTVTEd, BPED) according to age, sex, and civil status.

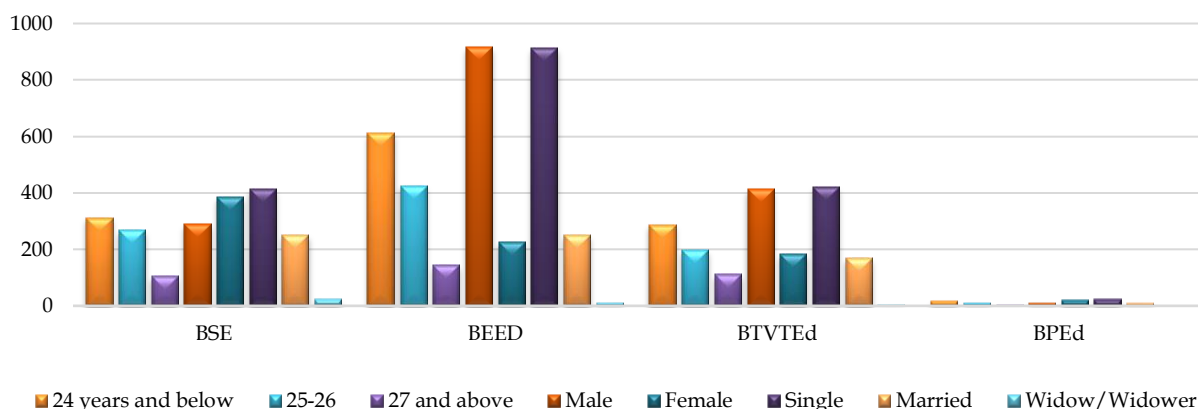


Figure 1. Demographic profile of CTE graduates according to sex, age, and civil status

As to age distribution, the majority of graduates across all programs are 24 years and below, with BEEd having the highest percentage (51.8%) in this age group. In the 25–26 age range, BPED has the largest percentage of graduates (33.3%), although BTVTEd has a sizable percentage of graduates (26.5%) who are 27 years of age or older. As to sex, there is a notable gender disparity across the programs. BEEd and BTVTEd have a significantly higher percentage of male graduates (77.5% and 69.2%, respectively) compared to female graduates. In contrast, BSE and BPED have a higher percentage of female graduates, with BSE having 57.7% females and BPED having 66.7% female graduates. As to civil status, majority of graduates in all programs are single, with BEEd having the highest percentage of single graduates (77.2%). The percentage of married graduates is highest in BSE (36.5%), and the percentage of widows/widowers is notably low across all programs, with BTVTEd having the highest at 8.8%. This demographic profile highlights the diversity in age, gender, and civil status among CTE graduates across different degree programs, indicating varying demographic trends that could influence program enrollment and completion rates.

The age, sex, and marital status of alumni from the GS five-degree programs, the PhEdD, MAEd, MIE, MA-Math Ed., and MIT are shown in Figure 2. As to age distribution, the majority of PhEdD and MA-Math Ed. graduates are 30 years and below, with PhEdD having the highest percentage (52.5%). MAEd and MIE programs have a significant portion of graduates aged 31–50, indicating a preference or suitability for mid-career professionals. Graduates aged 51 and above are least represented across all programs, with the highest percentage in PhEdD (17.5%). As to sex, there is a notable gender disparity in the MIT program, where 75% of graduates are males. The

MAEd program has a more balanced gender distribution but still leans towards male graduates (56.23%). The MIE program stands out with a higher percentage of female graduates (69.54%).

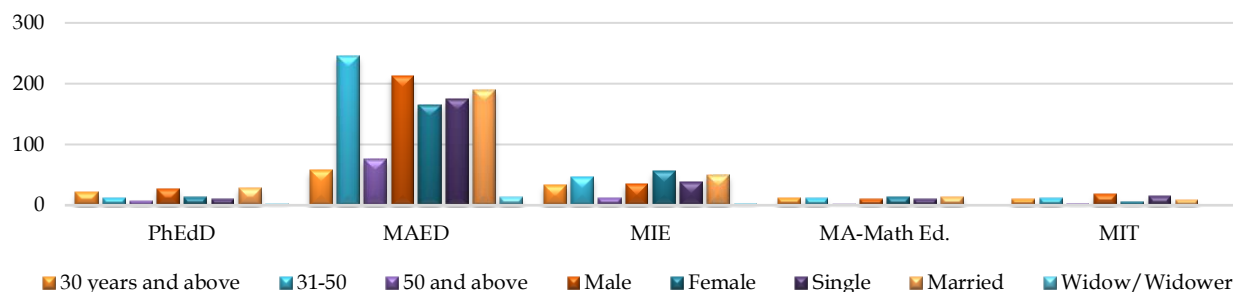


Figure 2. Demographic profile of the graduates in the graduate school according to sex, age, and civil status

In terms of civil status, a significant majority of graduates in most programs are married especially in the PhEdD program (70%). The MIT program has the highest percentage of single-graduates (62.5%) suggesting it might attract younger professionals. Widow/widower status is very low across all programs with no representation in some. The age, sex, and marital status variation among graduate students is highlighted in this demographic profile, which reflects a range of life phases and professional routes.

3.2 Distribution of Graduates Traced

Figure 3 presents the distribution of graduates and the graduates traced of the College of Teacher Education SY 2016-2017 to SY 2021-2022 along with the BSE, BEED, BTVTEd and BPed programs using the Google from link of questionnaire, actual survey, and cellphone calls.

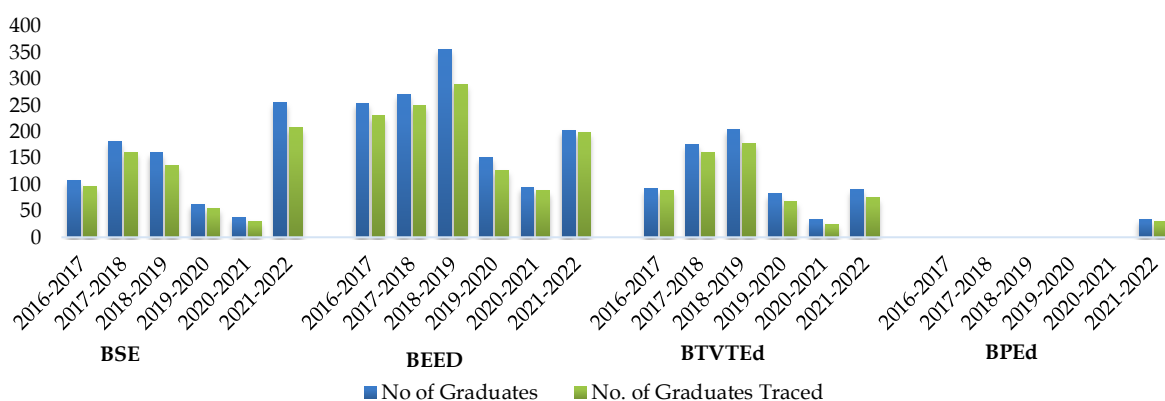


Figure 3. Distribution of graduates and the graduates traced of the college of teacher education SY 2016-2017 to SY 2021-2022

Figure 3 shows the number of graduates for each specialization for six academic years (SY 2016–2017 to SY 2021–2022): BSE (Bachelor of Science in Education), BEED (Bachelor of Elementary Education), BTVTEd (Bachelor of Technical-Vocational Teacher Education), and BPed (Bachelor of Physical Education). There are fluctuations in the number of graduates across the years, reflecting potential variations in student enrollment or program popularity. For a period of six academic years (SY 2016–2017 to SY 2021–2022), the number of graduates for each specialization—BSE (Bachelor in Secondary Education), BEED (Bachelor in Elementary Education), BTVTEd (Bachelor of Technical-Vocational Teacher Education), and BPed (Bachelor of Physical Education)—is displayed in the Table. The number of graduates varies from year to year, which could be due to changes in program popularity or student enrollment.

There are fluctuations in the number of graduates traced over the years, but overall, the percentages of graduates traced remain relatively high. For example, in SY 2016-2017, there were 96 graduates traced out of 108 total

graduates, with a percentage of 88.9%. Similarly, in SY 2021-2022, there were 203 graduates traced out of 256 total graduates, with a percentage of 80.9%. Across specializations, the percentages of graduates traced slightly vary, but generally remain high throughout the years. BEEd consistently has high tracing percentages, indicating potentially stronger alumni engagement or tracking mechanisms within this specialization. The high percentages of graduates traced suggest that CTE has robust systems in place for maintaining contact with alumni. This data can be valuable for the college administration in assessing the effectiveness of their programs and support services. High tracing percentages also imply potential opportunities for alumni engagement, networking, and career support initiatives within the college.

Figure 4 shows the distribution of graduates and the graduates traced for the Graduate School Programs from SY 2016-2017 to SY 2021-2022.

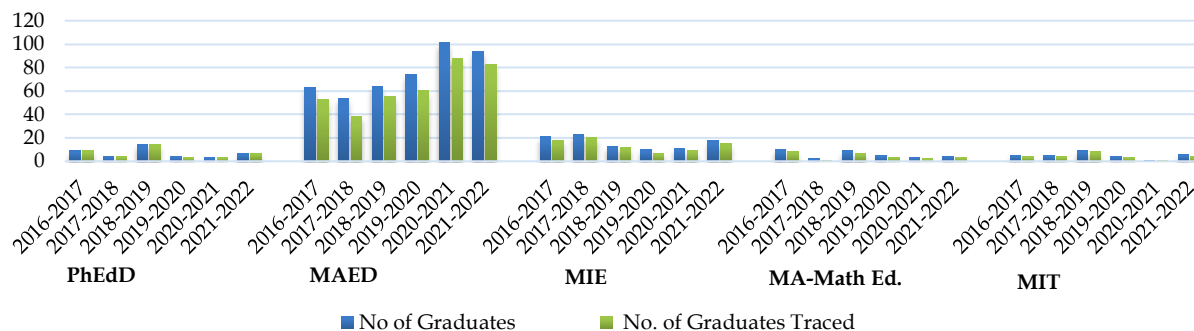


Figure 4. Distribution of Graduates and the Graduates Traced of the Graduate School Programs SY 2016-2017 to SY 2022-2022

Figure 4 presents data on the distribution of graduates and the graduates traced from Graduate School Programs for seven academic years, spanning from SY 2016-2017 to SY 2022-2023. The graduate programs listed include PhEdD (Doctor of Philosophy in Education), MAEd (Master of Arts in Education), MIE (Master of Industrial Education), MA-Math Ed (Master of Arts in Mathematics Education), and MIT (Master in Information Technology). As shown in Figure 4, the number of graduates varies across programs and years, indicating potential fluctuations in enrollment or program popularity. These fluctuations may be attributed to the number of graduates and the percentage of graduates traced over the years. For example, in SY 2016-2017, the PhEdD and MAEd programs had 100% of graduates traced, while other programs had slightly lower tracing percentages.

Tracing percentages vary across programs and years but generally show a high rate of graduates traced. Across programs, the percentages of graduates traced slightly vary but generally remain high throughout the years. Programs such as PhEdD and MAEd consistently show high tracing percentages, indicating potentially stronger alumni engagement or tracking mechanisms within these programs. The high percentages of graduates traced suggest that the Graduate School Programs have robust systems in place for maintaining contact with alumni. High tracing percentages also imply potential opportunities for alumni engagement, networking, and career support initiatives within the graduate school.

3.3 Employment Status

Figure 5 provides insights into the employment status of graduates from the CTE across different academic years. The employment status is categorized into four main categories: Employed, Underemployed, Self-employed, and Unemployed. The data is presented for four specific programs within CTE: BSE (Bachelor in Secondary Education), BEEd (Bachelor in Elementary Education), BTVTEd (Bachelor of Technical Vocational Teacher Education), and BPed (Bachelor of Physical Education).

In the academic years from 2016-2017 to 2021-2022, the employment status of graduates from various curricular programs, namely Bachelor in Secondary Education (BSE), Bachelor in Elementary Education (BEEd), Bachelor of Technical-Vocational Teacher Education (BTVTEd), and Bachelor of Physical Education (BPed), exhibited fluctuations. In the 2016-2017 academic year, BSE saw 96 graduates employed (53.1%), whereas BEEd had 230

graduates employed (82.2%), and BTVTEd had 89 graduates employed (51.7%). However, there were also underemployed, self-employed, and unemployed graduates across these programs. Over the years, there were variations in employment rates among the programs, with some experiencing an increase in employed graduates in certain years but also witnessing fluctuations in underemployment, self-employment, and unemployment rates. For instance, in the 2021-2022 academic year, while BSE had 100 graduates employed (48.3%), BEEd had 91 graduates employed (46.0%), BTVTEd had 23 graduates employed (30.7%), and BPed had 15 graduates employed (50.0%). Despite these fluctuations, the data highlights the dynamic nature of employment outcomes among graduates across different education programs over the years.

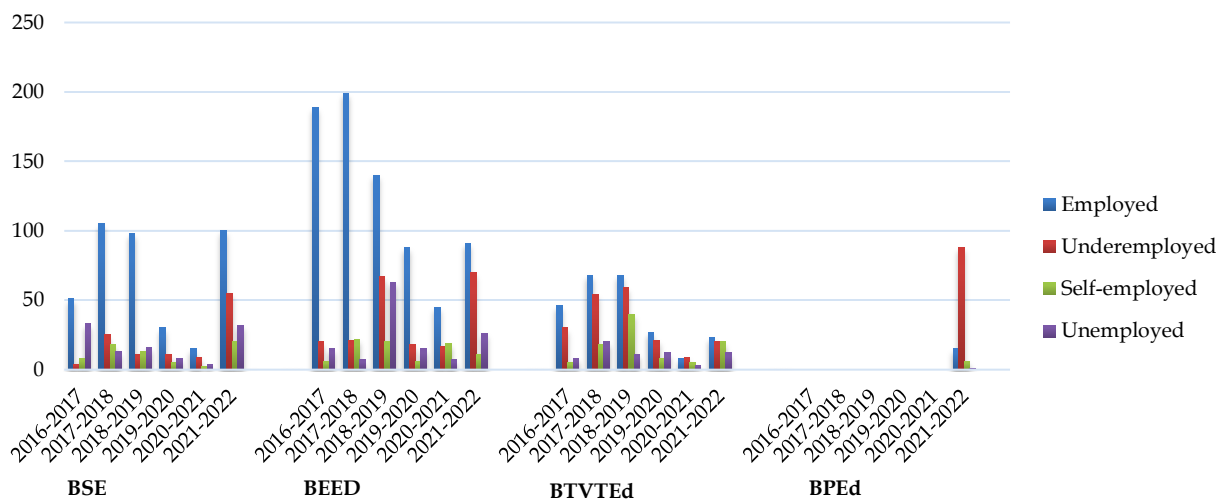


Figure 5. Distribution of CTE graduates employment status

In the academic years spanning from 2016 to 2022, the employment outcomes of graduates from various education programs were tracked. These programs included the BSE, BEEd, BTVTEd, and BPed. Across the years, fluctuations in employment rates were observed. In the 2016-2017 academic year, significant percentages of BEEd and BTVTEd graduates were employed, while a notable portion of BSE graduates remained unemployed. However, by the 2017-2018 academic year, the employment rates for BSE graduates notably increased. In subsequent years, there were variations in employment, underemployment, self-employment, and unemployment rates among graduates of these programs. Notably, in the 2021-2022 academic year, BPed graduates exhibited higher employment rates compared to previous years.

Overall, BEEd consistently has the highest number of employed graduates, followed by BSE and BTVTEd. Underemployed graduates show increasing trends for BEEd and fluctuating trends for BSE and BTVTEd. The number of self-employed graduates varies with no clear trend. There are fluctuations in the number of unemployed graduates across all programs, with BPed showing the lowest numbers in SY 2021-2022. The dynamic character of employment outcomes for graduates in the education industry across the years under examination is demonstrated by these figures. These results corroborated the findings of the study of Baking et al. (2015).

Figure 6 presents the distribution of graduates' employment statuses across different years and specific educational programs: Doctor of Philosophy in Education (PhEdD), Master of Arts in Education (MAEd), Master of Industrial Education (MIE), Master of Arts in Mathematics Education (MA-Math Ed.), and Master of Information Technology (MIT). Each row represents a school year (SY), while each column denotes an employment status category such as Employed, Underemployed, Self-employed, and Unemployed.

As seen in Figure 6, in the academic year 2016-2017, the PhEdD program achieved a perfect employment rate, with all 9 traced graduates securing employment, reflecting 100%. Meanwhile, in the MAEd program, out of 84 traced graduates, 80 were employed, indicating a robust employment rate of 95.3%. This suggests a high level of success

in job placement for graduates in these programs during that academic year. However, across the other programs, there were variations in employment percentages, indicating disparities in employment outcomes among different educational programs.

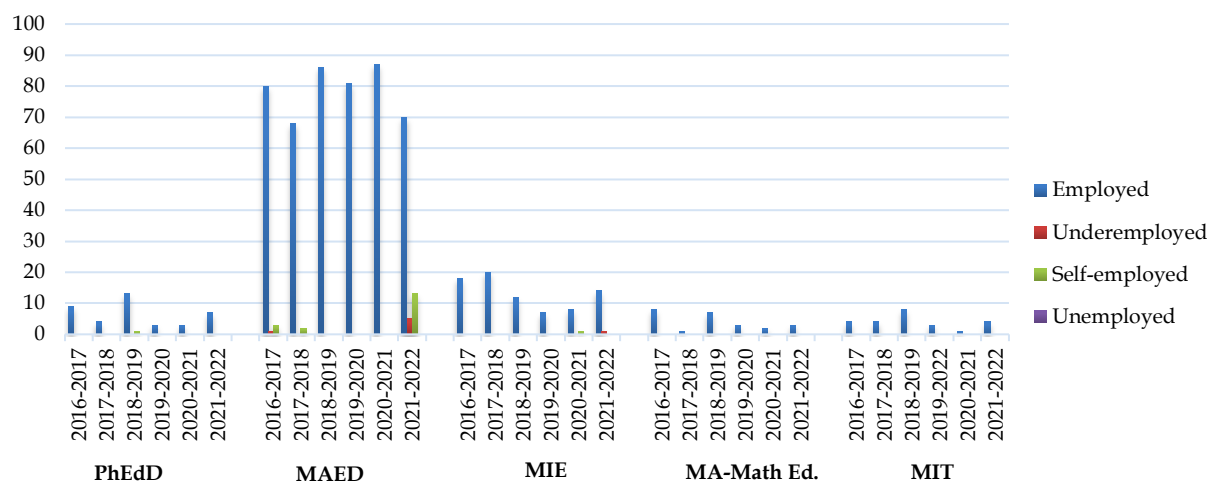


Figure 6. Distribution of graduates' employment status

As the subsequent years progressed, the employment patterns fluctuated. While some programs consistently maintained high employment rates, others experienced fluctuations. For instance, in SY 2021-2022, the PhEdD program continued to maintain a perfect employment rate, with 100% of traced graduates securing employment. However, the MAEd program experienced a slight decline in employment rate, with 79.5% of traced graduates employed. This indicates a shift in employment trends over the years, with some programs sustaining their success in job placement while others faced challenges. Additionally, the data also highlights instances of underemployment and self-employment observed in certain years and programs. These factors further contribute to the nuanced understanding of employment outcomes among graduates of different educational programs. Overall, the table provides a detailed breakdown of employment outcomes, showcasing the complexities and variations in job placement rates among graduates across several academic years and programs.

Figure 7 provides a detailed analysis of graduates in CTE who are employed, categorized by their degree programs (BSE, BEED, BTVTEd, and BPED) and various factors such as employer, position/job title, job status, year hired, length of employment, and monthly salary.

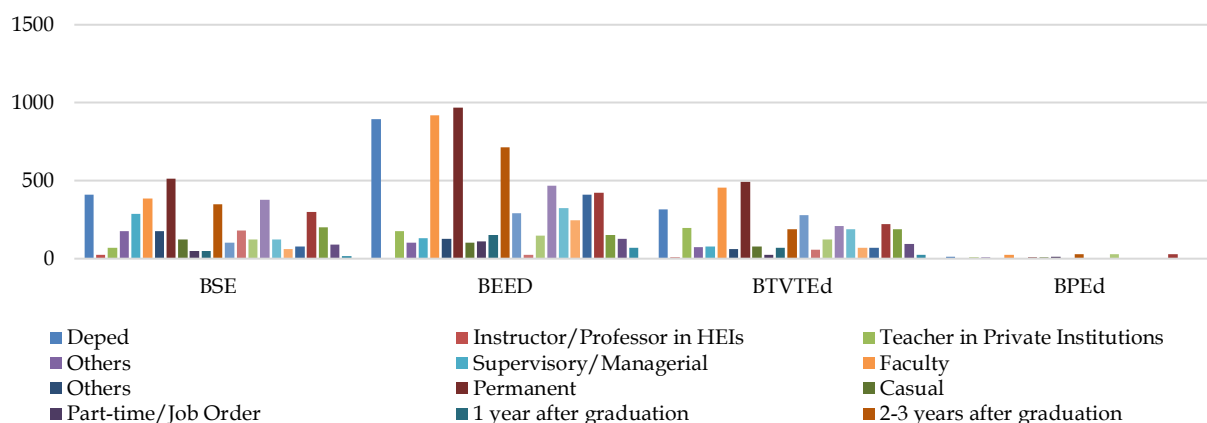


Figure 7. Profile of employed CTE graduates

As to employer distribution, the majority of graduates across all degree programs are employed by the Department of Education (DepEd). While BEEd graduates have the highest percentage of employment in DepEd (75.8%), BPed graduates have the lowest (40%). Additionally, a significant proportion of graduates in all programs are employed as teachers in private institutions, with BTVTEd graduates having the highest percentage (33.3%).

In terms of position/job title, BSE graduates have a high percentage of employment in faculty positions (56.3%), while BEEd and BTVTEd graduates have a significant proportion employed as faculty as well (11.2% and 76.8%, respectively). BPed graduates have the highest percentage (86.7%) of employment as faculty. As to job status, most graduates across all programs are employed in permanent positions. Remarkably, the highest percentage of permanent employment (81.8%) is held by BEEd graduates. Graduates with a BPed degree have the lowest percentage of permanent employment (26.7%), with a large share working in job order, casual, and part-time professions.

As to year hired, a significant proportion of graduates across all programs are hired within 2-3 years after graduation, with BPed graduates having the highest percentage (93.3%). BSE graduates have the highest percentage (51.2%) of graduates hired within this timeframe. In terms of length of employment, graduates across all programs have a significant proportion employed for 4-6 years. Notably, BTVTEd graduates have the highest percentage (35.5%) employed for this duration. As to monthly salary, there is variability in the distribution of monthly salaries across programs. BSE graduates have a higher percentage earning salaries between 15,001-25,000.00, while BEEd graduates have a higher percentage earning salaries between 25,001-50,000.00.

Figure 8 presents a comprehensive overview of graduates from the Graduate School who are currently employed, segmented by their degree programs: PhDd, MAEd, MIE, MA-Math Ed., and MIT.

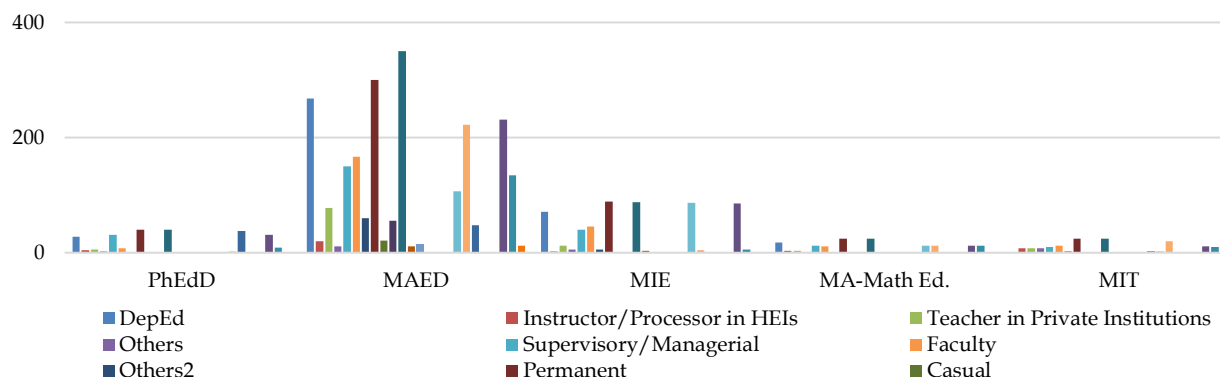


Figure 8. Profile of employed graduates from graduate school

In terms of employer distribution, the majority of graduates across all degree programs are employed by the Department of Education (DepEd). DepEd employs the highest percentage of PhEdD graduates (70%), MAEd graduates (71.9%), and MIT graduates (75%). Graduates are also employed as instructors/professors in higher education institutions (HEIs) and teachers in private institutions. Notably, MA-Math Ed. and MIT graduates have a significant percentage employed in these roles (33.3%). A smaller percentage of graduates are employed in other sectors.

As to position/job title, a considerable proportion of graduates across all programs hold supervisory/managerial positions. This is particularly prominent among PhEdD graduates (77.5%) and MIT graduates (41.7%). Many graduates also work as faculty members, with MAEd graduates having the highest percentage (44.3%). Some graduates are employed in other roles such as researchers or administrative positions. As to job status, the majority of graduates across all programs have permanent employment, with 100% of PhEdD, MAEd, MIE, MA-Math Ed., and MIT graduates having permanent positions. A small percentage of graduates are employed on a casual or part-time/job order basis.

In terms of year hired, the majority of graduates across all programs were already hired at the time of graduation. Notably, all PhD, MAEd, MIE, MA-Math Ed., and MIT graduates were already employed upon graduation. A small percentage of graduates were hired within 1-3 years after graduation. As to length of employment, graduates across all programs have varying lengths of employment. While some are in the early stages of their careers (1-3 years), others have been employed for longer periods (7-9 years and 10 years and above). As to monthly salary, a significant percentage of graduates earn monthly salaries between 25,001 and 50,000.00, with PhD, MAEd, and MIT graduates having the highest.

3.4 Level of Economic Relevance

The economic relevance of a degree obtained from CTE and GS Programs can be substantial and multifaceted. Table 1 presents the varying level of economic relevance of the degrees earned between the graduates from CTE and GS Programs.

Table 1. Level of economic relevance of the degree earned in the college of teacher education and graduate school program

Statement	CTE			Graduate School		
	Mean	SD	Interp.	Mean	SD	Interp.
1. My current income is well within my expectations upon graduation.	2.34	0.32	Relevant	3.51	0.53	Very Relevant
2. My earning potential increased after obtaining the degree.	2.46	0.45	Relevant	3.61	0.35	Very Relevant
3. I was quickly employed/promoted after graduating from the degree I earned from SNSU.	3.01	0.34	Relevant	3.55	0.52	Very Relevant
4. My employment status has become stable since I obtained the degree.	3.24	0.43	Relevant	3.60	0.34	Very Relevant
5. My financial investment (tuition fees, time spent studying) in obtaining this degree has been worthwhile based on my current economic situation.	3.35	0.61	Relevant	3.65	0.51	Very Relevant
Average Mean	2.90	0.43	Relevant	3.58	0.45	Very Relevant

Education graduates have an overall rating of *Relevant* ($x=2.90$, $SD=0.43$) while graduates of graduate school have an overall rating of *Very Relevant* ($x=3.58$, $SD=0.45$). However, despite the differences in the overall rating, both have the same indicators which ranked the first '*My financial investment (tuition fees, time spent studying) in obtaining this degree has been worthwhile based on my current economic situation*' ($x=3.35$, 3.65 ; $SD=0.61$, 0.51) and the last '*My current income is well within my expectations upon graduation*' ($x=2.34$, 3.51 ; $SD=0.32$, 0.53) respectively. This result implies that graduates of the CTE & GS programs from SNSU have similar perceptions on the economic benefits and relevance of the degree they earned from the university. Further, this result also indicates that SNSU graduates do not only provide opportunities for career advancement and employment, but also support the wider socioeconomic development of society by producing a workforce that is knowledgeable and skilled and is vital to innovation, productivity, and prosperity. Valero and Reenen (2019) posited that more innovation and a larger supply of human capital intensifies the impact of universities on growth.

According to Loveless (2024), obtaining a degree is all about creating chances in life, such as better employment prospects, higher-paying jobs, and improved skill sets. Additionally, Radcliffe (2023) posited that to compete for a greater salary and promotion, workers desire to acquire advanced techniques, new abilities, or higher education. The Organization for Economic Co-operation and Development (OECD, 2023) highlighted that better levels of education generally translate into higher salaries.

3.5 Level of Industry Relevance

The degrees earned from the CTE and GS Programs hold a significant level of industry relevance, given the foundational role of education in society. Table 2 presents the level of industry relevance of graduates from the College of Teacher Education and Graduate School programs of SNSU. Graduates from these programs rated all the indicators as *Very Relevant* and have the same overall qualitative rating of *Very Relevant* ($x=3.54$, $SD=0.57$; $x=3.71$, $SD=0.58$). This result reveals that the skills and expertise gained by the graduates from these programs are pertinent to the current jobs they are in. This relevance can then be translated into a wide range of career opportunities and potential for professional growth and advancement further underscoring that SNSU is moving forward to producing graduates of high-quality human capital. According to Stoffberg et al. (2023), higher levels

of educational qualifications may result in higher-performing teams and are more likely to exceed the minimum requirements of their jobs.

Table 2. Level of industry relevance of the degree earned in the college of teacher education and graduate school program

Statement	CTE			Graduate School		
	Mean	SD	Interp.	Mean	SD	Interp.
1. The skills and knowledge gained from this degree have directly contributed to my job.	3.66	0.67	Very Relevant	3.65	0.75	Very Relevant
2. The skills and knowledge acquired from my degree program directly are applied to my job responsibilities.	3.56	0.66	Very Relevant	3.60	0.44	Very Relevant
3. I have been involved in innovative projects or initiatives in my field that can be attributed to my degree.	3.42	0.43	Relevant	3.67	0.56	Very Relevant
4. My employers recognized and valued the skills and expertise I gained from my degree program.	3.51	0.46	Very Relevant	3.79	0.54	Very Relevant
5. My degree program prepared me to adapt to technological advancements and innovations within my industry.	3.55	0.56	Very Relevant	3.87	0.61	Very Relevant
Average Mean	3.54	0.57	Very Relevant	3.71	0.58	Very Relevant

Further, this result means that SNSU as a higher learning institution demonstrated vertical articulation of its mandate by being able to produce graduates of quality competence and relevance in their respective workplace. This result is consistent with Licuanan's (2016) assertion that HEIs should be able to meet and exceed the minimum standards set by CHED and that the way these institutions function as higher education establishments and, ultimately, the graduates they produce who can compete on a global scale, should serve as indicators of the quality of education.

3.6 Level of Satisfaction

Table 3 shows the level of satisfaction of graduates in the CTE and GS. There are eight indicators used and were rated on a scale of 1-4. The scale of one (1) is the lowest and qualitatively described as Not Satisfied while the scale of four (4) is considered the highest and described as Very Satisfied.

Table 3. Level of satisfaction of graduates in the college of teacher education and graduate school

Statement	CTE			Graduate School		
	Mean	SD	Interp.	Mean	SD	Interp.
1 Satisfaction with the present position/work.	3.55	0.34	Very Satisfied	3.67	0.44	Very Satisfied
2 Pride of the present responsible position/work.	3.76	0.45	Very Satisfied	3.54	0.47	Very Satisfied
3 Satisfaction with the relationship with the immediate supervisor.	3.44	0.43	Satisfied	3.56	0.86	Very Satisfied
4 Satisfaction with the relationship with fellow workers.	3.54	0.76	Very satisfied	3.60	0.67	Very Satisfied
5 Satisfaction with engagement in additional activities/works aside from the main.	3.21	0.65	Satisfied	3.56	0.40	Very Satisfied
6 Satisfaction with the present remuneration.	3.47	0.32	Satisfied	3.69	0.52	Very Satisfied
7 Satisfaction with the learning environment.	3.34	0.36	Satisfied	3.54	0.76	Very Satisfied
8 Satisfaction in dealing with the learners.	3.41	0.51	Satisfied	3.51	0.44	Very Satisfied
Average Mean	3.47	0.48	Satisfied	3.58	0.57	Very Satisfied

As shown in Table 3, of the eight (8) indicators used, only three (3) were rated as 'Very Satisfied' by the College of Teacher Education graduates. These high satisfaction ratings come from the *sense of pride in the present responsible position/work*, *satisfaction with the present position/ work*, and *the relationship to the immediate supervisor* with mean ratings of 3.76 (SD=0.45), 3.55 (SD=0.34) and 3.54(0.76), respectively. Considering the guidelines, recruitment, and selection of personnel stipulated in DepEd Order No.27 s. 2023, securing an item has been tough and challenging. Hence, having a job in the very first place makes graduates feel a sense of pride and achievement. It is a constructive step toward fulfilling their needs and attaining their goals, and giving them a sense of validation,

self-worth, and accomplishment. Daminar et al. (2022) confirmed that having a job is a beneficial development for graduates' careers as it relates to achieving a secure tenure with an income that allows them to live reasonably.

Additionally, the sense of pride in their current position indicates that the knowledge and abilities they acquired while at the university are relevant and in conformity with the demands of their field of work. This means that the degrees they obtained from the university have a bearing on their current positions, allowing them to effectively demonstrate and use the abilities they learned at work. This result corroborated the findings of Albina & Sumagaysay (2020) and Dela Cruz & Dela Cruz (2023) which suggested that graduate qualities should be emphasized by higher education institutions to support career growth.

Moreover, the relationships among coworkers in the current role/job add to the sense of fulfillment in the workplace. This indicates that SNSU's CTE graduates exhibit prosocial skills allowing them to interact with others more effectively and embrace inclusivity and diversity among their colleagues. This result conforms with the study of Naparan et al. (2024) and Abing et al. (2023). Cornillez et al. (2021) posited that human relations and communication skills are two of the most valuable competencies in the workplace. When individuals enjoy working with their colleagues, they are more likely to collaborate effectively, communicate openly, and support one another, thereby boosting their morale and motivation.

Meanwhile, indicators such as *satisfaction with the present remuneration* ($\bar{x}=3.47$, $SD=0.32$), with the *relationship to the immediate supervisor* ($\bar{x}=3.44$, $SD=0.43$), *dealing with the learners* ($\bar{x}=3.41$, $SD=0.51$), with the *learning environment* ($\bar{x}=3.34$, $SD=0.36$), and the *satisfaction with engagement in additional activities/ aside from the main* were all rated as 'Satisfied' and the latter received the lowest mean of 3.21($SD=0.65$). This implies that additional workload affects the level of job satisfaction among education graduates, and this does not only apply to academia but also to various kinds of jobs/industries. This result calls the attention of the university to better train the education students with the skills in managing work-life balance. While managing stress and accomplishing a task are inevitable in the teaching profession, these abilities are also regarded as employability skills (Naparan et al., 2024). Hence, to better prepare and adjust pre-service teachers for the real world of work, stress, and job management skills may be incorporated into their educational experiences. Dela Cruz & Dela Cruz (2023) postulated that institutions of higher learning are mandated to produce graduates who are holistically competent to enter the workforce and capable of executing tasks in the workplace.

However, workload, appropriate compensation, and a clear task plan are crucial elements affecting job satisfaction (Montouri et al., 2022). Studies have shown that when employees are unable to articulate the duties necessary to carry out a specific function, it is likely to negatively affect their job satisfaction (Naparan et al., 2024; Fernandez et al., 2022; Melaku & Hundii, 2020). Damoah et al. (2021) emphasized that due to the demands of teaching jobs, both aspiring and current teachers should be adaptable. Well-adjusted educators enhance their performance while advancing in their profession (Cheng et al., 2022; Daling, 2020).

As to the level of satisfaction among the graduates from the graduate school, all eight (8) indicators are rated 'Very Satisfied' with contentment from present remuneration ranked first with a mean of 3.69 ($SD=0.52$) while fulfillment in dealing with the learners ranked last ($\bar{x}=3.51$, $SD=0.44$). This result indicates that graduates demonstrated high application of the skills gained from the Graduate School of SNSU and that they are highly satisfied with the offerings and services of the institution. This result implies that graduates embody proficiency in both personal and professional aspects of the graduate program they completed. Nunez et al. (2022) asserted that program delivery and implementation may influence graduates' qualities to be greatly satisfied in their respective workplaces.

Moreover, rating 'Very Satisfied' on remuneration means that good compensation fosters a positive work environment where graduates feel valued and motivated to excel. This finding is akin to Walewangko et al. (2021) which revealed that compensation has favorably and significantly improve employee's performance. However, Idris et al. (2020) contended that it is not compensation but the work environment that positively and substantially affects career fulfillment and employee performance. Further, Maj (2023) confirmed that a diverse and inclusive workplace affects job contentment.

The disparity in the overall rating on the level of satisfaction between graduates in the CTE with an average mean of 3.47 (SD=0.48), qualitatively described as '*Satisfied*' and in the Graduate School with an average mean of 3.58 (SD=0.57) interpreted as '*Very Satisfied*', may signify several underlying factors related to their educational experiences, career expectations, and job opportunities. A notable factor contributing to the difference in satisfaction levels could be the gap in salary and benefits between careers in education and other fields. While teaching is a noble profession, it is often associated with lower salaries and fewer benefits compared to certain industries that may attract graduates from graduate school. Discrepancies in compensation packages could impact overall job satisfaction, especially for individuals with financial obligations such as loans or family expenses.

For SNSU to assess its program efficiency, promote its prestige, foster continuous improvement, and ensure learners are ready for their professional careers, finding out how satisfied former students are from the GS and CTE is vital. Determining the level of satisfaction of graduates in the programs they earned is one way of assessing the caliber of the university (Avramkova et al., 2021). Pentang et al. (2022) state that this method gives higher education institutions the ability to evaluate curricula and consider the importance of the instruction given to students. When evaluating the overall effectiveness of higher education institutions, graduates' employability must be taken into consideration (Dela Cruz & Dela Cruz, 2023).

Overall, the disparity in satisfaction levels between graduates in the CTE and GS of SNSU underscores the importance of understanding the unique factors shaping their career experiences and perceptions. Addressing these incongruencies may require targeted interventions, such as improving educational programs, enhancing career development opportunities, and promoting supportive environments for work-life balance tailored to the needs of each group of graduates.

4.0 Conclusion

The study's findings led to the conclusion that the use of Google link, survey questionnaires and cellphone calls were efficient since the response rates of the study in all programs in the College of Teacher Education and Graduate School were high having more than 75% of graduates were traced. The graduates of SNSU from CTE and GS have been gainfully employed in DepEd as permanent faculty while a majority in the graduate school is holding supervisory positions and perceive that they have economic advantages and applicability of the degrees they earned from the university as they have a high level of economic relevance. Moreover, the knowledge and competencies of CTE & GS graduates of SNSU are applied to their respective current positions as they have a high level of industry relevance although there is a disparity in their degree of satisfaction. Graduates of CTE programs felt that relationships among coworkers and the work environment had a greater impact on their level of satisfaction than their salary.

In light of the conclusions, it is recommended that the use of social media platforms be further enhanced in tracking more graduates to participate in the tracer study. The teaching staff of the College of Teacher Education and the Graduate School may keep up their professional development to transmit more knowledge and better prepare graduates with highly relevant skills and competencies that will highly increase their employability. The incongruencies in the level of job satisfaction may require targeted interventions such as improving more on quality educational programs, enhancing career development opportunities, and promoting supportive work-life balance environments tailored to the needs of each group of graduates. It is also recommended that a tracer study considering other programs from other colleges and campuses of SNSU be also conducted. SNSU, as a higher learning institution, shall continue to move forward with a commitment to continuous improvement of its educational programs and a spirit of openness to new opportunities fostering a dynamic and inclusive learning community that transcends borders and nurtures the leaders of tomorrow for nation's greater heights.

5.0 Contributions of Authors

This paper is a product of the concerted efforts of the authors. EPP conceptualized the paper, interpreted, and discussed figures, and prepared the intro; LSD interpreted and discussed tables, edited the results, discussions, and conclusion; EAB formulated the survey questionnaires and analyzed the data using the statistical tools; MCSV gathered the data, conducted interviews with some respondents to confirm their responses and did the tallying of the gathered data. The authors reviewed and approved the final work.

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7.0 Conflict of Interests

The authors declare no conflicts of interest about the publication of this paper.

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Personality Profile, Self-Efficacy, and Teaching Performance of Junior High School Teachers

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Abstract. Teachers' performance is crucial for the achievement of educational success, and as a result, numerous empirical studies have been conducted to explore various factors influencing teachers' teaching performance. However, focusing on teachers' personality and self-efficacy could be a valuable effort in identifying factors that impact their performance in pursuing educational goals. This study aimed to determine the personality profile, level of self-efficacy, and teaching performance of junior high school teachers (JHS). A descriptive research design was employed with 111 respondents who answered the questionnaires. Results showed that, when grouped and compared according to age, sex, and length of service, there was no significant difference between the personality profile and the level of self-efficacy of JHS teachers except for the Agreeableness personality trait when grouped and compared according to sex. Similarly, there is no significant difference between the level of teaching performance when grouped and compared according to age and length of service, except for the variable of sex. Conversely, using the Chi-Square Test of Independence tool, the result depicted no significant correlation between the personality profile of JHS teachers and the level of teaching performance. Also, with the utilization of the Spearman Rank Coefficient Correlation, the level of self-efficacy and the level of teaching performance have not been found to be significantly correlated.

Keywords: Junior high school; Teacher; Personality; Self-efficacy; Teaching performance.

1.0 Introduction

Teachers are prominent figures in the educational system, both statistically and in their potential to influence educational outcomes. Considerable research has been conducted based on the assumption that teachers' psychological characteristics are associated with teaching effectiveness. However, to this date, the question of what makes a good teacher has been asked by practitioners, policymakers, and researchers for decades (Kim et al., 2018).

A teacher's personality profile matters in determining their effectiveness. Each teacher approaches the job differently. Some run their classrooms like a tight ship, while others prefer a more unstructured approach that allows students to explore their creativity (McGuire, 2018). A focus on the teacher's personality could be a valuable effort in identifying factors that influence their performance in achieving any goals (Magno, 2008).

Self-efficacy is another trait that must be considered. Self-efficacy is a concept from Bandura's social-cognitive theory of behavioral change. It is hypothesized that the expectation of personal efficacy determines whether a behavior will be initiated and how long the efforts will be sustained in problem-solving situations. Self-efficacy is a person's belief in their ability to complete a task or achieve a goal. It encompasses a person's confidence in themselves to control their behavior, exert an influence over their environment, and stay motivated in the pursuit of their goal (Cherry, 2023).

On one hand, teacher performance is acknowledged as the most important institutional determinant of student academic achievement. For policymakers exploring ways to improve the education system, one permanent approach is to concentrate on teachers, who are the primary resources of the system.

As an educator, the opportunity for the researcher to work with many teachers allowed her to better understand that teachers should have the necessary skills to increase the probability of higher student achievement. In her observations, some teachers are left without assistance in developing methods to increase and maintain a high level of self-efficacy, leading to burnout. Furthermore, the lack of support places teachers in a stereotyping box that defies their character and personality. The researcher equally observed a massive decline in teachers' motivation, morale, productivity, attendance, and sense of accomplishment. From these first-hand experiences and observations, the researcher was driven to conduct this study. Thus, the purpose of this study is to determine the personality profile, the level of self-efficacy, and the teaching performance of Junior High School teachers.

2.0 Methodology

2.1 Research Design

A descriptive research design was employed. This design accurately and systematically describes the population, situation, or phenomenon (McCombes, 2023). It usually involves some form of comparison, contrast, and correlation. The researcher utilized a survey questionnaire to emphasize the importance of facts and focus attention on the most critical aspects to be reported. A survey is also an integral part of a descriptive research design because it allows the researcher to understand specific factors affecting participants.

2.2 Research Participants

111 Junior High School teachers in the District of Manapla, Negros Occidental participated in this study. A total enumeration was applied to select the respondents. According to Laerd (n.d.), total population sampling is a purposive technique where the entire population (total population) with specific characteristics (e.g., interests, experience, knowledge, attitudes, etc.) is examined.

2.3 Research Instrument

The research instrument employed in this study comprised two parts. The first part gathered information on respondent profiles, including name, age, sex, and length of service. The second part consisted of two sets of questions: the first set focused on Self-Efficacy, and the second set was linked to the Personality Profile. Two standardized instruments were employed: The Self-Efficacy test, consisting of a 20-item set constructed by Garong (2009), a former faculty member of West Negros University, and the Big Five Factor Markers Scale, a 50-item set from the IPIP (International Personality Item Pool). Permission to use the IPIP materials was obtained via email from John A. Johnson, Professor Emeritus of Psychology at the Pennsylvania State University and the IPIP Consultant.

Individual Performance Commitment and Review Form (IPCRF) was also used to assess teachers' performance. The IPCRF is a Philippine government employee assessment tool, that evaluates tasks accomplished by teachers throughout the year. It includes Key Result Areas (KRAs) such as Instructional Competence, Professional Growth, Learning Outcomes, Community Involvement, and a Special Task with a minimum of 15 objectives (Lopez, 2019).

Given that the research instrument employed standardized tests, the reliability of the questionnaires was already established. In Garong's study on Self-efficacy, the computed reliability coefficient using the Spearman-Brown Prophecy formula was 0.97, indicating very high reliability of the instrument. Furthermore, the IPIP scales for the Big Five Personality Marker test demonstrated a Cronbach Alpha reliability index of 0.84, with correlations to the original Goldberg (1992) factor markers.

2.4 Data Gathering Procedure

As soon as the validity and reliability of the instrument were established, permission was sought from the Division Superintendent of Negros Occidental, the District Supervisor, and the School Heads to administer the questionnaire to Junior High School Teachers in the District of Manapla. Upon approval, copies of the questionnaire were reproduced and personally distributed by the researcher to the respondents, enabling her to

explain the purpose of the study. Regarding teaching performance, the researcher requested a copy of the Teachers' Individual Performance Commitment and Review Form (IPCRF) from the respective School Heads.

2.5 Data Analysis Procedure

Three analytical schemes aligned to the study's specific objectives have been implemented. In the first place, a Descriptive Analytical Scheme has been applied to evaluate profiles focusing on age, sex, and length of service. Given several factors, e.g. extraversion, agreeableness, conscientiousness, emotional stability, and intellectual independence, the description scheme has been used to define personality profile, level of self-efficacy, and teaching performance for teachers. The study also utilized a comparative analytical scheme to identify significant differences in personality profile, self-efficacy, and teaching performance when teachers were grouped based on selected variables. Finally, the study employed a relational analytical scheme to determine significant relationships between personality profiles and teaching performance, as well as between levels of self-efficacy and teaching performance among the teachers.

3.0 Results and Discussion

3.1 Demographic Profile of the Respondents

Table 1 presents the profile of the respondents, encompassing age, sex, and length of service. The findings indicate that 48.6% of the respondents fall into the younger category, while the majority, constituting 51.4%, belong to the older group. Regarding gender distribution, the study reflects a predominance of female respondents, accounting for 73.0%, while males constitute 27.0%. Furthermore, the analysis of respondents' length of service reveals that 49.5% have shorter tenures, whereas the majority, comprising 50.5%, have longer years of service. Overall, the predominant demographic in this study comprises younger female respondents with lengthier service years.

Table 1. Descriptive statistics of the profile of the JHS teachers

Variables	Categories	Frequency	Percentage
Age	Younger (Below 43 years old)	54	48.6
	Older (43 years old and above)	57	51.4
Sex	Male	30	27.0
	Female	81	73.0
Length of Service	Shorter (Below 11 years)	55	49.5
	Longer (11 years and above)	56	50.5

3.2 Personality Profile of the Respondents

Table 2 outlines the personality profile of Junior High School (JHS) teachers, focusing on key factors such as Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Intellect/Imagination. The table provides insights into the distribution and characteristics of the teachers based on these personality dimensions, contributing valuable information to the understanding of the overall personality profile within the surveyed group.

Table 2. Descriptive statistics of personality traits of teachers

Personality Traits	Frequency	Percentage	Rank
Extraversion	3	2.70	5
Agreeableness	32	28.83	2
Conscientiousness	49	44.14	1
Emotional Stability	9	8.11	4
Intellect/Imagination	18	16.22	3
Total	111	100	

Conscientiousness emerged as the dominant trait, with 44.14% of teachers scoring high in this factor, ranking it first. Following closely, Agreeableness secured the second position, with 28.83% of teachers exhibiting this trait. This finding aligns with research suggesting that conscientious individuals are goal-oriented, organized, and attentive to details, characteristics beneficial for teaching and students' personal development. It supports the notion that conscientiousness is a trait strongly correlated with job performance, as proposed by Corr and Matthews (2009). Teachers with high conscientious scores are reported to be more effective in improving student conscientiousness, as highlighted by Cheng and Zamarro (2016). Conversely, the lower percentage of Extraversion

suggests that a smaller proportion of JHS teachers exhibit traits associated with sociability, energy, group work, and ease of interaction with others.

3.3 Level of Self-Efficacy of Teachers

Table 3 illustrates the level of self-efficacy of JHS teachers. According to the overall score of 4.22, which is interpreted as a "very high" level, JHS teachers in the Manapla district are showing very high levels of self-confidence. This indicates a strong belief in the ability of these teachers to encourage and involve students in discussions in the classroom. Despite achieving a high level of efficacy, the data implies that teachers face challenges in maintaining student interest during class. High self-efficacy is associated with positive effects on engagement, persistence, goal-setting, and various aspects of performance, including the use of effective strategies and the degree to which teachers monitor learning. The findings align with previous research suggesting that increasing self-efficacy positively influences teachers' willingness to engage in challenging tasks and enhances the quality and quantity of information processing (Biemiller, 2003; Garong, 2009).

Table 3. Descriptive statistics of the level of self-efficacy of teachers

Statements	Mean	Interpretation
1. Can perform a complete assessment of the class performance.	4.05	High Level
2. Can identify the different learning capabilities of my students.	4.15	High Level
3. Discuss topics that motivate and are interesting to students.	4.32	High Level
4. Can assess the difficulties of my students in the class.	4.14	High Level
5. Can assess the mental capabilities of my studies.	4.05	High Level
6. Can maintain the learning interest of my students during the class.	4.02	High Level
7. Can document the progress of my students	4.20	High Level
8. Assist students in performing their class activities.	4.45	High Level
9. Employ classroom discipline effectively.	4.22	High Level
10. Assist students in meeting the class assignments and projects.	4.04	High Level
11. Can identify the different learning capabilities of my students	4.03	High Level
12. Exert my intellectual and physical strength in providing learning to my students.	4.25	High Level
13. Use different teaching strategies to suit the learning needs of my students.	4.20	High Level
14. Possess a mastery of the subject matter.	4.41	High Level
15. Provide varied explanations to questions asked by my students.	4.45	High Level
16. Provide varied materials and topics in my class.	4.09	High Level
17. Provide thought-provoking questions to my students.	4.14	High Level
18. Go out of my way to get as much information as possible to provide interesting topics to my students.	4.06	High Level
19. Provide opportunities for my students to participate in class discussions and activities.	4.51	Very High Level
20. Encourage my students to participate in class discussions and activities.	4.58	Very High Level
Overall Mean	4.22	High Level

According to Age

Table 4 presents the level of self-efficacy among Junior High School (JHS) teachers grouped by age. Both the younger and older groups exhibit an overall mean score of 4.19 and 4.24, respectively, both interpreted as a "high level" of self-efficacy. This suggests that, regardless of age, JHS teachers generally share a high belief in their ability to encourage student participation in class activities. Notably, the mean scores indicate that the older group scored slightly higher than the younger group, highlighting a nuanced difference.

While both groups share a common interpretation of "high level," variations in self-beliefs emerge based on age. Specifically, younger respondents express challenges in performing a comprehensive assessment of class performance, while the older group faces difficulties assisting students with class assignments and projects. Previous research, such as Ghanizadeh and Moafian (2009), has found that age influences teachers' self-efficacy levels, with older teachers demonstrating higher confidence. However, literature on this topic presents conflicting findings, with studies like Zheng, Liu, and Yao (2023) suggesting that young teachers may exhibit stronger self-efficacy beliefs and greater expectations for promoting sustainable and healthy career development.

Contrary to these perspectives, Bandura (1995, 1994) proposes that age may not directly correlate with self-efficacy, emphasizing that individuals manage their lives differently. Instead, he suggests that self-efficacy beliefs evolve based on experiences, successes, and failures encountered during different life periods, shaping individuals' beliefs over time. These nuanced findings underscore the complex interplay of age and self-efficacy beliefs among JHS teachers, highlighting the need for a comprehensive understanding of individual experiences and challenges at various stages of their careers.

Table 4. Descriptive statistics of the level of self-efficacy of teachers in terms of age

Statements	Younger		Older	
	Mean	Interpretation	Mean	Interpretation
1. Can perform a complete assessment of the class performance.	3.81	High Level	4.26	High Level
2. Can identify the different learning capabilities of my students.	4.02	High Level	4.28	High Level
3. Discuss topics that motivate and are interesting to students.	4.28	High Level	4.37	High Level
4. Can assess the difficulties of my students in the class.	4.09	High Level	4.19	High Level
5. Can assess the mental capabilities of my studies.	4.02	High Level	4.09	High Level
6. Can maintain the learning interest of my students during the class.	3.98	High Level	4.05	High Level
7. Can document the progress of my students	4.26	High Level	4.14	High Level
8. Assist students in performing their class activities.	4.43	High Level	4.47	High Level
9. Employ classroom discipline effectively.	4.17	High Level	4.26	High Level
10. Assist students in meeting the class assignments and projects.	4.13	High Level	3.95	High Level
11. Can identify the different learning capabilities of my students	4.00	High Level	4.05	High Level
12. Exert my intellectual and physical strength in providing learning to my students.	4.30	High Level	4.21	High Level
13. Use different teaching strategies to suit the learning needs of my students.	4.11	High Level	4.28	High Level
14. Possess a mastery of the subject matter.	4.37	High Level	4.46	High Level
15. Provide varied explanations to questions asked by my students.	4.44	High Level	4.46	High Level
16. Provide varied materials and topics in my class.	4.09	High Level	4.09	High Level
17. Provide thought-provoking questions to my students.	4.13	High Level	4.14	High Level
18. Go out of my way to get as much information as possible to provide interesting topics to my students.	4.02	High Level	4.11	High Level
19. Provide opportunities for my students to participate in class discussions and activities.	4.54	Very High Level	4.49	High Level
20. Encourage my students to participate in class discussions and activities.	4.61	Very High Level	4.54	Very High Level
Overall mean	4.19	High Level	4.24	High Level

According to Sex

Table 5 examines the self-efficacy levels of Junior High School (JHS) teachers based on their sex, distinguishing between male and female groups. The overall mean of 4.13 for the male group and 4.25 for the female group both fall into the "high level" category, indicating that teachers when categorized by sex, exhibit a high level of efficacy. Notably, the female group demonstrates a slightly higher mean score than the male group, signifying a subtle difference despite both groups achieving a "high level."

Both male and female teachers express a strong belief in attaining very high levels of self-efficacy, particularly in providing opportunities and encouraging student participation in class discussions and activities. However, differences emerge in their views on specific challenges. The male group perceives challenges in maintaining students' learning interest during class, while the female group sees challenges in assisting students with class assignments and projects and identifying diverse learning capabilities.

This finding aligns with the Philippine Department of Education's (DepEd) K to 12 programs, which emphasizes the importance of teachers in identifying students' learning styles, intelligence, strengths, and weaknesses. Despite

both groups achieving the same high level of efficacy, distinctions in self-beliefs between male and female teachers indicate different perspectives and challenges.

Valerie (2018) suggests that men often perceive things logically, focusing on the main point, while women use intuition and emotion, paying attention to details and hidden meanings. This difference in perception may contribute to variations in self-beliefs between male and female teachers, as reflected in this research. Islahi (2013) notes that females generally possess personality traits essential for effective teaching to a greater degree than males. Similar observations are reported in Sarfo et al.'s (2015) study, indicating that female teachers exhibit higher instructional strategy efficacy than their male counterparts. However, Pas et al. (2012) caution that most studies exploring the association between gender and teacher efficacy have relatively small sample sizes and include few male teachers.

Table 5. Descriptive statistics of the level of self-efficacy of teachers in terms of sex

Statements	Male		Female	
	Mean	Interpretation	Mean	Interpretation
1. Can perform a complete assessment of the class performance.	3.90	High Level	4.10	High Level
2. Can identify the different learning capabilities of my students.	4.00	High Level	4.21	High Level
3. Discuss topics that motivate and are interesting to students.	4.30	High Level	4.33	High Level
4. Can assess the difficulties of my students in the class.	4.07	High Level	4.17	High Level
5. Can assess the mental capabilities of my studies.	3.97	High Level	4.09	High Level
6. Can maintain the learning interest of my students during the class.	3.83	High Level	4.09	High Level
7. Can document the progress of my students	3.93	High Level	4.30	High Level
8. Assist students in performing their class activities.	4.40	High Level	4.47	High Level
9. Employ classroom discipline effectively.	4.03	High Level	4.28	High Level
10. Assist students in meeting the class assignments and projects.	4.00	High Level	4.05	High Level
11. Can identify the different learning capabilities of my students	3.97	High Level	4.05	High Level
12. Exert my intellectual and physical strength in providing learning to my students.	4.10	High Level	4.31	High Level
13. Use different teaching strategies to suit the learning needs of my students.	4.13	High Level	4.22	High Level
14. Possess a mastery of the subject matter.	4.30	High Level	4.46	High Level
15. Provide varied explanations to questions asked by my students.	4.40	High Level	4.47	High Level
16. Provide varied materials and topics in my class.	3.97	High Level	4.14	High Level
17. Provide thought-provoking questions to my students.	4.13	High Level	4.14	High Level
18. Go out of my way to get as much information as possible to provide interesting topics to my students.	4.03	High Level	4.07	High Level
19. Provide opportunities for my students to participate in class discussions and activities.	4.53	Very High Level	4.51	Very High Level
20. Encourage my students to participate in class discussions and activities.	4.53	Very High Level	4.59	Very High Level
Overall mean	4.13	High Level	4.25	High Level

According to Length of Service

Table 6 provides insights into the self-efficacy levels of Junior High School (JHS) teachers based on their length of service, distinguishing between shorter and longer periods. The overall mean of 4.19 for the shorter group and 4.55 for the longer group both fall within the "high level" category, indicating that teachers when categorized by their teaching experience, exhibit a high level of efficacy. Both groups express a strong belief in their ability to encourage student participation in class discussions and activities, yet subtle distinctions arise in the figures. The mean score reveals that respondents with longer teaching experience have higher self-efficacy than those with shorter years of service.

This implies that teachers with longer experience may have acquired proficiency in subjects taught throughout their careers, despite facing challenges in assisting students with class assignments and projects. On the other hand, teachers with shorter experience, although achieving a "high level" of self-efficacy, indicate an ongoing process of improving their potential in completing assessments of class performance.

Contrary to the findings of Sen and Sood (2016), which suggested that less experienced secondary school teachers exhibited higher self-efficacy than their more experienced counterparts, this research indicates that teaching experience positively correlates with self-efficacy. The results align with the idea that experienced teachers' beliefs are often based on mastery experiences, while new teachers benefit from available teaching resources to improve their self-efficacy beliefs (Depaepe and Konig, 2018). Additionally, Kini and Podolsky (2016) note a positive association between teaching experience and student achievement gains, emphasizing that variation in teacher effectiveness exists at every stage of the teaching career. These findings underscore the importance of ongoing support and opportunities for reflection to enhance teachers' self-efficacy beliefs throughout their careers.

Table 6. Descriptive statistics of the level of self-efficacy of teachers in terms of length of service

Statements	Shorter		Longer	
	Mean	Interpretation	Mean	Interpretation
1. Can perform a complete assessment of the class performance.	3.82	High Level	4.27	High Level
2. Can identify the different learning capabilities of my students.	3.98	High Level	4.32	High Level
3. Discuss topics that motivate and are interesting to students.	4.29	High Level	4.36	High Level
4. Can assess the difficulties of my students in the class.	4.09	High Level	4.20	High Level
5. Can assess the mental capabilities of my studies.	4.00	High Level	4.11	High Level
6. Can maintain the learning interest of my students during the class.	3.96	High Level	4.07	High Level
7. Can document the progress of my students	4.25	High Level	4.14	High Level
8. Assist students in performing their class activities.	4.40	High Level	4.50	Very High Level
9. Employ classroom discipline effectively.	4.13	High Level	4.30	High Level
10. Assist students in meeting the class assignments and projects.	4.09	High Level	3.98	High Level
11. Can identify the different learning capabilities of my students	4.00	High Level	4.05	High Level
12. Exert my intellectual and physical strength in providing learning to my students.	4.35	High Level	4.16	High Level
13. Use different teaching strategies to suit the learning needs of my students.	4.13	High Level	4.27	High Level
14. Possess a mastery of the subject matter.	4.40	High Level	4.43	High Level
15. Provide varied explanations to questions asked by my students.	4.44	High Level	4.46	High Level
16. Provide varied materials and topics in my class.	4.13	High Level	4.05	High Level
17. Provide thought-provoking questions to my students.	4.16	High Level	4.11	High Level
18. Go out of my way to get as much information as possible to provide interesting topics to my students.	4.05	High Level	4.07	High Level
19. Provide opportunities for my students to participate in class discussions and activities.	4.53	Very High Level	4.50	Very High Level
20. Encourage my students to participate in class discussions and activities.	4.60	Very High Level	4.55	Very High Level
Overall mean	4.19	High Level	4.25	High Level

3.4 Level of Teaching Performance of Teachers

Table 7 determines the level of teaching performance of teachers when they are grouped according to age, sex, and length of service.

Table 7. Descriptive statistics of the level of teaching performance of teachers

Variables	Categories	Mean	Interpretation
Age	Younger	4.23	Very Satisfactory
	Older	4.19	Very Satisfactory
Sex	Male	4.08	Very Satisfactory
	Female	4.26	Very Satisfactory
Length of Service	Shorter	4.22	Very Satisfactory
	Longer	4.20	Very Satisfactory
Overall Mean		4.20	Very Satisfactory

Table 7 provides an analysis of the level of teaching performance in terms of age, gender, and length of service for teachers at junior high schools. When grouped according to age, sex and length of service, the average level of teaching performance is 4.20 which indicates a "very satisfactory" outcome.

While the study demonstrates very satisfactory ratings across variables, variations in the figures suggest nuanced differences in teaching performance. The results indicate that most female respondents below 43 years old and with less than 11 years of teaching experience perform very satisfactorily, potentially reflecting the dominance of female teachers in the District of Manapla. This aligns with national trends showing an increasing number of female educators (Ingersoll, 2019).

The findings also imply that female teachers may exhibit compassion and create a comfortable environment for students to share, serving as sisters or mothers, as emphasized by Islahi (2013). Younger teachers, despite having shorter service durations, demonstrate very satisfactory teaching performance, suggesting eagerness, commitment, and a strong work ethic, as noted in the study by Gunigundo (2017).

3.5 Personality Profile of Teachers When Grouped According to Age, Sex, and Length of Service

According to Age

Table 8 on the next page shows the personality profile of the Junior High School (JHS) Teachers when they are grouped according to age.

Table 8. Descriptive statistics of the level of the Personality profile in terms of age

Personality Traits	Younger		Older	
	Frequency	Percentage	Frequency	Percentage
Extraversion	2	66.7	1	33.3
Agreeableness	14	43.8	18	56.2
Conscientiousness	23	46.9	26	53.1
Emotional Stability	6	66.7	3	33.3
Intellect/Imagination	9	50.0	9	50.0
Total	54	48.6	57	51.4

The analysis of personality traits in Table 8 provides a breakdown of responses based on age groups (younger and older) within the Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Intellect/Imagination factors. In the Extraversion factor, 66.7% of those who scored high were younger respondents, while 33.3% were older. For Agreeableness, 43.8% of those scoring high are younger, with the majority (56.2%) being older. In the Conscientiousness factor, 46.9% of high scorers are younger, while the majority (53.1%) are older. In Emotional Stability, 66.7% of those with high scores are younger, and 33.3% are older. In Intellect/Imagination, 50% of high scorers are younger, and the other 50% are older respondents.

The overall frequency count indicates that 51.4% of the respondents are older, while 48.6% are younger. Notably, the dominant personality trait among both younger and older JHS teachers is Conscientiousness. This suggests a similarity in personality traits when grouped by age, with conscientiousness being a prevalent trait among both age categories. Conscientious individuals, as described by Kell (2019), are thorough, hardworking, and responsible. This trait is associated with good outcomes like longevity, attainment of a higher education level, job performance, and stability in the family. Conscientious people tend to follow societal norms, experience guilt, and shame when they fail to meet expectations and can delay gratification to achieve long-term goals. Conversely, individuals with low conscientiousness may be perceived as lazy, careless, and negligent. The results of this study imply that JHS teachers, whether younger or older, exhibit promising traits of being disciplined, organized, and goal-oriented individuals.

According to Sex

Table 9 presents the analysis of the personality profile of Junior High School (JHS) teachers based on their biological groupings (male and female). In the Extraversion factor, all 3 respondents who scored high were female, and no male respondents fell into this category. For Agreeableness, 5% of respondents scoring high were male, while the majority (75%) were female. In Conscientiousness, 30.6% of high scorers were male, and the majority (69.4%) were female. Emotional Stability showed 33.3% of high scorers as male and the majority (66.7%) as female. In Intellect/Imagination, 22.2% of high scorers were male, and the majority (77.8%) were female.

Table 9. Descriptive statistics of the level of Personality profile in terms of sex

Personality Traits	Male		Female	
	Frequency	Percentage	Frequency	Percentage
Extraversion	0	0	3	100
Agreeableness	8	25	24	75
Conscientiousness	15	30.6	34	69.4
Emotional Stability	3	33.3	6	67.7
Intellect/Imagination	4	22.2	14	77.8
Total	30	27	81	73

The overall frequency count reveals that out of 111 respondents, 27% are male, and the majority (73%) are female. Regardless of gender, the most prevalent personality trait among JHS teachers is Conscientiousness. The study suggests that both male and female groups of JHS teachers predominantly exhibit conscientious traits. Although both genders show a higher frequency in the conscientiousness factor, the figures indicate variations in the personality traits of JHS teachers. The female group significantly outnumbers males, implying that female teachers are more likely to be perceived as organized, dedicated, and disciplined individuals.

Empirical validations support the idea that teachers, particularly females, tend to be more conscientious. For example, Aidla and Vadi (2010) found that teachers in Estonia, especially females, demonstrated higher conscientiousness. The ability to exert self-discipline, organization, and impulse control to comply with the rules or objectives is a characteristic of conscientiousness, which is characterised by the ability to exert self-discipline, organization, and impulse control. While women generally score higher than men on some facets of conscientiousness, such as order, dutifulness, and self-discipline, these differences may not be consistent across cultures (Weisberg, DeYoung, & Hirsh, 2011; Costa et al., 2001).

Goncz (2017) emphasizes that both male and female teachers should possess qualities like cooperation, compromise, mild-manneredness, benevolence, and faith in mankind. In addition, for the characteristics such as competence, order, sense of responsibility, planning, self-discipline, impulse control, and commitment to work that emerge in this profession, a reasonable level of conscientiousness is crucial. Overall, gender differences in the personality characteristics of JHS teachers are highlighted concerning conscientiousness being a major trait between men and women.

According to Length of Service

Table 10. Descriptive statistics of the level of Personality profile in terms of length of service

Personality Traits	Shorter		Longer	
	Frequency	Percentage	Frequency	Percentage
Extraversion	2	66.7	1	33.3
Agreeableness	13	40.6	19	59.4
Conscientiousness	24	49.0	25	51.0
Emotional Stability	6	66.7	3	33.3
Intellect/Imagination	10	55.6	8	44.4
Total	55	49.5	56	50.5

Table 10 provides an analysis of the personality profile of Junior High School (JHS) teachers categorized by their length of service (shorter and longer). In the Extraversion factor, 66.7% of respondents with high scores are from the shorter length of service group, while 33.3% are from the longer length of service group. For Agreeableness, 40.6% of high scorers belong to the shorter group, and the majority (59.4%) are from the longer group. In Conscientiousness, 49% of high scorers are from the shorter group, and the majority (51%) are from the longer group. In Emotional Stability, 66.7% of high scorers are from the shorter group, and 33.3% are from the longer group. In Intellect/Imagination, 55.6% of high scorers are from the shorter group, while 44.4% are from the longer group.

The total frequency count of respondents, when grouped according to length of service, reveals that 49.5% of respondents have a shorter length of service, while the majority (50.5%) have a longer length of service. The dominant personality trait among JHS teachers, regardless of length of service, is Conscientiousness, as indicated by the frequency figures. The study suggests that both shorter and longer length of service groups of JHS teachers predominantly exhibit conscientious traits. Although both groups show a higher frequency in the

conscientiousness factor, the figures suggest differences in the personality traits of JHS teachers based on their length of service. The longer length of service group scores higher than the shorter group.

This implies that conscientiousness significantly predicts performance, with longer-serving teachers having accumulated more experience and demonstrating a goal-oriented performance. This finding aligns with research indicating that conscientiousness is a strong predictor of performance across various job types, as conscientious individuals tend to be more driven, achievement-oriented, and detail-oriented (Bullock, 2014). Additionally, measures of teacher conscientiousness reflect qualities such as dependability, achievement striving, and self-discipline, contributing to effective teaching (Cheng and Zamarro, 2016).

3.6 Comparative Analysis of Personality Profile of Teachers

According to Age

Table 11 presents a comparative analysis of the personality profile of teachers when grouped and compared according to age. Generally, when JHS teachers are grouped according to age, there is no significant difference in their personality profile.

Table 11. Differences in the personality profile of teachers according to age

Personality Traits		Age		Chi-Square	p-Value	Interpretation
		Younger	Older			
Extraversion	Count	2	1	0.175	0.916	Not Significant
	Percentage	66.7	33.1			
Agreeableness	Count	14	18	1.418	0.492	Not Significant
	Percentage	43.8	56.2			
Conscientiousness	Count	23	26	0.555	0.758	Not Significant
	Percentage	46.9	53.1			
Emotional Stability	Count	6	3	2.356	0.502	Not Significant
	Percentage	66.7	33.3			
Intellect/Imagination	Count	9	9	2.376	0.305	Not Significant
	Percentage	50.0	50.0			

According to Sex

Table 12 presents the comparative analysis of the personality profile of teachers when grouped and compared according to sex. In general, when JHS teachers are grouped according to sex, there is no significant difference in their personality profile.

Table 12. Differences in the personality profile of teachers according to sex

Personality Traits		Sex		Chi-Square	p-Value	Interpretation
		Male	Female			
Extraversion	Count	0	3	0.168	0.05	Not Significant
	Percentage	0	100			
Agreeableness	Count	8	24	56.879	0.05	Not Significant
	Percentage	25.0	75.0			
Conscientiousness	Count	15	34	2.868	0.05	Not Significant
	Percentage	30.6	69.4			
Emotional Stability	Count	3	6	3.383	0.05	Not Significant
	Percentage	33.3	67.7			
Intellect/Imagination	Count	4	14	0.483	0.05	Not Significant
	Percentage	22.2	77.8			

According to Length of Service

Table 13 presents the comparative analysis of the personality profile of teachers when grouped and compared according to length of service. In general, when JHS teachers are grouped according to their length of service, there is no significant difference in their personality profile.

Table 13. Differences in the personality profile of teachers according to length of service

Personality Traits		Length of Service		Chi-Square	p-Value	Interpretation
		Shorter	Longer			
Extraversion	Count	2	1	2.390	0.05	Not Significant
	Percentage	66.7	33.3			
Agreeableness	Count	13	19	1.005	0.05	Not Significant
	Percentage	40.6	59.4			
Conscientiousness	Count	24	25	0.861	0.05	Not Significant
	Percentage	49.0	51.0			
Emotional Stability	Count	6	3	4.522	0.05	Not Significant
	Percentage	66.7	33.3			
Intellect/Imagination	Count	10	8	0.483	0.05	Not Significant
	Percentage	55.6	44.4			

3.7 Comparative Analysis of the Level of Self-Efficacy

The findings, as depicted in Table 14, indicate that there is no significant difference between the levels of self-efficacy of Junior High School (JHS) teachers when they are grouped and compared according to age, sex, and length of service.

Table 14. Difference in the level of self-efficacy

Variables	Categories	N	Mean Rank	Mann Whitney U- test	Sig. Level	p-value	Interpretation
Age	Younger	54	53.06	1380.500	0.05	0.349	Not Significant
	Older	57	58.78				
Sex	Male	30	49.17	1010.00	0.05	0.173	Not Significant
	Female	81	58.53				
Length of Service	Shorter	55	53.53	1404.00	0.05	0.422	Not Significant
	Longer	56	58.43				

3.8 Comparative Analysis of the Level of Teaching Performance

The findings, as shown in Table 15, reveal that when JHS are grouped and compared according to age and length of service there is no significant difference about the level of teaching performance. However, there are significant differences in the level of teaching performance when grouped and compared according to sex.

Table 15. Difference in the level of teaching performance

Variables	Categories	N	Mean Rank	Mann Whitney U- test	Sig. Level	p-value	Interpretation
Age	Younger	54	58.07	1427.00	0.05	0.508	Not Significant
	Older	57	54.04				
Sex	Male	30	39.05	706.50	0.05	0.001	Significant
	Female	81	62.28				
Length of Service	Shorter	55	54.51	1458.00	0.05	0.628	Not Significant
	Longer	56	57.46				

3.9 Association Between Personality Profile and Teaching Performance

Table 16 determines the association between the personality profile and the level of teaching performance.

Table 16. Chi-square test of association between the level of personality profile and the level of teaching performance

	Chi-Square	Significant Level	p-value	Interpretation
Level of Personality Profile	0.699	0.05	0.951	Not Significant
Level of Teaching Performance				

The examination of statistics in Table 16 reveals a computed p-value of 0.951 ($r = 0.951$, $p > 0.05$) for the Chi-Square Test of Independence. The generated p-value is above the significance level of 0.05. This indicates that there is no correlation between the personality traits and the level of performance of Junior High School (JHS) teachers. Therefore, it can be inferred that the personality profile of teachers does not have a significant impact on their level of teaching performance, which has been consistently rated as "very satisfactory" based on their Individual Performance Commitment and Review Form (IPCRF) records.

3.10 Relationship Between Self-Efficacy and Teaching Performance

Table 17 determines the relationship between the level of self-efficacy and the level of teaching performance of JHS teachers.

Table 17. Correlation analysis between the level of self-efficacy and the level of teaching performance				
	Rho	Significant Level	p-value	Interpretation
Level of Self-Efficacy	0.166	0.05	0.082	Not Significant
Level of Teaching Performance				

The examination of statistics in Table 17 reveals a computed p-value of 0.082 for the Spearman Rho, which is above the tabular value of the significance level set at 0.05. This result implies that the level of self-efficacy among Junior High School (JHS) teachers is not significantly affected by their level of teaching performance. This finding contrasts with previous studies that emphasize the importance of teacher self-efficacy in the success of the teaching-learning process.

Although there is extensive literature on self-efficacy and its dimensions in education, there is a notable gap in studies looking at the relationship between teachers' self-efficacy, their actual teaching skills, and their characteristics (Cocca et al., 2018). Some researchers argue that teacher self-efficacy has broader implications for overall school effectiveness, suggesting a correlation between higher-performing schools and mediating factors between a school's climate and professional culture (Bray-Clark & Bates, 2003).

Moreover, existing research suggests that high self-efficacy beliefs can empower teachers to respond effectively to stressful situations and challenges. Teachers with positive efficacy beliefs are more inclined to take risks and embrace new teaching techniques, contributing to their overall effectiveness (Guskey, 2008). Despite the incongruence in this study's findings, the complex interplay between self-efficacy and teaching performance remains an intriguing area for further research and exploration.

4.0 Conclusion

In conclusion, the study presents several key findings regarding the personality profile, self-efficacy, and teaching performance of Junior High School (JHS) teachers. Firstly, the dominant personality trait among JHS teachers, as categorized by selected variables, is Conscientiousness. This trait signifies that the respondents generally exhibit qualities such as goal-oriented behavior, organizational skills, and attention to detail, all crucial attributes for the teaching profession. The demanding tasks of lesson planning, classroom organization, and meticulous attention to detail align with the conscientious nature required in the teaching role.

Secondly, in terms of self-efficacy, the overall findings indicate a "high level" among JHS teachers. They demonstrate a strong belief in encouraging student participation in class discussions. However, the study notes a challenge in maintaining students' interest, particularly due to external factors like technology and social media. Additionally, variations in teachers' beliefs emerged when categorized by age, sex, and length of service.

Thirdly, the overall teaching performance of JHS teachers in the District of Manapla is rated as "very satisfactory," exceeding established standards, as indicated in the Individual Performance Commitment and Review Form (IPCRF). When grouped by variables, most younger female teachers with shorter service years perform very satisfactorily. Nevertheless, the study suggests a continual need for efforts and professional development to achieve an outstanding level of teaching performance.

Regarding the influence of age, sex, and length of service on personality profile, self-efficacy, and teaching performance, the study reveals that these variables do not significantly impact these factors. However, sex emerges as a predictor significantly influencing teaching performance, with female teachers demonstrating a higher level of performance.

Moreover, when exploring the relationship between personality profile and teaching performance, as well as the relationship between self-efficacy and teaching performance, the study found no significant associations. In

essence, teachers' attitudes, and behaviors, based on their personality traits and self-efficacy, do not appear to impact their teaching performance. It seems that teachers' attitudes and behaviors, influenced by their personality traits and belief in their abilities, do not directly affect their teaching performance.

In summary, while certain traits and characteristics prevail among JHS teachers, and despite variations in self-efficacy beliefs, the study emphasizes the need for continuous professional development and efforts to enhance teaching performance. This can be achieved through workshops, seminars, and training sessions that focus on teaching methodologies, classroom management, and subject-specific content. These initiatives will help teachers refine their skills and boost their confidence in the classroom.

Additionally, schools should implement programs that address emotional support, physical wellness, and professional growth. These initiatives will enable teachers to recognize their strengths and areas for improvement, allowing them to set attainable goals and work towards enhancing their self-efficacy. To maintain teacher well-being, schools should provide access to counseling services or assistance programs to help manage stress and promote overall wellness. This holistic approach can contribute to increased confidence, resilience, and productivity among teachers. Recognizing the aspects that contribute to a teacher's efficiency is a significant concern for both research and policy-making. This understanding can potentially shape the way teachers prepare and improve educational experiences for all.

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There is only one author for this research.

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The author declares that they have no conflicts of interest.

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Mathematics Anxiety's Impact on Grade 11 General Mathematics Performance

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Abstract. This study investigates the relationship between math anxiety levels and the academic performance of Grade 11 students in General Mathematics. Utilizing a descriptive-correlational design, the research aims to delineate the profile of respondents concerning their math anxiety levels and academic performance. The sample comprised forty-nine Grade 11 students. The primary research instrument was Ellen Freedman's standardized Self-Test for Math Anxiety. Findings indicate that the respondents exhibited moderate levels of math anxiety and their academic performance in General Mathematics was generally satisfactory. Notably, a significant relationship was found between math anxiety and the respondent's sex. Additionally, the study revealed a negative correlation between math anxiety and academic performance, indicating that higher levels of math anxiety are associated with poorer academic performance in General Mathematics, and conversely, lower levels of math anxiety correlate with better academic performance. The study concludes with recommendations for educational practice and suggestions for future research directions.

Keywords: Mathematics anxiety; Mathematics performance; Grade 11

1.0 Introduction

Students face challenges in understanding math. They continue to fall behind of math achievement standards, lose interest, and eventually give up learning math (Yeh et al., 2019). This symptom can make students anxious when studying math. Math anxiety is known to be a common problem in K-12 and higher education (Ashcraft & Moore, 2009; Luttenberger et al., 2018; Yamahani, et al., 2018). It is also found to be a common and vulnerable problem among high school students and affects them at school (Cebu et al., 2023). When it's time to learn math, most students feel scared, lack motivation, lack confidence, hate math, and avoid the subject. This situation illustrates students' negative thoughts, feelings, and behaviors toward math.

On the other hand, the negative effects of math anxiety led to lower students' math performance. As highlighted by the Nuffield Foundation (2017), the negative impact of anxiety on student performance increases over the years as the school progresses. Anouti, Shehayeb, and Mchiek (2018) highlighted that low math skills harm students' anxiety in timed exams, and other researchers argue that high math anxiety is mainly associated with poor performance and is associated with low-achieving students. Additionally, high levels of anxiety can create anxious memories, which directly impact students' long-term and short-term performance in mathematics and other subjects (Buckley & Reid, 2013). Students' negative attitude towards this subject has led to poor performance in mathematics. This long-term negative fear becomes a math problem and causes anxiety in students.

Furthermore, in the context of Bulawan Integrated School most students especially those in the 11th-grade general mathematics class, dislike the subject of mathematics because they believe that mathematics is difficult and not easy to understand. Through my awareness of the subject of mathematics, I realized that other students were also

afraid to answers, nervous, and sweaty on their faces when they showed their answers on the board. It was also found that scores on formative and summative assessments were low. Even if the math teacher talks a lot and advances the lesson. It is very interesting to conduct study about the negative reactions of students in the field of mathematics and their psychological and behavioral manifestations toward mathematics. Therefore, the researcher decided to conduct this study to determine the mathematics anxiety's impact on the 11th-grade general mathematics performance of the students in Bulawan Integrated School.

2.0 Methodology

2.1 Research Design

This study used a descriptive correlational research design. It is descriptive because it describes the respondent's profile, level of mathematics anxiety, and academic performance in general mathematics. On the other hand, it is correlational because it investigates the relationship between the variables of mathematics anxiety, the demographic profile of the respondents, and the general academic performance in mathematics.

2.2 Research Participants

The total population of 49 Grade 11 students enrolled in the first semester of the School Year 2022 – 2023. In which 15 students enrolled in Agri Crop Production NC – II, 16 students enrolled in Electrical Installation and Maintenance NC – II, and 18 students enrolled in Computer System Services NC – II. No sampling technique was used in this study because all Grade 11 enrolled in the first semester of the School Year 2022 – 2023 were used as a respondent in this study.

2.3 Research Instrument

This study used an adapted ten (10) items and a five-point – Likert scale survey questionnaire of the standardized items of Ellen Freedman's Self-Test, Do You Have Math Anxiety (Freedman, 2006). These standardized items are designed to help students deal with the kind of math-related anxiety that affects the performance of students in mathematics. This study followed ethical guidelines, and respondents' participation was voluntary. To validate the instruments, several steps were taken. To ensure study objectives were met, an education expert reviewed the adapted questionnaire. Second, a pilot test with a small sample of respondents identified and assessed the instrument's clarity and comprehensiveness.

2.4 Data Gathering Procedure

This study used specific steps to collect the data. A letter was sent to the school head to inform and secure approval to conduct data collection. After securing the approval, the researcher asked to access the master list of all Grade 11 enrollees from the Principal's Office to be used as the respondents in the study. A parent's consent was given to the Grade 11 students who served as a respondent in the study.

2.5 Ethical Considerations

This research study followed ethical guidelines. In compliance with the research ethics protocol, the researcher gives consent from the parents/guardians of the respondents. This ethical consideration ensured that the survey respondents, with the consent of their parents/guardians, signify their awareness and understanding of the study objectives, their agreement to participate as survey respondents, their freedom to disclose or not to disclose information, their freedom to stop their participation anytime if they do not feel comfortable, their right to the confidentiality of information and anonymity of their identity as respondents of the researchers, their rights to understand about the study and ask questions about it, their right to know its benefits and the activities expected of them in the study.

3.0 Results and Discussion

Table 1. Frequency and percentage distribution of respondents in terms of sex

Sex	Frequency	Percentage (%)
Male	29	59.18
Female	20	40.82

Table 1 presents the demographic profile of the respondents in terms of sex. It shows that twenty – nine (29 or 59.18%) of the respondents were males while twenty (20 or 40.82%) were females. This implies that most of the

enrolled Grade 11 in the School Year 2022 – 2023 were males. These results support Ganley and Vasilyeva's (2011) study that spatial skills predict math ability in boys but not in girls and that math attitudes show a stronger relationship with academic performance in girls compared to boys. Additionally, Maloney et al. (2012) suggest that women may have more math anxiety than men when faced with tasks that involve math and arithmetic skills. Moreover, Khesht-Masjedi et al. (2019) found that girls are more anxious about math than boys.

Table 2. Frequency and percentage distribution of respondents in terms of age

Age	Frequency	Percentage (%)
16-17	36	73.47
18-19	10	20.41
20-above	3	06.12

Table 2 presents the demographic profile of the respondents in terms of age. It shows that thirty – six (36 or 73.47%) of the respondents were aged 16 – 17, ten (10 or 20.41%) aged 18 -19, and three (3 or 06.12%) whose age were 20 - above. This implies that most of the ages of the enrolled Grade 11 in the School Year 2022 – 2023 were 16 - 17. The finding supports the study of Jabor et al. (2011) found that students in the age group “under 19 years old” have higher math grade point averages (GPA) than students in the above age group. However, recent studies have shown that there is a negative relationship between math anxiety and academic performance in young adults (Wu et al., 2017; Gunderson et al., 2018). Moreover, Khasawneh et al., (2021) indicate that students with an age below or equivalent to nineteen (19), had a mean anxiety score of 26.52, and were more anxious than those in adulthood age with a mean score of 25.33.

Table 3. Level of Math Anxiety

Statements	Mean	Interpretation
1. I cringe when I have to go to math class.	2.63	Moderately anxious
2. I am uneasy about going to the board in a math class.	3.49	Very anxious
3. I am afraid to ask questions in math class.	2.73	Moderately anxious
4. I am always worried about being called on in math class.	3.30	Moderately anxious
5. I understand math now, but I worry that it's going to get difficult soon.	3.63	Very anxious
6. I tend to zone out in math class.	1.78	A little anxious
7. I fear math tests more than any other kind.	1.68	A little anxious
8. I don't know how to study for math tests.	1.90	A little anxious
9. It's clear to me in math class, but when I go home it's like I was never there.	3.57	Very anxious
10. I'm afraid I won't be able to keep up with the rest of the class.	2.37	A little anxious
Overall Mean	2.71	Moderately anxious

Scale: 1.00 – 1.79 = not all anxious, 1.80 – 2.59 = a little anxious, 2.60 – 3.39 = moderately anxious, 3.40 – 4.19 = very anxious, 4.20 – 5.00 = extremely anxious.

Table 3 presents the level of math anxiety of the respondents with an overall weighted mean of 2.71 interpreted as moderately anxious. The table revealed the top three statements such as “I understand math now, but I worry that it's going to get difficult soon” with a mean of 3. 63 described as very anxious, “It's clear to me in math class, but when I go home it's like I was never there” with a mean of 3.57 described as very anxious and “I am uneasy about going to the board in a math class” with a mean of 3.49 described as very anxious. On the other hand, the last statement “I fear math tests more than any other kind” with a mean of 1. 68 described as a little anxious. The findings supported by the Programme for the International Student Assessment (PISA) (2012), 59% of 15-year-old students said they often worry that math will be difficult for them and 31% said they are very nervous when thinking about math problems. Additionally, Ruff and Boes (2014) highlight that math anxiety is a persistent and important theme that leads to math avoidance and low achievement. Lyons and Beilock (2012) point out that many people feel anxious when doing math in their daily work. More importantly, they also found that individuals with high levels of math anxiety had significantly lower performance in math compared to non-math subjects. Moreover, Buckley (2013) points out that due to anxiety, students may develop negative attitudes toward mathematics, as many people with anxiety often try to avoid subjects, courses, and careers related to mathematics.

Table 4 shows the academic performance of the respondents in General Mathematics with a mean of 77.27 described as fairly satisfactory. Based on the results, it reveals that there were 39, or 79.59 percent whose academic performance belongs to the range of 75 – 79 described as fairly satisfactory, and 9, or 18.37 percent whose academic performance belongs to the range of 80 – 84 described as satisfactory. Meanwhile, only 1 or 2.04 percent whose academic performance belongs to the range of 85 – 89 described as very satisfactory. This implies that most of the

grades in General Mathematics of the respondents fall within 75 – 79 described as fairly satisfactory. This finding is corroborated by Ruff and Boes (2014), according to which low results in mathematics are a frequent weakness of many students. This tendency to underperform is associated with students' low interest in learning mathematics (Khasawneh et al., 2023). Low student performance in math is an indicator of subject anxiety. Students' academic performance and well-being in the classroom are both linked to math anxiety (Shaikh, 2013; Mutegi, 2021).

Table 4. Academic performance in General Mathematics

Descriptor	Range	Frequency	Percentage (%)
Outstanding	90-100	0	00.00
Very Satisfactory	85-89	1	02.04
Satisfactory	80-84	9	18.37
Fairly Satisfactory	75-79	39	79.59
Did not meet Expectations	0-74	0	00.00

Table 5 presents the relationship between the level of math anxiety and the demographic profile of the respondents. In terms of sex, the chi-square result was 51.957 with a degree of freedom of 4, and the computed p-value was 0.000. This implies that the p-value (0.000) result was less than the significance level of 0.05. Therefore, math anxiety and the respondent's sex have a significant relationship. Thus, the null hypothesis is rejected. In terms of age, the chi-square result was 8.734 with a degree of freedom of 8, and the computed p-value was 0.365. This implies that the computed p-value (0.365) result was greater than the significance level of 0.05. Thus, the null hypothesis is accepted. The results support the study of Maloney et al. (2012) suggesting that women may experience more math anxiety than men when faced with tasks that involve math and arithmetic skills. In contrast, Khasawneh et al. (2021) showed that age did not significantly influence math anxiety scores.

Table 5. The Relationship between the level of math anxiety and the demographic profile of the respondents

Variables	χ^2	df	p-value	Interpretation	Decision
Sex	51.97	4	0.000*	Significant	Reject Null
Age	8.734	8	0.365	Not Significant	Accept Null

Table 6 presents the significant relationship between math anxiety and the respondent's academic performance in General Mathematics. When analyzed using the Pearson Product – Moment Coefficient Correlation between the level of math anxiety and the academic performance in General Mathematics of the respondents the result shows that the computed coefficient correlation is -0.33 interpreted as a negative correlation while the computed p-value (0.0351) was less than the significance level of 0.05 which was statistically significant. This implies that math anxiety has a negative relation concerning academic performance in mathematics. Mutegi's (2021) study found that there was a significant negative relationship between students' math anxiety and their math performance. It found that when anxiety levels are medium/low, math performance is high. When anxiety levels are high, math performance will be low.

Table 6. The Relationship between the level of math anxiety and the academic performance of the respondents

Variables	Coefficient Correlation	p-value	Interpretation	Decision
Math Anxiety and Academic Performance	-0.33	0.035*	Significant	Reject Null

4.0 Conclusion

The following results were revealed in this study: Out of 49 respondents, 29 or 59.18% were male. This shows that the number of male respondents is more than the number of female respondents. The majority of respondents were between the ages of 16 and 17, the appropriate age for 11th grade, accounting for 36 or 73.47% of the total respondents. The respondent's level of mathematics anxiety was 2.71, which is interpreted as moderate anxiety, while the respondent's academic performance in general mathematics was 77.27, which was described as quite satisfactory. The results also showed that there was a significant relationship between mathematics anxiety and respondents' gender characteristics. At the same time, there was no significant relationship between math anxiety and respondents' age. It was revealed that there is a negative correlation, but there is a significant relationship between math anxiety and academic performance in math in general. The results demonstrated that high levels of math anxiety lead to poor academic performance in high school math or low levels of math anxiety lead to good academic performance in high school math.

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The authors indicate equal contribution to each section. The authors reviewed and approved the final work.

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7.0 Conflict of Interests

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Psychological Distress, Adaptive Coping Mechanism, and Well-Being of Junior High School Students in Public Schools

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Abstract. This study investigated various aspects of psychological distress, adaptive coping mechanisms, and well-being among junior high school students in public schools within General Santos City. The researchers employed a descriptive-correlational research design, administering a researcher-developed questionnaire to students from four prominent public high schools. Statistical analyses included the use of mean, standard deviation, and Pearson's r correlation. The findings indicate that junior high school students experience high levels of psychological distress. Although the overall impact of contributing factors is low, specific factors such as excessive use of technology or social media and concerns about post-junior high school futures were notably significant. Despite experiencing high levels of psychological distress, students reported using adaptive coping mechanisms and maintaining a high level of well-being. A significant relationship was also identified between psychological distress and student well-being. Based on these findings, the researchers recommend the implementation of tailored mental health intervention programs to address the specific challenges faced by students in public high schools. Such programs could enhance student well-being, mitigate long-term issues, and provide support for school counselors, teachers, and mental health advocates. The study's results offer a foundation for developing practical interventions to improve the mental well-being of junior high school students in public schools, thereby promoting a healthier and more supportive educational environment.

Keywords: Psychological distress; Adaptive coping mechanism; Well-being; Junior high school students; Philippines.

1.0 Introduction

Serious mental health concerns have become apparent recently, particularly for adolescents, since they are undergoing significant changes in their physical, emotional, and psychological aspects. Recent research highlights significant mental health challenges among adolescents, with one in five experiencing severe disorders at some point (Farley, 2020). Depression, anxiety, sleep disturbances, and post-traumatic stress symptoms are widespread (Ma et al., 2021). Given these alarming trends, it is crucial to prioritize mental health resources and support for adolescents.

Psychological distress can arise from various sources, including life events, interpersonal conflicts, societal pressures, and internal struggles. By definition, psychological distress is a set of physically and mentally painful symptoms connected to most people's typical mood swings (American Psychological Association, n.d.). Prolonged distress has been linked to adverse outcomes such as poor academic performance and behavioral issues (Divaris et al., 2013). Many high school students experience psychological distress, yet some avoid seeking professional help due to stigma concerns (Sheppard et al., 2018). Furthermore, in a study by Pengpid and Peltzer (2020), there

is an association of psychological distress with bullying victimization, parental emotional neglect, parental disrespect of privacy, having no close friends, frequent experience of hunger, school absenteeism, sedentary behavior, and injuries. Determining the level of and factors contributing to psychological distress among junior high school students in General Santos City could aid in developing targeted interventions that address the unique challenges faced by this population. In this regard, the role of adaptive coping mechanisms in lessening the impact of psychological distress and preventing its future occurrence becomes evident.

Adaptive coping mechanisms serve as protective factors that can mitigate the negative impact of life stressors and reduce the likelihood of their occurrence in the future. Some adaptive coping mechanisms are resiliency, religious coping, problem-solving, social support, exercise, and acceptance (Coulacoglou & Saklofske, 2018; Garber, 2017; Javed & Parveen, 2021; Lee et al., 2017; Reeve et al., 2013). However, another study also discovered that distressed respondents frequently used maladaptive coping mechanisms such as self-distraction, emotionally focused venting, self-responsibility, and behavioral withdrawal (Lin & Yusoff, 2013). According to Compas et al. (2017), the utilization of adaptive coping mechanisms by individuals in their daily lives, despite complexity and stress, can lower the likelihood of psychopathological consequences, highlighting the significance of coping strategies during the ongoing pandemic. Engaging in adaptive coping mechanisms might contribute to an individual's overall well-being by promoting effective stress management and reducing the negative impact of stress on mental health.

Adolescents' character development depends significantly on their overall well-being. They engage in academic-related activities the majority of the time. As a result, according to Kern et al. (2015), schools should be held accountable for the students' welfare and for preparing them for the challenges of adulthood. Few studies suggest that toxic stressors experienced early in life may have adverse effects on development and a probability of a chain reaction of stressors that will follow and threaten mental health (Nurius et al., 2015). In other words, adolescents are developing psychologically, and certain factors could influence their mental health, such as past stressful experiences. Given the insufficient availability of mental health resources in public schools, it becomes imperative to prioritize the implementation of culturally appropriate mental health interventions in the context of the Philippines.

Research on adolescents' mental health in the Philippines is limited, particularly those focusing on high school students in General Santos City. A survey by Kwangu et al. (2017) found a high prevalence of suicidal thoughts among Filipino teens, along with various risk factors like food insecurity, anxiety, loneliness, limited social connections, school absenteeism, bullying, physical violence, conflict, smoking, and alcohol consumption. Similarly, Malolos et al. (2021) highlighted how the COVID-19 pandemic worsened mental health challenges for Filipino children or adolescents aged 5-17 due to inadequate government policies. The study also gathered that despite the growing recognition of the importance of mental health, there is still a lack of sufficient interventions specifically tailored to address the mental health needs of children and adolescents. These findings provide further evidence of the importance and purpose of creating a program for students around the age group cited earlier, as junior high school students in public schools are mainly affected by lacking accessible mental health services.

Providing mental health intervention programs is crucial for promoting the well-being of public high school students by addressing their unique challenges and stressors, improving their academic performance and quality of life, and preventing long-term mental health issues. School interventions can positively change adolescents' perceptions of mental illness (Sakellari et al., 2014). Moreover, addressing mental health issues early on can prevent long-term problems, such as depression and anxiety disorders, and help students lead happier, healthier lives. A study by Robertson et al. (2017) concluded that the period of adolescence holds significant potential for implementing mental health interventions that can mitigate immediate and lasting consequences. With this in mind, the researchers chose a potential solution suited to junior high school students' specific mental health needs in public schools. Creating targeted mental health intervention programs in public high schools based on the insights gained from this research can have a transformative impact. It has the potential for practical application by guidance practitioners, academic professionals, and mental health advocates. This study's findings may fill gaps of understanding on the implications of mental health concerns of junior high school students in public schools.

2.0 Methodology

2.1 Research Design

The researchers used a descriptive-correlational research design to collect, measure, and analyze numerical data. According to Lau (2017), correlational studies seek to determine whether the characteristics of a population vary based on whether or not the individuals have encountered an event of interest in a natural setting. Using this approach helped determine if a significant relationship exists between psychological distress and well-being. This design was also ideal for generalizing the findings on psychological distress, adaptive coping mechanisms, and well-being to real-life situations in an externally valid way. A descriptive-correlational research design is appropriate for this study as it aims to identify characteristics, frequencies, and trends in the chosen topic (McCombes, 2022). In this case, this study aims to investigate various aspects of psychological distress, adaptive coping mechanisms, and well-being of junior high school students and inculcate the findings into developing an effective intervention program.

2.2 Research Participants

Junior High School students from seventh to tenth grade in four public schools in General Santos City were the respondents of this study. The researchers used the simple random sampling method to determine the participants chosen for this study. Simple random sampling is one of the methods of selecting individuals from a population where everyone has an equal opportunity to participate using a fair and unbiased process. The technique involves assigning a number to each person in the population and then randomly selecting participants for the sample (Simkus, 2023). The researchers also utilized quota sampling to identify the number of respondents and the random survey distribution. Quota sampling guarantees that a specific trait of a population sample will be presented in the precise manner desired by the researcher (Acharya et al., 2013). Therefore, a total of 379 respondents participated in the survey. The students were 12-16 years old and currently enrolled in a public high school, as this is the general age range of junior high school students in the Philippines. The present study excluded schools with no record of confirmed cases of psychological distress and focused on schools where such cases received reports. This criterion allowed the researchers to investigate psychological distress's prevalence and underlying causes in educational institutions. Moreover, the unique experiences and obstacles students in special education programs encounter are distinct from those their peers face. Consequently, they have been excluded from the study to uphold the precision and applicability of the findings.

2.3 Research Instrument

The researchers used a researcher-made survey that they created in May 2023 to obtain reliable and actionable results. The survey comprises four parts- level of well-being, psychological distress level, factors contributing to psychological distress, and adaptive coping mechanisms. The questionnaire utilized a 4-point Likert Type Scale, as with frequency-type choices: always, sometimes, seldom, and never. There are 60 items, with 15 questions for each part. To determine content validity, the researchers developed the questionnaire items based on the constructs and variables identified through the study. They refined the questions through expert review and feedback from the research adviser. Involving experts in the field helps ensure that the questionnaire items are relevant, comprehensive, and aligned with the study's objectives. The researchers also conducted a pre-survey to develop the items, which helped them assess the face validity of the questions and refine them accordingly. Since the questionnaire comprises 15 questions for each of the four parts, the researchers assessed the internal consistency reliability with the help of a statistician. The study utilized Cronbach's alpha to evaluate the questionnaire's internal consistency, which measured the interrelatedness or homogeneity of items within each part. A research director, a psychologist, and an established college administrator conducted the validation process. Before conducting the study, the researchers employed pilot testing to test the feasibility and accessibility of an approach for a larger population. Junior high school students from around the researchers' barangays participated in the pilot testing. The reliability test results showed that three of the parts were highly reliable, with part one garnering a reliability coefficient of 0.84, part three obtaining 0.80, and part four achieving 0.84. Although part four only garnered a reliability coefficient of 0.78, it is still considered reliable and acceptable for data gathering.

2.4 Data Gathering Procedure

A systematic research method was employed to ensure the study's successful execution, encompassing the following essential steps: The researchers made a request letter that was noted by the research adviser and college

dean, allowing them to conduct an inquiry to obtain the population of junior high school students at the selected locale and ask the guidance practitioners if there have been cases of students going through psychological distress reported to them. Inclusion and exclusion criteria were then established based on the information gathered from the inquiry. Then, subject matter experts evaluated the researcher-formulated questionnaire and underwent pilot and reliability testing to identify and correct problems before implementing the survey. Before conducting the study, the researchers employed pilot testing to test the feasibility and accessibility of an approach for a larger population. Random junior high school students participated in the pilot testing. The test required 30 respondents from junior high school students to present its population. During the pilot testing, the researchers protected the rights of the respondents by following a particular code of conduct, which is anonymity to keep the respondent's identity unknown during and after the study, confidentiality to make sure that the respondents' information and responses will remain private, and the data will be safely secured before and after the study, as well as informed consent to ensure that the respondents are aware of what the study is about and what risks they might encounter. The researchers also applied these ethical considerations during the actual study. Informed consent was collected beforehand. Since the reliability testing results showed that most parts of the questionnaire were highly reliable, the researchers were confident in following and utilizing the validated tools to ensure the data's consistency during the actual gathering. The researchers then gathered the students' responses and transferred the data to Google Sheets for easier access and organization for data analysis. The data was stored and presented per the ethical obligations for quantitative research.

2.5 Ethical Considerations

The researchers followed standard protocols as suggested by Ignacio (2023) to ensure ethical considerations during the study. The researchers ensured that the respondents' identities remained unknown during and after the study for security reasons, meaning the respondents' names or any identifying information were undisclosed from their survey responses. The respondents' information remained confidential, and students' data were safely secured before and after the study. The researchers ensured that only authorized personnel had access to the data and took measures to prevent information from being disclosed. The researchers built a sense of trust with their respondents, having clear communication, clarity with the objectives and procedures, and maintaining the integrity of the research. The students verbally assented to the researchers to prove they freely participated in the study and were not coerced. They were then issued an informed consent document to participate in a research study and parents' consent since the respondents were minors. In addition, they understood the purpose of the study, any risks involved, and their rights to withdraw at any time. The researchers ensured that the participants were treated fairly and with respect.

3.0 Results and Discussion

3.1 Level of Psychological Distress

Table 1. Descriptive statistics of the level of psychological distress

Indicator	Mean	Interpretation	SD
1. I feel socially isolated from my friends and classmates.	2.554	High	0.848
2. I feel restless because things don't go the way I want them to.	2.794	High	0.816
3. I have trouble sleeping or experience sleep disturbances due to anxiety.	2.354	Low	1.067
4. I feel a lack of motivation to participate in academic activities.	2.702	High	0.860
5. I experience increased irritability or mood swings.	2.860	High	0.917
6. I feel a loss of interest or enjoyment in activities.	2.422	Low	0.952
7. I find it difficult to concentrate on doing schoolwork.	2.723	High	0.813
8. I experience physical symptoms such as headaches or stomach aches due to stress.	2.499	Low	1.001
9. I feel stressed due to financial problems	2.435	Low	1.078
10. I feel stressed due to family problems.	2.507	Low	1.092
11. I feel worried about the state of the world and current events.	2.691	High	0.821
12. I feel a lack of control or power over my own life.	2.496	Low	0.935
13. I have thoughts of self-harm or suicide.	2.029	Low	1.111
14. I feel anxious about my performance in tests or exams.	3.114	High	0.940
15. I feel that I am tired for no reason.	3.050	High	1.047
Grand Mean	2.615	High	0.995

Legend for mean score interpretation: 1.00-1.75 = very low, 1.76-2.50= low, 2.51-3.25=high, 3.26-4.00=very high

Table 1 presents indicators of the level of psychological distress exhibited by public junior high school students within General Santos City. The respondents obtained a high grand mean score ($M=2.615$, $SD=0.995$), suggesting

a high level of psychological distress. The statement "I feel anxious about my performance in tests or exams" has the highest mean score of 3.114 (SD=0.940). A study by Lin and Yusoff (2013) stated that students experience high levels of psychological distress mainly on their performances on their tests. Most students who are anxious make it difficult for them to perform well on their tests or exams effectively, and flooding thoughts of worry could affect their overall health and their daily lives. On the other hand, the statement "I have thoughts of self-harm or suicide" has the lowest mean score of 2.029 (SD=1.111). This finding is contrary to the study of Zanusi et al. (2021), which stated that the prevalence of students having thoughts of self-harm or suicide ideations is high. Although this difference requires further investigation, it suggests that, within the context of public high schools in General Santos City, academic pressures may outweigh suicidal ideations among students.

These results carry significant implications for various stakeholders in the mental health and education sectors. Teachers must recognize that test anxiety negatively impacts students' performance and well-being, necessitating the introduction of supportive strategies in the classroom. To proactively address these pressing issues, policymakers should consider integrating mental health education and support services into the academic curriculum. Furthermore, mental health professionals must promote junior high school students' coping mechanisms and address academic stressors through tailored interventions.

3.2 Factors Contributing to Psychological Distress

Table 2. Descriptive statistics of the factors contributing to psychological distress

Indicator	Mean	Interpretation	SD
1. Interacting with my peers is challenging for me.	2.507	Low	0.886
2. Family conflicts stress me out.	2.567	High	1.040
3. I am a target of bullying when I am at school.	1.757	Very Low	0.940
4. Academic demands and performance expectations overwhelm me.	2.847	High	0.942
5. My self-esteem issues bother me.	2.625	High	1.030
6. My family does not give me emotional support.	1.968	Low	1.036
7. I use technology or social media excessively.	3.084	High	0.878
8. There is a lack of support from my teachers or school counselors.	2.140	Low	0.951
9. The pressure to conform to cultural expectations affects me.	2.296	Low	0.927
10. My current financial situation causes difficulties for me	2.438	Low	1.007
11. Falling asleep quickly is challenging for me.	2.710	High	1.011
12. Coping with my physical health condition/s is difficult for me.	2.380	Low	0.933
13. A traumatic event I've experienced makes me anxious.	2.625	High	1.100
14. Alcohol or drug use is something I struggle with.	1.251	Very Low	0.673
15. The uncertainty about my future after junior high school worries me.	2.945	High	0.962
Grand Mean	2.409	Low	1.064

Legend for mean score interpretation: 1.00-1.75 = very low, 1.76-2.50= low, 2.51-3.25=high, 3.26-4.00=very high

Table 2 provides a comprehensive evaluation of the factors influencing psychological distress. The results revealed that these factors collectively make a low contribution to the respondents' psychological distress, with a grand mean score of 2.409 (SD=1.064). Notably, it is essential to highlight that the factor "I use technology or social media excessively" stood out, boasting the highest mean score (M=3.084, SD= 0.878). It is worth noting that excessive use of social media and technology emerged as the most prominent factor contributing to the respondents' psychological distress, in line with Keles et al.'s (2019) systematic review, which categorized social media exposure into time spent, activity, investment, and addiction, all correlating with depression, anxiety, and psychological distress.

Contrarily, the statements "I am a target of bullying when I am at school" and "Alcohol or drug use is something I struggle with" accumulated the lowest mean scores as well as Very Low interpretations, with mean scores of 1.757 (SD=0.940) and 1.251 (SD=0.673) respectively. This signifies that school bullying does not significantly contribute to the psychological distress experienced by junior high school students in public schools. Conversely, Pengpid and Peltzer (2020) argued that psychological distress is not only related to the COVID-19 pandemic but sometimes due to bullying as well. It is essential to acknowledge that despite the results of the current study proving otherwise, psychological distress in adolescent students could stem from various factors, including bullying.

3.3 Adaptive Coping Mechanisms

Table 3 presents indicators of different adaptive coping mechanisms. These adaptive coping mechanisms are employed at a high grand mean score ($M= 2.888$, $SD= 0.953$), emphasizing the potential of these high-scoring strategies as valuable tools in bolstering resilience and promoting mental health among individuals facing challenges. The results show that the statement "I practice setting my future goals" garnered the highest mean score of 3.282 ($SD=0.846$), indicative of very high utilization. This finding contrasts with Einav and Margalit's (2023) study, wherein it was discovered that several adolescents struggle with contemplating and preparing for their future. The high utilization of practicing future goal-setting contrasts with Einav and Margalit's study, underscoring adolescents' diverse approaches to navigating their future aspirations. This contrast underscores adolescents' diverse approaches to contemplating and preparing for their future aspirations, suggesting the need for tailored support and guidance in this aspect of adolescent development. Educators, policymakers, and mental health practitioners can utilize these findings to emphasize the importance of fostering goal-setting skills among junior high school students, thereby equipping them with vital tools for resilience and long-term success.

Table 3. Descriptive statistics of the adaptive coping mechanisms

Indicator	Mean	Interpretation	SD
1. I seek support from friends or classmates when facing difficulties.	2.788	High	0.896
2. I seek social support from family members when facing difficulties.	2.599	High	1.009
3. I engage in physical activities/exercise to manage stress.	2.662	High	0.944
4. I use relaxation techniques (e.g., deep breathing and meditation) to calm myself during stressful situations.	3.005	High	0.979
5. I express my thoughts and feelings through creative outlets such as art, writing, or music.	3.150	High	0.926
6. I break tasks into smaller, manageable steps when facing challenges.	2.836	High	0.835
7. I seek guidance or advice from teachers, school counselors, or other trusted adults when facing difficulties.	2.253	Low	1.015
8. I practice positive self-talk and remind myself of my strengths and abilities.	2.087	High	0.923
9. I prioritize self-care activities, such as getting enough sleep, eating nutritious meals, and practicing good hygiene.	2.960	High	0.900
10. I use problem-solving strategies to solve challenges or conflicts.	2.734	High	0.917
11. I practice adapting to changes and view them as opportunities for individual growth.	3.018	High	0.831
12. I practice time management techniques to organize and prioritize my tasks and responsibilities.	3.053	High	0.840
13. I rely on humor to manage stress.	3.026	High	0.925
14. I find comfort in spiritual or religious practices during difficult times.	2.868	High	0.994
15. I practice setting my future goals.	3.282	Very High	0.846
Grand Mean	2.888	High	0.953

Legend for mean score interpretation: 1.00-1.75 = very low, 1.76-2.50= low, 2.51-3.25 =high, 3.26-4.00=very high

On the other hand, the statement "I seek guidance or advice from teachers, school counselors, or other trusted adults when facing difficulties" garnered a low mean score of 2.253 ($SD=1.015$). Stapley et al. (2022) concluded that adolescents who indicated facing elevated and continual life challenges hesitated or could not seek assistance from their parents. It is noteworthy to observe the lower mean score for seeking guidance from teachers or trusted adults, underscoring the limited use of this coping strategy among the surveyed individuals. Furthermore, the current study reveals that students' resilience is strengthened through creative self-expression, future planning, and physical activity, highlighting the multifaceted nature of effective coping with challenges among young individuals. By integrating these findings into interventions, educators, policymakers, and mental health practitioners can better support junior high school students in navigating challenges and promoting their overall well-being.

3.4 Level of Well-being

Table 4 shows the indicators of the level of well-being, the mean, and its interpretation. The grand mean for the level of well-being is 2.924, and the standard deviation is 0.874, with a High verbal interpretation, indicating that respondents have a high level of well-being. The results signify that the statement "I can easily balance my academic responsibilities and personal life" got the highest mean score of 3.082 ($SD=0.833$). This finding is supported by Koshkin et al. (2014), wherein the unique aspects of how students establish a sense of balance in their lives while engaging in demanding academic pursuits, juggling work responsibilities, and managing day-to-day activities were explored. However, the statements "I have access to resources for my mental health needs"

and “I feel emotionally stable despite the challenges I face” received high mean scores and interpretations but were lowest overall, with mean scores of 2.631 (SD=0.943) and 2.813 (SD= 0.923) respectively. This finding signifies that students feel that they do not have enough access to mental health services, and they struggle with emotional stability in facing difficulties.

Table 4. Descriptive statistics of the level of well-being

Indicator	Mean	Interpretation	SD
1. I feel physically healthy and energized.	2.873	High	0.793
2. I feel emotionally stable despite the challenges I face.	2.813	High	0.923
3. I feel supported by my friends and classmates.	3.050	High	0.867
4. I feel a sense of purpose and motivation in my daily activities.	2.937	High	0.840
5. I feel a sense of gratitude in my life despite the challenges I face.	3.034	High	0.843
6. I can stay calm despite having challenges and problems.	2.939	High	0.857
7. I feel a sense of belonging and acceptance in my school community.	2.945	High	0.766
8. I feel delighted when sharing and expressing my ideas with my classmates.	2.913	High	0.900
9. I feel optimistic and hopeful about the future despite the uncertainties.	2.858	High	0.823
10. I feel a sense of accomplishment and satisfaction with my academic progress.	3.063	High	0.849
11. I have access to resources for my mental health needs.	2.631	High	0.943
12. I feel confident in my ability to adapt and navigate changes.	2.894	High	0.899
13. I feel valued when communicating with my family.	2.939	High	0.986
14. I can still manage to relieve my stress despite having challenges.	2.889	High	0.872
15. I can easily balance my academic responsibilities and personal life.	3.082	High	0.833
Grand Mean	2.924	High	0.874

Legend for mean score interpretation: 1.00-1.75 = very low, 1.76-2.50= low, 2.51-3.25=high, 3.26-4.00=very high

For educators, these results emphasize the importance of advocating for increased access to mental health resources within public school settings, ensuring that students have the support they need to address their mental health concerns effectively. Policymakers should prioritize allocating resources toward mental health initiatives within schools and implementing policies that enhance access to mental health services and support networks. Mental health practitioners can utilize these findings to develop targeted interventions aimed at promoting emotional resilience and coping skills among junior high school students, equipping them with the tools they need to navigate challenges and thrive emotionally. By addressing these concerns collaboratively, educators, policymakers, and mental health practitioners can foster a supportive environment that promotes holistic well-being among junior high school students.

3.5 Relationship between Psychological Distress and Well-Being of Public Junior High School Students

Table 5. Correlation analysis between psychological distress and well-being of public junior high school students

Variables	N	r-value	df	p-value
Psychological Distress Well-Being	379	-0.013	378	<.001

Legend for p-value score interpretation: p < .05= moderate evidence against null hypothesis,
p < .01= strong evidence against the null hypothesis,
p < .001= very strong evidence against the null hypothesis

The study intended to determine the relationship between psychological distress and the well-being of junior high school students in public schools within General Santos City. Using Pearson correlation, the computed p-value is <.001, which indicates that there is a significant relationship between the psychological distress and well-being of the students. Furthermore, the magnitude of the relationship is -0.313, which is interpreted as a moderate negative relationship. This implies that higher levels of psychological distress are correlated to lower levels of well-being.

These findings have critical implications for educators, policymakers, and mental health practitioners working with this demographic. Educators can use this information to identify students who may be at risk of experiencing low well-being due to psychological distress and implement targeted interventions to support their mental health. Policymakers may consider allocating resources toward mental health initiatives within schools to address this correlation. Mental health practitioners can utilize these findings to tailor interventions aimed at promoting well-being and mitigating psychological distress among junior high school students more effectively.

3.6 Recommended Intervention Activities

The intervention activities presented were based on the study's results, which found that students struggle with high levels of psychological distress while also using adaptive coping mechanisms that contribute to their high levels of well-being. In light of the compelling insights from this study on junior high school students in public schools, the researchers aspire to fortify these students with effective coping strategies and support mechanisms, ultimately fostering an environment conducive to enhanced well-being and psychological resilience.

Mindfulness Activities

The first activity promotes the students having control of themselves, enables them to respond to situations with composure, and improves their quality of life. A study by Canby et al. (2015) states that adopting Mindfulness-Based Stress Reduction (MBSR) provides a good outcome in reducing psychological distress and allows us to become aware of our motions of self-control. Furthermore, an article by Sapthiang et al. (2018) discussed how incorporating mindfulness-based interventions into schools could be a cost-effective strategy for enhancing the mental well-being of adolescents, and such interventions may contribute to better student learning performance and classroom behavior. This linking of evidence emphasizes the potential for transformative effects when integrating mindfulness practices into educational environments.

Resilience-based activities

The second activity aims to help individuals foster their awareness of emotions, both their own and those of others, and assist them in making informed decisions while setting clear and achievable goals. An article from GoodTherapy (2018) states that meditation, progressive muscle relaxation, calming techniques, spending time in nature, or listening to music can help manage stress. Also, a trial conducted by Henje et al. (2017) achieved results proving that Training for Awareness, Resilience, and Action (TARA) shows promise as a practical and effective way to help adolescents deal with feelings of sadness and anxiety as it not only brings about improvements in mood but also helps enhance psychological flexibility, sleep quality, and mindfulness skills. The essence of the second activity is profound, focusing on holistic improvements to guide individuals toward a deeper understanding of emotions, sound decision-making, and the pursuit of achievable goals.

Recreation-based activities

The third activity allows students to spend more time away from stressors and engage in activities that help reduce stress. According to Lubans et al. (2016), engaging in physical activity can improve physical self-perception and boost self-esteem among young individuals. Moreover, the study revealed that involvement in extracurricular activities was linked to elevated life satisfaction and optimism, along with reduced anxiety and depressive symptoms (Oberle et al., 2020). Focusing on recreation-based activities shows that the intention to provide students with a reprieve from stressors is a thoughtful initiative that promotes a more balanced and healthier lifestyle.

Self-Care Activities

The fourth activity aims to promote self-kindness, reduce self-criticism, and enhance overall well-being. A study by Bluth and Eisenlohr-Moul (2017) states that the intervention of self-compassion and mindfulness lessens the burden of distress and helps increase resilience. Furthermore, a study by Albertson et al. (2014) revealed that self-care is not just a concept but something an individual can do, which means that studying self-compassion involves learning about it from an outside perspective and experiencing it firsthand. By practicing self-compassion, individuals can experience and create a happier and more compassionate world for everyone. Moreover, intervention for self-compassion resulted in noteworthy improvements in self-compassion, mindfulness, optimism, and self-efficacy. It also led to significant reductions in rumination compared to the active control intervention (Smeets et al., 2014). The focus on promoting self-kindness holds transformative potential, as supported by studies highlighting the reduction of distress, the cultivation of resilience, and the creation of a happier and more compassionate world for individuals engaged in such practices.

4.0 Conclusion

The research provides a different view on mental health, revealing crucial insights into the psychological landscape of junior high school students in public schools within General Santos City. It emphasizes the importance of developing effective coping strategies to manage psychological distress while nurturing well-being.

The research has significant practical implications, urging stakeholders, including students, guidance practitioners, public school administrators, and parents, to prioritize mental health support and school awareness. Essentially, the study underscores the significance of addressing psychological distress, cultivating adaptive coping mechanisms, and nurturing well-being among junior high school students in public schools. By recognizing the importance of these factors and implementing the practical recommendations outlined in this research, society can collectively contribute to a more emotionally resilient and well-balanced future generation. It is a call to action, a reminder that the psychological well-being of the youth is a vital investment in the well-being of society as a whole.

5.0 Contributions of Authors

The authors confirm the equal contribution in each part of this work. All authors reviewed and approved the final version of this work.

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7.0 Conflict of Interests

All authors declare that they have no conflicts of interest

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Teachers' Methods of Instructions and Learners' Instructional Preference: Predictors of Students' Academic Performance in English 8

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Abstract. The study aimed to identify the method of instruction dominantly used in English 8 classes. The study also wanted to investigate the impact of the methods of instruction dominantly employed by the teachers and the student preferences on the latter's academic performance. The researcher utilized the descriptive-correlational survey design. The respondents of the study were the 300 randomly selected Grade 8 students from 10 high schools of Santa Catalina Districts 1, 2, 3, and 4. The researcher used a standardized questionnaire and employed the weighted mean, percent, Multiple Linear Regression Analysis, and Spearman Rank Correlation Coefficient in treating the data. The results revealed that the extent of teachers' utilization of and the extent of preference for the five learning methods of instruction in their English class is "high." The data also indicated that, among all methods of instruction, teacher-centered instruction demonstrated the strongest correlation with teachers' utilization and with students' preferences. The students' academic performance also improved as teachers used more teacher-centered instruction and increased with a higher preference for teacher-centered instruction. These findings highlight the effectiveness of tailoring and employing classroom instructions and diverse methods in English language teaching that align with students' preferred methods of learning, to enhance their knowledge and academic achievement.

Keywords: Method of instruction; Learner preference; Academic performance; English language teaching; Teacher-centered instruction.

1.0 Introduction

English has been designated as ASEAN's official language. It is also the language used in communication around the world. That is the reason many internationalized nations place a high focus on developing English language capabilities among their citizens (Kirkpatrick; Crystal; Tien & Cuong, cited in Sengsouliya et al., 2021). However, teaching and learning English is perceived as a challenging process. Teachers from non-English-speaking nations, in particular, struggle with carrying out effective instruction (Gathumbi et al.; Khajloo, cited in Sengsouliya et al., 2021). In the present academe, teaching and learning styles are of great significance in the teaching and learning process. Diverse methods of instruction in the course of the teaching and learning process emerge as a result of how learners respond to teaching methods. This chain reaction has an impact on the learners' instructional preferences (Chetty et al., 2019). Consequently, according to Sengsouliya et al. (2021), successful learning outcomes occur when teachers tailor their teaching methods to what students prefer. Recognizing students' preferred learning methods and matching them with learning instructions will increase learning effectiveness and academic performance (Sengsouliya et al., 2021).

Learning English is an important part of the Philippine school system. It is both an instructional tool and a medium of communication. As stipulated by Department of Education (DepEd) Order Number 36, Series of 2006, English shall be the primary medium of instruction in all public and private secondary institutions. However, Genelza (2022) argued that the quality of English instruction in high schools is comparable to that of primary schools, which is insufficient for students to grow academically. This situation is also problematic considering that the learning environment in which students learn influences their academic performance. Moreover, the classroom approach, teacher-student interactions, and available resources can all have a substantial impact on students' learning outcomes. This implies that acquiring knowledge is not just concerned with what the students need to learn but also with what learning instruction they desire to learn most effectively (Cardino & Ortega-Dela Cruz, 2020).

Undeniably, countless studies have been conducted on the notions of students' learning styles and teachers' teaching styles (Cuevas, 2015; Li et al., mentioned in Chetty et. al, 2019). These studies, however, focused only on one or two methods of instruction. Also, based on the current researcher's online research, only a few studies addressing the extent of students' preference for the methods of instruction have been undertaken. Due to this gap, the current study is aimed at exploring five methods of instruction used in English classes, namely: teacher-centered instruction, cooperative learning together with the audio-lingual method, task-based language teaching method, and suggestopedia (Wagner et al., 2020; Setiyadi, 2020). It also intends to examine the relationship between the teachers' methods of instruction and the learners' instructional preferences.

Hence, as a masterand in education majoring in English, the researcher wanted to determine which of the five methods of instruction is most commonly employed in the English teaching and learning process. Furthermore, this undertaking would investigate whether the dominant learning instruction employed by teachers and the students' learning preference influence the latter's academic performance. The research project's conclusions have the potential to be a major driving force behind the improvement of classroom pedagogy by carefully matching teaching strategies to students' varied learning preferences and creating an atmosphere that encourages higher academic achievement.

2.0 Methodology

2.1 Research Design

The research utilized the descriptive-correlational survey. It is descriptive because it (a) determines the extent of utilizing the methods of instruction, (b) evaluates the extent of students' preference for the methods of instruction, and (c) identifies the students' academic performance in English 8. At the same time, it attempts to establish a correlation among the aforementioned variables.

2.2 Research Locale

The study was conducted in the selected public schools in the District of Santa Catalina, under the Schools Division of Negros Oriental. The District of Santa Catalina is divided into four. The study considered the following schools: a) three schools from District 1, namely, Eligio T. Monte de Ramos High School, Casiano Z. Napigkit National High School, and Don Emilio Macias Memorial National High School; b) four schools from District 2, namely, Nagbalaye High School, Sta. Catalina Science High School, Cawitan High School, and Nagbinlod High School; c) one school from District 3, which is Sta. Catalina National High School; and, lastly, d) two schools from District 4, namely, San Miguel High School and Obat High School. Some of these schools are located along the national highway, while others are within a semi-rural area. However, all these schools are accessible by all means of transportation. Additionally, every classroom complies with the necessary standards, signifying that the schools meet the DepEd's usability and safety standards.

2.3 Research Participants

The respondents of this study were the 300 randomly selected Grade 8 students in the Schools District of Santa Catalina. They rated their English 8 teachers. Fifteen (15) identified secondary teachers, teaching English 8, were subjected to this evaluation by the respondents.

2.4 Research Instrument

The study used a self-made questionnaire as well as data on the students' academic performance in English. The questionnaire consists of 4 parts. Part I displays the disclosure statement, which proves the students' consent, allowing the researcher to gather data/information about them, provided that confidentiality of data is observed. It also contains the purpose of the study. Part II covers the respondents' profile and their average first quarter grade in English 8 during the school year 2023-2024. Part III displays the extent of teachers' utilization of the methods of instruction and Part IV covers the extent of students' preference for the methods of learning instructions. Parts III and IV consist of teacher-centered instruction, cooperative learning together with audio-lingual method, task-based language teaching method, and suggestopedia as few of the exemplary methods that involve a comprehensive procedure for presenting language materials learning context.

The questionnaire was validated by 3 English teachers who are Master's Degree holders and into research undertakings. A dry-run was also performed to ensure item reliability. A total of 30 randomly selected students from the researchers' school served as the respondents of the dry-run. Additionally, the Cronbach's Alpha Test was applied to assess the items' reliability. The results showed the following Cronbach's Alpha Coefficients: 0.713 for teacher-centered instruction; 0.701 for cooperative learning; 0.711 for task-based language teaching method; 0.722 for audio-lingual method; and 0.701 for suggestopedia. These figures indicate consistency of responses, meaning the items are reliable.

2.5 Data Gathering Procedure

Following the design hearing, the researcher incorporated all of the corrections and feedback of the panel members. Then, a letter of request to conduct the study was sent to the Dean of Foundation University Graduate School for recommendation to the Schools Division Superintendent of the Division of Negros Oriental. The signed and approved request was presented to the District Office of Santa Catalina Districts 1, 2, 3, and 4. After the consent was secured, the letter was then presented to the school principals and respective advisers of the students. During the distribution of the questionnaire, the researcher explained the goal and significance of the study to the students. The questionnaires were retrieved immediately after the students finished answering the survey. The findings were tallied using MS Excel processed, evaluated, and interpreted.

2.6 Ethical Considerations

Since humans were chosen as study participants, information was kept confidential to protect the participants' dignity and privacy. Furthermore, the researcher ensured that possible risks to the participants must always be avoided. With that, throughout the study, the researcher exercised all relevant ethical considerations. The researcher also adhered to the ethical protocols established by Foundation University's Ethics Committee. Consultations were made to ensure that the research problem was clear, sound, significant, and ethically proper. The researcher also maintained a non-judgmental attitude during the data-gathering process to prevent condemnation.

3.0 Results and Discussion

3.1 Teachers' Methods of Instructions

Teacher-Centered Instruction

Table 1. Extent to which teachers utilize teacher-centered instruction (n = 300)

Indicators		Mean	VD	EoU
1.	presents the topic and provides plenty of examples.	4.29	A	VH
2.	discusses the concepts of the lesson thoroughly.	4.21	A	VH
3.	takes charge of the learning process throughout the entire class.	4.07	O	H
4.	is the source of knowledge in the classroom.	4.04	O	H
5.	delivers the content and facilitates our learning.	3.97	O	H
Composite		4.12	O	H
Legend:	Scale	Verbal Description (VD)		Extent of Utilization (EoU)
	4.21 – 5.00	Always (A)		Very High (VH)
	3.41 – 4.20	Often (O)		High (H)
	2.61 – 3.40	Sometimes (S)		Moderately (M)
	1.81 – 2.60	Rarely (R)		Low (L)
	1.00 – 1.80	Never (N)		Very Low (VL)

Table 1 shows that teachers generally have a “high” utilization of the Teacher-Centered Method of Instruction in their English class, as evidenced by the composite weighted mean of 4.12. Explicitly, teachers have a “very high” utilization of presenting the topic and providing plenty of examples ($w\bar{x} = 4.29$). Moreover, the teachers competently take control of the topic and guarantee that students have a thorough understanding of the subject by providing many simple and relatable examples. As Tukhtasinov and Otabek (2022) claimed, students understand and develop well when the teacher provides plenty of examples and patterns for them to follow, creating a better understanding of the subject.

The table also exhibits that teachers display a “very high” usage of discussing the concepts of the lesson thoroughly ($w\bar{x} = 4.21$). For students to gain a deep understanding of the lesson, teachers engage in thorough discussions to explore and explain the concepts in detail. This result affirms the statement of Muganga and Ssenkusu (2019, that teachers primarily lead the learning process through lectures and thorough discussions, focusing on transmitting information to students. This method places the teacher as the central figure in delivering content and guiding students' understanding of the subject matter (Muganga & Ssenkusu, 2019).

The table further reveals that teachers show a “high” implementation in terms of taking charge of the learning process throughout the entire class ($w\bar{x} = 4.07$). Teachers' responsibilities include not only providing lectures but also monitoring progress, assessing understanding, and modifying their methods to ensure optimal learning for all students. The findings correspond to what Naibaho (2019) posited that teachers take charge of the class and all classroom activities. In this situation, the teacher serves a role—informing pupils who need to be informed, organizing exercises, reading aloud, and providing students with an example or demonstration of how to do something correctly throughout the class (Naibaho, 2019).

The table also displays that teachers set forth a “high” practice of being the source of knowledge in the classroom ($w\bar{x} = 4.04$). Teachers are considered authorities who impart knowledge, guiding students through subjects and lessons and meeting their educational needs. This finding is likewise evident in the study of Ghafar (2023), wherein a teacher-centered method of instruction places the teacher at the center of the classroom, serving as the primary authority and source of knowledge. The teacher is responsible for developing lesson plans and assessments, while students are responsible for executing them. The teacher provides feedback and clarity on class objectives to help students progress through the learning process (Ghafar, 2023).

The table also reflects that teachers exhibit a “high” application of delivering the content and facilitating learning ($w\bar{x} = 3.97$). Teachers' responsibilities extend beyond merely delivering lesson materials; they also play a significant role in facilitating student learning. Teachers facilitate and guide students to understand the subject matter. Likewise, Naibaho (2019) strongly believes that delivering correct knowledge and facilitating learning are two beneficial roles of teachers in a teacher-centered classroom and that every role a teacher plays in language acquisition is designed to facilitate student progress.

Cooperative Learning

Table 2. Extent to which teachers utilize cooperative learning (n = 300)

Indicators	Mean	VD	EoU
1. provides group activities to engage us in the class.	3.91	O	H
2. allows us to have peer tutoring with our classmates to enhance our learnings.	3.79	O	H
3. gives group presentations that would let us experience teamwork.	3.79	O	H
4. lets us have a small group discussion regarding a certain topic.	3.64	O	H
5. promotes collaborative learning by assigning by pair projects.	3.55	O	H
Composite	3.74	O	H

Table 2 depicts that teachers predominantly have a “high” utilization of the Cooperative Learning method of instruction in their English class, as seen by the composite weighted mean of 3.74. Pointedly, teachers have a “high” usage of providing group activities to engage the class ($w\bar{x} = 3.91$). Teachers frequently add group activities into their English lessons to actively engage students and get everyone involved in the learning process. As emphasized by Adjei *et al.* (2022), participating in group activities increases students' chances of applying what they have learned and pushes them to think critically and solve problems rather than simply absorbing

knowledge. Furthermore, group activities foster valuable engagement and interactions between students and teachers (Adjei *et al.*, 2022).

The table also indicates that teachers display a “high” utilization of allowing peer tutoring with the students’ classmates to enhance their learning ($w\bar{x} = 3.79$). Teachers use peer tutoring to promote students' learning, a strategy in which students collaborate and teach one another to learn and reinforce ideas. This result is an affirmation of the statement of Alwi, Samson, and Shahzadi (2019) that peer tutoring is an effective method by which students help one other to understand the content, particularly in classes with a diverse range of learning abilities and limited individual attention from the teacher.

Furthermore, the table shows that teachers show a “high” practice of giving group presentations that would let the students experience teamwork ($w\bar{x} = 3.79$). Teachers frequently exhibit an active dedication to student teamwork by assigning group presentations. Correspondingly, Balakrishnan *et al.* (2021) believes that to encourage active participation, teamwork, and knowledge retention, class activities can be varied by incorporating student presentations, group discussions, and critical thinking tasks.

The table also presents that teachers exhibit “high” exertion of small group discussion regarding a certain topic ($w\bar{x} = 3.64$). Teachers allow students to engage in small group discussions to delve deeper into a particular topic and encourage collaborative learning among peers. The study of Tran *et al.* (2019) supports the current finding that organizing students into small groups, who then collaborate to help one another learn academic topics, has been documented throughout the literature as an effective learning approach for assisting students acquire practical learning skills and practical competencies for effective communication.

The data also indicate that teachers set forth a “high” implementation in terms of promoting collaborative learning by assigning pair projects ($w\bar{x} = 3.55$). Teachers create an environment of shared learning experiences by providing collaborative pair work. As emphasized by Khalilova (2023), one of the most effective ways to promote collaboration in English classes is to incorporate group activities, and pair work is one technique that encourages critical thinking, good communication, and active engagement. By using this pair activity, teachers can help students succeed in learning the language (Khalilova, 2023).

Task-Based Language Teaching Method

Table 3 indicates that teachers mainly have a “high” utilization of the Task-Based Language Teaching Method of instruction in their English class, as signified by the composite weighted mean of ($w\bar{x} = 3.62$). Particularly, teachers have a “high” usage of letting the students write prose or poetry with a criterion on how they are going to be graded ($w\bar{x} = 3.76$). Teachers utilize criteria for evaluating students' works to set clear objectives, establish consistency in evaluation, and provide constructive feedback for improvement. This result affirms the statement of Chowdhury (2019) that teachers should properly communicate their expectations to students by providing grading criteria. Some studies have shown that employing rubrics has teaching benefits. These scholars have demonstrated that using rubrics in the classroom eventually leads to increases in student learning and overall performance. Furthermore, multiple studies have found that rubrics improve the reliability and transparency of assessments (Chowdhury, 2019).

Table 3. Extent to which teachers utilize task-based language teaching (n = 300)

Indicators	Mean	VD	EoU
1. lets us write a prose or poetry with a criterion on how we are going to be graded.	3.76	O	H
2. lets us discuss concepts to our classmates using the English language.	3.68	O	H
3. lets us read a passage and do a short role play about it using the english language.	3.65	O	H
4. gives us real-life scenarios (e.g., a job interview) and allows us to act them out using the english language.	3.55	O	H
5. lets us engage in debate regarding a certain topic using the english language.	3.48	O	H
Composite	3.62	O	H

The table also points out that teachers illustrate the “high” application of letting the students discuss concepts with their classmates with the use of the English language ($w\bar{x} = 3.68$). Teachers encourage students to discuss concepts with their classmates to test their level of knowledge and mastery of the English language. Similarly, Bhandari (2020) postulated that teachers should prepare the students to engage in communicative tasks by allowing them to spend most of their time talking, discussing, negotiating, and assisting one another in learning the language through meaningful conversation. This communicative activity requires learners to interpret, manipulate, produce, or utilize the target language, with an emphasis on meaning rather than form (Bhandari, 2020).

The table further stipulates that teachers display “high” employment of letting the students read a passage and do a short role play about it using the English language ($w\bar{x} = 3.65$). Role-playing helps students master the target language by allowing them to use real-life communication skills engagingly and interactively. This finding is likewise evident in the study by Waluyo (2019), which found that role-playing provides teachers with opportunities to improve oral language production in the target language among students. Role-playing also promotes authentic interaction in a variety of roles and social contexts in the classroom. It can be used to provide meaningful classroom language practice in the task-based language teaching method (Waluyo, 2019).

Additionally, the data suggest that teachers set forth “high” utilization of giving the students real-life scenarios (e.g., a job interview) and allow them to act it out using the English language ($w\bar{x} = 3.55$). To enrich the learning process, teachers provide their students with the opportunity to practice their English language proficiency through authentic circumstances. This finding coincides with the claim of Khalil and Kholofelo Semono-Eke (2020) that task-based language learning (TBLT) stresses the use of authentic language, and students participate in meaningful tasks that require the target language. Teachers utilize TBLT to design and teach language using language-based tasks. In general English, such activities include visiting a friend, holding an interview, ordering meals at a restaurant, or contacting customer service for assistance (Khalil & Kholofelo Semono-Eke, 2020).

Moreover, the table shows that teachers exhibit “high” exertion of letting the students engage in debate regarding a certain topic using the English language ($w\bar{x} = 3.48$). Teachers employ debate in English class to help students develop critical thinking abilities, practice good communication, and engage in discussions about a variety of topics. Similarly, Saidah, Munir, and Anam (2020) asserted that debate can be utilized in task-based language teaching as a problem-solving and perspective activity. Debate allows students to negotiate meaning while also motivating them to utilize the target language because the teacher can change the topic to one that is challenging but still within the bounds of the students' thinking skills (Saidah, Munir & Anam, 2020).

Audio-Lingual Method

Table 4. Extent to which teachers utilize audio-lingual method (n = 300)

Indicators	Mean	VD	EoU
1. presents appropriate model of a structure (e.g., types of sentences) and lets us familiarize the structure and repeat it again and again.	4.11	O	H
2. gives us drills after our discussion like constructing the correct simple sentence structure or supplying the correct missing word in a sentence.	4.00	O	H
3. provides activities before the discussion like vocabulary, word combinations and pronunciations.	3.90	O	H
4. uses tongue twister to improve our articulation and pronunciation of English words.	3.66	O	H
5. utters a sentence, like "the door is red," then she'll tell us to replace it with a book. then we'll say, "the book is red," and she'll mention another item, and we'll repeat the sentence with the new object.	3.55	O	H
Composite	3.84	O	H

Table 4 shows that teachers generally have a “high” utilization of the Audio-Lingual Method of Instruction in their English class, as evidenced by the composite weighted mean of 3.84. Explicitly, teachers have a “high” utilization of presenting appropriate models of a structure (e.g., types of sentences) and let the students familiarize the structure and repeat it again and again ($w\bar{x} = 4.11$). In teaching, teachers provide the correct example of

a structure and allow students to become familiar with it through repetition. This finding is agreed upon by Mohan (2019), as he mentioned that using structure drills to teach sentence structures is very effective. The audio-lingual method and its structural drills could be an efficient way to teach English grammar, particularly sentence structures.

Furthermore, the data indicate that teachers display “high” usage of giving the students drills after the discussion such as constructing the correct simple sentence structure or supplying the correct missing word in a sentence. ($w\bar{x} = 4.00$). Teachers provide students with practice drills and exercises after the lesson discussion to reinforce learning and comprehension. As emphasized by Safitri (2019), teachers can use a variety of pattern drills to help language learners develop their listening and speaking skills. They may select to utilize one or more pattern exercises based on the specific patterns that students must acquire in their language learning (Safitri, 2019).

The table also reveals that teachers show “high” implementation of providing activities before the discussion, including vocabulary, word combinations, and pronunciations ($w\bar{x} = 3.90$). Teachers prepare students for discussion by imparting vocabulary, word combinations, and proper pronunciations through a variety of exercises. Hotimah (2022) likewise acknowledged that the audio-lingual method is one method of English language learning that can help pupils improve their speaking abilities. This method uses word combination exercises, vocabulary memorization, conversations, and pronunciation. Thus, the primary goal of this method is to foster proficient communication through the use of drills and dialogues (Hotimah, 2022).

In addition, the data signify that teachers set forth “high” practice of using tongue twisters to improve the students’ articulation and pronunciation of English words ($w\bar{x} = 3.66$). Teachers improve their students' ability to articulate and speak English words accurately by using tongue twisters, which is a fun and useful teaching technique. This finding strengthens the claim of Montaño Zeballos (2023) that using tongue twisters as a teaching tool could help students pronounce words more accurately. Additionally, tongue twister phrases may enhance the ability to employ proper short- and long-vowel words.

The table also reflects that teachers exhibit “high” application of uttering a sentence, like "The door is red." Then, the teacher will tell the students to replace it with a book, then the students will say, "The book is red." The teacher will mention another item, and the students will repeat the sentence with the new object. ($w\bar{x} = 3.55$). In the audio-lingual method, a technique known as single slot substitution drill involves students replacing one word for another in a sentence to develop vocabulary and language structure. With this drill, students can practice utilizing the target language more accurately by concentrating on one part at a time. This affirms the statement of Vinasih (2019) that in this strategy, the teacher utters a sentence. After speaking the sentence out, pupils are required to imitate by accurately adding a word to the sentence. The goal of this method is to make it easier for the pupils to use the target language. In addition, the Audio-Lingual method uses a variety of techniques to drill students (Vinasih, 2019).

Suggestopedia

Table 5. Extent to which teachers utilize Suggestopedia (n = 300)

Indicators	Mean	VD	EoU
1. keeps us motivated and interested throughout her class.	4.09	O	H
2. acts as our partners or parents throughout her class.	4.05	O	H
3. incorporates stories about our topic allowing us to use our imaginations.	3.98	O	H
4. participates in activities such as games or songs happily and genuinely.	3.68	O	H
5. lets us relax for a minute while listening to peaceful music before starting our class.	3.43	O	H
Composite	3.85	O	H

Table 5 depicts that teachers predominantly have “high” utilization of the Suggestopedia Method of instruction in their English class, as signified by the composite weighted mean of 3.85. Pointedly, teachers have “high” usage of keeping the students motivated and interested throughout their class ($w\bar{x} = 4.09$). Teachers keep a high level of engagement to ensure the students remain motivated and interested during their class. This finding is aligned

with what Colliander and Fejes (2021) found that suggestopedia lets the teacher motivate and enable students to acquire subjects through positive ideas. As a result, the teacher can overcome students' psychological barriers, and the students can enjoy themselves without fear of making mistakes (Colliander & Fejes, 2021).

The data also indicate that teachers display a “high” practice of acting as students’ partners or parents throughout their classes ($w\bar{x} = 4.05$). In the classroom, teachers often take on the role of students' partners or parents, providing guidance throughout their learning. This result confirms the statement of Dobryanskyj *et al.* (2021) that teachers should act as genuine partners with their students, developing a feeling of belonging and mutual respect to foster a positive learning environment.

In addition, the table exposes that teachers show “high” utilization of incorporating stories about the topics, allowing the students to use their imaginations ($w\bar{x} = 3.98$). By incorporating stories into lessons, teachers may engage students' imaginations while also making learning more participatory and relatable. This result is parallel to the discussion of Tay and Uran (2023) that teachers should incorporate context and stories from students' daily lives into the lessons. This method would assist with imagination, which entails silently visualizing a mental image to go with a new word (Tay & Uran, 2023).

The table also presents that teachers exhibit “high” exertion of participating in activities such as games or songs happily and genuinely ($w\bar{x} = 3.68$). Teachers demonstrate genuine involvement by actively participating in class activities. This result affirms the statement of Dobryanskyj *et al.* (2021) that teachers should “naturally” and “genuinely” participate in activities like games and songs. Although teachers use a variety of strategies, aspects such as “communication in the spirit of love, respect for man as a human being, and a specific humanitarian way of applying their techniques” are essential (Dobryanskyj, *et al.*, 2021).

Moreover, the data show that teachers set forth “high” implementation of letting the students relax for a minute while listening to peaceful music before starting the class ($w\bar{x} = 3.43$). Teachers should integrate a brief period of relaxation for pupils by playing soothing music prior to class discussion, to create a pleasant and focused learning atmosphere. Baihaqi and Rutiningsih (2019) proposed that educators can harness the power of music as a tool to facilitate relaxation and promote a calm atmosphere within the classroom environment. By integrating music into teaching practices, teachers can effectively assist students in achieving a state of tranquility, consequently enhancing their concentration and attentiveness during instructional sessions. Students will acquire confidence as they successfully participate in these activities on their own and can have a more enjoyable learning experience without feeling pressured (Baihaqi & Rutiningsih, 2019).

3.2 Learners’ Instructional Preference

Teacher-Centered Instruction

Table 6 shows that students generally have a “high” extent of preference for the Teacher-Centered Method of Instruction in their English class, as evidenced by the composite weighted mean of 4.09. Explicitly, students have a “very high” preference for teachers presenting a topic and providing plenty of examples ($w\bar{x} = 4.29$). Students learn best when they are provided with ample illustrations, as this exemplifies the practical applications and aids their comprehension. Correspondingly, Zhao (2019) argued that it is more helpful for pupils when teachers provide multiple examples to guide their knowledge, allowing them to generalize the concept spontaneously.

Table 6. Extent to which students prefer teacher-centered instruction (n = 300)

Indicators	Mean	VD	EoU
1. presents the topic and provides plenty of examples.	4.29	SA	VH
2. discusses the concepts of the lesson thoroughly.	4.26	SA	VH
3. delivers the content and facilitates our learning.	4.03	A	H
4. is the source of knowledge in the classroom.	3.97	A	H
5. takes charge of the learning process throughout the entire class.	3.93	A	H
Composite	4.09	A	H

Furthermore, the data signify that the students have a “very high” preference for teachers discussing the concepts of the lesson thoroughly ($w\bar{x} = 4.26$). Thorough discussions provide students with a comprehensive learning experience and enable students to absorb ideas effectively. The finding is parallel with the results obtained by

Murphy, Eduljee, and Croteau (2021) revealing that the students felt that they learned more when their teacher took time to thoroughly discuss and explain the lesson.

The table further reflects that the students exhibit a “high” preference for teachers delivering the content and facilitating their learning ($w\bar{x} = 4.03$). Students prefer teachers who actively facilitate their learning by creating an engaging environment that encourages participation and fosters a deeper understanding of the subject matter. This result affirms the statement of Naibaho (2019) that aside from delivering knowledge, one of the things that students seek from teachers is feedback on how well they utilize the language they are learning. This means that in addition to assisting the students in utilizing the language and correcting their errors, teachers must also facilitate and provide feedback, offer various forms of assessment, and encourage students’ learning (Naibaho, 2019).

In addition, the table displays that students set forth a “high” preference for the teacher being the source of knowledge in the classroom ($w\bar{x} = 4.04$). Students are strongly inclined to learn from their teachers. They are more receptive and prefer to learn when their teacher is their primary source of knowledge. This finding is in line with the result of Ghafar (2023), indicating that in a teacher-centered education, the teacher serves as the primary source of knowledge in the classroom. This method places the teacher at the center of the learning process, with students depending on the teacher for guidance and information. Essentially, teacher-centered education emphasizes the teacher’s role in guiding students’ learning experiences (Ghafar, 2023).

The results further reveal the students’ “high” preference for teachers taking charge of the learning process throughout the entire class ($w\bar{x} = 3.93$). Students tend to rely on teachers to direct class activities and maintain a planned and orderly environment. According to Naibaho (2019), the teacher is in charge of organizing and supervising a variety of language-learning activities for the students. Activities usually include instructing students, providing them with knowledge, splitting them up into study groups (either pairs or groups), and keeping them engaged throughout the entire lesson.

Cooperative Learning

Table 7 depicts that students predominantly have a “high” preference for the Cooperative Learning method of instruction in their English class, as seen in the composite weighted mean of 3.74. Pointedly, students have a “high” preference when the teacher provides group activities to engage the class ($w\bar{x} = 3.91$). The students’ preferences for group activities in their English class are driven by their desire for active engagement, collaborative learning, and opportunities for social interactions. As emphasized by Dörnyei and Muir (2019), students considered group activities fulfilling because of the variety of components involved. These include the enjoyment of participating in the activities, the satisfaction of achieving shared objectives, the sense of accomplishment gained by achieving these goals, and individual benefits, such as obtaining excellent grades and rewards (Dörnyei & Muir, 2019).

Table 7. Extent to which students prefer cooperative learning (n = 300)

Indicators	Mean	VD	EoU
1. provides group activities to engage us in the class.	3.92	A	H
2. allows us to have a peer tutoring with our classmates to enhance our learnings.	3.90	A	H
3. gives group presentations that would let us experience teamwork.	3.85	A	H
4. promotes collaborative learning by assigning by pair projects.	3.79	A	H
5. lets us have a small group discussion regarding a certain topic.	3.75	A	H
Composite	3.84	A	H

The table also indicates that students display a “high” preference when the teacher allows peer tutoring with their classmates to enhance their learning ($w\bar{x} = 3.79$). Students like it when their teacher encourages peer tutoring among classmates since it improves their learning experience through teamwork and shared knowledge. Correspondingly, Alwi, Samson, and Shahzadi (2019) maintained that tutoring is an excellent addition to classroom instruction because it is the most effective technique to improve students’ learning ability. Empirical research has justified peer tutoring, particularly for students who are in danger of failing or have been diagnosed with reading or learning difficulties (Alwi, Samson & Shahzadi, 2019).

The table shows that students show a “high” preference for teachers giving group presentations that would let them experience teamwork ($w\bar{x} = 3.79$). Students prefer group presentations as it allows them to engage in teamwork, which they value in the learning process. Group presentations also provide possibilities to promote cooperation and experience among students. This finding affirms the statement of Lar and Maulina (2021) that group presentations consist of two or more students presenting the content in class. Group presentations inspire teamwork and allow students to receive input from one another as they prepare the presentation.

The data also unveil that students set forth a “high” preference for teachers promoting collaborative learning by assigning pair projects ($w\bar{x} = 3.55$). Students find group learning and mutual support more engaging. They prefer their teachers to let them work on a project along with others. On a similar note, Khalilova (2023) asserted that pair work activities require students to work together to perform tasks or engage in discussions. This method allows students to work on their speaking and listening abilities while receiving quick feedback from their partner. Pair work also promotes active involvement and confidence in utilizing the English language.

The results further suggest that students exhibit a “high” preference when the teachers let them do small group discussions regarding a certain topic ($w\bar{x} = 3.64$). During their English class, students find it beneficial when teachers allow them to take part in small group discussions on a particular topic because it fosters a more collaborative environment in which they can share their knowledge, ideas, and opinions. This result affirms the statement of Tran *et al.* (2019) that in small groups, interpersonal and social skills could be improved when members communicate with one another more regularly. Through their learning reflection, members of small groups are more effective in helping the group achieve its goals.

Task-Based Language Teaching Method

Table 8 indicates that students mainly have a “high” preference for the Task-Based Language Teaching Method of instruction in their English class, as signified by the composite weighted mean of 3.74. Particularly, students have a “high” preference when the teacher gives them real-life scenarios (e.g., a job interview) and allows them to act it out using the English language ($w\bar{x} = 3.82$). When teachers provide opportunities for students to role-play using the English language and incorporate real-life circumstances, students find this to be more engaging. This result backs the statement of Khalil and Kholofelo Semono-Eke (2020) that the task-based method of teaching English is regarded to be appropriate for the nature of the material. TBLT works well in this situation because learners may concentrate on the specific language skill they need to improve. The implication of adopting TBLT is that an English teacher may easily teach technical and specialist vocabulary using a task-based method (Khalil & Kholofelo Semono-Eke, 2020).

Table 8. Extent to which students prefer task-based language (n = 300)

Indicators	Mean	VD	EoU
1. gives us real-life scenarios (e.g., a job interview) and allows us to act them out using the english language.	3.82	A	H
2. lets us read a passage and do a short role play about it using the english language.	3.75	A	H
3. lets us write a prose or poetry with a criterion on how we are going to be graded.	3.72	A	H
4. lets us engage in debate regarding a certain topic using the english language.	3.70	A	H
5. lets us discuss concepts to our classmates using the english language.	3.69	A	H
Composite	3.74	A	H

The table also stipulates that students have a “high” preference for their teachers letting them read a passage and do a short role-play about it using the English language ($w\bar{x} = 3.75$). When learning the target language, students prefer role-playing because it gives an authentic and engaging opportunity to practice language skills in real-life scenarios. It is also acknowledged by Waluyo (2019) that role-playing allows students to express themselves using the target language and boosts self-confidence to overcome speaking inhibitions, potentially leading to an improvement in their speaking skills.

Additionally, the data suggest that students set forth a “high” preference when the teacher lets them write prose or poetry with a criterion on how they are going to be graded ($w\bar{x} = 3.72$). Engaging students to write helps them

improve their sentence structure and express their creativity, while also assessing their work using established grading criteria. Saifudin, Setiawan and Anam (2020) likewise emphasized that in writing, students must be given a set of criteria for grading. A lot of emphasis is placed on model compositions that students can emulate, as well as how well a student's product is determined against a list of criteria that includes content, organization, vocabulary use, grammatical use, and mechanical considerations such as spelling and punctuation (Saifudin, Setiawan & Anam, 2020).

The table further shows that students exhibit a “high” preference when the teacher lets them engage in debate regarding a certain topic using the English language ($w\bar{x} = 3.70$). Debate not only improves critical thinking skills but also improves students' understanding of English language organization and communication. This result upholds the statement of Saidah, Munir and Anam (2020) that debate can facilitate task-based language learning by exposing learners to authentic situations and eliciting the use of communication methods. Debate also allows students to use a wide range of vocabulary, including comparing, reasoning, persuading, and forming conclusions.

Results also point out that students illustrate a “high” preference for discussing concepts with their classmates using the English language ($w\bar{x} = 3.69$). Students like it when teachers allow them to have discussions with their classmates because it allows them to share their thoughts, have a voice, and demonstrate their capacity to produce meaningful work. This finding is in line with the results of Bhandari (2020), wherein learners are given tasks that are relevant to their life skills and experiences. Language tasks such as communicative tasks, discussing, and reporting help students acquire both the subject content and communication skills. The success of proper implementation depends on the teacher's skills and the students' preparation (Bhandari, 2020).

Audio-Lingual Method

Table 9 shows that students generally have a “high” preference of the Audio-Lingual Method of Instruction in their English class, as evidenced by the composite weighted mean of 3.97. Explicitly, students have a “high” preference for teachers presenting appropriate model of a structure (e.g., types of sentences) and letting them familiarize the structure and repeat it again and again ($w\bar{x} = 4.12$). Students benefit more when their teacher provides them with an appropriate model of a structure and makes them practice and repeat it multiple times. This finding is aligned with what Mohan (2019) said that the teacher presents a model of a structure, and the students repeat the structure based on the model. After many repetitions of sentence structures, students “overlearn” them, and the structures become a part of the students' language behavior, giving them the ability to generate similar sentences autonomously in communicative contexts (Mohan, 2019).

Table 9. Extent to which students prefer audio-lingual method (n = 300)

Indicators	Mean	VD	EoU
1. presents appropriate model of a structure (e.g., types of sentences) and lets us familiarize the structure and repeat it again and again.	4.12	A	H
2. provides activities before the discussion like vocabulary, word combinations and pronunciations.	4.00	A	H
3. uses tongue twister to improve our articulation and pronunciation of english words.	3.95	A	H
4. gives us drills after our discussion like constructing the correct simple sentence structure or supplying the correct missing word in a sentence.	3.91	A	H
5. utters a sentence, like "the door is red,". then she'll tell us to replace it with a book. then we'll say, "the book is red," and she'll mention another item, and we'll repeat the sentence with the new object.	3.87	A	H
Composite	3.97	A	H

The table reveals that students show a “high” preference when the teacher provides activities before the discussion, like vocabulary, word combinations and pronunciations ($w\bar{x} = 4.00$). Students respond better to teachers who provide stimulating activities like word combination, pronunciation, and vocabulary practice because it enables them to actively engage and fully immerse themselves in the learning process. As what Hotimah (2022) emphasized, the audio-lingual method teaches vocabulary, word combinations, pronunciation, and grammatical patterns through conversations, with the goal of allowing students to reply rapidly and properly in

spoken language. This method educates pupils on grammatical sentence patterns rather than stressing vocabulary development (Hotimah, 2022).

The table also shows that students have a “high” preference when the teacher uses tongue twister to improve their articulation and pronunciation of English words ($w\bar{x} = 3.95$). When teachers use tongue twisters to assist students to improve their pronunciation and articulation of English words, students find it more enjoyable and effective. This finding is in line with the results of Montaña Zeballos (2023), wherein tongue twisters improved the students’ pronunciation and increase their interest in learning how to pronounce sentences on their own.

The table further exhibits that students display a “very high” preference when the teacher gives them drills after the discussion, like constructing the correct simple sentence structure or supplying the correct missing word in a sentence ($w\bar{x} = 3.91$). Students prefer it when the teacher provides drills after a discussion to reinforce their learning. These practice drills help learners apply what they have studied and improve their retention of the content. This is agreed by Safitri (2019), who claimed that the Audio-lingual Method emphasizes continuous practice and repetition through drills to help students develop strong language habits. This method considers language learning as a habit-forming process, allowing students to generate phrase patterns without hesitation (Safitri, 2019).

The table also reflects that students exhibit a “high” preference when the teacher utters a sentence, like "The door is red" and then tells them to replace the word “door” with “book,” allowing them to change the sentence to "The book is red." The teacher will then mention another item, and the students will repeat the sentence with the new object ($w\bar{x} = 3.87$). This drill emphasizes the repeating of language patterns to support students’ development of automatic responses and improve their integration of the target language. This finding affirms the statement of Mohan (2019) that slot-filling drills involve providing pupils with a sentence and having them fill it in. After the teacher gives another subject, the student is expected to pronounce the new subject plus the predicate. This structure drills under the audio-lingual method is an effective way to teach sentence structures (Mohan, 2019).

Suggestopedia

Table 10 depicts that based on the data, students predominantly have “high” utilization of the Suggestopedia Method of Instruction in their English class, as reflected in the composite weighted mean of 4.08. Pointedly, students have a “very high” preference when the teacher acts as their partner or parent throughout the class ($w\bar{x} = 4.21$). Students like it when teachers act as both partners and parents, providing guidance, support, and a caring learning environment. This result is affirmed by the statement of Dörnyei and Muir (2019) that teachers’ friendly and supportive behavior spreads across the classroom, producing a good and encouraging environment in which pupils are more likely to show similar attitudes and behaviors.

Table 10. Extent to which students prefer Suggestopedia (n = 300)

Indicators	Mean	VD	EoU
1. acts as our partners or parents throughout her class.	4.21	SA	VH
2. incorporates stories about our topic allowing us to use our imaginations.	4.12	A	H
3. keeps us motivated and interested throughout her class.	4.11	A	H
4. lets us relax for a minute while listening to peaceful music before starting our class.	4.00	A	H
5. participates in activities such as games or songs happily and genuinely.	3.99	A	H
Composite	4.08	A	H

The table further shows that students show a “high” preference when the teacher incorporates stories into their lesson allowing the students to use their imaginations ($w\bar{x} = 4.12$). Students appreciate it when teachers relate stories about the topics being taught because it stimulates their imaginative thinking and improves their learning experience. According to Putri and Kurniawati (2022), integrating stories into lessons creates a positive atmosphere that eliminates students' tension and mental pressure. It is easy to stimulate the student's imagination and memory so that the brain can efficiently work (Putri & Kurniawati, 2022).

The table also indicates that students display a “high” preference when the teacher keeps them motivated and interested throughout her class ($w\bar{x} = 4.11$). Students like it when their teacher keeps them motivated and engaged throughout the lesson, allowing them to stay focused and interested in learning. It is recognized by Colliander and Fejes (2021) that by motivating students, teachers instill confidence in their ability to learn. Students will learn more effectively when they feel confident.

The table unveils that students set forth “high” preferences when the teacher lets them relax for a minute while listening to peaceful music before starting the class ($w\bar{x} = 4.00$). Students enjoy it when teachers give them a minute to reset by listening to calming music before starting the lesson, allowing them to relax and keep their minds focused. As firmly stressed by Baihaqi and Rutiningsih (2019), music is used to relax students’ minds and improve their presentation of information. It allows students to enjoy the teaching and learning process by generating optimal conditions for their brains to process a large amount of content effectively. Relaxation and providing pupils with control over their learning experiences are important aspects of improving their comprehension (Baihaqi & Rutiningsih, 2019).

The data also signify that the students exhibit a “high” preference when the teacher participates in activities such as games or songs happily and genuinely ($w\bar{x} = 3.99$). Students appreciate it when teachers participate enthusiastically in activities, making the learning environment more engaging and interactive. This finding is likewise evident in the study of Shakhnoza (2022) who stated that teachers can utilize a variety of strategies, including active participation in songs and games, dramatic texts, and music in their lessons.

3.3 Students’ Academic Performance in English 8

Table 11 shows the students’ academic performance during the 1st quarter in their English 8 class. There are 25% of the students who obtained an outstanding rating; approximately 32% of them have a very satisfactory rating; and around 31% of them have satisfactory performance. Furthermore, about 12% of the students have a fairly satisfactory rating, while only 0.33% did not meet the expected performance rating in English 8. The students’ academic performance in English is determined by their Written Work (30%), Performance Task (50%), and Quarterly Assessment (20%) as stipulated in the components of Summative Assessment (DepEd Order No. 8, s. 2015).

Table 11. Students’ Academic performance in English 8 (n = 300)

Rating	Verbal Description	Frequency	Percent
90% - 100%	Outstanding	75	25.00
85% - 89%	Very Satisfactory	97	32.33
80% - 84%	Satisfactory	92	30.67
75% - 79%	Fairly Satisfactory	35	11.67
< 75%	Did Not Meet Expectations	1	0.33
Total		300	100.00
Mean = 85.71 (Very Satisfactory)			
SD = 5.05			

The overall performance of the students is 85.71% with a verbal description of very satisfactory. This signifies that, generally, the students at this level have developed the fundamental knowledge, skills, and core understanding of the concepts of English 8 and they can transfer them independently through authentic performance tasks (DepEd Order No. 73, s. 2012).

3.4 Relationship between the Extent of Teachers’ Utilization of and the Extent of Students’ Preference for the Five Methods of Instruction

Table 12. Relationship between the extent of teachers’ utilization of and the extent of students’ preference (n = 300)

	r_s	p-value	Decision	Remark
Teacher-Centered Instruction	0.407	0.000	Reject H_{o1}	Significant
Cooperative Learning	0.294	0.000	Reject H_{o1}	Significant
Task-Based Lang. Teaching	0.170	0.003	Reject H_{o1}	Significant
Audio-Lingual Method	0.226	0.000	Reject H_{o1}	Significant
Suggestopedia	0.223	0.000	Reject H_{o1}	Significant

Level of significance = 0.05

Table 12 presents the data identifying the relationship between the extent of teachers' utilization of and the extent of students' preference for the five methods of instruction. Using Spearman Rank Order Correlation, the results reveal p-values that are less than the level of significance (0.05). This finding is enough evidence to reject the null hypothesis, which means that the relationship between the extent of teachers' utilization and the extent of students' preference for the five methods of instruction is significant. This signifies that teachers who utilize teacher-centered instruction more tend to have students who highly prefer the same type of instruction. Similarly, the more teachers utilize cooperative learning, task-based language learning, audio-lingual method, and suggestopedia, the greater also is the preference of the students for these methods of instruction.

However, of all the r_s -values, it is the teacher-centered instruction that displays the highest degree of relationship between teachers' utilization and students' preference for this method of instruction. This connotes that generally, teachers utilize a teacher-centered method in delivering their English class. Teachers tend to have more utilization of the traditional teacher-centered method of instruction when teaching English because it provides a systematic and organized approach to lesson delivery. This method provides clear direction and instruction, resulting in a thorough transfer of knowledge to students.

The above findings corroborate the result gathered by Baghoussi (2021) that the teacher-centered method of instruction continues to be dominant in educational settings. Teachers continue to employ the teacher-centered method in their English classes because it establishes organized learning and mass transfer of knowledge. Baghoussi (2021) also revealed that the traditional physical classroom design, which consists of organized chairs and tables facing the blackboard with the teacher positioned close to the board and facing the pupils, promotes teacher-centeredness and lecturing. The finding is also parallel with the result of Upadhya and Lynch (2019) that students are accustomed to and prefer the teacher-centered method to teaching since they were mostly educated in this manner in prior years of school, with the teacher playing a key role in imparting instruction and information.

3.5 Relationship between the Extent of Teachers' Utilization of the Different Methods of Instruction and the Students' Academic Performance

The data in Table 13 present the relationship between the extent of teachers' utilization of the different methods of instruction and the student's academic performance. Employing Multiple Linear Regression Analysis, it is shown that the F-test significance or overall p-value (0.000) is less than the level of significance (0.05). This means that the sample data provide enough evidence to reject the null hypothesis for the entire population. In other words, some of the explanatory or independent variables (5 different methods of instruction) are significant predictors of students' academic performance. Assessing the regression analysis output, it can be observed that only the extent of teachers' utilization of teacher-centered instruction can significantly predict the students' academic performance. ($p = 0.000$). Moreover, its coefficient (2.203) is positive, which denotes that the more teachers utilize teacher-centered instruction, the greater is the academic performance of the students. Because teachers generally use the teacher-centered method of instruction, children grow used to it and perform well academically as a result. The regulated and authoritative nature of teacher-centered instruction creates an environment in which students thrive and excel in their academic endeavors. This result is likewise evident in the finding of Gorowara and Lynch (2019) that the student's learning and academic performance improved, demonstrating that they gained knowledge using the teacher-centered learning method.

Table 13. Relationship between the extent of teachers' methods of instruction and the student's academic performance (n = 300)

Variables	Coefficients	SE	t Stat	p-value
Intercept	73.416	2.889	25.410	0.000
Teacher-Centered Instruction	2.203	0.502	4.392	0.000
Cooperative Learning	0.786	0.566	1.389	0.166
Task-Based Lang. Teaching	0.101	0.585	0.173	0.863
Audio-Lingual Method	-0.153	0.561	-0.273	0.785
Suggestopedia	0.132	0.567	0.232	0.816
$r = 0.293$				
$r^2 = 0.086$				
adjusted $r^2 = 0.070$				
F-ratio = 5.524				

Level of significance = 0.05

Meanwhile, other methods of instruction (i.e. cooperative learning, tasked-based language teaching, audio-lingual method, and suggestopedia) do not significantly relate to the academic performance of the students (all p-values $> \alpha = 0.05$). This result, however, contradicts the claim of Qureshi *et al.* (2023) that cooperative learning enhances student learning. The use of it in the classroom should be encouraged because it helps students progress academically. Additionally, in the study of Prianty, Ngadiso and Wijayanto (2021), it was found that task-based language teaching enhances learners' academic performance. The main reason teachers utilize task-based language teachings is that it increases students' academic outcomes.

Furthermore, in the study of Suwarno, Retnowati and Sundari (2023), results showed that the teacher effectively implemented the Audio-lingual Method, resulting in improved academic achievement of the students. Subsequently, according to the result of Budianto and Yuniar (2023), pupils who were taught with suggestopedia performed better academically. This study contributes both theoretically and practically to the field of English teaching and learning. It adds to our understanding of how suggestopedia affects student achievement.

3.6 Relationship between the Students' Extent of Preference on the Enumerated Methods of Instruction and Their Academic Performance

The data in Table 14 reveal the relationship between the extent of students' preference for the different methods of instruction and the student's academic performance. Utilizing Multiple Linear Regression Analysis, it is shown that the F-Test significance or overall p-value (0.001) is less than the level of significance (0.05). This means that there is enough evidence to reject the null hypothesis. This also indicates that some of the explanatory or independent variables (5 different methods of instruction) are significant determinants of the student's academic performance. Moreover, the regression analysis output unveils that only the extent of students' preference for teacher-centered instruction can significantly predict their academic performance ($p = 0.000$). Additionally, its coefficient (1.703) is positive, which suggests that the higher the extent of the student's preference for teacher-centered instruction is, the greater their academic performance. This result emphasizes the impact of teaching methods on students' learning outcomes and the need to adapt to student preferences to achieve effective academic results. Similarly, the finding of Gorowara and Lynch (2019) implied that students were more established to and preferred the teacher-centered method of instruction. Drill practice or repetitive learning has traditionally been students' preferred method of acquiring new knowledge. The increase in the student academic accomplishment level could be attributed to this learning method of instruction which is employed throughout their academic endeavor (Gorowara & Lynch, 2019).

Table 14. Relationship between the students' extent of preference and their academic performance (n = 300)

Variables	Coefficients	SE	t Stat	p-value
Intercept	74.625	2.894	25.788	0.000
Teacher-Centered Instruction	1.703	0.584	2.918	0.004
Cooperative Learning	0.600	0.593	1.013	0.312
Task-Based Lang. Teaching	0.785	0.593	1.324	0.186
Audio-Lingual Method	-0.367	0.635	-0.578	0.564
Suggestopedia	0.079	0.555	0.143	0.886
$r = 0.254$				
$r^2 = 0.064$				
adjusted $r^2 = 0.048$				
F-ratio = 4.043				
p-value = 0.001 (significant)				
Level of significance = 0.05				

Meanwhile, other methods of instruction (i.e. cooperative learning, task-based language teaching, audio-lingual method, and suggestopedia) do not significantly relate to the academic performance of the students (all p-values $> \alpha = 0.05$). However, this finding does not support that of Sintia, Rusnayati, and Samsudin (2019), who found that students prefer cooperative learning based on their preferred learning method, resulting in improved academic performance. From the findings of Adjei *et al.* (2022), it has also been revealed that cooperative learning is more accepted and preferred by students in doing tasks in the classroom. As a result of the findings, it can be inferred that collaborative learning results in higher levels of academic achievement.

Afifah and Devana (2020) also stated that students prefer task-based language learning because it makes learning English more enjoyable, and they agree that task-based activities are a great way to enhance English academically. As a result, task-based language teaching improves students' academic achievement. Additionally, in the study of Rustomi (2021), findings revealed that students respond favorably to the teacher's use of the audio-lingual method, resulting in improved academic performance. This finding does not align with what Iryna *et al.* (2023) found that the suggestopedia method has a positive impact on students' cognitive, motivational, emotional, and social development. Accordingly, the suggestopedia method of language teaching used in the study emphasized increasing students' linguistic competence and cultivating academic achievement.

4.0 Conclusion

Bertrand Russell said, "More important than the curriculum is the question of the methods of teaching and the spirit in which the teaching is given." This statement implies that successful learning depends not just on curriculum content, but also on diverse and engaging teaching methods tailored to different learning styles and preferences. In teaching English, it is clear that teachers employ various methods of instruction, which include teacher-centered instruction, cooperative learning, task-based language teaching, audio-lingual method, and suggestopedia. As a result, students highly prefer these methods of instruction in learning English as well, leading to students' exceptional academic performance in their English 8 class.

In addition, the researcher has inferred that among all methods of instruction studied, teacher-centered instruction demonstrated the strongest correlation with teachers' utilization and students' preferences. The academic performance of students also improved as teachers used more teacher-centered instruction. On the other hand, students' performance increased with a higher preference for teacher-centered instruction. This highlights the effectiveness of tailoring and employing classroom instructions and diverse methods in English language teaching that align with students' preferred methods of learning to enhance their knowledge and academic achievement.

5.0 Contributions of Authors

This study has a single author and her adviser reviewed and approved the final version of this paper.

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7.0 Conflict of Interests

The author declared that she has no conflicts of interest as far as this study is concerned.

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Exploring the Effects of the Implementation of Anti-Child and Forced Marriage Ordinance among the Tagakaulo and Blaan in Malungon, Sarangani Province

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Abstract. This study explored the effects of the Anti-Child and Forced Marriage Ordinance on the Tagakaulo and Blaan in Malungon, Sarangani Province. A mixed method employing quantitative and qualitative approaches, specifically concurrent triangulation design was used to gather relevant data. This study provided the customary practices of the indigenous communities in which the results showed the gender separation and taboos against premarital interaction between men and women. They also accepted polygyny and the separation of married couples. The marital practices of Blaan and Tagakaulo include child and arranged marriages as well as the instances of forced marriages where children married against their own will. Malungon enacted the Anti-Child and Forced Marriage Ordinance in 2018 to ensure children's education and protection. The results showed that the mentioned practices declined as it is prohibited, especially with the approval of RA 11596 or the law criminalizing child marriage. Even though there are violators in its initial implementation in the far-flung areas, results showed that both communities highly accepted the Anti-Child and Forced Marriage ordinance and the law criminalizing child marriage with the subthemes: education as a priority, protection, and welfare of their children, and negative consequences of early marriage. Furthermore, friendships and relationships are already accepted without requiring them to marry instantly. This study contributed to the understanding of the implementation of the Anti-Child and Forced Marriage ordinance followed by approval of the law criminalizing child marriage affected the customary marital practices of the Blaan and Tagakaulo communities.

Keywords: Child marriage; Forced marriage; Arranged marriage; Government ordinance.

1.0 Introduction

The Blaans and Tagakaulos were among the original inhabitants of large parts of Southern Mindanao (Christensen, 1997). Sarangani Province is in the southernmost part of Mindanao where Malungon is one of its upland municipalities (depedsarangani.org). It is also a first-class municipality in the province and is considered an ancestral domain of the Blaan and Tagakaulo indigenous people. According to Guiam et al. (2013), many indigenous communities practiced early and pre-arranged marriage as it is considered one of the most significant rites of passage. Bicchieri et al. (2014) also found that conformity in the community is one of the factors behind child marriage as it was accepted as a part of their custom, tradition, and culture. In Malungon, one of the problems encountered by the municipality was the rising cases of teenage pregnancy. Based on their data from 2015 to 2017, it was 27% which is over and above the 4% threshold by the Department of Health. This makes the municipality the highest percentage in Region 12. Aside from that, there were 11, 12, and 13-year-old mothers recorded. According to the Municipal Social Welfare Development Officer, there is a case of a young girl married to an older

husband who experienced a hemorrhage that also ignited the local officials to protect children as they recognized that early and arranged marriages are a threat to child safety and well-being.

Hence, the Municipal Tribal Chieftain as well as the Indigenous Peoples Mandatory Representative, authored an ordinance prescribing rules and regulations against child and forced marriage as a deterrent to teenage pregnancy in the Municipality of Malungon and appropriating funds thereof” otherwise known as the Anti-Child and Forced Marriage Ordinance for both IP and non-IP groups. It was unanimously approved by the members of Sangguniang Bayan and approved by the Municipal Mayor in March 2018. It is a response to the result that the practice of child and arranged marriage was one of the contributing cases of teenage pregnancy and health-risk issues for children. As reported by UNFPA (2022), child marriage is considered a precursor to teenage pregnancy that poses health risks to girls and death due to complications from pregnancy and childbirth. According to the ordinance’s author, it safeguards children’s right to education and protection.

With its implementation, representatives from the local government of Malungon were invited to the senate deliberation for the proposed bill that criminalizes child marriage which is now a national law known as RA 11596. Hanna et al., (2014) stated that communities must be consulted at the earliest stage possible and the indigenous people need to be invited to participate in assessing procedures that affect them. This study described the customary practices of Blaan and Tagakaulo. It also determined the effects of the municipal ordinance in terms of its acceptability, penalty, and issues and challenges as it meddled with their customary marital practices. Hence, it addressed two research gaps. First, the spatial gap with the limited research that explored the cultural practices of Blaan and Tagakaulo in Malungon. Second, the empirical gap with the absence of study on the effects of the Anti-Child and Forced Marriage ordinance in their cultural practices and their reactions to its implementation.

2.0 Methodology

2.1 Research Design

A mixed method employing quantitative and qualitative approaches, specifically the concurrent triangulation design, was used to gather relevant data. This design gathers and analyzes quantitative and qualitative data to cross-validate the results from different sources (Creswell and Clark, 2018). The researcher used surveys, Focus Group Discussions (FGD), and Key Informant Interviews (KII) to gather effective results and interpretations of Blaan and Tagakaulo, specifically their customary practices and the effects of the local ordinance.

2.2 Research Participants

The specific areas were Sitio Kalonbarak for Blaan and Sitio Kityan Daku for Tagakaulo in the Barangay Poblacion under the Municipality of Malungon, Province of Sarangani. The IP village of Blaan at Sitio Kalonbarak is approximately 7.6 kilometers from the municipal hall while the Tagakaulo respondents and participants reside around 3 kilometers away. These communities were selected based on the numerous residents of the mentioned indigenous groups in Barangay Poblacion.

Key Informants at the barangay level were the tribal chieftain, sitio leader, youth representative, women's organization president, and the barangay captain in both communities to know their response and strategy to its implementation. Other key informants from the municipal level to gather valuable inputs to the enactment and implementation of the ordinance include the Municipal Tribal Chieftain/Indigenous People Mandatory Representative (IPMR)/President of Blaan Indigenous Political Structure, Former IPMR currently Barangay Affairs Officer, Municipal Social Welfare Development Officer (MSWDO), Local Youth Development Officer (LYDO) and President of Tagakaulo Indigenous Political Structure/Vice Municipal Tribal Chieftain. For the survey, 30 sets of Kaulo parents in Kityan Daku and 30 sets of Blaan parents in Kalonbarak, incorporating 60 Blaan and 60 Tagakaulo respondents. They can share relevant information on their marriage practices, the acceptability of the ordinance, and the challenges encountered. Also, two focused group discussions (FGDs) were conducted in each community that were participated by five women who experienced their customary marriage.

2.3 Research Instrument

The researcher utilized a researcher-made survey questionnaire and interview guide. The research adviser, and statistician colleague who is also a research coordinator reviewed and validated these instruments. It followed ethical guidelines as the researcher received a compliance certificate from the NCIP Region XII. A pilot test was

conducted to clarify the questions. Moreover, the researcher handed the informed consent form to all the research respondents and participants as the purpose of this study informed them.

2.4 Data Gathering Procedure

During the proposal of this study, the researcher coordinated with the ordinance's author. As he gave his approval, the researcher asked permission to conduct from the Municipal Mayor of Malungon and the National Commission on Indigenous Peoples (NCIP) Region XII. The NCIP staff from Sarangani Province accompanied the researcher at a community meeting, and she echoed the rationale and purpose of the study to the tribal council of Barangay Poblacion, Malungon Sarangani Province. They have decided to unanimously approve the conduct of the study in two IP communities. After completing the process required by the NCIP, they issued the Certificate of Compliance.

Regarding the study's conduct, the researcher coordinated with the community leaders and tribal chieftains of both communities to conduct the survey. The researcher gave the survey respondents the informed consent form and explained the significance of the study. The informants received a letter at both barangay and municipal levels for the KII. The FGD was conducted after finishing all the KI. The researcher also conducted the validation facilitated by the NCIP staff to comply with their final requirement after gaining the results.

2.5 Ethical Considerations

This study followed the Indigenous Knowledge Systems and Practices (IKSP) on academic research guidelines set by NCIP Region XII. The Municipal Tribal Chieftain and the Municipal Mayor also approved the conduct of this study. All survey respondents, key informants, and FGD participants signed the informed consent form 13 of MSU-IIT. The collected and analyzed data are held confidentially and privately. It also underwent a community validation process with the NCIP staff, ensuring the integrity of the results.

2.6 Data Analysis

For the narrative from the informants and FGD participants, the researcher used thematic analysis. For the survey, the researcher used the following: a) Frequency and Percentage distribution to determine the answers in the checklist questions, and b) Weighted Mean to determine the average score of samples.

3.0 Results and Discussion

The following are the customary practices of Blaan and Tagakaulo communities in two IP communities in Malungon, Sarangani Province.

3.1 Division of Sexes

The Blaan and Tagakaulo indigenous people cited sexual taboos (*lafiudin*-Blaan, *samboaga*-Tagakaulo) for unmarried persons, including the prohibition of being seen together in public places with the opposite sex, even among friends. Informants and FGD participants revealed that breaking these rules may result in the forced arrangement of marriage. The parents are the ones who will find a partner for their child, which reinforces strict gender separation. The responses from both indigenous communities indicated that they share the same notion of the division of sexes because they had no courtship before due to the arrangement of parents for their child's partner. In the study of Fernandez et al. (2021), a Blaan informant also said that couples don't undergo courtship since the parents are the ones who court their partner's parents for marriage. It coincides with the findings of Matas (2015), which state that there is an absence of courtship as experienced by pre-arranged marriage students. Informants and FGD participants said:

Girls and boys are not allowed to bond. -J, El, Ep, R (Blaan)

A girl and a boy are not allowed to be near each other. We have had no courtship before because the parents are the ones who settled the marriage. - D, El (Blaan)

Before, the sight of a girl and a boy together was prohibited. If it happens, the parents will arrange the wedding. - (Blaan, FGD participants)

If a girl is still in the well, boys are not yet allowed to go there. -Fb3 (Blaan)

A boy and a girl were not allowed to be seen together...If seen even once, they'd be forced to marry each other. -N, M, B, S, A (Tagakaulo)

In our time, there is no courtship between young individuals, only the parents will talk to the other parents, so girls and boys were not allowed to be seen talking to know each other. – Ft4, Ft5 (Tagakaulo)

A girl and a boy were not allowed to be seen together. If it happens, both parents will plan the date of their marriage. – (Tagakaulo, FGD participants)

Table 1. Division of Sexes

Description	Blaan	Tagakaulo
Men and women were discouraged from being friends which strengthens strict gender separation.	Restriction of contact between opposite sex.	Restriction of contact between opposite sex, if violated, forced marriage will be arranged by parents.
	Forced marriage ensues through parental arrangement.	Absence of courtship in older generation due to parentally arranged marriage.

3.2 Marital Norms and Practices for Unmarried and Married Members

The research participants conveyed that Blaan and Tagakaulo shared cultural practices and norms related to the sexual behavior of unmarried and married members. Key informants and FGD participants from both indigenous groups mentioned the prohibition of children of the opposite sex from being seen together. Here are some of the narratives from both communities:

Unmarried children of opposite sex are not allowed to be seen together. If you are a married woman, you're prohibited from bonding and talking with another man. – Ep, D, El, J, R, Fb1, Fb2, Fb3, Fb4, Fb5 (Blaan)

An unmarried girl is not allowed to be seen with a boy. Also, a married woman and another man were not allowed to be in each other's company. – A, B, N, M, Ft1, Ft2, Ft3, Ft4, Ft5 (Tagakaulo)

It is prohibited for a married woman to be seen with another man. If it happens, the bridewealth (sablag) will be returned doubled to the husband. – (Tagakaulo, FGD participant)

If both of you talked privately, it means that you have a relationship. – Ft2 (Tagakaulo)

Polygyny

It is prohibited for married women to form close connections with other men. They were not allowed to add additional husbands to the households. However, it is accepted for married men to add wives (damway – Blaan, kaluwa – Tagakaulo) after gaining the first wife's approval. Hirai (2015) defined polygyny in her study as the practice of a man having more than one wife at the same time. A husband who can give the bridewealth and obtain the first wife's approval can have another wife. There was no wedding ceremony, but it involved giving the bridewealth which would be doubled by the man, especially if the woman was currently married but was taken away to be the other wife. They also lived together harmoniously in one house, helping each other with household responsibilities. It was also practiced among indigenous communities such as Tboli (Hirai, 2015) and Kalagan, who were like the wealthy and members of the higher ranks (Joshua Project). In Porcalla's (2017) report, a man cannot be sued for polygamy because he belongs to the Manobo tribe. Garvan (1927) added that it presupposes the first wife's consent, but this practice was infrequent among the Manobo, except for those with the means to pay for the luxury of having another wife. Ebrahim et al. (2017) also mentioned in their study that Muslim members adopted the practice of polygyny under Shari'ah or Islamic Law. Informants from Blaan said:

Before, husbands are allowed to add wives (damway) but wives are not allowed to add husbands. – J, El, D, Fb1, Fb2, Fb3, Fb4, Fb5

The husband will also give a bridewealth for the other wives. – El, J, R, D, Fb3, Fb4, Fb5

The husband will ask for the approval of the wife first before having another wife. –El, R, D, J, Fb4, Fb5

My grandfather had three wives. Man can have many wives as long as he can provide. The first wife can suggest to her husband to have another wife to share household responsibilities. – D

Wives stayed together in one house. If there are five wives, then there should be five rooms. The first wife is the queen of the household. – El

I am the daughter of my father's second wife (damway). My mother and the original wife were okay with it and they were also helping each other with the household chores. –Fb2

My father took a married woman from her husband (amlad) to be his second wife. It was settled through dialogue (kasfala) with the tribal elders and leaders as well as by giving back the bridewealth that doubled from its original value. He gave five horses and two carabaos. –R

My son took the wife of another man. He doubled the bridewealth (kafligo) and gave the Php100,000 to the previous husband.
–Fb5

The Tagakaulo observed the same acceptance of polygyny with the responses below:

Husbands are allowed to add wives (kaluwa). No restrictions on the number of wives but a wife is prohibited from adding husbands. – M

A wife must only have one husband but husbands can have more than one wife. –A, S, B, N, Ft1, Ft2, Ft3, Ft4, Ft5

In my Uncle's house, his wives stay together in the same house but they have different rooms. – B

My grandfather had 15 wives. – A

My grandfather had 9 wives living in one house but in separate rooms. – N

If the husband wants another wife, he will ask for the first wife's consent and she can also suggest a woman she likes. There are no restrictions on the number of wives as long as the husband can provide for their needs. They will stay together in the same house. Then, a sign like a handkerchief and a cap outside the door of the wife's room indicates where the husband sleeps.

– N

I was married at the age of 14. In our marriage, he was abusive every time he was drunk. I was taken away by another man at the age of 28...Yes, he asked first for the approval of his wife. We stayed together for 20 years at the same house with his first wife, helping each other. – Ft4

Separation of Married Couples

Both groups allowed separation (*skah*-Blaan, *meg ayaw*-Tagakaulo) and the practice of men acquiring the wife of another man (*amlad*-Blaan, *peg ayaw*-Tagakaulo) under specific conditions involving the return of the bridewealth (*kafligo*-Blaan, *sablag*-Tagakaulo) usually twofold from the original value. Informants and FGD participants from Blaan said:

In our tribe, if both parties agree to separate (skah), it's okay as long as the bridewealth is returned. It's not always the doubled value but a little higher compared to the value of the bridewealth that was originally given...it depends. It will be facilitated by tribal elders and leaders. – Ep, D

Separation is accepted in our tribe. The new husband will return the bridewealth (kafligo) if she was taken away from her previous husband (amlad) which is usually twofold to the previous husband. – Fb1, Fb2, Fb3, Fb4, Fb5

The original bridewealth will be doubled if the wife committed a sin and must give it back to her husband if they separate. – R, El, J, Fb1, Fb2, Fb3, Fb4, Fb5

The Tagakaulo FGD participants also supported the statements of the key informants.

Separation (meg ayaw) is accepted and the man will return the bridewealth twofold if he takes the woman from her husband (peg ayaw). – B, A, N

There will be no killing as long as there will be dialogue and negotiation (balaw-balaw). If the husband gave his wife the bridewealth of two horses, the man who stole away his wife would return four horses. It will be given in two-fold. – A

Separation is allowed after the bridewealth (sablag) is returned twofold to the husband especially if the woman was taken away by another man. However, if both agree to the separation and there's no other man involved, it's acceptable if the bridewealth is not returned immediately. – Ft1, Ft2, Ft3, Ft4, Ft5

The Blaan and Tagakaulo shared a common notion in dealing with the separation between married couples, which involved the return of the bridewealth by the wife or the wife's family if it was a mutual decision. If the couple separated because another man took away the wife, he would give the twofold bridewealth to her husband. The separation process of both indigenous groups was facilitated and settled by the elders and tribal leaders. San Jose (2021) revealed in his study among the Tagakaulo, Blaan, Manobo, and Tausug that they mostly recognized the authority of their tribal leaders for the settlement of misunderstandings.

Table 2. Prohibited sexual behavior of unmarried and married members

Description	Blaan	Tagakaulo
- Unmarried and married individuals are prohibited from forming bonds with the opposite sex beyond their immediate family. - Polygyny is allowed as husbands are permitted to have multiple wives, whereas a wife's infidelity may lead to penalties, typically involving the giving back of the bridewealth mostly doubled from its original value. - A married couple can choose to separate. Also, a man can take away the wife of another man as long as they reach an agreement regarding the return of the bridewealth facilitated by tribal leaders or elders.	A taboo (<i>lafiudin</i>) for unmarried boys and girls to form bond and friendship. Husbands are allowed to add wives (<i>damway</i>) with no limit on the number of wives as long he can give the bridewealth (<i>kafligo</i>) and with permission of the first wife. The wives stayed together in one house but in separate rooms. They allowed separation (<i>skah</i>). The wife will return the bridewealth (<i>kafligo</i>), usually doubled from the original value. The practice of taking away the wife of another man (<i>amlad</i>) which will be settled through giving of bridewealth (<i>kafligo</i>), doubled from the original value.	Sexual taboos (<i>samboaga</i>) as it is prohibited for the unmarried Tagakaulo to form connections with their opposite sex. Husbands are permitted to have another wives (<i>kaluwa</i>). No restrictions on the number of wives given that the bridewealth is settled and agreed by the first wife. They all lived together in one house but in separate rooms. Separation (<i>meg ayaw</i>) is accepted which will be settled through the giving back of bridewealth (<i>sablag</i>), usually doubled from the original value. The man will return the bridewealth (<i>sablag</i>) twofold if he takes away a woman from her husband (<i>peg ayaw</i>). <i>Makabatog</i> led settlement.
	Fulung led the settlement.	

3.3 Marital Practices

Table 3 presents the customary marital practices of child and arranged marriages as well as the occurrences of forced marriage among children for whom they don't have romantic feelings. Both parents discuss (*kasfala* - Blaan, *balaw-balaw* - Tagakaulo) about wanting their children to marry to be followed by their wedding planning. The bridewealth (*kafligo* - Blaan, *sablag* - Tagakaulo) must be wholly given to the bride's family before their wedding as it is one of the processes that tied the marriage of both indigenous groups.

Table 3. Marital Practices

Description	Blaan	Tagakaulo
Both indigenous communities practiced child and arranged marriage before the enactment of the ordinance. There were also forced marriages as children had a limited choice of spouses.	Customarily, they have no courtship, only arranged marriage by the parents.	No courtship as the parents of the boy will talk to the parents of the girl about wanting a marriage.
	<i>Sloluk aban</i> is the engagement of the children in the womb of the mothers through an exchange of <i>malong</i> .	<i>Liwan sa salolo</i> is the marriage engagement of children in the womb of their mothers.
	Existence of child marriage.	Existence of child marriage.
	There were 14, 15, and 16 years old who were already married.	Parents marry off their children ages 11, 13, and 14 years old.
	Occurrences of forced marriage as children are afraid to break the ties made by their parents through the acceptance of bridewealth (<i>kafligo</i>).	The arranged marriages resulted in children being forced to marry as they had no choice and were afraid of their parents.
	The family cornered the boy as he was seen talking to their daughter (<i>atnafus</i>).	<i>Igliputan</i> happened when the girl's family cornered the boy for marriage as they were seen talking.

Arranged Marriage

Both Blaan and Tagakaulo have practiced arranged marriages for their children, sometimes even when they are still so young. It coincides with Tinio's (1993) and Matas (2015) findings among the Blaan. Baja and Diaz among the Tagakaulo (2023) noted in their research among the Tagakaulo communities that some parents will arrange a marriage primarily on the bridewealth for financial considerations. The bridewealth is essential to Tagakaulo

marriage, for it symbolizes commitment and unity between the couple and their families (Baja and Diaz, 2023). Benito (2020) also highlighted this tradition among the Blaan. Informants revealed that:

There was no courtship before, only arranged marriage by the parents. – R, Ep, D, El (Blaan)

Even if they're still in their mother's womb, parents can already arrange their marriage. When they are born as a girl and boy, they will exchange the baby's malong as a sign that they are engaged (sloluk aban). – D (Blaan)

There was no courtship before. Only the parents of the boy will talk to the parents of the girl about wanting a marriage. – A, N, M (Tagakaulo)

We had no courtship before, only parents' agreement. – B (Tagakaulo)

There are arranged marriages at a young age. Sometimes even before the child is born (liwan sa salolo). – A, N (Tagakaulo)

Child Marriage

Many women from indigenous communities get married when they're 17 or under (Hirai 2015). The study of Guiam et al. (2013) in the Blaan of the municipality of Malungon with 80 respondents revealed that 15 years old was the average marrying age of both sexes. Baja and Diaz (2023) also conducted a study about young Tagakaulo couples, noting the practice of child marriage. Moreover, the participants of their FGD confirmed the prevalence of child marriage. In this study, 27 out of 60 Blaan and 23 out of 60 Tagakaulo respondents were married before 18. Informants from both communities said:

Before, 14 and 16 years old can already be married. – R (Blaan)

I worked at Polomolok, South Cotabato. There, I was in a relationship with my co-worker. A few months later, he accompanied me to my house. My parents scheduled the date of marriage after a week. I was 15 years old at that time. – Fb2 (Blaan)

After reaching an agreement, an 11-year-old can be married. At ages 13 and 14, parents can marry off their children. – B (Tagakaulo)

The boy and his parents went to our house in the presence of my parents. I just followed the instructions of my parents since I never really thought about it. I agreed to our relationship and married him at the age of 14. – Ft4 (Tagakaulo)

Forced Marriage

In this study, some Blaan informants have witnessed arranged marriages that led to children marrying someone without their full consent. There were also situations where the girl's family cornered a boy as they were seen talking. A few Blaan respondents from the study of Guiam et al. (2013) shared that their parents forced them to marry early. These are the narratives of Blaan informants and FGD participants:

A girl is forced to agree even if she does not want to marry because she is afraid of her father. – El

The parents arranged the marriage and forced marriage happened when the child did not want to get married...but was forced by the parents due to prior ties with the other family. – Ep

I was 14 years old when I was married to a boy arranged by my parents. I was forced to marry him because they were already there. My parents told me that I was young when they already received my bridewealth (kafligo) which is a gong and a horse. My sister's marriage was also arranged by my parents and it happened when she was at the age of 15. – Fb3 (FGD, Blaan)

There was also a situation of our neighbor before where the family cornered the boy as he was seen talking to their daughter (atnafus). – Fb4, Fb5 (FGD, Blaan)

Forced marriages also happen in the Tagakaulo communities as children have limited autonomy in selecting their future spouses since their parents are the ones doing it. As stated by the informants:

A boy talked to the girl then the boy was cornered by the girl's family to marry her (igliputan). – N, A

Both parents planned the marriage without the ideas and approval of their children...children are forced to marry because they are also afraid of their parents. – M, A

There were girls in our neighborhood before that they did not want to marry especially with older husbands but they did not have a choice. – Ft2, Ft5 (FGD, Tagakaulo)

Both indigenous communities share similar marital practices, although they differ in the terms that they use. They have practiced giving the bridewealth before marriage, including its return when separation happens, as it plays a significant role in serving as a symbolic and tangible element of marital relationships. Based on the responses of the informants, forced marriage is the result of the practice of child and arranged marriage, as the children have

limited choices in selecting their spouses. They also fear going against their parents' decisions and traditions. Using the Structuration Theory, child and arranged marriage have been accepted as part of the structure in both Blaan and Tagakaulo communities. Hence, they have seen nothing wrong in deciding the partner for their children, including their marriage, despite their age, since it became part of their practices as Blaan and Tagakaulo. Even though, as individuals, they had the agency to resist this practice, there was no support system from local officials and tribal leaders before. As a result, they failed to exert an effort to resist this practice, knowing that it was detrimental to the children. Nowadays, there is a difference in their realizations with the enactment of the ordinance in 2018, in which the penalty was repealed by RA 11596 (law criminalizing child marriage) in 2021.

3.4 Acceptance of the Blaan and Tagakaulo on the Provisions of the Ordinance including the RA 11596

The table below indicates that Blaan has a very high acceptance of the provisions and prohibitions of the ordinance, including the RA 11596 or the law criminalizing child marriage, based on the level of their strong agreement on the law as indicated through the mean score per item response the highest of which is 5.00. They believed that the purpose of the ordinance was for their children's brighter future (mean: 4.97), protecting them from abuse and exploitation (mean: 4.97), which also ensured the welfare of their children (mean: 4.95). Similarly, the Tagakaulo also adheres to the idea that the ordinance is for their children's future (mean: 5.00) as well and the RA 11596 strengthens the ordinance, believing that it aims to protect the children from abuse and exploitation (mean: 4.98). It is for their children's brighter future (mean: 4.98). Both indigenous communities strongly agree with a mean result of 4.90 for Blaan and 4.88 for Tagakaulo on all the provisions and prohibitions of the ordinance and the RA 11596 or the law criminalizing child marriage. There were already numerous laws that aimed to stop the practice of child and arranged marriages. Article 5, Executive Order No. 209, also referred to as the Family Code of 1987, mentions that the minimum marriage age is 18 years old for both men and women (officialgazette.gov.ph). In 2015, the UN Human Rights Council Resolution strengthened the efforts to eliminate the practice of child, early, and forced marriage as it violates human rights (Calimoutuo et al., 2016). Nevertheless, these attempts were not successful in contrast to the enactment of the local ordinance, which had strong support from the communities and tribal leaders as they realized the great significance of education and the negative consequences of early marriage through a series of community consultations and Information Education Campaigns on the purpose of the enactment of the Anti-Child and Forced Marriage Ordinance in 2018 and the implementation of RA 11596 in 2021.

Malungon is the first ever LGU to enact an ordinance prohibiting child marriage...banning child and forced marriage. When our partners such as WeLive Foundation, Commission on Population and Development, and Gabriela knew about the ordinance, they lobbied it to the Senate. We are not the sole basis but we were invited as resource persons during the deliberation of RA 11596 when it was still a senate bill. It is one of the milestones in Malungon because we are able to do it since we are an ancestral domain of Blaan and Tagakaulo. We are able to break the barrier. – Ks
Actually, our ordinance was one of the basis of the RA 11596. From the national level, they went to us and conducted their research. – Ep

Informants from both communities expressed also their acceptance on the RA 11596 with the following statements below:

We were very happy with the approval of the law because we are hoping that our children will not experience difficulties someday. Also, the members of our tribe were aiming for our children to finish their education. – A
The penalty of the ordinance will not instil fear but the penalty of the law (RA 11596) will. – A
The law will make them fear a penalty such as Php40,000, where do you find such money even the tribal chieftain can be imprisoned. It is a tough law. – N
The passing of the law strengthened and supported the ordinance. The ordinance is only implemented in Malungon which is why we are in great joy with the approval of RA 11596 because it covers the whole Philippines. – Ep
I am happier with the law because we need to prioritize children's education. – J
I am happy with the implementation of the law. – R
The law is good because it includes imprisonment which people feared. I am happy because there were children who failed to go to school and got pregnant at a young age because their parents didn't care. Right now, there are protocols that the parents' must attend to their child's concerns so they will not be summoned to the barangay. – S
The law is good. It also reinforced the ordinance. With its implementation, the national law will prevail. – M

The Tagakaulo FGD participants also have a positive outlook on the RA 11596 as well as some Blaan participants but there were two who expressed their sentiments:

I do not want to be fined Php50,000 as imposed by the law and then end up in jail. – Fb3

Parents should not be held responsible for their children's decision to marry early by fining and imprisoning them. If the children were the ones who decided it, they must bear the penalties for their actions. As parents, we tell them about the things that are good for them such as studying but if they do not believe, we can do nothing about it. – Fb5

Table 4. Level of Acceptance of the Blaan and Tagakaulo on the Provisions of the Ordinance No. 2018-108-13 including the RA 11596 (Law Criminalizing Child Marriage)

Statements	Blaan		Tagakaulo	
	Mean	V.I.	Mean	V.I.
1. I consider the implementation of Anti-Child and Forced Marriage Ordinance for IP and non IP in the Municipality of Malungon is helpful in preventing the cases of teenage pregnancy.	4.73	Strongly Agree	4.67	Strongly Agree
2. I consider the implementation of the Anti-Child and Forced Marriage for IP and non IP in the Municipality of Malungon to reduce the cases of teenage pregnancy.	4.73	Strongly Agree	4.58	Strongly Agree
3. I believe that the Anti-Child and Forced Marriage is enacted for the welfare of our children.	4.95	Strongly Agree	5.00	Strongly Agree
4. The Presence of Anti-Child and Forced Marriage Advisory Council at the Municipal and Barangay Levels will help address our tribe's concern.	4.88	Strongly Agree	4.95	Strongly Agree
5. I support on the creation/ establishment-plan of Child and Youth Development Affairs Office to encourage the active participation of our children in sports, education and various trainings.	4.93	Strongly Agree	4.93	Strongly Agree
6. I support on the creation/ establishment-plan of Counseling Section under the Municipal Health Office to help and assist the child and teenage mothers.	4.96	Strongly Agree	4.87	Strongly Agree
7. I approve the RA 11596 or the law criminalizing child marriage as it will ensure the facilitation and solemnization of child marriage as well as cohabitation of adults with children shall be penalized.	4.93	Strongly Agree	4.80	Strongly Agree
8. The RA 11596 protects the children from abuse and exploitation.	4.97	Strongly Agree	4.98	Strongly Agree
9. The RA 11596 will strengthen the Anti-Child and Forced Marriage Ordinance	4.92	Strongly Agree	5.00	Strongly Agree
10. The ordinance will ensure our children's brighter future.	4.97	Strongly Agree	4.98	Strongly Agree
Grand Mean	4.90	Strongly Agree	4.88	Strongly Agree

The Influence of Power in the Approval of the Ordinance

The highest leaders from both Blaan and Tagakaulo indigenous groups in Malungon were the ones who pushed the ordinance and endorsed it to the tribal leaders and council of the 31 barangays, representatives of every sector during the multi-sectoral meeting, and to the people of the Municipality as the ordinance concerns both the IP and non – IP. However, the IP communities of Blaan and Tagakaulo were the ones who were highly affected by the presence of the practice of child and arranged marriages, leading to instances of forced marriages. The ordinance's author is Blaan, the Municipal Tribal Chieftain and the current IPMR. Together with the previous IPMR and now barangay affairs officer (Tagakaulo) and the Vice Municipal Tribal Chieftain (Tagakaulo), they were all for the approval and enactment of the ordinance. Moreover, the Municipal Mayor of Malungon, a member of the Blaan indigenous group, approved the ordinance by seeing its importance. The local government also focused on providing quality education, resulting in the implementation of Innovation and Collaboration in Attaining No Limitation (I CAN) in Education program.

With their positions, they were the ones who held great power in influencing the indigenous people. Rahim (1989) defined power as the ability of one party to change or control another party's behavior, attitudes, opinions, objectives, needs, and values. They can draw commitment from the indigenous people to achieve the collective goal of successfully implementing the ordinance. The Fulung of the Blaan are equivalent to the Datus or elders of other tribes and were the most respected and renowned members of the community since they are also recognized as the highest leaders in the community who facilitated in resolving significant conflicts within and among the indigenous communities (Buendia et al., 2006). Makabatog or Wiseman served as the tribal leader for Tagakaulo (Arquiza, 2001). They have functions similar to those of the Fulung of the Blaan. The power and authority they

hold over the indigenous people in Malungon played a significant role in influencing them to accept and comply with the ordinance, highlighting the importance of education instead of marriage and emphasizing that the ordinance is for the children's welfare and benefit.

We are not having a hard time getting the support of the tribal leaders because the Municipal Tribal Chieftain as well as the current IPMR pushes the ordinance...they understand its significance. – Ks

It underwent a consultative meeting where many sectors were informed. Many members knew the ordinance because at every tribal meeting, the tribal chieftains echoed the prohibited act of marrying off children at an early age. – N

During the meeting with the tribal leaders in Malungon about the ordinance, they clarified if it is not against the customary law. My answer is no. When you say customary law, everyone practiced that customary law. It is just a practice since not all indigenous members want to marry early, especially those who have educated children. They have no objections but ask if it harms or damages the culture. I answered them that it is part of 'education that changes their lives' direction'. Many realized 'that to arrange your child for marriage is tantamount to killing them and dragging them into prison' since they have no other opportunities as you imprisoned their future. Unanimously, they go for the approval and support of the ordinance. The Sangguniang Bayan also unanimously approved the ordinance. – Ep

Yes, there is a proposal. The 31 tribal chieftains of Malungon attended where a proposal was endorsed with a reason that our children must have an education and not marry early. We supported and gave clearance for the approval of the ordinance as we are looking to its positive results. – D

We conducted a series of tribal council meetings, barangay assemblies, and other events to inform the public about the purpose of the ordinance. – M

Few reacted to the ordinance when we had our conference in Malungon. I replied that we need to accept this ordinance because our children must not be married early. In child marriage, we are the ones who destroy our children's future. Our culture can understand and adjust as we aim to protect the future of our children. Then, they understood and did not resist. – N

Acceptability and Willingness to Comply with the Ordinance

The Blaan and Tagakaulo survey respondents and research participants accepted and were willing to comply with the ordinance. Results showed they prioritized their children's education, protection, and welfare. There is also a recognition of the negative consequences of early marriage. It also means that the research participants recognized the negative impacts of child marriage, resulting in the need to protect their children and ensure their welfare, specifically through education. Furthermore, informants shared their high appreciation of the benefits of education and professionalism, which led them to recognize the need for an ordinance against child marriage. Key informants from the barangay and municipal level also conveyed their ideas and observations about the acceptance and compliance of the indigenous communities.

Yes, they saw the difference...that it is beneficial for them. If they continue the practice of early marriage, the young couple will sacrifice a lot in establishing their livelihood. They saw the importance of finishing their education before entering into marriage. – C

They accepted it because it was for the protection of their children. They have already seen the advantages of their children going to school. – Kr

Yes, they accepted the ordinance... the trend these days is the competition in terms of completing their education. Yes, they are willing to comply with the ordinance. – B

The penalty is not the main reason that they accepted the ordinance but they saw the negative consequence of marrying their child at an early age...the elders understood the decent purpose of the ordinance. – Ep

I can say that they accepted the ordinance because of the lesser practice of early and arranged marriage. The parents recognized the importance of children finishing their studies for better opportunities. – M

Blaan informants affirmed their statements as they mentioned:

Our Blaan community accepts and abides by the ordinance. – R, D, J

I am very happy with the ordinance. I can see that the children in our community were happy because there was no arranged marriage and they could choose who they wanted. Also, parents today are happier if their children finish their studies. – El

Education is very important. If you have knowledge and education through going to school, it is for your benefit. I only reached elementary. In my family, my child graduated as a nurse and now working in California. If I encourage her to marry, she will not reach her dreams. The tribe also realized the advantages of children not being married early because they hoped for children to finish their education, unlike before when they were thinking of the bridewealth. – D

Furthermore, the Blaan mothers who participated in the FGD highlighted their reasons for accepting the ordinance such as:

We accepted the ordinance. – Fb1, Fb2, Fb3, Fb4, Fb5

I accepted the ordinance because it was for the family's benefit. – Fb1, Fb4.

I also accepted the ordinance for our children to finish their education to ensure employment and at 16 years old...they still do not understand the marriage responsibilities. – Fb3

I agree with the ordinance because it is hard to have enough income, children must have an education. – Fb2

The ordinance is for our children's future. – Fb5

The Tagakaulo informants and participants also have positive views on the enactment of the ordinance with the following narratives:

We are happy with the ordinance so that the Tagakaulo children can focus on finishing their education – S, Y

I accepted the ordinance to protect the children and for them to complete their education. – N

We really accepted the ordinance because it is important to end those practices to ensure our children's welfare and future...they are willing to abide because our tribe's goal is for their children to finish their studies. – A

We agreed and approved of the ordinance. – Ft1, Ft2, Ft3, Ft4, Ft5

The children will not marry early and they will finish their studies – Ft1, Ft2, Ft3

I accepted the ordinance because life is very difficult today. If they marry early, it will only add to the burden of the family. – Ft4

I accepted the ordinance for our children's welfare and for them to focus on their education. – Ft5

3.5 Level of Acceptance on the Prohibited Acts in the Ordinance No. 2018-108-13

Table 5. Level of Acceptance on the Prohibited Acts in the Ordinance (No. 2018-108-13)

Statements	Blaan		Tagakaulo	
	Mean	V.I.	Mean	V.I.
1. The man or groom at the time of the marriage ceremony who is at least 18 years old.	4.65	Strongly Agree	4.78	Strongly Agree
2. The guardians, parents, and other individuals who have moral authority over of the minor, including any members of groups or associations that support child marriage or fail to take action to stop it	4.80	Strongly Agree	4.87	Strongly Agree
3. Those who perform, participate, and encourage forced marriage or child marriage.	4.85	Strongly Agree	4.83	Strongly Agree
4. Religious community, or tribal leaders who either enabled forced marriages to occur or did nothing to stop them while having personal knowledge.	4.88	Strongly Agree	4.90	Strongly Agree
5. Those who arrange the union of one or two minors and cause them to live together as husband and wife before reaching the age of 18..	4.80	Strongly Agree	4.77	Strongly Agree
6. Any person who violated the ordinance will be fined the amount of P2,500.00.	4.83	Strongly Agree	4.80	Strongly Agree
Grand Mean	4.80	Strongly Agree	4.83	Strongly Agree

The results indicated that the respondents strongly agreed with the prohibited acts of the ordinance (mean 4.80-Blaan and 4.83-Tagakaulo). The FGD and KII revealed that they want their children to complete their education for a better future. FGD participants have said that the Php2,500.00 penalty is also significant for them. On the other hand, informants also noted that:

The penalty is not the main reason that they accepted the ordinance but they saw the negative consequences of marrying their child at an early age...the leaders and elders understood the decent purpose of the ordinance. – Ep

They are not afraid of the penalty because it is a minimal amount but as time goes by after the implementation of the ordinance, they are not doing the child and arranged marriage as they prioritize their children's education. – C

Honestly, if we think about it, the penalty is just a small amount since they can provide a bridewealth with high value. What changes their decision is the realization due to constant information, and education campaigns. – Ks

The Blaan and Tagakaulo this time realized that the ordinance was for their benefit as they also put a high value on the education of their children. – M, B, Ep

If we look at the penalty of Php2,500.00, it is just a small amount since they can even afford Php15,000.00. It's because they prioritized education. Also, if they violate it, their attention will be called, and it is a shame (kamula-mula) for them. – B

The penalty is a small amount, but they must think of their future if they marry early. –Ft4

They are not afraid of the penalty because it is a minimal amount that they can pay but they think that it is for the welfare and benefit of the children. – D

The good practices remained...what changed was the attitude of the tribe as they saw that the ordinance is needed and timely especially since we are a developed municipality, they witnessed how great to have professionals. – M

Hence, the penalty is not the primary factor for accepting the ordinance as both respondents and informants highly recognized that its enactment aimed to protect the welfare of their children. The findings in the studies of Guiam et al. (2013) and Hirai (2015) on other Blaan communities also revealed a common desire among the Blaan to prevent child marriage. The study of Baja & Diaz (2023) among Tagakaulo couples indicated that they were unwilling to continue the practice of child marriage because survival is difficult with early marriage. Responses from the KII and FGD also showed the same, acknowledging the importance of education and the negative consequences of child marriage.

3.6 Issues and Challenges Faced By The Blaan And Tagakaulo

As witnessed by 2 (3.5%) Blaan and 1 (1.8%) Tagakaulo, there was a continuity of arranged marriages below 18 years old. There were also 14 (24.6%) Blaan and 2 (3.6%) Tagakaulo who observed resistance from their community to change their customary marital practices. Even though there are no recorded petitions and complaints from all the 31 barangays in the Municipality of Malungon, it illustrates minimal resistance from both indigenous communities. The study also revealed the issue of cohabitation, which is reflected below, with 38 (66.7%) Blaan and 48 (85.7%) of Tagakaulo respondents affirmed parental consent for cohabitation. Its presence is also shown in Table 7 for Blaan (2.17) and Table 8 for Tagakaulo (1.90), which indicates that it was observed occasionally after the ordinance's implementation. The union involving a minor did not change drastically after the ordinance's implementation. There were only 3 (5.3%) for Blaan and 2 (3.6%) for Tagakaulo, who identified the low enforcement of the prohibited acts of the ordinance. Only 2 (3.6%) Tagakaulo exhibit a slight issue concerning the support of tribal leaders and elders and a language barrier in information dissemination with 1 (1.8%). Out of 60 respondents for each IP group, others found no issues or challenges in its implementation.

Table 6. Issues and Challenges in the implementation of the Ordinance

Category	Blaan	Tagakaulo
Parents' consent on child cohabitation	38 (66.7%)	48 (85.7%)
Resistance to change marital practices	14 (24.6%)	2 (3.6%)
Low enforcement of ordinance prohibited acts	3 (5.3%)	2 (3.6%)
Continuity of arranged marriage below 18 yrs. old	2 (3.5%)	1 (1.8%)
Lack of support of the tribal leaders and elders to the provisions of the ordinance.	0 (0%)	2 (3.6%)
Language barrier in the dissemination of information.	0 (0%)	1 (1.8%)
TOTAL	57	56

Parents' Consent on Cohabitation

There were marginal cases of early cohabitation with parents' approval that could be part of the awareness gap in implementing the ordinance. Informants and FGD participants among the Blaan in Sitio Kalonbarak pointed out:

We were informed late about minors living together. We did not separate them because the girls were already pregnant but we talked to the parents not to repeat the same circumstances. – R, D

We will let the parents decide because the cohabitation already occurred. I told them that the tribal leaders would not accept this. We guided you and told you about the ordinance because there is a consequence for this. They replied that they needed to defend their honor since their children already lived together. They requested the consideration of the tribal leaders that when the minors reach 18 years old, they will get married. – D

We knew a young girl who lived together with her partner. We talked to their parents but we did not separate them since the girl was already pregnant. The parent of a girl also said that she wanted her daughter to finish her education but they decided to live together. – El

Yes, there are existing few cases of cohabitation among minors after the implementation of the ordinance. The tribal chieftain and purok leader talked to them and their parents. – Fb2, Fb3, Fb4, Fb5

My daughter did not finish her grade 11 in 2019 as she chose to live together with her boyfriend even if we wanted her to finish her studies first. – Fb2

The Tagakaulo informants and participants in Sitio Kityan also faced the same issues on cohabitation, as verified by the following statements:

We face issues related to the cohabitation of minors, as parents often fail to engage leaders during the meetings and discussions (balaw-balaw). We called the attention of both parties and talked to them. – A

We have a situation where a girl was 16 years old. They stayed together though they were not yet married because the girl was already pregnant. They reached a marriage agreement when the girl turned 18 years old. – N

There was a case where a girl was pregnant. They signed an agreement that the boy would marry her when she reached 18 years old. They separately stayed at their parents' house. – B

Instances of early cohabitation exist, but the decisions are no longer made by the parents because it is initiated by the children. – Ft1, Ft2, Ft3, Ft4, Ft5

Initial Reaction to the Ordinance

The municipal ordinance is a solid blow to the marriage traditions of the Blaan and Tagakaulo communities. Although the data gathered above indicated the overwhelming acceptance of these communities about the penalty and prohibitions of the ordinance in 2018, repealed by RA 11596 signed into law in 2021, some indigenous people initially expressed their sentiments and minimal resistance to the enactment of the ordinance as it would affect their tradition specifically their customary marital practices. These are the narratives below:

From 2016-2017, the ordinance was almost two years in the making. It was hard to penetrate because it is part of the culture as child marriage is a customary practice of the tribe. Some questioned for interfering with their culture. So, the biggest job of the Technical Working Group (TWG), especially our Mayor is to explain to the tribal leaders the reason why the ordinance is needed and the need to stop certain practices. At first, there is a resistance. But, through the series of communication and information campaigns, they understood that their children's future would be affected if those practices continued. – Ks

At first, I heard that some members were complaining about the ordinance. During our first meeting, some showed negative reactions because it is part of their traditions that were passed through generations. But, through a series of meetings, they understood the reason for its enactment. – C

Out of 100%, only 5% reacted but right after that the ordinance was discussed well, it made them understand its purpose. There's no revolt and petition from the communities. – B

At first, there were some reactions from the members of the tribe but the importance of the ordinance was talked over to them again. Then, they understood that the ordinance was not for the sake of other people but for their families. – M

Violators of the Ordinance in its Initial Implementation

Informants and FGD participants revealed that there have been cases of minimal resistance following the ordinance, especially in the far-flung communities, as they continue the practice of child and arranged marriage, leading to some children being forced to marry early. In Malawi, Africa, there were inconsistencies in a new marriage act that prescribed the age of marriage to be 18 years old, which threatens the enforcement of the law, arguing that legal reform is essential but not enough (Wang, 2016). It showed that reforming family law is one of the most difficult to achieve. However, the collaborative effort of the municipal and local officials and the support of the tribal leaders of the communities played a significant part in ensuring the successful implementation. It also revealed the community residents' active engagement and awareness in reporting cases of children, including timely intervention and addressing reported cases of child marriage through direct communication and attention from the local authority and the tribal leaders.

If a community resident hears that parents are set to marry their child, they will report it to me or the DSWD but there are very few parents who resist due to personal interest...we will call their attention and talk to them. – Ep

There is no problem...if there are cases, they automatically report it in the barangay. The barangay level with the BCPC will intervene. – Kr

We received a call on the conduct of child marriage in Barangay Tamban. The venue was already prepared, and we told the involved families that it was prohibited...the ceremony was postponed since the girl is only 16 years old. – A

A young girl is set to marry and with the help of the SK Chairman and Tribal Leader, it is stopped. The young girl did not want to marry because she wanted to study first. The informant added that there was also a situation in another barangay

where the parents already arranged the marriage of their young daughter, and the Barangay Captain intervened to stop the marriage. Also, the youth and leaders are already empowered by the enactment of the ordinance. – Ks
There was a case in another barangay where a child cried because her parents forced her to marry but it was stopped. We requested the parents for a dialogue... the marriage did not happen. – Ep

With these constant Information Education Campaigns (IEC) and support from the tribal leaders and local officials, both communities for Sitio Kityan Daku and Sitio Kalobarak revealed their acceptance and compliance with the ordinance:

No petition and revolt in our community. – R, J, D (Blaan)
There was no complaint because the children were happy to choose whom they liked and the parents were happier if their children finished their studies. – El (Blaan)
No violent reactions in our community. – Blaan, FGD participants
No resistance to the implementation of the ordinance. – S, Y, N (Tagakaulo)
No negative reactions from our family and neighborhood. – Tagakaulo, FGD participants

The result implied that the Blaan and Tagakaulo understood the reasons behind the ordinance's implementation despite their initial struggles, as it would change their customary marital practices. The Mayor and Municipal Tribal Chieftain quickly addressed the concerns through dialogue and meetings. Using the lens of the Structuration Theory, one factor that there was no apparent resistance to the implementation of the ordinance of both indigenous groups as they chose to adhere to the external structure, which is the ordinance as it is mandated by the government, endorsed by their municipal and supported by their tribal leaders who hold power and authority in their communities. Arquiza (2001) mentioned in her study that an INDISCO staff discovered that some tribal leaders knew that the community members would not question their decisions due to the hierarchical social structure in their community as residents often look up to them in facilitating to solve their problems. Others who were hesitant at first have also realized the benefits it holds for their children through the constant information education campaign by their municipal and local officials, including their tribal leaders.

Although it contradicted their social structure as a child and arranged marriage was part of their traditions, they chose to accept and abide by the external structure mandated by the government. However, aside from the influence of their leaders, some expressed their acceptance of the ordinance, as supported by the replies of some informants and FGD participants as they realized the disadvantage of marrying early without proper education. The Structuration Theory also claims that individuals have the capacity of the agency to reproduce or modify an existing structure. Through the series of meetings and the Information and Education Campaign, indigenous people evaluated and identified that the practice of child and arranged marriages leading to forced marriages can negatively affect their children's well-being as it prevents them from reaching their full potential. Lastly, the responses also showed that the indigenous people have rationalized what is fair and reasonable to future generations. All these realizations and justifications led to collective actions of modification in their existing structure and transformation into a new structure that adapted to the rules and regulations.

The tribe realized that there are practices that should be stopped...self-actualization of the tribe on the negative consequences of early marriage and early pregnancy. Yes, there is a realization and behavioral change among the community members that it is wrong to destroy the future of the children and they should not use the notion of culture as an excuse to hinder children from finishing their education and getting a good life. Most parents especially those in the cultural communities experienced struggles in marrying and bearing a child at an early age and so, they did not want their children to suffer the same. – Ks

3.7 Perceived Changes in Blaan Practices

The results indicated the changes in the customary practices of the Blaan, specifically those related to child and arranged marriages, resulting in forced marriage on the end of the children. These practices were also clearly prohibited by the ordinance in 2018 and the law criminalizing child marriage signed in 2021. The data reveals a shift from being very highly observed practices of wedding ceremonies of a girl or boy below 18 years old (mean: 4.77) and arranged marriages of minors (mean: 4.77) to very low or rarely manifested and observed on any occasions in their community. Highly observed practices such as forced marriage, adolescents are encouraged to

marry early, and adult grooms that marry a girl below 18 years old have also declined. However, cases of early cohabitation before, with the parents' approval, have been observed on some occasions (mean: 3.15) and are still observed on a few occasions (mean: 2.17) in their community today. According to the FGD participants, the children are the ones who decide this because, as parents, they want their children to finish their education.

Yes, there are existing few cases of cohabitation after the implementation of the ordinance, and the tribal chieftain and purok leader talked to them and their parents. –Fb2, Fb3, Fb4, Fb5

My daughter did not finish her grade 11 in 2019 as she chose to live together with her boyfriend even if we wanted her to finish her studies first. –Fb2

In terms of the discontinuity of child, arranged, and forced marriages, they affirmed that:

The practice of child and arranged marriage has been stopped in Sitio Kalonbarak. No children are forced to marry these days. – R, El, D, J, Fb1, Fb2, Fb3, Fb4, Fb5

It is important to note that the practice of bridewealth remains very highly observed by the Blaan community as it is not discouraged by the ordinance. The decline of the practices prohibited by the ordinance suggested that the Blaan community is well-informed about the importance of the ordinance, and local officials and tribal leaders strongly support its implementation.

Table 7. Perceived Changes in Blaan Practices

Practices before and after the implementation of the ordinance		Before		After	
		Mean	Description	Mean	Description
1.	A wedding ceremony for a girl or a boy below 18 years old	4.77	Very High	1.23	Very Low
2.	The man/groom who is 18 years of age and above at the time of the celebration of the marriage with a girl below 18 years old.	4.21	High	1.32	Very Low
3.	Parents/guardians marry off their daughters below 18 years old.	4.23	High	1.42	Very Low
4.	The family received the bridewealth	4.98	Very High	4.78	Very High
5.	The cohabitation of minors with the approval of the parents.	3.15	Moderate	2.17	Low
6.	Cohabitation of minors without the knowledge of their family	1.75	Low	1.15	Very Low
7.	A girl below 18 years old chooses to marry early.	3.65	High	1.18	Very Low
8.	Forced marriage happened in the community.	3.95	High	1.03	Very Low
9.	Arranged marriages of minors happened in the community.	4.77	Very High	1.08	Very Low
10.	Adolescents are encouraged to marry early.	4.00	High	1.02	Very Low
Grand Mean		3.95	High	1.64	Low

3.8 Perceived Changes in Tagakaulo Practices

Table 8. Perceived Changes in Tagakaulo

Practices before and after the implementation of the ordinance		Before		After	
		Mean	Description	Mean	Description
1.	A wedding ceremony for a girl or boy below 18 years old	4.50	Very High	1.15	Very Low
2.	The man/groom who is 18 years of age and above at the time of the celebration of the marriage with a girl below 18 years old.	4.20	High	1.28	Very Low
3.	Parents/guardians marry off their daughters below 18 years old.	4.22	High	1.17	Very Low
4.	The family received the bridewealth.	4.93	Very High	4.55	Very High
5.	The cohabitation of minors with the approval of the parents.	3.95	High	1.90	Low
6.	Cohabitation of minors without the knowledge of their family	2.03	Low	1.22	Very Low
7.	A girl below 18 years old chooses to marry early.	4.03	High	1.32	Very Low
8.	Forced marriage happened in the community.	3.93	High	1.01	Very Low
9.	Arranged marriages of minors happened in the community.	4.82	Very High	1.02	Very Low
10.	Adolescents are encouraged to marry early.	4.27	High	1.05	Very Low
Grand Mean		4.09	High	1.57	Low

According to the data, the Tagakaulo community effectively adapted to the changes brought about by the ordinance. The very highly observed practices of weddings involving a girl or a boy below 18 years old (4.50) and arranged marriages involving minors (4.82) have significantly declined, which shows their acceptance and compliance. The data also revealed the community's highly observed practices before involving children,

arranged, and forced marriages declined from highly observed to no longer observed except for instances of early cohabitation, which continue in a limited number of cases. It showed minimal opposition to the ordinance's prohibitions. Like the Blaan community, the Tagakaulo continues the tradition of giving bridewealth since the ordinance does not prohibit this practice. The decline in the practices that violate the ordinance results for both communities suggests indigenous communities' shared acceptance and adherence. In the findings of Pelayo (2015), child marriage rates globally have declined, with one in four women marrying at a minor age compared to one in three in the early 1980s. The result added the percentage of girls marrying before the age of 15 dropped from 12% to 8%, which suggests a continued decrease in child marriages.

The tribal leaders also agreed that early marriage was not right for their children that's why they decided to stop the practice. – Kr, Ks, C

In Sitio Kityan Daku, there are no longer occurrences of child and arranged marriage...children are highly discouraged from marrying early. – S, A, Y, N, Ft1, Ft2, Ft3, Ft4, Ft5

Transition of the Marital Practices

The responses of the KI and FGD also revealed a significant cultural shift in the practices of the Blaan and Tagakaulo communities, showing an acceptance of various forms of companionship towards more inclusive attitudes with some regulations and changes in their marital practices as they approve the purpose of the ordinance. There was an evolving attitude towards relationships and marriages since the indigenous communities had undergone significant changes as they had already accepted relationships and friendships. Children were now allowed to have friends of the opposite sex, and parents no longer dictated their child's choice of partner. Hence, children from these communities have more freedom in choosing their spouses. Also, technological advancement permitted children to have friends and relationships online, leading to difficulty controlling them. As mentioned by the informants at the municipal level:

Children are allowed to have friends but they are discouraged from marrying early. Dating is accepted. Nowadays, it is also difficult to control our children because of the use of cell phones. – Ep

It's really different these days. Children are allowed to bond with friends and some are in a relationship. The role of the parents is to remind their children to focus on their studies. We have numerous integrated schools to ensure that children even in far-flung areas can go to school. Education is the best! – B

Friendship and being in a relationship are already accepted by the indigenous communities. – M, Ks, Kr

The informants and participants of both communities affirmed the acceptance of friendships and being in a relationship:

It is now acceptable to have friends with the opposite sex and to be in relationships. – J, El, D, R, Fb1, Fb2, Fb3, Fb4, Fb5 (Blaan)

Our children are allowed to have friends...girls and boys can be seen together. – S, Y (Tagakaulo)

Now, parents do not choose their children's partner...the children are the ones who will choose their partner. – S, Ft5 (Tagakaulo)

Parents are educated that a girl can be friends with a boy. – A, Y, N, Ft1, Ft2, Ft3, Ft4, Ft5 (Tagakaulo)

Before, the people in the communities were mostly uneducated, thus they directly followed the tradition. – A (Tagakaulo)

If a girl gets pregnant, we do not automatically recommend cohabitation at present. The girl will stay at her mother's house. After the child was born, we hoped that she would continue her studies as we did not want her to be illiterate. – A (Tagakaulo)

Being in a relationship is allowed unlike before. – N, Ft1, Ft2, Ft3, Ft4, Ft5 (Tagakaulo)

With the enactment of the ordinance, there were also regulations and changes in the marriage practices of both IP communities with the following responses:

Our Mayor has not allowed the Barangay Tribal Chieftains to officiate tribal marriages, reserving this role solely for the Municipal Tribal Chieftain. – Kr

The tribal chieftain will not officiate a wedding ceremony involving a minor. Relationships are allowed but parents gave reminders to focus on education. – C

In a case involving a pregnant minor, a dialogue was initiated with the family. We reached an agreement that their child would marry only upon reaching 18 years old. They decided not to live together at present. – B

The good practices remained...what changed was the attitude of the tribe as they saw that the ordinance is needed and timely especially since we are a developed municipality, they witnessed how great to have professionals. – M
We do not change who we are but we stop the practices that affect the welfare of our children. – A, R, D
This is not an issue for the loss of their identity as members of the indigenous communities retained practices that do not deprive their children's welfare. – Ep
Our culture can understand and adjust as we aim to protect the future of our children. – N

The report of Christensen (1997) from the interviews with the Blaan and Tagakaulo in Malungon brought about the importance of education in distancing younger generations from certain indigenous practices that can harm them, such as arranged marriages at an early age. The informant added in that report that despite being educated, they retained their cultural identity as they learned the cultures that should not be practiced and those that should be preserved and promoted. It shows the significance of education in helping them shape their lives and in choosing which part of their cultures to protect and promote. Also, the positive influence of Kasalan ng Bayan for its cost-effectiveness is one of the initiatives of the local government of Malungon.

The Municipality offers free weddings through Kasalan ng Bayan to legally aged couples. It is officiated by our Mayor during the Lingap sa Barangay. – Kr, Ep, B, M
We have free weddings every Lingap sa Barangay. As to the conditions for the live-in partners, the cohabitation must start during their legal age and stay together for at least five years. – Ks
Kasalan ng Bayan is really helpful because there are no expenses. – J, D, R, Fb1, Fb2, Fb3, Fb4, Fb5
Kasalan ng Bayan during Lingap ng Barangay for couples of legal age is freely offered. – A, S, Ft1, Ft2, Ft3, Ft4, Ft5

4.0 Conclusion

This study explored the effects of the Anti-Child and Forced Marriage Ordinance in Malungon in which the municipal and barangay officials, as well as the tribal council, gained in-depth data on the implementation of the ordinance and the response of the indigenous community, including the enactment of RA 11596. It gave the indigenous groups an avenue to convey their insights and to realize their commitment to abide by the law. Both indigenous communities adhered to the custom of child and arranged marriages. Forced marriages also happened before, as children have a limited say in choosing their spouses.

Additionally, part of their customary practices was the giving of bride wealth, strict taboos on interactions between the sexes, polygyny, and separation. Even though they have culture, beliefs, and practices that have been part of their social structure for a long time, they were willing to accept the changes in their marital practices due to these subthemes: education as a priority, protection, and welfare of their children, and negative consequences of early marriage. The data from the survey respondents also showed very high acceptance of the provision of the ordinance and RA 11596 as they put high regard for education and professionalism, resulting in a shift by discouraging their children from marrying early. The survey data revealed that practices prohibited by the ordinance were rarely to no longer observed.

Furthermore, there is a cultural shift among the Blaan and Tagakaulo, marked by greater acceptance of relationships and friendships and increased freedom for children in choosing partners. There is also a regulation in marriages in which the couple must be of legal age and the positive view of Kasalan ng Bayan for its cost-effectiveness. Remarkably, both indigenous communities adjusted their social structure as they were willing to abide by and adapt to the changes imposed by the ordinance in 2018 and the approval of RA 11596 in 2021. It is recommended that the implementation of RA 11596 studies be explored in the far-flung areas and other members of the IP communities outside Malungon. Also, studies focus on the Tagakaulo communities, their cultural identity, the experiences of teenage mothers, and the impact of early marriages since there are limited studies of Tagakaulo compared to Blaan.

5.0 Contributions of Authors

The first author, Mariel Guanzon, processed the NCIP, gathered data, encoded and analyzed data, and wrote the results and discussion of the study. The second author, Sulpecia Ponce, served as the research adviser who guided the formatting, interpreting, editing, and finalizing the results of the study.

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7.0 Conflict of Interests

There are no conflicts of interest about the publication of this paper as long as it is used for academic purposes only.

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Untold Stories of Teachers and Graduates of Alternative Learning Systems

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Abstract. The study aimed to determine the experiential accounts of Alternative Learning System teachers and graduates and the relationship between their experiences in the 1st District of Ilocos Sur. It utilized the transcendental phenomenological research applying the focus group discussion and a reviewed semi structured open-ended question. Participants' responses were recorded and transcribed verbatim, listed, categorized, coded, and thematized using the Moustakas framework. Teachers and graduates of Alternative Learning System share a unique relationship characterized by equal efforts to achieve a common goal and built on mutual respect, trust, and understanding. In conclusion, the relationship between teachers and graduates is crucial to the program's success. The equal efforts of both parties have resulted in the empowerment of individuals who have not been able to complete their basic education through traditional means. It is important to recognize the role of teachers in the lives of graduates and provide them with the necessary support and resources to continue their work. In this way, Alternative Learning System programs can continue to make a positive impact on the lives of those seeking to improve their lives through education.

Keywords: Alternative learning system; Teachers; Educational challenges; Flexible learning; Educational equity.

1.0 Introduction

Everyone in the country is entitled to free basic education. However, many Filipinos do not have the opportunity to enroll and complete formal basic education. Some quit going to school for various internal and external causes, while others live in areas without any schools.

On the other hand, the Government's efforts to fight education attrition through strengthening students' programs and utilizing an alternative to encourage continuing education thus, promulgated Republic Act 9155 in 2001 or the Governance Act of Basic Education, which offers provisions for Alternative Learning System (ALS) to cope with illiteracy and promote sustainable education. The Alternative Learning System (ALS) is a parallel learning system in the Philippines that provides a practical option to the existing formal education. It aims to cater to learners who cannot access or afford formal schooling due to various reasons such as poverty, geographical isolation, or personal circumstances (Department of Education, 2016). It is specifically beneficial to those who work long hours. Those behind bars, on the other hand, are still allowed to be educated through this system of education. It is conceived as a timely educational intervention program in this context. D.O. No.12, s. 2019 aims to promote and support the program management activities and capacity-building programs for ALS implementers, especially for the roll out of the ALS K to 12 Basic Education Curriculum. It shall provide the Program Support Funds' release, utilization, and liquidation rules to the ALS program.

The study of Guerrero (2017), explores the history of ALS, emphasizing how it progressed from a simple literacy program to a full-fledged alternative learning system. Key accomplishments, modifications to policy, and difficulties encountered by the program over time are covered in the research. Meanwhile, Alonzo (2018) looks at the DepEd memos and guidelines that are important to the governance of ALS. The study analyzes and assesses the efficacy of the goals, plans, and procedures for implementation provided in official documents. Ibrahim (2019) contrasts the various ALS instructional strategies, including project-based learning, peer teaching, and experiential learning. The study assesses how well these strategies work to improve learning outcomes and encourage active involvement.

Additionally, Reyes (2021) confers the value of community involvement in ALS. It emphasizes the contribution that parents, community organizations, and local leaders have made to the program's improvement. The study highlights the necessity of teamwork in order to improve ALS's responsiveness to regional demands. Cruz (2020) offers a thorough examination of ALS students, concentrating on their personal histories, reasons for enlisting, and difficulties they encounter. The study provides insights into the many demands and goals that individuals with ALS have. Garcia (2020) looks at the difficulties instructors and students in ALS encounter as well as areas that could use innovation and development. The study sheds light on the viewpoints and experiences of important players in the alternative education space while non-traditional educational approaches in several nations, deriving insights that are relevant to the Philippine setting. The study Roberts (2019) focuses on creative approaches, effective models, and difficulties encountered by alternative education initiatives globally.

Furthermore, Santos (2018) discusses that Alternative Learning Systems (ALS) teachers are vital in providing education and skills training to out-of-youth and adult learners who have not completed their basic education through the traditional school system. These teachers are trained to provide individualized instruction, mentoring, and support to learners from various backgrounds and learning needs. It also facilitates the development of the life skills and values that learners need to succeed in their personal and professional lives. ALS graduates, on the other hand, have the knowledge, skills, and abilities that they want to pursue to advance their education, obtain better employment opportunities, and participate actively in their communities. ALS graduates are provided with essential life competencies to meet the challenges and opportunities of the 21st century, including critical thinking, problem-solving, communication, and self-management (Rivera, 2019).

Based on the reviewed literature, the researcher found that problems, questions, and gaps still need to be addressed. Experts argue that most of the results of previous research focused on general and quantitative concerns but did not consider teachers' and learners' experience and psychological makeup (Arzadon & Nato, 2015; Atillano, et al., 2016; Mamba, 2021). Prior studies on the Alternative Learning System (ALS) have mostly concentrated on broad, quantitative issues including learner outcomes, program efficacy, and policy ramifications. The human narratives, psychological profiles, and lived experiences of ALS teachers and alumni are not sufficiently explored. Gaining an awareness of their viewpoints can enhance our comprehension of the program's influence on people's lives and offer important insights into the program's impact on individuals' lives.

The financial benefits and professional difficulties that ALS teachers face have been the subject of some research (Aque & Benavides 2020), but little is known about the broader experiences of teachers, including the opportunities and advantages that come with their position, their coping strategies, and their general well-being. By looking into these areas, we can find solutions to help ALS teachers become more effective and beneficial to the students they teach.

Given these gaps in the literature, there is a compelling need for research that delves deeper into the experiential accounts of ALS teachers and graduates. Understanding their lived experiences, challenges, coping mechanisms, and the overall impact of ALS on their lives can provide a more holistic and nuanced perspective on the program's effectiveness and areas for improvement.

As a result, the researcher was motivated to conduct this study to identify the experiential accounts of Alternative Learning System teachers and graduates and the relationship between their experiences in the 1st District of Ilocos Sur for the School Year 2022-2023. The questions as a guide of the study are a) what is it like to be an ALS teacher

and graduate? b) what the benefits and opportunities are, challenges and coping mechanisms of being an ALS teacher and graduate; and c) how it like is to be an ALS teacher and graduate.

2.0 Methodology

2.1 Research Design

The study employed the transcendental phenomenological approach in a qualitative type of research. As Moustakas (1994) pointed out, the research procedure begins with identifying the phenomenon of interest. After collecting data through phenomenological interviews with collaborators who experienced the phenomenon, the data were analyzed according to Moustakas' phenomenological data analysis procedure.

Outputs in the focus group discussion were listed, categorized, and thematized. The thematic analysis method is the best technique of evaluation for searching to apprehend experiences, thoughts, or behaviors throughout the records set. Themes are actively built patterns (or meanings) derived from records set that solve a study's question instead of mere summaries or categorizations of codes. Themes may be generated inductively or deductively (Kiger, 2020)

2.2 Research Participants

The participants of the study were chosen with the following inclusion criteria: For the ALS teachers, they: 1) have been teaching in ALS at least three years before the conduct of the study, 2) holders of TIII plantilla position, and 3) have earned 36 MA units. For the graduates, they: 1) must be 20-30 years of age, 2) were enrollees of School Year 2019-2020 to school year 2021-2022, and 3) are Accreditation and Equivalency passers.

To guarantee that participants have an adequate awareness of the ALS context, problems, and dynamics, teachers with a minimum of three years of experience teaching ALS are included. The purpose of this criterion is to get opinions from educators who have had more in-depth interaction with the ALS program and its partners. Within the educational system, teachers with a TIII plantilla post are frequently seen as possessing a higher degree of authority, knowledge, and leadership. Teachers at this level can offer viewpoints from other educators who might have a greater influence on ALS procedures, policies, and results. Participants are guaranteed to have advanced academic training and knowledge in education or a related discipline if they hold at least 36 MA units. In order to enhance the study's findings, this criterion seeks to incorporate educators who might possess a deeper theoretical understanding, instructional expertise, or research literacy. Although those who do not meet the requirements for earning MA units are not allowed to apply, this does not mean that they are unable to train ALS students effectively or with high quality. Ensuring a specified degree of academic qualification and expertise among participants is the main goal of MA units. But it's important to recognize that good teaching has many facets and can be proven by a range of credentials, experiences, and abilities.

By limiting the age range to those between the ages of 20 and 30, we hope to gather perspectives from ALS graduates who are still relatively young and just beginning their adult life, careers, and postsecondary education. This criterion enables the study to investigate the short- and long-term effects of ALS on the lives of graduates. The age range restriction to 20-30 years old is intended to gather perspectives from comparatively young ALS graduates who are just beginning their adult life, careers, and postsecondary education. This criterion makes it possible for the study to investigate how ALS affects graduates' lives in the short and long run. It is ensured that participants have successfully satisfied the minimum competency levels specified for ALS graduates by requiring them to have passed the Accreditation and Equivalency (A&E) test. This criterion seeks to incorporate graduates who have attained an acknowledged degree of academic qualification and proficiency.

Lastly, the specified inclusion and exclusion criteria for ALS teachers and graduates are designed to ensure the study's focus, relevance, and quality. While the criteria aim to capture insights from educators with specific qualifications and experiences, it's essential to acknowledge that effective teaching and learning can be demonstrated through various pathways and qualifications. The criteria should be viewed as a means to achieve a specific research focus rather than a judgment on the capabilities or contributions of educators or graduates who do not meet these criteria. Future research could consider exploring the experiences and perspectives of a broader

range of ALS stakeholders to provide a more comprehensive understanding of the program's impact and effectiveness.

2.3 Research Instrument

This study used reviewed interview guide questions. The interview guide's content validity was thoroughly examined as part of the validation process, experts in the fields of education research, qualitative research methods, and particularly the Alternative Learning System (ALS). They are academic scholars, seasoned researchers and experts with a thorough understanding of adult education, teaching, and ALS and was recommended by the research panelists. It involved pilot testing and iterative adjustments in response to feedback. To guarantee a thorough and exacting validation procedure, the validators were selected on the basis of their impartiality, objectivity, and pertinent experience. By going through this validation procedure, the researcher assured that the interview guide is legitimate, dependable, and efficiently gathers the data needed to meet the goals of the study.

2.4 Data Gathering Procedure

This study used specific steps to gather the needed data. The researcher identified the participants in accordance with the set inclusion and exclusion criteria. After the approval of the questions, the researchers then scheduled the administration of the Hybrid FGD since participants came from different municipalities. The researcher utilized transcendental phenomenology through focus group discussion with semi structured interview guide questions that were coded, categorized, and thematized using Moustakas Framework.

2.5 Ethical Considerations

This research study followed ethical guidelines. There were no conflicts of interest in the conduct of the study because the researcher was just interested in the answers of the participants for research purposes. It maintained the privacy and confidentiality of the participants. The researcher provided the participants with proper orientation for the purpose of the study. The benefits that they got from the research were explained to them. Participation was voluntary, and they could withdraw whenever they decided not to participate in the study. All the participants of this study were part of the “vulnerable groups”. The researcher ensured that respect of dignity, autonomy, and the involuntariness of the participants were not compromised during the conduct of the research. The participants may have slight perceptive distress in remembering their experiences. The questionnaire was brief, clear, and direct to the point to address this concern. The participants were given enough time and a preferred place/setting. The participants benefitted from the study because the results will be used to develop suitable programs. There was no compensation to be given to the participants for participating in the interview.

The relationship between the experiences of ALS professors and graduates is investigated in this qualitative study using thematic analysis, comparative analysis, and investigation of related experiences. The study intended to identify the common obstacles, influences, interactions, and dynamics that form the experiences of both groups within the setting of ALS by examining the narratives, themes, and views that they have in common. This thorough investigation highlighted the interrelated roles, experiences, and effects of ALS teachers and graduates within the alternative education system, offering a deep, contextualized understanding of their interaction.

3.0 Results and Discussion

3.1 Benefits and Opportunities of Alternative Learning Teachers and Graduates

Alternative Learning System (ALS) offers various benefits and opportunities for both its teachers and graduates. For ALS teachers, it provides an opportunity to make a difference in the lives of out-of-school youths and adults by helping them obtain basic education and improve their chances of gaining employment or pursuing higher education. Being ALS teachers also allow for flexibility in schedule and location, as classes can be conducted outside of traditional school settings. On the other hand, ALS graduates' benefit from gaining basic education which they could not obtain through the formal school system. This enables them to acquire new skills, enhance their employability, and pursue further studies. ALS also allows them to be active members of their communities contributing to the development of society.

Generally, ALS offers both teachers and graduates a chance to improve their lives and positively impact society. From ALS teachers there were three themes emerged: (1) financial rewards, (2) a sense of fulfillment, (3) empowering out-of-school youths and out-of-school adults.

ALS Teachers

Financial Rewards. This can give them additional financial support and recognition for their work delivering education to marginalized learners. This benefit was also shared with most of their learners. Most ALS teachers noticed that students were missing classes due to various reasons such as lack of interest, financial constraints, and family responsibilities. They realized the need to find a way to motivate them by attending classes regularly. While thinking about possible solutions, they came up with the idea of providing free snacks for their students. They believed that by offering snacks, they could create a positive environment in the classroom and encourage their students to attend classes regularly.

ALS teachers have a sense of security because aside from their basic salary and bonuses provided by the government, they are entitled to a special hardship allowance. This is evident in D.O No.39 s. 2021, the Guidelines on the Provision of Special Hardship Allowance for Public School Teachers. The Department of Education (DepEd) recognizes that to make education more accessible, recruiting, retaining, and encouraging personnel to work in hard-to-reach, far-flung stations and those with more challenging working conditions is necessary. The incentive grant pays to such teachers, particularly a Special Hardship Allowance (SHA).

According to Aquino (2021), compensation and incentives, such as salary and benefits, are significant factors that affect performance. The study suggests the need for policy interventions to improve the compensation and incentives for ALS teachers and provide professional development opportunities to enhance their skills and knowledge. In addition, ALS teachers receive financial benefits such as hardship allowances, which compensate them for the challenging work environments and geographical barriers they face.

The information gathered from the participants may imply that the benefits they can get from being ALS teachers are more on psychological and professional development. This further means that they are not pressured in their work since the schedule of the learners is not fixed, considering that some have jobs. These learners have the option to take the modular platform of instruction or face-to-face modality. With this teaching and learning arrangement, the teachers have the opportunity for their professional development. The findings of the study contradict the experiences of Dizon (2020) that challenges faced by ALS teachers include heavy workloads, limited resources, and the need for more professional development opportunities. Likewise, Potenciano (2019) pointed out solutions for better time management, including more comprehensive and meaningful teacher training, more central coordination of efforts and materials, more efficient resource allocation and utilization, and more responsive administrative support structures.

Sense of Fulfillment. It is exciting to note that ALS teachers are proud to be part of a profession that helps transform the lives of learners and contribute to the development of the community. ALS teachers experience a sense of fulfilment when witnessing the success of their learners. This can involve seeing learners who were previously out of school or struggling academically to be able to complete their education and pursue their goals.

ALS teachers expressed a sense of attainment when their students experienced a sense of gratification when they felt they made a difference in the lives of their students in terms of academic success, employability, and self-improvement. In the overall, these teachers described their sense of reward and fulfillment in teaching ALS students as a form of personal satisfaction and professional realization.

Tabadero (2019) proposed that the job satisfaction of ALS teachers is associated with their sense of purpose and fulfillment in serving marginalized communities, as well as their sense of autonomy and professional growth opportunities. The study recommended continued support and recognition for ALS teachers to enhance their well-being and effectiveness. Furthermore, their sense of purpose and fulfillment influences their (ALS teachers) motivation in serving marginalized communities and their perceived autonomy and professional growth opportunities.

Empowering Out-of-School Youths and Out-of-School Adults. ALS seeks to nurture greater understanding and empathy towards an often overlooked and underserved population. Out-of-school youths and adults are individuals who lack access to formal schooling. Learning the experiences and stories of out-of-school youths and adults can be gained for the diversity of pathways and experiences that people take in their academic journey and the complex decision-making involved. This helps to shape a more holistic understanding of educational access and how that affects life choices, opportunities, and outcomes.

From the narrative of the participants, it concurs that learning from the experiences and stories of out-of-school youths and adults may help reduce the stigma and allow them for a greater connection and understanding between and among students, regardless of their educational background. It permits a greater capacity to identify and understand the risk factors of leaving school early, a chance for greater opportunities for success and pathways for those already out of school. Through this, creating a more supportive community with resources and systems is designed to empower them. ALS teachers have the chance to significantly impact their lives and provide them with the opportunity to finish their education.

To appreciate more the role of the ALS teachers, Martinez & Diaz (2019) discussed the role of ALS in facilitating the reintegration of out-of-school youths and adults into education. It examines how ALS programs provide a second chance for individuals to complete their education and acquire essential skills for personal and professional development. Therefore, ALS teachers are vital in empowering OSY and OSA by providing them with the necessary knowledge and skills to pursue their goals, enhance their employability, and contribute to their communities.

ALS Graduates

There are three themes that emerged, namely, (1) community involvement, (2) lifelong learning, and (3) second chance and redemption.

Community Involvement. ALS advocacy through community involvement encourages the participation of various stakeholders in promoting and supporting the program. It highlights the importance of community engagement in increasing awareness, generating support, and ensuring the sustainability of the ALS program. Through this, the program can reach more out-of-school youths and adults, provide relevant learning opportunities, and contribute to the development of the community. The cited premises were proven through the responses of the seven (7) ALS graduates.

Community involvement is necessary for implementing the program to reach and help more out-of-school children, youths, and adults eradicate illiteracy as one of the government's goals. The findings of the study of Nguyen & Tran (2018), who explored the role of community participation in the delivery of the Alternative Learning System (ALS) in the Philippines, emphasized the importance of community involvement in promoting ALS and ensuring the sustainability of the program. The study found that community participation can facilitate the recruitment of ALS learners, the establishment of learning centers, and the provision of learning resources. Moreover, community participation promotes the development of relevant and context-specific ALS programs that cater to the needs of learners. The study also recommended the continuous engagement of communities in the implementation of ALS and the development of mechanisms that encourage community participation.

Lifelong Learning. ALS provides opportunities for individuals to continue their education despite their age, including those who are working, nursing a child, or juggling other responsibilities, as testified by the participants. It may be concluded that lifelong learning and ageless education allow learners to develop and hone a variety of skills. This can be particularly helpful for non-traditional learners, such as adults re-entering education, who may be more interested in pursuing specialized areas of study and less worried about gaining general knowledge. They can benefit from focusing on specific skill sets and knowledge related to their goal. Additionally, lifelong learning and ageless education allow learners to pursue their interests without any time constraints or deadlines, allowing for more creative thinking.

Perez & Lopez (2017) explored the possibilities and difficulties of encouraging lifelong learning and ageless education in Alternative Learning Systems (ALS) programs. It looks at a number of variables that affect older individuals' involvement in ALS programs and offers suggestions for raising that involvement. Furthermore, the authors recommend that educational institutions and stakeholders embrace learners' diversity. Moreover, it acknowledged the different needs and learning preferences of the learners.

Second Chance and Redemption. Alternative learning system graduates highlight the importance of providing a second chance to out-of-school youths and adults who could not complete their basic education through traditional means. The program serves as a platform for these learners to redeem themselves and have a chance to improve their lives through education. The program offers a flexible and individualized approach that considers the unique circumstances of each learner, providing them with opportunities to complete their basic education and acquire essential life skills.

This chance for redemption by empowering learners to take control of their education and make significant changes in their lives. It allows them to overcome past failures, and challenges and regain confidence, and self-worth. Moreover, it offers a second chance for them to pursue their dreams and aspirations and make a meaningful contribution to their families, community, and society.

Through ALS, learners are given a chance to redeem themselves and prove that they can achieve their goals, despite their previous setbacks. This opportunity for redemption significantly impacts their lives, allowing them to develop a positive outlook and renewed hope for the future. It will be the proof of resiliency and determination of the human spirit in overcoming adversity and making the most of the opportunities presented to them. Smith & Johnson (2017) examined the effectiveness of ALS programs in enhancing educational attainment among youth offenders. It explores the impact of ALS interventions on academic achievement, skill development, and recidivism rates among incarcerated youth. The findings suggested that ALS gave them a second chance to continue their education, which they could not do before for various reasons, including poverty, lack of interest, and criminal activities.

ALS helped them realize the importance of education and provided them with a pathway toward a better future. Aside from that, studies about the role of ALS as a platform for second chance education in the Philippines revealed how ALS programs enable students to overcome obstacles and fulfill their academic objectives (Hernandez & Cruz., 2018).

The findings suggested that ALS gave them a second chance to redeem themselves from their mistakes and failures. It also helped them realize their full potential and gave them hope for a brighter future.

Challenges of ALS Teachers

ALS teachers face various challenges in the implementation of the program. The themes that emerged include the physical and emotional demands, challenging work environment, geographical barriers, lack of borrowed community learning center and lack of support from the government. In addition, ALS teachers face the challenge of recruiting and convincing out-of-school youths and adults to enroll in the program and adapting to each learner's individual needs and circumstances. Despite these challenges, ALS teachers continue to persevere and adapt to ensure that ALS learners are allowed to receive an education and improve their lives.

ALS teachers faced several challenges, and six themes emerged: (1) geographical barriers, (2) challenging work environment, (3) barriers to recruitment, (4) fluctuating learner engagement, (5) lack or borrowed community learning center, and (6) lack of support from local government.

Geographical Barriers. In the Alternative Learning System, teachers often face the challenge of shifting between different locations to reach out to learners who are situated in remote and underserved areas. In this context, understanding the lived experiences of ALS teachers who shift between locations is very important to improve the quality of education provided through ALS programs.

This theme made it difficult in the implementation of the program. The day-to-day traveling in various barangays cannot assure the safety of an ALS teacher. Recently, there was an accident involving an ALS implementer bumped by a closed van while going to her community learning center in her assigned district. The said teacher suffered from multiple injuries in her arm and leg and underwent a cheekbone operation caused by a vehicular accident.

The participants' responses revealed that teaching in ALS requires a lot of energy, dedication, and patience to deal with diverse learners. ALS teachers are facing difficulties in traveling between locations. However, they are adaptive and responsive to the needs of learners in each location. Santos & Reyes (2020) noted the difficulty of traveling from one place to another and teaching several subjects in different locations daily. Due to their restricted sources and absence of transportation options, teachers had to use personal cars or motorcycles most of the time. Commuting to different locations made it hard for them to complete their tasks efficiently.

The studies of Santos & Reyes (2020), Garcia & Martinez (2019) both agreed that the barriers that hinder the implementation of an Alternative Learning System (ALS) in the Philippines and identified transportation-related barriers such as lack of access to transportation, long travel time, and transportation costs as major challenges.

Challenging Work Environment. Novice ALS teachers' experiences are typical of those of ALS teachers that happened to every one of us. In the conduct of community mapping, when they knocked at doors, residents assumed that they were selling laundry soaps/rejuvenating soaps, buying destroyed pieces of jewelry, recruiting agents of cooperatives, and the like. There were also instances when they ran dog after dog.

Alternative Learning System teachers revealed their experiences of what it is like to be an ALS teacher; T7 stated, "Being an ALS teacher is challenging because I need to give extra effort to convince learners to continue what they have started." This shows that one faces numerous difficulties, such as dealing with marginalized learners, teaching in nontraditional settings, and adapting to different learning styles. ALS teaching is also a challenging job to meet the needs of diverse groups and requires a high degree of skill and commitment into a challenging environment.

Hernandez & Cruz (2018) found that student engagement was a significant challenge for these teachers due to the need for more traditional approaches such as resources, lecture-based instruction, and class schedules. Furthermore, teachers who work with alternative learning systems must be highly adaptable and creative when it comes to finding methods to engage students, as well as being able to adjust rapidly to the needs of each student. Hence, the Alternative Learning System serves a population of students with various challenges, such as poverty, mental health issues, or language barriers. Teachers must be prepared to overcome these challenges. They often work in challenging environments where they must adapt to the needs of their students with unique circumstances and diverse backgrounds. They may also need more resources and infrastructure, impacting their ability to deliver effective instruction.

Barriers to Recruitment. Some learners may perceive ALS as inferior or traditional education, which makes it challenging to search for and recruit them. Improving the quality of ALS education and raising awareness about its benefits can help overcome this barrier. The fact that ALS teachers are concerned about the difficulty of recruiting and enrolling learners may suggest understanding the importance of having sufficient participants to make the program viable.

Santos & Reyes (2020) discovered that the lack of awareness and information dissemination about ALS and the limited resources for recruitment and outreach are major challenges. He suggested the need for a comprehensive communication and information dissemination plan to promote ALS and increase its visibility and the establishment of partnerships with local government units and community organizations to facilitate recruitment and outreach efforts.

Fluctuating Learner Engagement. One of the challenges Alternative Learning System (ALS) teachers face is fluctuating learner engagement, which can impact their teaching effectiveness and learners' progress. The reasons

for fluctuating learner engagement may vary, including personal or familial circumstances, environmental factors, or individual motivation levels. Understanding the lived experiences of ALS teachers in managing fluctuating learner engagement can provide insights into effective strategies for addressing this challenge and improving the quality of education provided through the ALS program.

Hernandez & Cruz (2018) highlighted ALS teachers' challenges in promoting learner engagement, such as lack of motivation and interest, limited resources, and learner diversity. Hence, fluctuating learner engagement is a common but emotionally taxing experience for teachers. Consequently, the reasons for fluctuating learner engagement may vary, including personal or familial circumstances, environmental factors, or individual motivation levels. ALS teachers must navigate these fluctuations and find ways to motivate their learners to stay engaged in their studies.

Lack of or Borrowed Community Learning Center. The theme of lack of or borrowed community learning centers in the implementation of the ALS program refers to the challenge faced by the ALS program in terms of inadequate and insufficient learning centers or facilities, leading to the need to borrow or rent spaces from the community. No available learning centers or facilities can be used for ALS classes in some areas. In contrast, in others, more than the existing facilities may be required to accommodate the number of learners.

One of the biggest challenges in the study is the lack of adequate learning facilities such as classrooms, equipment, and materials. As a result, the ALS program must rely on borrowed community learning centers. The study emphasized the need for the government to provide adequate resources and facilities to implement the ALS program, particularly in conflict-affected areas. Moreover, it is a significant theme as it shows ALS implementers' challenges in ensuring that the program is accessible and sustainable for all learners. It pointed out the importance of community involvement and support in educating marginalized learners.

Lack of Support from Local Government. It pertains to the challenges and issues encountered by the Alternative Learning System teachers regarding insufficient support and resources from the local government units (LGUs) where the program is being implemented. This theme highlights the critical role of LGUs in providing the necessary support to ensure the success of the ALS program, which aims to provide educational opportunities to underserved and marginalized sectors of society.

Hernandez & Cruz (2017) explored the factors that affect the implementation of the ALS program in a specific LGU in the Philippines, including the lack of support from the LGU and inadequate resources for the program. The study emphasized the importance of addressing these challenges to ensure the success of the ALS program in the LGU. Moreover, it is a significant theme as it shows ALS implementers' challenges in ensuring that the program is accessible and sustainable for all learners. It pointed out the importance of community involvement and support in educating marginalized learners.

3.2 Coping Mechanisms of ALS Teachers

Alternative Learning System (ALS) teachers face various program implementation challenges. Despite the challenges, these teachers continue to provide education to marginalized learners. To address their difficulties, ALS teachers employ different coping mechanisms to carry out their duties and responsibilities effectively. The following themes focus on the coping mechanisms of ALS teachers in facing the challenges of implementing the program. Despite the challenges faced by ALS teachers, they see to it that they cope with those. Three themes emerged: (1) patience and perseverance, (2) effective communication, and (3) collaboration and coordination with stakeholders.

Patience and Perseverance

These are important traits in coping with challenges encountered by ALS teachers. This involves dealing with complex learners, navigating bureaucratic obstacles, and overcoming geographic barriers. ALS teachers demonstrated patience and perseverance in finding ways to overcome challenges and ensure the program's success. They exhibited a strong dedication to their students and a commitment to educating those the formal

education system has marginalized. The study highlights the importance of recognizing and supporting the efforts of ALS teachers in the Philippines.

Collaboration and Coordination with Stakeholders

The delivery of the Alternative Learning System (ALS) program heavily relies on community resources, especially in terms of providing the necessary learning facilities and materials. This collaboration and coordination with stakeholders are a common theme in the challenges faced by ALS program implementers, particularly in areas lacking government support and infrastructure.

In the study of Bacal & Ormilla (2021) conferred that majority of respondents that creating connections, having stakeholders like parents and government representatives participate, and the implementers of ALS had a positive attitude were all excellent. Hence, collaboration and partnerships between LGUs and ALS implementers should also be established to ensure adequate support and resources for ALS learners. They enable effective resource allocation, expand reach and access, ensure contextualization, strengthen support systems, and contribute to the long-term sustainability of the program.

3.3 Inspirations and Motivations

ALS teachers and learners often derive motivation and inspiration from the opportunities and second chances the program provides. For teachers, the opportunity to positively impact the lives of out-of-school youths and adults can be a source of personal fulfillment and satisfaction. Meanwhile, for learners, ALS offers a chance to overcome previous obstacles and achieve their educational and personal goals. They may find inspiration in the idea that pursuing education and improving their lives is never too late. Moreover, the supportive community of teachers and learners within the ALS program can also provide a sense of motivation and belongingness. The perseverance, dedication, and resilience exhibited by teachers and learners in the face of challenging circumstances can be a source of inspiration and motivation for all those involved in the program.

ALS Teachers

Positive Outlook Towards Out-of-School Youths and Out-of-School Adults. ALS teachers are critical in educating out-of-school youths and adults who cannot complete formal education. Despite the challenges, ALS teachers maintain a positive outlook towards their learners, recognizing their potential and striving to provide them with the necessary knowledge and skills to succeed.

The teaching profession is often characterized by its positive outlook towards learners, especially those in out-of-school youth and out-of-school adult programs. Alternative learning system allows teachers to get to know learners and their diverse needs. As such, many teachers have a positive outlook on these programs because it allows them to create personalized learning experiences to help each student achieve their fullest potential.

Research has found that teachers and facilitators in these alternative settings often view out-of-school youths and adults positively and embrace the opportunity to work in multi-age environments, contributing to a social inclusion process. They added that applying innovative pedagogical approaches in alternative settings allows teachers to better address the diversity of learners, which has been found to motivate teachers by providing new experiences and increasing their job satisfaction.

Teachers often take pride in being part of the solution when educating children from diverse backgrounds. Alternative learning system allows teachers to teach in ways that traditional models of instruction may overlook. This allows teachers to connect with students, build relationships, and foster a safe and supportive environment for learning. Generally, the positive outlook of teachers towards OSY and OSA reflects their willingness to invest in students and help them reach their goals. Through their dedication, teachers understand that creating personalized, meaningful learning experiences is a key to making a lasting impact on the lives of OSY and OSA students.

ALS Graduates

Self -Motivation and Determination. This theme highlights the inspiring stories of alternative learning system learners who faced various challenges such as financial constraints, lack of access to education, and personal struggles but were still able to enroll and graduate from the ALS program through their strong self-motivation, resilience, and determination to improve their lives and attain a better future.

Caparas (2019) explored the various motives that drive ALS learners, including desires for their careers, personal goals, and family expectations. Furthermore, the study might have looked into how ALS students modify their learning strategies to fit the program's flexible and unconventional setting.

Various factors that contributed to learner engagement, such as the support of family and friends, the flexible scheduling of ALS classes, and the use of interactive and learner-centered teaching strategies by ALS teachers. The authors concluded that the ALS program could provide second chances to learners unable to complete their education through the formal school system.

Family and Children. Many alternative learning system learners are motivated to pursue their education and graduate from the program because of their families and children. For them, education is seen to provide a better life for their loved ones and to be better role models for their children. The desire to give their families a brighter future serves as a driving force for them to overcome the challenges of pursuing their education through the ALS program. According to Alkharusi, et al., (2020), parents are extremely important to their children's education. The study examines several parental involvement factors, such as participation in school events, communication with instructors, and academic assistance.

ALS Teachers

Adaptability and Flexibility. ALS teachers can go with the flow and be flexible in response to changing times and situations. This involves adjusting their teaching methods, curriculum, and delivery modes to meet the needs of their learning and changing circumstances. As revealed by T1 and T4, cited that “Just go with the flow and be equipped with the latest trends, be updated, and be an open-minded person” respectively.

The article by Loughland (2019) determined the concept of adaptability among teachers. The authors conducted a comprehensive review of the literature on teacher adaptability to identify factors that contribute or hinder teachers' ability to adapt to changes in their work environments. The review found that adaptable teachers were more likely to be effective in their teaching practices and able to cope with changing circumstances. The study also identified several factors contributing to teacher adaptability, such as a supportive work environment, professional development opportunities, and a growth mindset.

It is expounded in the study of Parsons, et al., (2017) that the concept of teacher adaptability is in the context of the rapidly changing educational landscape of the 21st century. The authors argued that teachers must be able to adapt to a multitude of changes, including advances in technology, new educational policies, and shifting student demographics. It discussed the various dimensions of teacher adaptability, including cognitive flexibility, emotional regulation, and willingness to learn and try new approaches. The authors emphasized the importance of professional development in fostering teacher adaptability. They provided recommendations for teacher educators and administrators to support teachers in developing this critical skill.

Sense of Fulfillment. ALS teachers often report a sense of fulfillment, recognizing that they are rendering a positive impact in the lives of their learners. Despite the challenges they face in the implementation of the ALS program, many teachers find satisfaction in helping out-of-school youths and adults gain access to education and opportunities for personal and professional development. Pinca (2015) consider that teachers found their work in the program fulfilling, as they can make a positive impact on the lives of learners. The teachers' sense of fulfillment was attributed to the personal and professional growth they experienced and the transformative effect of education on their students.

ALS Graduates

Resilience and Adaptability. Graduates of the Alternative Learning System (ALS) have demonstrated remarkable resilience and adaptability in navigating the challenges they face after completing the program, which has helped them to transition to new opportunities and pursue their goals successfully.

Almeida (2019) explored the stories of the resilience of ALS graduates in the Philippines. Using a qualitative approach, the study highlighted the challenges faced by ALS graduates after graduation and how they overcame these challenges through resilience and adaptability. The study emphasized the importance of continuing education and skills development to sustain the gains of ALS graduates.

Accelerated Learning and Educational Access. ALS program focuses on providing faster and more accessible education to out-of-school youths and adult learners. It has successfully provided learners with a second chance to complete their basic education in a shorter time compared to the traditional schooling system. This accelerated learning approach is particularly beneficial for learners who have missed out on formal education and need to catch up quickly.

The study by Santos & Mance (2016) found that most ALS completers have positive attitudes toward SHS program, with the desire to acquire skills and knowledge as the top reason for pursuing SHS. The study also identified challenges faced by ALS completers in pursuing SHS, including financial constraints and a lack of information on the SHS program. Also, Magno (2018) aimed to investigate the educational pathways of Alternative Learning System (ALS) graduates and their subsequent experiences in higher education. The findings indicated that ALS served as a second chance for the participants, and they were motivated by various factors to pursue higher education.

ALS has also successfully provided educational access to learners in marginalized and remote areas where access to traditional schools may be limited. The program's flexible scheduling and non-formal approach have made education accessible to learners who would otherwise be unable to complete their studies. Overall, the theme of Accelerated Learning and Educational Access highlights the importance of ALS in providing opportunities for educational advancement to learners whom the traditional education system may have otherwise be left behind.

Career Advancement and Economic Opportunities. ALS provides opportunities for out-of-school youths and adults to acquire the skills and knowledge necessary to enter professional life, start a business, or pursue higher education. ALS graduates who are employed report increased job satisfaction, better working conditions, and higher earnings compared to their pre-ALS situation. Entrepreneurs or self-employed benefit from the program by gaining the necessary competencies and resources to start and manage their businesses. Some pursue higher education or vocational training after completing the program and may have better chances of obtaining higher-paying jobs or advancing their careers.

Furthermore, ALS has been shown to provide opportunities for working students to pursue education while maintaining employment and has also been found to benefit Filipino employees in terms of their career growth. These findings highlighted the importance of providing access to alternative education pathways for individuals who may have difficulty accessing traditional education systems and the potential benefits that can be gained through such programs.

Future-Oriented and Hopeful. The theme of future-oriented and hopeful ALS graduates highlights the aspirations and goals of learners who have completed the Alternative Learning System program. These learners often come from disadvantaged backgrounds and face significant barriers to educational and economic opportunities. However, through their experiences in the ALS program, they have developed a sense of hope and determination to strive for a better future for themselves and their families. This theme explores the ways in which the ALS program has helped these learners build a positive outlook on their future and empowered them to achieve their dreams.

Guanzon-Lapeña & Jacob (2017) explored how hope and aspirations motivate out-of-school youth in pursuing education and found that hope and aspirations are significant predictors of educational pursuit among out-of-

school youth. The study also found the factor such as age, gender, and educational background significantly influence the level of hope and aspirations among out-of-school youth.

One key aspect of the ALS experience is the sense of empowerment and agency that many graduates feel. For many individuals, the opportunity to pursue education and acquire new skills through ALS represents a second chance or an alternative path to achieving their goals. This sense of agency and empowerment can be a powerful motivator for learners. It can help to build confidence and self-esteem.

At the same time, however, many ALS learners may also experience feelings of uncertainty, anxiety, or self-doubt. Returning to a classroom setting can be intimidating for individuals who have struggled with traditional educational models or have been out of school for some time. Additionally, learners may face logistical and practical challenges, such as finding transportation to and from classes or balancing their studies with work or family obligations.

Despite these challenges, many ALS graduates can overcome obstacles and succeed in their studies. For some, this may involve discovering new interests or passions and finding opportunities to apply their learning in real-world settings. For others, it may involve overcoming personal barriers and developing new skills or strategies to manage their time and resources effectively.

Overall, the lived experiences of ALS graduates reflect the complex and multifaceted nature of adult education and the diverse range of learners who participate in these programs. By understanding ALS learners' unique challenges and opportunities, educators and policymakers can better support and empower individuals seeking to pursue education and improve their lives.

The Alternative Learning System (ALS) program has become a crucial component in providing educational opportunities to individuals who have not been able to complete their basic education through traditional means. The program aims to empower its learners to become independent, lifelong learners and productive members of society. However, the success of the program is not solely attributed to the learners, but also to the dedication and commitment of ALS teachers who have played a significant role in the lives of the program's graduates.

ALS teachers and graduates share a unique relationship that is characterized by equal efforts to achieve a common goal. ALS teachers have to work tirelessly to provide education to out-of-school youths and adults, who often face various challenges and barriers to learning. Despite the difficulties that they encounter, ALS teachers remain steadfast in their commitment to providing quality education to their learners.

On the other hand, ALS graduates also exert tremendous effort to complete the program. They must overcome various obstacles, including financial constraints, family responsibilities, and personal issues. Through their resilience and determination, ALS graduates can complete their education and pursue their dreams.

The relationship between ALS teachers and graduates is built on mutual respect, trust, and understanding. ALS teachers are aware of the challenges that their learners face, and they strive to provide support and guidance to help them overcome these obstacles. They create a safe and welcoming learning environment that encourages learners to express themselves and participate in class discussions.

ALS graduates, in turn, appreciate the efforts of their teachers and acknowledge the positive impact that they have had on their lives. They recognize the sacrifices and hard work of their teachers, and they express their gratitude through their success in life.

The equal efforts of ALS teachers and graduates have led to the success of the program. ALS graduates have been able to achieve their aspirations and secure better opportunities in life, while ALS teachers have been able to make a positive impact on the lives of their learners. In conclusion, the relationship between ALS teachers and graduates is crucial in the success of the program. The equal efforts of both parties have resulted in the empowerment of individuals who have not been able to complete their basic education through traditional means. It is important

to recognize the role of ALS teachers in the lives of their graduates and provide them with the necessary support and resources to continue their work. By doing so, the ALS program can continue to make a positive impact on the lives of individuals who seek to improve their lives through education.

4.0 Conclusion

After the in-depth analysis based on the findings, the researcher forwarded the following conclusions:

- a) The Alternative Learning System (ALS) program has a significant role in impacting the lives of ALS teachers and graduates. The relationship between the lived experiences of ALS teachers and graduates is a testimony to their equal efforts in achieving their common goal.
- b) Genuine support from concerned groups is crucial in fully assisting ALS graduates in their integrated growth and development, enabling them to overcome obstacles and achieve their goals.
- c) Despite the challenges and difficulties faced by ALS teachers, they remain resilient and adaptable in their pursuit of education and career advancement. The ALS program has provided them with opportunities to improve their lives, and their aspirations and motivations have ignited them to continue attaining and striving for success.
- d) Provide comprehensive career guidance and counseling to ALS graduates to help them navigate their career paths and achieve their goals.
- e) The positive impact of the ALS program on the lives of its teachers and graduates highlights the importance of providing access to education and training programs for disadvantaged individuals and marginalized communities.

Based on the conclusions drawn, the following recommendations are forwarded:

- a) Increase the availability and accessibility of ALS programs to reach more learners and provide them with opportunities for education and career advancement.
- b) Foster a supportive and empowering environment for ALS teachers to help build their resilience and adaptability in facing challenges.
- c) Provide adequate training and support for ALS teachers to effectively deliver the program and meet the needs of their learners.
- d) Continuously evaluate and improve the ALS program to ensure that it remains relevant, effective, and responsive to the changing needs of its learners and society.
- e) Provide comprehensive career guidance and counseling to ALS graduates to help them navigate their career paths and achieve their goals.
- f) Research on the implementation of an Alternative Learning System for teachers and graduates should be conducted in the Division of Ilocos Sur.

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University's Vision, Mission, Goals and Objectives: Awareness, Acceptability, and Relevance

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Abstract. This study was conducted to determine the level of awareness, acceptability, relevance, and extent of agreement on the formulation of BISU-Candijay Campus' vision, mission, goals, and objectives (VMGO) academic year 2022-2023 among students, faculty members, administrative staff, parents, alumni, and other stakeholders and the significant differences of their responses. A researcher-made questionnaire was designed from the VMGO of the university, and the new AACUP Outcomes-Based Education (OBE) survey instrument. Data were gathered via Google form and were summarized using weighted mean and One-Way ANOVA as the main statistical treatment and Tukey HSD as post hoc analysis coded in the R statistical package. The findings of the study disclosed that the group of respondents were very much aware of the university's VMGOs because of the different formats and platforms of dissemination to the concerned stakeholders. The university's VMGO statements were favorable and fulfilled the interests and needs of the university's stakeholders including external stakeholders for the quality of education. Stakeholders strongly affirmed that the university's goals are consistent and are aligned with its mission. Further, the results of this study implied that students' level of awareness, acceptability, and relevance vary significantly with the responses from alumni. It was concluded that BISU-Candijay Campus' efforts and system in disseminating its vision, mission, goals, and program objectives are very effective in raising the different stakeholders' awareness. The university's VMGO was also well-formulated with the participation of concerned representatives in such a way that it was very highly accepted by the students, faculty, administrative staff, parents, alumni, and other stakeholders. It is recommended that BISU-Candijay Campus consider consistently delivering the VMGO for inspirational purposes, aiming to motivate and empower individuals to contribute to the university's success.

Keywords: Vision; Mission; Goals; Objectives; University.

1.0 Introduction

The university's strategic and operational planning and operations are guided by its vision, mission, goals, and objectives (VMGOs). As stressed by Vetadine (2010) cited in the study of Pelicano et al. (2016) when school leaders work with staff and the community to develop a clear educational vision, students are more likely to learn in depth. This shared vision, which is linked to learning and monitoring, helps focus attention on essential issues, inspiring both students and faculty while instilling a feeling of joint responsibility. Furthermore, a vision is a statement about what an organization aims to be. As a result, it appeals to all members of the organization and helps them experience a sense of ownership and inclusion (Nurhaida et al, 2023). As per the guidelines provided by CHED (2012), the vision and mission define an institution's long-term perspective on itself and its place in the world, including its status, role, and the methods it uses to achieve its purpose and desired impact. Program objectives, on the other hand, are broad statements that outline the professional milestones and careers that graduates will be able to achieve within a certain term following graduation. These objectives are developed based

on the requirements and expectations of the program's stakeholders. Furthermore, the Accrediting Agency for Chartered Colleges and Universities in the Philippines (AACCUP) maintains a strict standard of quality excellence for VMGO implementation. A university's rating is not being compared to others but is determined by the extent to which its VMGO is realized (AACCUP, 2010). Having a clear vision and mission statement makes the roadmap smooth sailing for all members of the academic community (Gomez & Basco, 2022). Generally, in determining its vision, the university or a study program must pay attention to future developments and challenges (Purba et al, 2024).

Bohol Island State University (BISU)-Candijay Campus, located in the eastern portion of Bohol and one of the six campuses of the university, is guided by the VMGO's statements to providing quality education to its students and services to its stakeholders. These statements serve as specific guidance for the university's future, including its academic graduate and undergraduate programs. BISU envisions "a premier Science & Technology University for the formation of a world-class and virtuous human resource for sustainable development in Bohol and the country." The university mission states that "BISU is committed to provide quality higher education in the arts and sciences, as well as in the professional and technological fields; undertake research and development, and extension services for the sustainable development of Bohol and the country." According to the BISU Quality Manual (2023), the following are the goals of the university: pursue faculty and education excellence, strengthen the current viable curricular programs, and develop curricular programs that are responsive to the demands of the times both in the industry and the environment; promote quality research outputs that respond to the needs of the local and national communities; develop communities through responsive extension programs; adopt efficient and profitable income-generating projects/enterprises for self-sustainability; provide adequate, state-of-the-art, and accessible infrastructure support facilities for quality education; and promote efficient and effective good governance supportive of high-quality education. According to BISU Quality Manual (2023), the following are the goals of the university: BISU is directing all its efforts towards excellence guided by its foresight, pursue faculty and education excellence and strengthen the current viable curricular programs, and develop curricular programs that are responsive to the demands of the times both in the industry and the environment; promote quality research outputs that respond to the needs of the local and national communities; develop communities through responsive extension programs; adopt efficient and profitable income generating projects/enterprise for self-sustainability; provide adequate, state-of-the-art and accessible infrastructure support facilities for quality education; and promote efficient and effective good governance supportive of high-quality education.

This study is based on Locke and Letham's (1990) wide-ranging theory model, which connects goals in order to explicate goal-setting for performance while taking into account elements such as task difficulty and aptitude. This theory posits that employees are motivated by clear objectives or goals and timely feedback. Furthermore, striving for a goal serves as a strong motivator to achieve it, hence improving performance. Galvan, Celada, Gentallan, and Melencion (2019) found that Bohol Island State University should promote student participation in the formulation and updating of its VMGOs. The VMGO has to be better incorporated into the university's educational practices and activities. The VMGO's effectiveness is determined by its structure and dissemination. For an educational institution's VMGOs to be met, its members must comprehend and embrace their consequences. The academic units of a university, which include schools and colleges, should set goals that are consistent with the institution's vision and mission. Furthermore, every program within these academic units must specify objectives that match their unique purposes (Parilla et al, 2023). However, in the findings of Niala et al. (2024), it was disclosed that teaching and non-teaching personnel manifested a slighter degree of awareness of their university's vision, mission, goals, and objectives, which means that links to diverse industries, agencies, and other stakeholders and sectors should be regularly developed, sustained, and reinforced for greater dissemination of their VMGO to its customers. VMGOs in learning institutions are important; however, only limited attention has been given by researchers. There are assessments already conducted by other institutions about how these VMGOs are implemented, including awareness among its stakeholders and their acceptability. However, it is unclear whether stakeholders interpreted the VMGO clearly; thus, further analysis is still needed.

Moreover, it is important to evaluate the conformance of the university's VMGOs with the stakeholders' activities and practices because, based on noted observations of state universities and colleges, or SUCs, there are issues concerning the awareness, acceptability, and relevance of their VMGOs, including stakeholder engagement. According to Nurhaida et al. (2023), it is advised that faculty members and the programs offered continue to

broaden and intensify the dissemination of VMGOs, not only for internal and external stakeholders. Extra efforts must also be considered to focus the activities on encouraging both internal and external stakeholders to believe that the institution's teaching and non-teaching activities are aimed towards the goals and objectives of program study as well as the faculty's mission and vision.

As the need for outcomes-based education became more apparent, CHED provided minimum sets of learning outcomes for several university programs, which were combined with the Policy-Standard to Enhance Quality Assurance (QA) and Philippine Qualifications Framework in Philippine Higher Education with an Outcomes-Based and Typology-Based Approach. According to Article IV, Section 17 of CMO 46, Series of 2012, higher educational institutions can recognize a variety of characteristics and achieve great achievements if they remain true to their VMGOs. These comments are based on the institutions' strengths and weaknesses, as well as the opportunities and needs that exist in their respective locales.

Hence, it is appropriate to ask stakeholders if they believe BISU's VMG statements and program objectives are still relevant in light of recent developments. In light of the foregoing, the purpose of this study was to assess the level of awareness, acceptability, and relevance of BISU-Candijay Campus' vision, mission, goals, and program objectives (VMGOs) for the academic year 2022-2023. Specifically, the study was carried out to ascertain the stakeholders' awareness regarding the university's vision, mission, and goals, as well as its programs' objectives; assess the stakeholders' acceptance level of BISU-Candijay Campus' VMGOs; evaluate the stakeholders' perception of their relevance; examine the extent of agreement in the formulation of the VMGOs; and identify potential variations in awareness, acceptance, and relevance perceptions among different stakeholder groups regarding the university's VMGOs.

2.0 Methodology

2.1 Research Design

A quantitative design using a descriptive survey approach of research was utilized involving different population groups such as students, administrative staff, faculty members, alumni, parents, other stakeholders include members from various government and non-governmental organizations, as well as community leaders. A descriptive research describes the distribution of one or more variables in relation to an existing state or scenario. (Aggarwal and Ranganathan, 2019). Hence, the researchers used the quantitative method using the descriptive approach to determine the level of awareness, acceptability, and relevance of the BISU-Candijay Campus VMGOs.

2.2 Research Participants

The study was conducted at Bohol Island State University-Candijay Campus, Cogtong, Candijay, Bohol of the four colleges: College of Fisheries and Marine Sciences (CFMS), College of Teacher Education (CTE), College of Technology and Allied Sciences (CTAS) and College of Advance Studies (CadS).

A total of 1,166 representative samples of students (1,019), faculty members(26) of the four colleges (CFMS, CTE, CTAS, and CAdS), administrative staff (25) were randomly taken through stratified sampling, and other stakeholders such as parents, alumni as well as other stakeholders in the community (96) were chosen by convenience sampling, i.e., depending upon their availability. Most statisticians agree that for a larger population, a good sample size can be obtained from a comparatively small minimum ratio of 10 percent of individuals to ensure representativeness of the sample. (St. Olaf College, 2024).

2.3 Research Instrument

The study used a researcher-created questionnaire based on the university's vision, mission, and goals, as well as the program objectives of each curricular program at BISU-Candijay Campus, and aligned with the new Outcomes-Based Education (OBE) survey tool of the AACCUP (2010), which used a 5-point Likert Scale for the level of relevance, awareness, and acceptability. For content validity and cross-checking to see if the items were aligned with the specific problems of the study, the researchers presented the questionnaires to the three academic deans of the campus. Further, the researchers also conducted a dry run to ensure item validity and reliability. Through confirmatory factor analysis and Cronbach's alpha test, the items were tested, and the results showed that the survey instrument is considered valid (p -value = 0.000, CFI = 0.996, TLI = 0.995), and the higher value of alpha made it more reliable (raw α = 0.97). Thus, the instrument is considered valid and reliable.

2.4 Data Gathering Procedure

After the approval of permission to conduct the survey, questionnaires were distributed to the respondents, and then data from online questionnaires via Google Forms were gathered and summarized using a weighted mean as the main tool for the data analysis. To determine the significant difference, the data were analyzed using the One-Way ANOVA as the main statistical treatment and Tukey HSD as post hoc analysis coded in the R statistical package.

2.5 Ethical Considerations

Throughout the entire conduct of this study, the researchers demonstrated all required ethical concerns and followed the ethical policies and guidelines established by the Research and Development Office of the campus. Since humans were selected to participate in the study, information confidentiality was strictly adhered to. ensure the safety and protection of the respondents' rights, dignity, and privacy.

3.0 Results and Discussion

3.1 Awareness of the VMGO

Table 1. Level of awareness of BISU-VMGO as perceived by students

Indicators	CFMS (n=136)	CTE (n=323)	CTAS (n=433)	CAdS (n=127)	Mean	Description
Vision	3.98	4.47	4.33	4.43	4.30	Very Highly Aware
Mission	4.11	4.58	4.43	4.50	4.41	Very Highly Aware
Goals	4.04	4.47	4.39	4.43	4.33	Very Highly Aware
Program Objectives	4.30	4.71	4.55	4.72	4.57	Very Highly Aware
Overall Mean	4.11	4.56	4.43	4.52	4.41	Very Highly Aware

Table 2. Level of awareness of BISU-VMGO as perceived by faculty

Indicators	CFMS (n=7)	CTE (n=6)	CTAS (n=9)	CAdS (n=4)	Mean	Description
Vision	4.85	5.00	4.73	4.83	4.85	Very Highly Aware
Mission	4.75	4.85	4.65	4.82	4.77	Very Highly Aware
Goals	4.50	4.75	4.39	4.67	4.58	Very Highly Aware
Program Objectives	4.89	4.75	4.59	4.83	4.77	Very Highly Aware
Overall Mean	4.75	4.84	4.59	4.79	4.74	Very Highly Aware

Table 1 demonstrates the level of knowledge among college students of the university's vision, mission, and goals, as well as its program objectives. The findings revealed that students from various academic disciplines at BISU-Candijay Campus are overwhelmingly aware of the university's vision, mission, and goals, with the exception of students from the College of Fisheries and Marine Sciences, who only have a high level of awareness. Additionally, students demonstrate a thorough comprehension of the curriculum objectives. These findings indicate that students are well informed about the university's VMGO, which may be due to the consistent virtual orientations during the pandemic and the rigorous implementation of VMGO into course syllabi, where it is usually introduced as the first lesson in each course. This provides an opportunity for students to understand more. Furthermore, the placement of VMGO in prominent or strategic locations, such as activity centers, classrooms, facades, buildings, and university online platforms, ensures accessibility for students to familiarize themselves with its content. Additionally, printing and exhibiting VMGO on bulletin boards, annual reports, student manuals, test papers, and various university programs, both offline and online, fosters awareness of the university's VMGO. Finally, VMGO is introduced and discussed throughout the university's orientation program, allowing students to understand its relevance. The findings were consistent with those of Niala and Pascua (2024), who found that the stakeholders were typically well-versed in their university's VMGO and its dissemination.

As seen in Table 2, Faculty members from the four colleges are "very highly aware" of the university's VMGO. It is clear from the fact that every faculty member's first activity in all areas he or she teaches is the VMGO orientation, which is also included in the course syllabus. Because mastery of the subject is required for quality and effective teaching, the repetitive tasks of VMGO discussion in the class with the students will build a high degree of awareness. Furthermore, the VMGO is a significant issue for every faculty and staff of the university,

particularly in the application of its core functions or other components of the university's desire to enhance its operations for the greater good of its customers. The result of Niala et al. (2024) study disagrees with the findings, which revealed that teaching and non-teaching personnel manifested a slighter degree of awareness of their university's vision, mission, goals, and objectives.

Table 3. Level of awareness of BISU-VMGO as perceived by administrative staff, parents, alumni, and other stakeholders

Indicators	Admin Staff (n=25)	Parents (n=37)	Alumni (n=44)	Other Stakeholders (n=15)	Mean	Description
Vision	4.80	4.59	4.77	5.00	4.79	Very Highly Aware
Mission	4.72	4.57	5.00	5.00	4.82	Very Highly Aware
Goals	4.80	4.62	5.00	5.00	4.86	Very Highly Aware
Program Objectives	4.68	4.84	4.73	5.00	4.81	Very Highly Aware
Overall Mean	4.75	4.66	4.88	5.00	4.82	Very Highly Aware

Table 3 evaluates the level of awareness among administrative staff, parents, alumni, and other stakeholders of the university. It was manifested in the table that all of them are “very highly aware” of the university’s VMGO with other stakeholders representing government and non-government organizations and other community representatives as the highest with an overall mean of 5.00. The results provide a positive indication that administrative personnel and external stakeholders such as parents, alumni, and others are highly aware of the university's efforts to instill the values outlined in its Vision, Mission, Goals, and Objectives (VMGO) among its graduates. By this, they would be effective partners and linkages which would be a great contribution in fulfilling the university's ultimate goals.

Overall, the results revealed that the group of respondents in this study were very much aware of the university’s VMGOs because of the different formats and platforms of dissemination to the concerned stakeholders, which were similar to the study of Arado, Mendoza, and Esmero (2019), which emphasized that the institution's efforts to disseminate its vision are highly effective in understanding and raising awareness of it.

3.2 Acceptability of the VMGO

Table 4 shows the degree of acceptability among students on the VMGO is high, as evidenced by the mean ratings of "very highly acceptable." This implies that the student's goals are consistent with the university's priorities. However, CFMS students only gave the university's mission and goals a "highly acceptable" rating. This finding is in parallel to the study of Tan et al. (2022), which disclosed that internal stakeholders, such as students, viewed understanding and acceptance of the vision, mission, and goals of the University of Southeastern Philippines (USEP) to the greatest extent.

Table 4. Level of acceptability of BISU-VMGO as perceived by students

Indicators	CFMS (n=136)	CTE (n=323)	CTAS (n=433)	CAdS (n=127)	Mean	Description
Vision	4.45	4.73	4.78	4.68	4.66	Very Highly Acceptable
Mission	4.19	4.95	4.77	4.78	4.67	Very Highly Acceptable
Goals	4.16	4.83	4.78	4.79	4.64	Very Highly Acceptable
Program Objectives	4.45	4.86	4.69	4.43	4.61	Very Highly Acceptable
Overall Mean	4.31	4.84	4.75	4.67	4.64	Very Highly Acceptable

Table 5. Level of acceptability of BISU-VMGO as perceived by faculty

Indicators	CFMS (n=7)	CTE (n=6)	CTAS (n=9)	CAdS (n=4)	Mean	Description
Vision	4.68	5.00	4.95	4.88	4.88	Very Highly Acceptable
Mission	4.89	4.89	4.87	4.86	4.88	Very Highly Acceptable
Goals	4.78	4.84	4.80	4.81	4.81	Very Highly Acceptable
Program Objectives	4.93	5.00	4.18	4.98	4.77	Very Highly Acceptable
Overall Mean	4.83	4.93	4.70	4.88	4.84	Very Highly Acceptable

In addition, Table 5 presents the level of acceptability of the university’s VMGO as perceived by faculty members across colleges. The overall result revealed that the VMGO for them is “very highly acceptable,” except for the CTAS teachers, who gave a rating of 4.18 or described their program objectives as “highly acceptable.” These findings can be credited to faculty members who were involved in formulating, revising, and disseminating this

VMGO, most particularly in integrating it into their course syllabi. The results support Gomez and Basco's (2022) findings, suggesting that both internal and external stakeholders understand and accept the VMGO statements. Similarly, they strongly believe that the VMGO statements are clearly articulated, highly congruent, and connected with the university's policies and curricular activities in the Teacher Education Department programs.

Furthermore, Table 6 shows that the BISU vision, mission, goals, and objectives statements were “very highly acceptable” (4.92) as perceived by administrative staff, parents, alumni, and other stakeholders. Alumni and other stakeholders representing government and non-government organizations and other community representatives gave a rating of 5.0 as the highest. It can be gleaned from the findings that these groups of respondents were knowledgeable of and agreeable to the VMGO statements because the university regularly invited the representatives of these groups to be involved in the formulation, implementation, dissemination, and review of the university’s VMGO statements.

Table 6. Level of acceptability of BISU-VMGO as perceived by administrative staff, parents, alumni, and other stakeholders

Indicators	Admin Staff (n=25)	Parents (n=37)	Alumni (n=44)	Other Stakeholders (n=15)	Mean	Description
Vision	4.72	4.86	5.00	5.00	4.90	Very Highly Acceptable
Mission	4.68	4.89	5.00	5.00	4.89	Very Highly Acceptable
Goals	4.69	4.89	5.00	5.00	4.90	Very Highly Acceptable
Program Objectives	4.72	4.89	5.00	5.00	4.90	Very Highly Acceptable
Overall Mean	4.70	4.89	5.00	5.00	4.90	Very Highly Acceptable

Overall, the results also indicate that the Bohol Island State University VMGO statements were favorable and fulfilled the interests and needs of the university’s stakeholders including external stakeholders for the quality of education. It further shows that the university maintains a strong affiliation with the constituents and the community. This confirms Galvan, Celada, Gentallan, and Melencion's (2019) findings that BISU adheres to its primary objective of providing quality higher education for the long-term development of Bohol and the country.

3.3 Relevance of the VMGO

Table 7 presents that the BISU VMGO is “very much relevant” as perceived by the students across colleges, with the College of Teacher Education as the highest with an overall mean of 4.71, except CFMS gave only an overall mean of 4.13 or was described as “much relevant” for vision, mission, goals, and objectives. This means that the formulation of this VMGO does not fail to meet the needs and expectations of the target customers, and the result further indicates that the university VMGO is very relevant to the demands of the different sectors in the community. This result confirms the study of Villanca et al. (2020), which revealed that stakeholders strongly agreed that current educational practices and activities are consistent with the institutions' vision and mission demonstrated in the teaching of their faculty members as well as the institution's philosophy.

Table 7. Level of Relevance of BISU-VMGO as perceived by students

Indicators	CFMS (n=136)	CTE (n=323)	CTAS (n=433)	CAdS (n=127)	Mean	Description
Vision	4.16	4.80	4.59	4.68	4.56	Very Much Relevant
Mission	4.14	4.75	4.56	4.75	4.55	Very Much Relevant
Goals	4.16	4.78	4.60	4.69	4.56	Very Much Relevant
Program Objectives	4.06	4.53	4.43	4.46	4.37	Very Much Relevant
Overall Mean	4.13	4.71	4.54	4.64	4.51	Very Much Relevant

Table 8 shows that the faculty members agreed that the university’s VMGO is also “very much relevant” to the needs of the community, province, and the country. The College of Teacher Education faculty members gave the highest rating of 4.81. This indicates that the respondents as one of the main actors directly involved in the formulation, implementation, and review of the university’s VMGOs. Furthermore, they had internalized the university's significant role in contributing to sustainable development in Bohol and the county, integrating these insights more comprehensively into their teaching and academic activities. It is congruent with the findings of Niala et al. (2024) study, which manifested a high alignment of the academic strategies, practices, and activities implemented by the faculty and students with the institution’s VMGO, which contributed much towards the realization of the program outcomes.

Table 8. Level of relevance of BISU-VMGO as perceived by faculty

Indicators	CFMS (n=7)	CTE (n=6)	CTAS (n=9)	CAdS (n=4)	Mean	Description
Vision	4.78	4.85	4.81	4.79	4.81	Very Much Relevant
Mission	4.75	4.78	4.76	4.78	4.77	Very Much Relevant
Goals	4.75	4.89	4.82	4.80	4.81	Very Much Relevant
Program Objectives	4.49	4.73	4.45	4.65	4.58	Very Much Relevant
Overall Mean	4.69	4.81	4.67	4.76	4.74	Very Much Relevant

In addition, Table 9 shows that the university's VMGOs were "very much relevant" (4.87) according to the administrative staff as well as the external stakeholders. Though alumni and other stakeholders were not directly involved in the curricular activities/events in the University because they were more concerned about their daily work routines, still they had the highest mean of 5.0 compared to other stakeholders. This means that these external stakeholders appreciated the VMGOs because these statements were crafted in response to the needs and interests of the customers, the business sector, the industry, and the community.

Table 9. Level of relevance of BISU-VMGO as perceived by administrative staff, parents, alumni, and other stakeholders

Indicators	Admin Staff (n=25)	Parents (n=37)	Alumni (n=44)	Other Stakeholders (n=15)	Mean	Description
Vision	4.80	4.68	5.00	5.00	4.87	Very Much Relevant
Mission	4.80	4.70	5.00	5.00	4.88	Very Much Relevant
Goals	4.80	4.68	5.00	5.00	4.87	Very Much Relevant
Program Objectives	4.80	4.62	5.00	5.00	4.86	Very Much Relevant
Overall Mean	4.80	4.67	5.00	5.00	4.87	Very Much Relevant

Overall, the "very much relevant" description of the VMGOs in this study is consistent with the findings of Tan et al. (2022), who discovered that the University of Southeastern Philippines (UseP) VMG and CTET Program objectives are the most relevant to the university's key functions.

3.4 Extent of Agreement in the Formulation of the VMGO

Table 10. Extent of agreement in the formulation of the vision, mission, goals, and objectives

Indicators	Students (n=1,019)	Faculty (n=26)	Admin Staff (n=25)	Parents (n=37)	Alumni (n=44)	Others (n=15)	Mean	Desc
1. Bohol Island State University has a system for determining and constructing its Vision and Mission Statement.	4.57	4.78	4.34	4.60	4.43	4.52	4.54	Strongly Agree
2. Bohol Island State University's Mission statement reflects the institution's legal and other statutory mandates.	4.40	4.10	4.47	4.58	4.41	4.86	4.47	Strongly Agree
3. The goals of the university are consistent and aligned with the Mission of the University.	4.69	4.56	4.73	4.82	4.59	4.31	4.62	Strongly Agree
4. The objectives of the program have the expected outcomes in terms of competencies (skills and knowledge), values, and other attributes of the graduates which include the development of: technical skills;	4.89	4.24	4.18	4.39	4.79	4.22	4.52	Strongly Agree
5. research and extension capabilities;	4.59	4.58	4.16	4.30	4.43	3.56	4.47	Strongly Agree
6. students' ideas, desirable attributes, values, and personal discipline;	4.78	4.60	4.22	4.26	4.69	3.64	4.45	Strongly Agree
7. moral character;	4.52	4.54	4.71	4.22	4.47	4.22	4.45	Strongly Agree
8. critical, analytical, problem-solving and other higher order thinking skills; and	4.66	4.62	4.36	4.14	4.33	4.74	4.45	Strongly Agree
9. aesthetic and cultural values	4.34	4.48	4.17	4.00	4.14	3.89	4.41	Strongly Agree
Overall Mean	4.60	4.50	4.37	4.37	4.48	4.22	4.41	Strongly Agree

Table 10 presents that the university's stakeholders "strongly agree" with the formulation of the vision, mission, goals, and objectives. Stakeholders strongly affirmed that the university's goals are consistent and aligned with its mission with a highest mean of 4.62 described as "strongly agree". It was also indicated in the table that the students' extent of agreement in the formulation of the VMGO is notably higher than those of the other stakeholders with an overall mean of 4.60 or described as strongly agree. The findings are consistent with those of Sabanal et al.'s (2021) study, which revealed that the majority of stakeholders confirmed that Visayas State University's VMGO is inclusive, and it was especially significant that it considered the welfare of all its stakeholders, particularly students.

3.5 Differences in the Respondents' Level of Awareness, Acceptability, and Relevance of BISU VMGO

Table 11, 12, and 13 displays a variance analysis of the level of awareness, acceptability, and relevance of the BISU vision, mission, goals, and program objectives. Table 11 demonstrates substantial differences in stakeholders' awareness levels ($F = 10.04$, $p < 0.05$). According to the post-hoc analysis, the awareness level among students differs greatly from that of alumni and other stakeholders. The awareness level among academics, administrative staff, and parents is not considerably different. However, Tan et al. (2022) found a significant gap in internal and external stakeholders' knowledge of the university's VMGs.

Table 11. The difference in the level of awareness of BISU-VMGO

Indicators	F-Test Value	p-value	Decision	Interpretation	
Vision	9.22	0.00	Reject Ho	Significant	
Mission	9.03	0.00	Reject Ho	Significant	
Goals	11.18	0.00	Reject Ho	Significant	
Program Objectives	3.2	0.01	Reject Ho	Significant	
Overall	10.04	0.00	Reject Ho	Significant	
Post Hoc Analysis - Tukey HSD (Honest Significant Difference)					
	Adjusted p-values				
Pairwise Comparison	Vision	Mission	Goals	Program Objectives	Overall
Alumni-Administrative Staff	1	0.587	0.871	1	0.960
Faculty- Administrative Staff	1	1	0.872	0.996	1
Other Stakeholders - Administrative Staff	0.961	0.804	0.951	0.591	0.779
Parents- Administrative Staff	0.897	0.958	0.927	0.923	0.990
Student- Administrative Staff	0.031*	0.350	0.036*	0.979	0.099
Faculty-Alumni	0.999	0.757	0.153	1	0.943
Other Stakeholders-Alumni	0.905	1	1	0.660	0.980
Parents-Alumni	0.895	0.057	0.160	0.968	0.564
Student-Alumni	0.003*	0.000*	0.000*	0.700	0.000*
Other Stakeholders-Faculty	0.987	0.900	0.416	0.851	0.744
Parents-Faculty	0.778	0.864	1	0.998	0.994
Student-Faculty	0.009*	0.163	0.699	0.690	0.106
Parents-Other Stakeholders	0.461	0.292	0.477	0.953	0.382
Student-Other Stakeholders	0.007*	0.017*	0.006*	0.091	0.003*
Student-Parents	0.334	0.887	0.292	0.160	0.241

Legend/Significant code: * - significant at 0.05

Table 12 demonstrates substantial differences in acceptability ratings among stakeholders ($F = 7.251$, $p < 0.05$). The post-hoc analysis demonstrates that the level of acceptability among students differs significantly from that of alumni respondents. The level of acceptability among professors, administrative personnel, parents, and other stakeholders is not considerably different. This result is consistent with Tan et al.'s (2022) findings, which show a substantial difference between internal and external acceptance and understanding of the objectives of the University of Southeastern Philippines (UseP) VMG and the College of Teacher Education and Technology (CTET) Program.

In addition, Table 13 demonstrates substantial differences in the levels of relevance among stakeholders ($F = 9.675$, $p < 0.05$). The post-hoc study reveals that the students' relevance level differs significantly from that of the alumni respondents. The level of relevance between faculty, administrative staff, parents and other stakeholders does not significantly differ. However, these findings contradict Niala et al.'s (2024) study, which found statistically significant disparities among respondents' responses on the alignment of educational tactics, methods, and

activities with Isabela State University, College of Business, Accountancy, and Public Administration's (ISU-CBAPA) VMGO and attainability.

Table 12. The difference in the level of acceptability of BISU-VMGO

Indicators	F-Test Value	p-value	Decision	Interpretation	
Vision	5.938	0.00	Reject Ho	Significant	
Mission	5.979	0.00	Reject Ho	Significant	
Goals	7.111	0.00	Reject Ho	Significant	
Program Objectives	6.721	0.00	Reject Ho	Significant	
Overall	7.251	0.00	Reject Ho	Significant	
Post Hoc Analysis – Tukey HSD (Honest Significant Difference)					
	Adjusted p-values				
Pairwise Comparison	Vision	Mission	Goals	Program Objectives	Overall
Alumni- Administrative Staff	0.318	0.165	0.150	0.415	0.189
Faculty- Administrative Staff	0.891	0.752	0.951	1	0.934
Other Stakeholders - Administrative Staff	0.599	0.428	0.407	0.683	0.460
Parents- Administrative Staff	0.910	0.650	0.643	0.875	0.741
Student- Administrative Staff	0.994	1	0.999	0.934	0.994
Faculty-Alumni	0.957	0.954	0.694	0.619	0.801
Other Stakeholders-Alumni	1	1	1	1	1
Parents-Alumni	0.878	0.946	0.937	0.965	0.918
Student-Alumni	0.001*	0.001*	0.000*	0.000*	0.000*
Other Stakeholders-Faculty	0.986	0.985	0.868	0.827	0.921
Parents-Faculty	1	1	0.992	0.966	0.999
Student-Faculty	0.300	0.331	0.567	0.738	0.408
Parents-Other Stakeholders	0.963	0.985	0.982	0.991	0.976
Student-Other Stakeholders	0.133	0.142	0.071	0.091	0.069
Student-Parents	0.217	0.131	0.051	0.048	0.060

Legend/Significant code: * - significant at 0.05

Table 13. Difference on the level of relevance of BISU-VMGO

Indicators	F-Test Value	p-value	Decision	Interpretation	
Vision	6.711	0.00	Reject Ho	Significant	
Mission	6.952	0.00	Reject Ho	Significant	
Goals	6.711	0.00	Reject Ho	Significant	
Program Objectives	11.18	0.00	Reject Ho	Significant	
Overall	9.675	0.00	Reject Ho	Significant	
Post Hoc Analysis – Tukey HSD (Honest Significant Difference)					
	Adjusted p-values				
Pairwise Comparison	Vision	Mission	Goals	Program Objectives	Overall
Alumni- Administrative Staff	0.817	0.815	0.817	0.871	0.160
Faculty- Administrative Staff	1	1	1	0.872	0.942
Other Stakeholders - Administrative Staff	0.928	0.927	0.928	0.951	0.420
Parents- Administrative Staff	0.976	0.992	0.976	0.927	0.679
Student- Administrative Staff	0.416	0.375	0.416	0.036*	0.997
Faculty-Alumni	0.834	0.695	0.834	0.153	0.737
Other Stakeholders-Alumni	1	1	1	1	1
Parents-Alumni	0.213	0.301	0.213	0.160	0.926
Student-Alumni	0.000*	0.000*	0.000*	0.000*	0.000*
Other Stakeholders-Faculty	0.936	0.869	0.936	0.416	0.890
Parents-Faculty	0.967	0.999	0.967	1	0.997
Student-Faculty	0.358	0.505	0.358	0.699	0.485
Parents-Other Stakeholders	0.544	0.634	0.544	0.477	0.979
Student-Other Stakeholders	0.068	0.058	0.068	0.006*	0.066
Student-Parents	0.874	0.698	0.874	0.292	0.051

Legend/Significant code: * - significant at 0.05

Overall, the above results of this study implied that students' level of awareness, acceptability, and relevance vary significantly with the responses from alumni. These further manifests that the more years you stay in the university, the higher the level of awareness and acceptability will manifest just in the case of the university's

alumni who did experience the different activities and programs congruence with the university's VMGOs and more importantly had more opportunities to internalize the significant existence of the university. This study supports the findings of Villanca et al. (2020), which show a strong alignment in the dissemination and acceptability of the university's vision and mission, as well as the College of Education's goals and objectives.

4.0 Conclusion

Following the presentation of the findings, it was concluded that the vision, mission, goals, and program objectives are key components of the university's strategic planning and are very effective in raising the different stakeholders' awareness. The university's VMGO was also well-formulated with the cooperation of concerned representatives, resulting in widespread acceptance by students, faculty, administrative staff, parents, alumni, and other stakeholders. Moreover, the university provides the extent of consideration of the needs and interests of the community, province, and country as manifested by its vision, mission, goals statements, and program objectives which are still align in view of subsequent developments. Further, the goals of the university are consistent and aligned with its mission.

It is recommended that BISU-Candijay Campus consider consistently delivering the VMGO for inspirational purposes, aiming to motivate and empower individuals to contribute to the university's success. Furthermore, relevant study should be undertaken regularly to make sure that stakeholders understand the VMGOs, with the inclusion of other industry partners and strengthening private-public linkages.

5.0 Contributions of Authors

The authors confirm the equal contributions proportionate to their assigned tasks to realize the completion of this study.

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7.0 Conflict of Interests

The authors declare no conflicts of interest about the publication of this paper.

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Correlational Analysis of Academic Performance in General Education Courses During the Digital Learning Space

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Abstract. The integration of digital learning setups in higher education has revolutionized the educational landscape, necessitating a reevaluation of academic performance in General Education Courses (GECs). This correlational analysis study examines the interconnectedness of student grades across eight GECs during the transition to digital learning environments. By investigating the relationships between GEC subjects, the study sheds light on potential interdisciplinary connections and offers insights into overall academic performance trends. Findings reveal significant correlations between various GECs, highlighting the importance of fostering interdisciplinary learning experiences and promoting critical skills development among students in digital educational contexts. The study underscores the imperative of designing curriculum frameworks that encourage holistic learning experiences, prioritizing the development of communication skills, scientific literacy, and ethical reasoning. Additionally, it emphasizes the need for continuous evaluation and improvement initiatives to enhance the quality of education in digital learning environments. This research contributes to a deeper understanding of academic performance trends in GECs and informs pedagogical practices aimed at preparing students for success in an increasingly complex and interconnected world.

Keywords: General Education Courses (GECs); Academic performance; Digital learning environments; Interdisciplinary connections.

1.0 Introduction

In the dynamically evolving landscape of educational paradigms, the pervasive integration of technology has become increasingly pronounced, particularly in the transition from conventional classroom settings to online modalities, including emergent hybrid systems. Within this context, the digital literacy proficiency of educators in higher education has garnered heightened significance as a pivotal determinant of their efficacy within online educational environments. This study seeks to assess the digital literacy competencies of higher education instructors, focusing on their utilization of academic platforms, incorporation of digital instructional materials, and adeptness in conducting virtual assessments. An integral aspect of this inquiry involves the consideration of student feedback, providing valuable insights into the intersection of instructor digital literacy and student engagement. The anticipated findings of this investigation hold considerable implications for educational administrators, highlighting the imperative of instituting comprehensive digital training initiatives for instructors amidst the backdrop of global technological advancements. Such insights stand to inform strategic decision-making at the Technological University of the Philippines, fostering an environment conducive to embracing digital literacy advancements and fostering innovation within the academic sphere.

The widespread adoption of digital learning platforms and online instructional materials has made a significant transformation in education. The instructors' digital proficiency plays a significant role in identifying online learning effectiveness.

The GEC instructors' digital literacy at the Technological University of the Philippines-Taguig in online education is a crucial factor in the student's academic performance. Suspendra (2019) and Mega (2022) emphasize the significance of digital literacy in the ability of students to utilize online learning materials and have an engagement in an online setting. Moore (2001) cited that digital literacy has a big role in creating an effective online learning environment. Yuen, Yaoyuneyong & Johnson (2011) mentioned the importance of being adaptable in the advancement of technology to sustain the needs of tech-savvy learners, as well as the need to navigate effective educational transformation from traditional to online education.

Teachers' digital literacy plays a central role in students' academic performance, influencing not only their mastery of technological tools but also their higher-order thinking skills (Nawaz & Kundi, 2010; Akturk & Ozturk, 2019). Santos et al. (2019) highlight the significant impact of teachers' digital support on students' learning outcomes and academic achievement. Numerous studies have demonstrated a positive correlation between teachers' digital literacy and students' academic success (Lee, Moon, & Cho, 2015; Tondeur et al. (2017). Ali, Thomas, & Hamid (2020) emphasize the importance of teachers' technology pedagogical content knowledge (TPACK) in enhancing student achievement, stressing the effective integration of technology into classroom instruction (Voogt & McKenney, 2017). Additionally, research underscores the significance of professional development programs in enhancing teachers' digital literacy skills (Ding et al.,(2019) with Falloon (2020) advocating for continuous support and training to maximize the potential of technology in education.

Correlation Model of the Academic Performance of Students in GECs During Digital Learning Setup

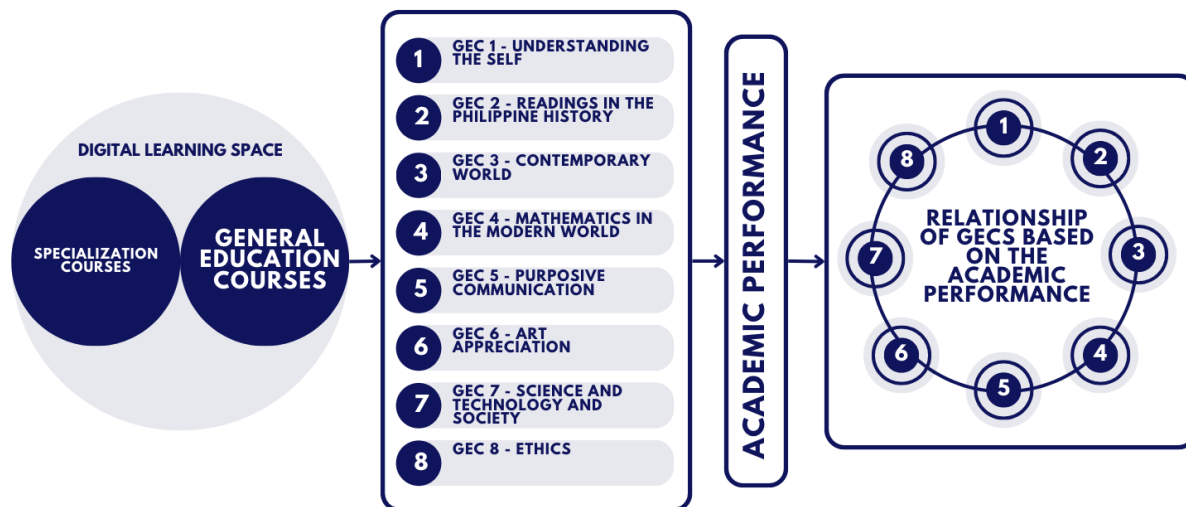


Figure 1. Correlation Model of the Academic Performance of Students in GECs During Digital Learning Setup

2.0 Methodology

The methodology employed for this study aimed to investigate the correlation among the grades of students who have completed all eight General Education Courses (GECs) at the Technological University of the Philippines – Taguig. The population of 300 students who have completed all eight GECs, a sample size of 172 was determined using Slovin's formula at a 95% confidence level with a 5% margin of error. This sample size was selected to ensure a representative subset of the population while maintaining practical feasibility in data collection and analysis.

The methodology involved several key steps to ensure the validity and reliability of the data collected. Firstly, all students who were at least 18 years old were asked to provide consent to participate in the study. This ethical

consideration ensured that participants voluntarily agreed to take part in the research. Secondly, the anonymity of names was maintained to protect the privacy and confidentiality of participants. By anonymizing participant identities, the study aimed to encourage honest responses and minimize potential biases or concerns related to privacy. Thirdly, grades were obtained from the student's responses and then verified by the registrar to ensure accuracy and reliability. This validation step was crucial in confirming the authenticity of the data collected and minimizing the risk of errors or inconsistencies.

Limitations are acknowledged when interpreting the findings of the study. Firstly, the pedagogy of instructors, their teaching approach, and academic freedom may have influenced student grades in GECs. Variations in teaching styles and instructor biases could have impacted the consistency and fairness of grading across courses. Secondly, the study focused exclusively on GEC courses, neglecting potential correlations with grades in other courses or academic disciplines. Future research could explore the relationship between GEC grades and grades in major-specific courses to provide a more comprehensive understanding of academic performance. Lastly, the implementation of online learning during the study period may have introduced additional challenges or confounding factors that were not accounted for in the methodology. The shift to online education could have influenced student performance in GECs due to factors such as technological limitations, access to resources, or changes in instructional delivery methods.

3.0 Results and Discussion

Table 1. Summary of grades as reference to academic performance

Groups	Average	Variance
GEC 1 Understanding the Self	1.58	0.38306
GEC 2 Readings in the Philippine History	1.86	0.14148
GEC 3 Contemporary World	1.92	0.31061
GEC 4 Mathematics in the Modern World	1.92	0.18109
GEC 5 Purposive Communication	1.75	0.69079
GEC 6 Art Appreciation	1.85	0.10748
GEC 7 Science and Technology and Society	2.17	0.84470
GEC 8 Ethics	1.90	0.20975

Legend: 1.00 – Excellent, 1.25 – Superior, 1.50 to 1.75 – Very Good/ Above Average, 2.00 to 2.50 – Good/ Average, 2.75 – Satisfactory, 3.00 – Passed, 5.00 Failed

The table presents a summary of grades, providing insight into the average performance and variance among students across eight General Education Courses (GECs). Firstly, it is notable that the average grades vary across the different GECs, ranging from 1.58 to 2.17. GEC 7 (Science and Technology and Society) has the highest average grade of 2.17, indicating relatively stronger performance in this course compared to others. Conversely, GEC 1 (Understanding the Self) has the lowest average grade of 1.58, suggesting comparatively weaker performance in this particular GEC.

Secondly, the variance in grades within each GEC reflects the degree of dispersion or spread of grades around the average. Higher variance values indicate greater variability in student performance within a particular GEC. For instance, GEC 7 (Science and Technology and Society) exhibits the highest variance of 0.8447, implying a wider range of grades among students in this course. On the other hand, GEC 6 (Art Appreciation) has the lowest variance of 0.10748, indicating more consistent performance among students in this GEC.

These findings suggest that while some GECs may have higher average grades, there can be significant variability in student performance within each course. Factors such as course content, teaching methods, and individual student characteristics may contribute to these variations. Understanding these patterns of academic performance can inform educators' efforts to address challenges and enhance learning outcomes in General Education Courses.

Table 2. Correlation matrix of the academic performance of students in general education courses during the onset of pandemic

	GEC 1	GEC 2	GEC 3	GEC 4	GEC 5	GEC 6	GEC 7	GEC 8
GEC 1	1.00000	0.52702	0.62992	0.40681	0.91570	0.34802	0.90669	0.65862
GEC 2	0.52702	1.00000	0.78145	0.46515	0.74529	0.62589	0.60144	0.53947
GEC 3	0.62992	0.78145	1.00000	0.76264	0.83815	0.73596	0.58421	0.38584
GEC 4	0.40681	0.46515	0.76264	1.00000	0.49173	0.75627	0.39239	0.18983
GEC 5	0.91570	0.74529	0.83815	0.49173	1.00000	0.39410	0.95027	0.83950
GEC 6	0.34802	0.62589	0.73596	0.75627	0.39410	1.00000	0.27657	0.00315
GEC 7	0.90669	0.60144	0.58421	0.39239	0.95027	0.27657	1.00000	0.80090
GEC 8	0.65862	0.53947	0.38584	0.18983	0.83950	0.00315	0.80090	1.00000

Legend: , GEC 1 - Understanding the Self, GEC 2 - Readings in the Philippine History, GEC 3 - Contemporary World, GEC 4 - Mathematics in the Modern World, GEC 5 - Purposive Communication, GEC 6 - Art Appreciation, GEC 7 - Science and Technology and Society, GEC 8 - Ethics

GEC 1 Correlation with other GECs

The positive correlation coefficients suggest a potential association between academic performance in GEC 1 and other GECs, indicating that students who excel in Understanding the Self may also perform well in courses spanning diverse subjects such as history, communication, science, and ethics. The notably high correlations observed for GEC 5 (Purposive Communication) and GEC 7 (Science and Technology and Society) suggest a particularly strong relationship with GEC 1, possibly indicating shared themes or complementary skill sets.

A possible explanation for these findings is that GEC 1 fosters critical thinking, self-reflection, and analytical skills, which are transferrable across various academic domains. Moreover, topics related to communication and the societal implications of science and technology may intersect with themes explored in Understanding the Self, thereby reinforcing learning outcomes and enhancing academic performance.

GEC 2 Correlation with other GECs

The positive correlations observed between academic performance in GEC 2 Readings in Philippine History and other GECs highlight the interconnectedness of knowledge and skills across different disciplinary domains. The moderate to strong correlations suggest that students who excel in understanding historical contexts and perspectives may also demonstrate proficiency in areas such as self-awareness, communication, mathematics, art appreciation, science, technology, and ethics.

A probable insight for these findings is that GEC 2 Readings in Philippine History may foster critical thinking, analytical skills, and a deeper understanding of societal dynamics, which are transferable to other academic subjects. Moreover, the themes explored in GEC 2 may intersect with those addressed in other GECs, reinforcing learning outcomes and enhancing academic performance across the curriculum.

GEC 3 Correlation with other GECs

The substantial positive correlations observed between academic performance in GEC 3, Contemporary World, and other GECs underscore the interconnectedness of knowledge and skills across diverse disciplinary domains within the university curriculum. The findings suggest that students who excel in understanding contemporary global issues may also demonstrate proficiency in areas such as self-awareness, historical analysis, mathematical reasoning, communication, art appreciation, science, technology, and ethics.

A probable explanation for these findings is that GEC 3, Contemporary World, provides students with a broad understanding of global challenges, societal dynamics, and cultural perspectives, which are transferable to other academic subjects. Moreover, the themes explored in GEC 3 may intersect with those addressed in other GECs, reinforcing learning outcomes and enhancing academic performance across the curriculum.

GEC 4 Correlation with other GECs

The positive correlations observed between academic performance in GEC 4, Mathematics in the Modern World, and other GECs underscore the interconnectedness of knowledge and skills across diverse disciplinary domains within the university curriculum. The findings suggest that students who excel in mathematical reasoning and problem-solving may also demonstrate proficiency in areas such as self-awareness, historical analysis, communication, art appreciation, science, technology, and ethics.

One possible input for these findings is that GEC 4, Mathematics in the Modern World, provides students with quantitative reasoning skills and analytical tools that are applicable across various academic subjects. Moreover, the themes explored in GEC 4 may intersect with those addressed in other GECs, reinforcing learning outcomes and enhancing academic performance across the curriculum.

GEC 5 Correlation with other GECs

The substantial positive correlations observed between academic performance in GEC 5, Purposive Communication, and other GECs underscore the interconnectedness of communication skills and knowledge across diverse disciplinary domains within the university curriculum. The findings suggest that students who excel in purposive communication may also demonstrate proficiency in areas such as self-awareness, historical analysis, contemporary world issues, mathematics, art appreciation, science, technology, and ethics.

An idea for these findings is that GEC 5, Purposive Communication, equips students with effective communication skills and critical thinking abilities, which are essential for success in various academic subjects and professional contexts. Moreover, the themes explored in GEC 5 may intersect with those addressed in other GECs, reinforcing learning outcomes and enhancing academic performance across the curriculum.

GEC 6 Correlation with other GECs

The correlation coefficients observed between academic performance in GEC 6, Art Appreciation, and other GECs underscore the interconnectedness of aesthetic appreciation and knowledge across diverse disciplinary domains within the university curriculum. The findings suggest that students who excel in art appreciation may also demonstrate proficiency in areas such as historical analysis, contemporary world issues, mathematics, communication, science, technology, and ethics, albeit to varying degrees.

One possible explanation for these findings is that GEC 6, Art Appreciation, fosters critical thinking and cultural appreciation, which are transferable to other academic subjects. Moreover, the themes explored in GEC 6 may intersect with those addressed in other GECs, reinforcing learning outcomes and enhancing academic performance across the curriculum.

GEC 7 Correlation with other GECs

The significant positive correlations observed between academic performance in GEC 7, Science and Technology and Society, and other GECs underscore the interconnectedness of scientific literacy and societal understanding across diverse disciplinary domains within the university curriculum. The findings suggest that students who excel in understanding the interplay between science, technology, and society may also demonstrate proficiency in areas such as self-awareness, historical analysis, mathematical reasoning, communication, and ethics, albeit to varying degrees.

One possible idea for these findings is that GEC 7, Science and Technology and Society, provides students with a critical understanding of the implications of scientific and technological advancements on society, which are transferable to other academic subjects. Moreover, the themes explored in GEC 7 may intersect with those addressed in other GECs, reinforcing learning outcomes and enhancing academic performance across the curriculum.

GEC 8 Correlation with other GECs

The correlation coefficients observed between academic performance in GEC 8, Ethics, and other GECs underscore the interconnectedness of ethical reasoning and moral understanding across diverse disciplinary domains within the university curriculum. The findings suggest that students who excel in ethical reasoning and moral decision-making may also demonstrate proficiency in areas such as self-awareness, historical analysis, contemporary world issues, communication, and scientific literacy, albeit to varying degrees.

The findings show that GEC 8, Ethics, provides students with a critical understanding of moral principles and ethical frameworks, which are transferable to other academic subjects. Moreover, ethical considerations are pervasive in various aspects of human society, intersecting with themes explored in other GECs and reinforcing learning outcomes across the curriculum.

Correlational Analysis of GEC Subjects

The correlational analysis of General Education Courses (GECs) reveals insightful patterns in students' academic performance across diverse disciplinary domains. The summary highlights notable correlations among GEC subjects, ranging from strong to weak relationships, shedding light on potential interdisciplinary connections and overall academic performance trends.

Strongest and Weakest Correlations

The analysis identifies GEC 5 (Purposive Communication) and GEC 7 (Science, Technology, and Society) as having the strongest correlation, indicating a robust relationship between communication skills and scientific literacy. Conversely, GEC 6 (Art Appreciation) and GEC 8 (Ethics) exhibit the weakest correlation, suggesting a minimal association between appreciation of art and ethical reasoning.

Interdisciplinary Connections

Notably, correlations such as GEC 1 (Understanding the Self) and GEC 5 (Purposive Communication), as well as GEC 7 (Science, Technology, and Society) and GEC 1 (Understanding the Self), underscore the interconnectedness of self-awareness, communication skills, and societal understanding. These findings suggest that students who excel in understanding themselves may also demonstrate proficiency in effective communication and critical engagement with societal issues.

Overall Academic Performance

The average academic performance of students across GECs indicates a generally positive trend, with GEC 1 (Understanding the Self) exhibiting the highest average GPA, suggesting above-average performance. Conversely, GEC 7 (Science, Technology, and Society) demonstrates the lowest average GPA, indicating average performance. The overall average GPA falls within the range of "Very Good/Above Average" to "Good/Average," suggesting that students perform satisfactorily across GEC subjects.

The correlational analysis indicates a strong correlation between academic performance in GEC subjects, suggesting a cohesive academic experience for students across diverse disciplines. However, it is essential to interpret these findings cautiously, recognizing the need for further data validation and contextualization. Lateral data gathering and qualitative assessments could complement the quantitative analysis, providing a comprehensive understanding of student performance in GECs.

The correlational analysis offers valuable insights into interdisciplinary connections and overall academic performance trends in GEC subjects, it is crucial to approach the findings as developmental rather than conclusive. Further research and evaluation are necessary to deepen our understanding of student learning outcomes and inform pedagogical practices effectively.

4.0 Conclusion

The correlational analysis of the academic performance of students in General Education Courses (GECs) at the Technological University of the Philippines – Taguig yields valuable insights into interdisciplinary connections and overall performance trends. For the interdisciplinary connections, the study reveals significant correlations between various GEC subjects, indicating interconnectedness across diverse disciplinary domains. Strong correlations, such as those between Purposive Communication and Science, Technology, and Society, highlight the importance of communication skills and scientific literacy in academic performance. In terms of the academic performance trends, students demonstrate satisfactory performance across GEC subjects, with Understanding the Self exhibiting the highest average GPA and Science, Technology, and Society showing the lowest. The average GPA falls within the range of "Very Good/Above Average" to "Good/Average," suggesting a generally positive academic experience. Concerning the strongest and the weakest correlations, Purposive Communication, and Science, Technology, and Society exhibit the strongest correlation, indicating a robust relationship between communication skills and scientific literacy. Conversely, Art Appreciation and Ethics show the weakest correlation, suggesting a minimal association between aesthetic appreciation and ethical reasoning. And, for the implications for curriculum design, the findings underscore the importance of designing a curriculum that fosters interdisciplinary connections and emphasizes critical skills such as communication, scientific literacy, and ethical reasoning. By promoting integration across GEC subjects, educators can enhance student learning outcomes and

prepare them for diverse academic and professional challenges. This study contributes to a deeper knowledge of trends in the academic performance in GEC subjects and can prepare the students for the digital world that is constantly changing.

Based on the conclusions drawn from the correlational analysis, the following recommendations are proposed:

- a) **Enhance Interdisciplinary Learning.** Educators should design curriculum frameworks that encourage interdisciplinary learning experiences, allowing students to explore connections between different GEC subjects. Integrated coursework, collaborative projects, and interdisciplinary seminars can facilitate holistic learning and promote critical thinking skills.
- b) **Promote Communication and Scientific Literacy.** Given the strong correlation between Purposive Communication and Science, Technology, and Society, institutions should prioritize the development of communication skills and scientific literacy across the curriculum. Courses focused on effective communication, research methodologies, and ethical considerations in scientific inquiry can enhance student proficiency in these areas.
- c) **Facilitate Ethical Reflection.** While Ethics exhibits a weaker correlation with other GEC subjects, ethical reasoning remains a vital component of holistic education. Institutions should incorporate opportunities for ethical reflection and moral deliberation into the curriculum, encouraging students to engage with ethical dilemmas and develop principled decision-making skills.
- d) **Continuous Evaluation and Improvements.** To ensure the effectiveness of curriculum design and pedagogical practices, institutions should conduct regular evaluations of student learning outcomes and solicit feedback from stakeholders. Continuous improvement initiatives, informed by data-driven assessments and qualitative insights, can enhance the quality of education and support student success.

In conclusion, the correlational analysis provides valuable insights into the academic performance of students in GEC subjects and highlights opportunities for curriculum enhancement and pedagogical innovation. By fostering interdisciplinary connections, promoting critical skills development, and facilitating ethical reflection, institutions can empower students to thrive in an increasingly complex and interconnected world.

5.0 Contributions of Authors

Lizette Terania: She assumed responsibility for the conceptualization of the study, overseeing the development of its framework and methodology. Furthermore, she conducted the comprehensive collection of pertinent data integral to the research inquiry. Additionally, she crafted and refined the research instrument employed in data acquisition. Lastly, she encoded and proofread the study, ensuring its coherence, accuracy, and scholarly integrity.

Jonathan Daved Dela Cruz: He was assigned the responsibility of designing and conceptualizing the research models, which included developing theoretical frameworks and methodological strategies that were specific to the goals of the study. In addition, he carried out thorough data analysis using sophisticated statistical methods to extract insightful conclusions and meanings from the collected data.

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7.0 Conflict of Interests

The authors declare that there is no conflict of interest.

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Capacity Audit on Disaster Risk Reduction and Management in Basic Education

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Abstract. Vulnerability may be associated with a community's capacity to act and counteract the effects of a hazard by enhancing the community's capacity to reduce risk. With this, the study seeks to assess the school's capacity for disaster risk reduction and management in terms of implementation differences and identify the obstacles and training requirements for DRRM in the Secondary Public Schools of the province of Benguet. The questionnaire was self-designed based on the activities of the four thematic areas, with its validity and dependability subject to verification. The result indicates that the resource capacity of public secondary institutions is moderately established. Regarding capability, there is no significant distinction between resources, knowledge, and talents. With the current School DRRM plan, every school has a disaster risk reduction and management plan, and most have evacuation and contingency plans. The Public Service Continuity plan and the local climate change action plan are present in only nine institutions. With this result, there are still many spaces to be filled, and the DRRM capacity of each public school must be improved. It may affect the school's performance in delivering its main objective to provide a safe and hazard-free environment. It is best to be proactive and ready to ensure that learners and teachers are safe. The result also indicates that public institutions must examine their system and enhance its implementation of the different thematic areas of DRRM; it does not require a complicated framework but a functional and understandable guideline. If DRRM is implemented effectively, it will assure the continuity of education and the safety of students and faculty.

Keywords: Capacity audit; Disaster risk reduction and management; Basic education.

1.0 Introduction

The Philippines faces various natural hazards due to its geographical location, within the Pacific Ring of Fire and the typhoon belt. Hence, there is a significant likelihood that the nation may experience cyclones, volcanic eruptions, landslides, flooding, and earthquakes. Additionally, the Philippines faces certain challenges related to human-induced hazards, including potential incidents of terrorism, civil unrest, structural fires, vehicular accidents, and other related occurrences.

Furthermore, as indicated by the Global Climate Risk Index (CRI) 2021, the Philippines stands out as a country that experiences a high frequency of extreme weather events. Based on the statistical data obtained in 2019, it is evident that the Philippines attained a score of 26.67, representing the lowest score within the timeframe spanning from 2015 to 2019. In the preceding year, the country secured the second position in the index, with a score of 11.17 (CPBRD 2021). According to the CPBRD (2020), the Philippines ranked ninth globally regarding the severity of extreme weather events, as indicated by its score of 20.96 on the 2020 World Risk Index (WRI). The statement suggests a need for improvement by reducing disaster risk.

Disasters are unavoidable; they can have a major or minor effect, depending on the person or the community's resiliency. These vary, especially if they need proper training or exposure. Children and youth suffer most from the effects of hazards, which may be physical or psychological. According to Care (2017), Children suffer the most during disasters because of their inherent social, psychological, and physical weaknesses. The physical sensitivity of children, who experience the worst shock from any calamity, continues to have a significant impact.

The United Nations Office for Disaster Risk Reduction (UNODRR) (2010) reiterates that lowering the risk and impact of disasters will most assist people under thirty. Children and youth are disproportionately affected by disasters in food security, which affects their nutritional status, physical capabilities, psychological well-being, admission to school and quality education, financial aspects, and possible abuses. They are frequently the first and hardest hit when disasters strike. With this, it is important to emphasize the children and youth's rights to be involved in the capability building of the community on DRRM to strengthen the capacities needed for them to survive during and after a calamity. Moreover, it will also acknowledge their effort in building risk reduction and resilience in the community.

Moreover, Save the Children Philippines Calls for Stronger Disaster Preparedness for Kids - Philippines (2019) has urged improving community and school disaster preparedness, noting that children are most at risk for emergency-related illness, injury, and death. In this context, the learners will learn from the adult's actions, a good predisposing factor in visual learning. As Rymanowicz (2015) said, children copy what they listen to and observe from the people they are exposed to with what is referred to as "observational learning." These kids imitate the people they watch most, especially if they admire them. It does not matter whether they are in contact with them, as long as it interests them with their character. It occurs in any place or event.

This study assesses the school's ability to effectively mitigate and manage disaster risks. This initiative aims to enhance the implementation of fundamental components of Disaster Risk Reduction and Management (DRRM) within educational institutions and communities. The objective is to familiarize individuals with protocols and skills that can be utilized before, during, and following a calamitous event. This assertion is substantiated by the declaration made by the Emergency and Risk Management for Academics (ERMA, 2018), which affirms that Disaster Risk Reduction (DRR) endeavors to mitigate the susceptibility and consequences of calamities on educational institutions, emphasizing the paramount importance of ensuring school safety. The mitigation of Vulnerability and reduction of the likelihood of disaster occurrence can be achieved through adequate preparedness among teachers and students. These students possess the ability to educate their family members on pre-disaster, during-disaster, and post-disaster protocols. Consequently, the entire community will acquire knowledge and readiness in the face of any occurrence.

2.0 Methodology

2.1 Research Design

The present study employed a descriptive quantitative research design to assess the implementation of Disaster Risk Reduction and Management in Basic Education in the Province of Benguet. Data was gathered through a survey questionnaire.

2.2 Research Participants

The research was carried out in the province of Benguet, specifically in the main and extension secondary public schools. The study's participants were the School Disaster Risk Reduction and Management Coordinators. However, the school response rate could have been higher, with only 18 out of 59 participants providing feedback, representing approximately 30.50% of the total respondents, which is acceptable (Assessment, 2023). In this study, the participating schools were grouped into three clusters, namely Bokod, Buguias, and La Trinidad, based on the Municipality where their respective schools are situated.

2.3 Research Instrument

The researcher developed the questionnaire and subsequently subjected it to a validation process to assess its reliability and validity. The internal consistency of the measure was assessed using Cronbach's Alpha, yielding a coefficient of .926, indicating a high level of internal consistency. The survey comprised 35 items and was

segmented into three sections according to the subject matter. It was then distributed to the participants for completion.

2.4 Data Gathering Procedure

The researcher sought authorization from the superintendent of the Benguet school division to carry out the study and administer the questionnaire to the secondary public schools. Afterward, the researcher sought authorization from the school principal to distribute the survey questionnaires to the school's Disaster Risk Reduction and Management (DRRM) coordinators.

2.5 Ethical Considerations

The study adhered to ethical protocols when administering the questionnaires and followed the specific instructions set by the division office in administering the questionnaire. All materials were disposed of for confidentiality.

3.0 Results and Discussion

3.1 Level of Capacity in Terms of Resources, Knowledge, and Skills

Table 1. Descriptive statistics of the level of capacity the school

Skills	Mean	Interpretation
Level of Capacity in Terms of Resources	2.93	Moderately Established (ME)
Level of Capacity in Terms of Knowledge and Skills	3.00	Moderately Knowledgeable (MK)
Level of Capacity in Terms of Knowledge	3.15	Moderately Knowledgeable (MK)
Level of Capacity in Terms of Skills	2.84	Moderately Knowledgeable (MK)
Level of Capacity of the School	2.96	Moderately Established (ME)

The data on the capacity of schools in terms of resources, knowledge, and skills is presented in Table 1. The average score of 2.96 indicates a moderate level of establishment and knowledge. It implies that there are prospects for additional enhancement and expansion. A low mean score is a matter of apprehension due to its potential impact on executing safety and security protocols within the school premises. A decrease in perceived safety within their environment can influence learners' performance. In a study conducted by Kibriya et al. (2018), the researchers sought to investigate the influence of school safety on academic performance. The results of their study suggest that the absence of a secure educational setting negatively impacts students' academic achievement in mathematics and reading. Applebury (2023) asserts that safety measures within the school setting yield beneficial outcomes for students as they facilitate social and creative learning development. If learners' basic needs are not adequately fulfilled, they may encounter feelings of discomfort, which could ultimately result in their decision to withdraw from the educational institution. Promoting a safe environment is crucial to cultivating an optimal learning environment. According to a study conducted by Solutions (2022), the foremost objective of protective measures in educational settings is to prioritize the safety of learners, teachers, and other school personnel.

The weighted mean of 2.93, representing the capacity in terms of resources, can be interpreted as moderately established. This observation indicates that public schools possess a certain level of resources, albeit limited, which may affect the effective execution of DRRM initiatives. According to Watt et al. (2014), managing resources involves the organization and efficiently deploying an organization's resources as required. Implementing these resources within the school premises will enhance the efficacy of DRRM initiatives.

Knowledge and skills are closely interconnected, yet they possess distinct characteristics. Knowledge encompasses individuals' understanding, perceived information, practical comprehension of concepts or theories, and awareness of environmental occurrences. Furthermore, knowledge is derived from an individual's social and environmental interactions, acquired through personal experiences and exposure to various sources such as social media, printed media, literature, internet browsing, policies, and guidelines. Additionally, knowledge can be obtained through interactions with lecturers and speakers.

Table 1 also displays the mean score of 3.15 for knowledge, indicating a moderate knowledge level. It implies that educational institutions possess a certain level of knowledge, yet there still needs to be a greater understanding of effective strategies for enhancing and developing their overall capabilities. The research conducted by Bhika and

Pretorius (2019) found that the execution of any project necessitates the involvement of human resources in all activities. The allocation and utilization of resources will significantly impact the project's outcome, either leading to its success or failure. Therefore, it is imperative to possess appropriate human resources for the task, as inadequate team proficiency can pose a significant obstacle to successfully executing such endeavors or initiatives.

Skills refer to the aptitude and competence to proficiently utilize one's acquired knowledge. These skills are derived from an established knowledge base. Acquiring knowledge, encompassing ideas, facts, procedures, and information, is the foundation for developing skills. An individual may possess a comprehensive understanding of various concepts and theories; however, the practical application of this knowledge presents a distinct challenge. According to the data presented in Table 1, the mean score for skills is 2.84, indicating a moderate level of knowledge. When compared to the average knowledge score, it exhibits a lower score. It suggests that more theories must be translated into the practical skills required in Disaster Risk Reduction and Management (DRRM). According to the Surge Advisory (2019), it has been noted that individuals can acquire knowledge about a particular task or skill without necessarily engaging in the practical execution of said task or skill. More than merely knowledge of the procedures and concepts is required; their practical application is also imperative. Furthermore, Clarisse (2023) posited that possessing understanding and knowledge does not necessarily guarantee optimal performance.

3.2 Difference in the Level of Capacity in terms of the Variables Resources, Knowledge, and Skills

The capacity of each secondary public school cluster in Buguias Bokod and La Trinidad in terms of available resources is depicted in Table 2. The mean scores of 2.81, 2.73, and 3.12, interpreted as moderately established, reveal no significant differences in capacity. All three clusters from distinct municipalities were enacted identically. Resource capacities are similar between institutions based on location. Additionally, it can be observed from the table that there is no statistically significant difference in terms of knowledge. Buguias and Bokod exhibit mean scores of 3.23 and 2.77, respectively, which can be interpreted as reflecting a moderate level of knowledge.

On the other hand, La Trinidad demonstrates a mean score of 3.28, indicating a high level of implementation. There exists a slight disparity in the average scores of the indicators; however, this does not necessarily indicate a significant divergence in their implementation. Upon examination of the score, La Trinidad lies on the threshold between moderate and high, suggesting a limited number of indicators in which La Trinidad demonstrates a higher rate, such as coordination or monitoring of students during times of disaster.

Table 2. Test of difference in resources, knowledge and skill according to the municipal school location

Knowledge And Skill	Municipality	Mean	De	Kruskal-Wallis Statistic	P-Value	Pairwise
Capacity Level in terms of Resources	Buguias	2.81	ME	2.624ns	0.269	-
	Bokod	2.73	ME			-
	La Trinidad	3.12	ME			-
Capacity in Terms of Knowledge	Buguias	3.23	MK	2.924ns	0.232	-
	Bokod	2.77	MK			-
	La Trinidad	3.28	HK			-
Capacity in Terms of Skills	Buguias	2.97	MK	1.075ns	0.584	-
	Bokod	2.60	MK			-
	La Trinidad	2.88	MK			-

La Trinidad exhibits a more favorable reception of cellular signals than Buguias and Bokod. Consequently, this disparity impacts the monitoring of students and teachers, a matter that lies outside the purview of the school's ability to regulate the implementation of this indicator. Nevertheless, the researcher posits that the Buguias and Bokod clusters diligently endeavor to oversee their students and employees, irrespective of the obstacles they may encounter.

Furthermore, the findings in Table 2 indicate no statistically significant disparity in skill levels among the three clusters, as evidenced by the mean scores of 2.97, 2.60, and 2.88, which can be interpreted as indicating a moderate level of implementation. The researcher posits that the variation in teacher training and skill enhancement may only occur when there is a collaboration between private partnerships or government agencies to develop the teachers' diverse skills suitable for the particular cluster. Furthermore, there is a prevailing belief that the outcome

will transform over time as the government diligently endeavors to disseminate Disaster Risk Reduction and Management (DRRM) practices within the community.

3.3 Assessment of the Existing DRRM Plans

These plans hold significant importance in Disaster Risk Reduction and Management (DRRM) due to their inherent functionality in times of necessity. These plans possess distinct purposes that the relevant governing body has authorized for implementation. The UNODRR (2010) outlines that disaster preparedness aims to assist school personnel and learners in various disasters, including earthquakes, typhoons, human-induced landslides, chemical spills, bombs, and man-made fire incidents. The objective is to ensure the safety of individuals and minimize the risk of injury, loss of life, and property damage. Table 3 presents the extant disaster risk reduction and management (DRRM) plans implemented by the educational institutions. Planning holds significant importance for individuals, professionals, and organizations alike. According to Curiel (2017), this approach facilitates the achievement of goals and objectives by promoting the efficient utilization of resources and time.

The school's Disaster Risk Reduction and Management (DRRM) plan achieved the highest ranking, with all respondents indicating that they possess a corresponding School Disaster Risk Reduction and Management (SDRRM) plan. One primary factor contributing to the top ranking of the SDRRM plan is its mandatory implementation across all public schools in the Philippines. Furthermore, the plan outlines the programs and activities for the annual Disaster Risk Reduction and Management (DRRM) initiatives. It demonstrates the schools' strong dedication to ensuring the safety of both students and employees despite the financial limitations and other challenges they encounter within their respective regions.

Table 3. Descriptive statistics of the assessment of existing local DRRM plans

	Frequency	Percentage	Rank
Evacuation Plan	15	19.23%	2
School DRRM Plan	18	23.08%	1
Public Service Continuity Plan	9	11.54%	5
Contingency Plans for identified hazards in the schools	15	19.23%	2
Local Climate Change Action Plan	9	11.54%	5
Emergency Plan	12	15.38%	4

The Evacuation Plan and Contingency Plan hold the second position in terms of rank. It is imperative to establish and maintain an evacuation plan that remains in effect throughout the year, ensuring that all individuals, including visitors, possess knowledge of its contents. It will accurately indicate the locations individuals should go to in an emergency. Kerema (2023) defines evacuation as the procedural response in a disaster or emergency. This assistance offers a more efficient and improved secure area access method. Understanding the significance of a contingency plan lies in comprehending the prescribed course of action, the requisite resources that must be mobilized, and the optimal timing for activating the said plan. This measure serves as a strategic planning tool in disaster management. Terrae (2016) asserts that implementing a contingency plan proves to be highly advantageous during periods of calamity. The Contingency Plan can identify potential issues that can be proactively addressed before their occurrence. In a similar scenario, it is understood that it must be supported and strengthened to become more effective, according to Bagolong et al. (2013). The Local Government must strengthen people's fresh outlook, rescue teams, rescue facilities, flood warnings, and evacuation centers to ensure the effectiveness of the early warning system and contingency preparations. By implementing this comprehensive plan, all individuals would possess the necessary knowledge and guidance to effectively navigate situations without the designated point person or organization.

4.0 Conclusion

The performance of an institution can be influenced by its capacity. The conclusions have been derived from the empirical observations and analysis conducted in the study. The responses above were derived from the School Disaster Risk Reduction and Management (DRRM). The resource capacity level in Benguet's public secondary schools indicates a moderate establishment level. The knowledge and skills of human resource personnel have a moderate level of knowledge and skill. Their overall capacity is similar when considering the notable disparities in resources, knowledge, and skills. The responsibility of determining the existing School Disaster Risk Reduction and Management (DRRM) plan lies with the school coordinators. Each educational institution possesses a disaster

risk reduction and management plan, with the majority also implementing evacuation and contingency plans. Educational institutions must formulate a Public Service Continuity plan and a local climate change action plan to be implemented.

These recommendations are derived from the identified gaps in the study's findings. It is imperative to conduct a comprehensive evaluation of the internal capacity of the educational institution, encompassing all staff members. This evaluation should identify individuals with the requisite skills and expertise to fulfill specific service roles effectively. Subsequently, a strategic plan should be formulated, including training potential personnel who can assume the responsibility of training others within the school. One should consider seeking potential collaborative partners such as the Municipal Disaster Risk Reduction and Management (DRRM) Office, Provincial DRRM Office, Office of the Civil Defense, Philippine National Police, Bureau of Fire Protection, and especially parents, as crucial partners. In addition, secondary schools can collaborate with state universities and colleges or private institutions to formulate and implement projects under the National Service Training Program, Disaster Nursing, and Community Health Nursing. It is also recommended that an annual review of plans be conducted and refresher training provided to ensure the comprehensive coverage of all necessary knowledge and skills within the educational institution. This approach should extend beyond the skills mentioned in the survey questionnaires. If plans have yet to be devised, the school administration may opt to incorporate them into the In-Service Training program, thereby ensuring the active participation of all staff members in the planning process. The researcher acknowledges the initial challenges associated with initiating this endeavor, but once commenced and completed, the subsequent task involves annual updates to monitor and enhance its progress. Incorporating funding for capability building into the school budget poses significant challenges. To address this issue, the researcher proposes that the top management form a training team comprising department personnel who can assist the school when necessary.

5.0 Contributions of Authors

The study's author is responsible for the entire research process, which includes data collection, analysis, and work development.

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7.0 Conflict of Interests

The author declares no conflict of interest in the conduct of this research

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Describing the Use of Freedom Wall in Expressing Students' Emotion

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Abstract. This study looked into the use of a freedom wall for students' emotional expression. An explanatory sequential mixed-methods research design was used. The study included 30 Grade 11 HUMSS students from a school in Misamis Oriental. A validated survey instrument was used to collect information on students' demographics and opinions. The Freedom Wall's emotional benefits and challenges were investigated using focus group discussions. The results showed that it was a useful venue for expressive arts, thoughts and quotes, emotional expression, and interactive discussions. Students believed that the freedom wall had a favorable impact on their emotional expression and creativity. Thematic analysis indicated three major emotional benefits: emotional relief, confession of feelings, and starting a conversation. Students' perceptions of the Freedom Wall's use were not significantly different when classified by age; nevertheless, gender variations were observed. Female students are more likely to express their feelings openly, which aligns with prior research on gender and emotional expression. Challenges to its use were discovered, including issues about location and privacy, as well as the requirement for physical maintenance. The study indicated that the freedom wall is important for offering emotional release, serving as a confession wall, and initiating student participation. The study shed light on the Freedom Wall's emotional benefits and problems, giving to a better understanding of its role in encouraging emotional expression in schools.

Keywords: Freedom wall; Students' emotion; Emotion expression; Use of freedom wall; Expression.

1.0 Introduction

As reported by the World Health Organization (Malolos et al., 2021), prior to the 2015 Global School-based Student Health survey, 16.8% of Filipino students aged 13 to 17 had attempted suicide at least once in the previous year. In line with Hippocrates' emphasis on the natural causes of mental health disorders and Aristotle's recognition of the relationship between emotions and physical health, Lawson (2023) emphasizes the significant influence of ideas and emotions on an individual's health (Drcelsig, 2022). Scholarly study has exhaustively investigated the relationship between suppressed emotions and physical health, highlighting the undeniable link between emotional expression and overall well-being.

In the specific setting in one of the schools of the Division of Misamis Oriental, the introduction of a platform known as the Freedom Wall serves as an answer to the requests of the students to have a safe place for them to disclose issues and concerns relating to them. Although there have been no recorded suicide incidents among the students in school, suicidal thoughts are reported to be frequently experienced by them, particularly within a specific Grade 10 section from the previous academic year, who are currently in Grade 11. Understanding the importance of the student's mental health, the school administration worked to establish a platform where students could freely express their thoughts and emotions. A freedom wall in the form of a corkboard with paper strips was put up in the Grades 10 and 11 classrooms. The need for such a platform arises from the understanding

that emotional repression in individuals can lead to various challenges, including difficulties in social connections, decision-making, and mental health issues such as anxiety and stress-related disorders (Drcelsig, 2022).

The purpose of the study was to describe how the students use this platform to express thoughts and feelings that they might be afraid to share to their parents, teachers, or peers for fear of being misunderstood or rejected. Interestingly, thirty (30) of these students have acknowledged struggling with suicidal thoughts, which highlights the significance of offering alternate channels for support and communication. Spending a lot of money or making drastic life-changing efforts to take care of our welfare is not always necessary. Even something as basic as writing can assist in lowering anxiety, stress levels, and depressive symptoms (Diggory, 2021). This can help people decompress, especially today's teens who are more likely to experience anxiety disorders, depression, and suicidal thoughts. Given that writing has been shown to have therapeutic benefits in reducing anxiety, tension, and depressive symptoms (Diggory, 2021), this study tried to explain how the Freedom Wall has developed into an essential platform for support and emotional expression. This study can be helpful in several ways, particularly by offering an early intervention to stop more serious problems with students' mental health from developing later on. It can also be very helpful in raising awareness of mental health issues, giving students a safe place to talk about their feelings, and giving them the confidence to speak up about their mental health.

2.0 Methodology

2.1 Research Design

This study utilized the explanatory sequential mixed-methods research design – from quantitative (phase 1) to qualitative (phase 2), to describe, analyse, and interpret the data gathered. This design helped the researcher describe the use of the freedom wall in expressing students' emotions in terms of the following domains – expressive arts, thoughts and quotes, emotional expression, and interactive discussions. Focus group discussion was also employed to explore the challenges and benefits of freedom walls for students' emotional expression.

2.2 Research Participants

The study was carried out in one of the schools in Medina, Province of Misamis Oriental, Northern Mindanao, Philippines. Medina District is divided into two: North and South. Medina North District is composed of nine ten (10) elementary and two secondary schools and Medina South District has eleven (11) elementary and one secondary schools. The proponent school is a Brigada Eskwela Hall of Famer Awardee and has thirty total number teachers. It has a total of 605 student populations: 418 in Junior High School and 187 in Senior High School. The researcher used a purposive sampling technique in the selection of the study participants. The criteria included the currently enrolled Grade 11 Humanities and Social Sciences (HUMSS) students regardless of age and sex but reported having suicidal thoughts and were the ones who demanded to have someone to talk to and to share their thoughts when they were still in Grade 10. Out of 71 Grade 11 HUMSS students, 30 met the criteria: 18 were females and 12 were males. The researcher only focused on the Grade 11 HUMSS student-respondents who met the criteria to describe how the freedom wall influenced their thoughts, emotional expression, and well-being given that they were experiencing suicidal thoughts.

2.3 Research Instrument

The instrument used in the present study was a researcher-made survey questionnaire which was validated by three experts. The questionnaire was revised incorporating all the validators' suggestions. After this, the revised questionnaire was administered to thirty (30) students other than the actual respondents for pilot testing to assess its reliability. Generated using Cronbach's Alpha reliability test, the questionnaire got a Cronbach's Alpha of 0.7217. Since the Cronbach Alpha value belongs to the acceptable value, the instrument was deemed to have internal consistency in measuring the constructs under study. Specifically, Part I attempted to describe the demographic profile of the respondents such as age and sex. Part II consisted of sixteen (16) items which were in a 4-point Likert Scale (strongly disagree, disagree, agree, and strongly agree) that helped the researcher measure the students' assessment on the utilization of freedom wall in terms of four domains such as expressive arts, thoughts and quotes, emotional expression, and interactive discussions. Each domain consisted of four items. This part also assessed if there is a difference as to the student's age and sex in their utilization assessment when they are grouped based on the domains listed. The domains in the research questionnaire were developed based on the review of existing literature on the Freedom Wall and with the commonly observed topics posted by the students on the Freedom Wall. While the phrase freedom wall may not be widely used, Pogrmic and Derčan (2021)

examine in their article the role of street art in urban space recognition of how street art functions as a medium for expression for people and communities, frequently on public walls and spaces. It talks about how street art in public places can be viewed as an expressive art form. Art has the power to convey people's thoughts, goals, and attitudes. Part III consisted of 18-item interview guide questions that were utilized in the focus group discussion for thematic analysis to get themes about the emotional benefits of providing students the freedom wall for emotional expression and the challenges they experienced in using it.

2.4 Data Gathering Procedure

This study used specific steps to gather the data needed. The researcher surveyed how the respondents assessed their utilization of the freedom wall in expressing their emotions in terms of expressive arts, thoughts and quotes, emotional expression, and interactive discussions. In the phase 2, the respondents underwent focus group discussion. A letter stating the intent of the researcher was attached to the questionnaire for the appropriation of the conduct of the study. Informed consent was requested from the respondents, assuring them of the confidentiality of their responses. The questionnaires were disseminated to the Grade 11-HUMSS class and retrieved after. Using the SPSS, the answers were tallied and presented in tables, analyzed, and interpreted. The six processes of Clarke and Braun's thematic analysis, which were mentioned by Kiger and Varpio (2020), were utilized by the researcher to address problems 4 and 5. These procedures included becoming familiar with the data, creating preliminary codes, looking for and reviewing themes, summarizing, and recognizing themes, and creating the report. After that, the researcher used the interview guide questions to facilitate a focus group discussion in which the respondents were split into two groups of fifteen (15) respondents. In the data analysis, problems 1 and 2 were treated through simple frequency distribution and inferential statistics. Problem 3 was treated through an unpaired 2-sample t-test. For the descriptive analysis, Table 1 presented the weighted mean, and the qualitative description as follows: Very low level 1:00-1.75), Low level (1.76-2.50), High level (2.51-3.25), and Very high level (3.26-4:00)

Table 1. Qualitative interpretation of 4-point likert scale measurements

Scale	Range	Description	Interpretation
1	1.0 – 1.75	SD	Very Low
2	1.76 – 2.50	D	Low
3	2.51 – 3.25	A	High
4	3.26 – 4.0	SA	Very High

Legend: SD-Strongly Disagree, D-Disagree, A-Agree, SA-Strongly Agree

Data were statistically treated utilizing the Statistical Package for the Social Sciences (SPSS). For the qualitative data, the researcher employed thematic analysis to analyze data obtained from the focus group discussion.

2.5 Ethical Considerations

This research study followed ethical guidelines. All the possible risks of harm were discussed before the distribution of the questionnaires. The respondents gave their informed consent and voluntarily participated in the study and were informed that they were free to discontinue participating. The accomplished survey forms and their responses were held with utmost confidentiality and anonymity. Before conducting the focus group discussion, the respondents were asked to respect each other's privacy and keep what was discussed confidential.

3.0 Results and Discussion

3.1 Demographic Profile

Table 2. Demographic profile of the respondents

Variables		Frequency	Percent
Age	16	16	53.3
	17	14	46.7
Gender	Female	18	60
	Male	12	40

The results (see Table 2) show that the respondents were between the ages of 16 and 17, where 53.3% were at the age of 16 and 46.7% were at the age of seventeen. The data revealed an equal distribution of students between the ages of 16 and 17 who use the freedom wall for emotional expression. This shows that all the responders are in the latter stages of adolescence, a time when intense feelings frequently influence people's decisions when urges

arise (Explaining Social and Emotional Changes During Adolescence - Brainwave Trust Aotearoa, 2022). They may feel enthusiastic and in love at this point. And the way individuals communicate their emotions is via art (UNICEF, 2023). Since feelings of love, fury, and desire are at their peak during this period, adolescents need to learn healthy ways to express their emotions. In terms of gender, the total number of participants involved was 60% of females and 40% of males. This only implies that the Grade 11 HUMSS students in that class are dominated by females. The gender disparities existing in this class can be influenced by factors such as individual differences and preferences, gender roles, and community expectations (Granato, 2023).

3.2 Students' Assessment on their Utilization of Freedom Wall *In terms of Arts*

Table 3. Descriptive statistics of students' assessment on their utilization of freedom wall in terms of expressive arts

INDICATOR	MEAN	SD	DESCRIPTION	INTERPRETATION
1. I believe the Freedom Wall has allowed me to express my thoughts and creativity in a meaningful way.	3.4	0.498	Strongly Agree	Very High
2. The Freedom Wall has given me the opportunity to try out a variety of artistic mediums and methods, which has helped me advance in expressive arts.	3.1	0.583	Agree	High
3. The Freedom Wall has played a significant role in helping me feel more creatively free to discuss and explore concepts that might be difficult to express through traditional artistic mediums.	3.1	0.583	Agree	High
4. The Freedom Wall, has improved my comprehension of expressive arts by giving me a place to freely experiment with various artistic elements and express feelings that could be difficult to express through other media.	3.2	0.484	Agree	High
Composite	3.2	0.537	Agree	High

Legend: 1.0-1.75 Strongly Disagree (Very Low); 1.76-2.50 Disagree (Low); 2.51-3.25 Agree (High); 3.26-4.0 Strongly Agree (Very High)

Table 3 presents the students' assessment of their utilization of the freedom wall in terms of expressive arts regardless of age and gender. With a mean score of 3.4 which falls in the very high range, where twelve (12) strongly agreed and eighteen (18) agreed, the data indicates that students find the freedom wall most useful for expressing their ideas and creativity in a meaningful way. The students can post whatever they have in mind, expressing it through drawings, short poems, songs, etc. This implies that the freedom wall in particular offers students a secure and encouraging environment in which they can explore their creativity and express themselves in ways that could be challenging to express in person. Results suggest that the freedom wall is an effective instrument for encouraging students' growth in expressive arts in general in which three students posted drawings such as hearts and flowers and wrote short passages through expressive writing. Corey (2022) asserts that expressive writing encourages the writer to connect with their inner voice and convey their thoughts and feelings without adhering to a formal style or worrying about grammar. These only show that the Freedom Wall has enabled the students to experiment with a wide range of artistic mediums and techniques, feel more creatively free to discuss and explore ideas, and enhance their understanding that emotions can also be expressed creatively through the Freedom Wall. The second, third, and fourth statements fall in the high range which provides more evidence in favor of the conclusion that most students had a positive experience with the Freedom Wall.

In terms of Thoughts and Quotes

Table 4. Descriptive statistics of students' assessment on their utilization of freedom wall in terms of thoughts and quotes

INDICATOR	MEAN	SD	DESCRIPTION	INTERPRETATION
5. I've found that the Freedom Wall is a valuable place to post meaningful quotes that speak to my own introspection.	3.1	0.571	Agree	High
6. I think utilizing the Freedom Wall allows me to share thought-provoking sayings with my peers and promotes reflection.	3.1	0.647	Agree	High
7. I think my opinions and quotations have contributed to the development of an environment in the school where there is an open exchange of ideas and a support for different viewpoints.	3.2	0.568	Agree	High
8. My ideas and quotes are shown on the Freedom Wall, which enables me to communicate significant ideas and expressions to the school community.	3.2	0.610	Agree	High
Composite	3.15	0.599	Agree	High

Table 4 offers an insightful and thought-provoking image of how the Freedom Wall helps students express their emotions through quotes and reflection. The overall mean score of 3.15 and the mean scores for statements 5, 6, 7,

and 8 are all in the High range, suggesting that students have a favorable opinion of the Freedom Wall. This implies that the freedom wall is a useful forum for exchanging thought-provoking quotations that speak to their innermost sentiments and views. The students tend to share bible verses and inspirational quotes which reflect their sentiments and mood. They highly believe that the Freedom Wall serves as a reflective space for their personal thoughts, opinions, and quotations fostering a deeper understanding of oneself. The fact that students' ideas and quotes are shown on the Freedom Wall highlights the platform's effectiveness in enabling the communication of significant ideas and expressions to the school community. This implies that the Freedom Wall serves as a channel for sharing impactful content with a wider audience. Thus, maintaining and potentially expanding the Freedom Wall could continue to foster a positive and stimulating atmosphere within the school. This result is consistent with studies showing the healing value of self-reflection and expressive writing (Mianti et al., 2024). Students can develop greater self-awareness, learn to manage emotions, and negotiate challenging mental environments as they consider and discuss thought-provoking quotes.

With mean ratings of 3.1 and 3.2, respectively, students' perceptions of the freedom wall extend beyond introspection; they also see it as a forum for exchanging insightful quotes with classmates, fostering introspection, and fostering an open dialog. In doing so, the freedom wall fosters these relationships and spreads contemplation and understanding throughout the school community. Although there are disagreements regarding the 5th to 8th statements, the average (3.15) reveals that students generally agree that the Freedom Wall is a useful tool for exchanging ideas and quotations. Disagreements in individual statements highlight areas where the effectiveness of the Freedom Wall might vary among students. These students are hesitant to share their thoughts and prefer not to put them in writing due to privacy concerns. They prefer not to post their thoughts concerning serious issues for their privacy. By addressing these issues, the platform can become more successful and inclusive, better serving the needs and expectations of a wider range of students in the school community.

In terms of Emotional Expression

Table 5. Descriptive statistics of students' assessment on their utilization of freedom wall in terms of emotional expression

INDICATOR	MEAN	SD	DESCRIPTION	INTERPRETATION
9. The freedom wall has given me a great platform to creatively express my emotions and has given me a way to talk about things that would be hard to talk about in more conventional ways.	3.4	0.615	Strongly agree	Very High
10. My involvement with the freedom wall has enabled me to freely express a variety of emotions, which has helped me develop empathy and a sense of community.	3.2	0.568	Agree	High
11. Considering my use of the freedom wall as a tool for emotional expression, I believe it has given me a secure and encouraging environment in which to express both difficult and pleasant feelings, fostering a more compassionate and understanding learning environment.	3.3	0.651	Strongly agree	Very High
12. The freedom wall has given me a platform to express my thoughts and feelings, which has helped to build a sense of community among people who can appreciate and relate to a range of emotional experiences.	3.3	0.651	Strongly agree	Very High
Compoite	3.3	0.621	Strongly agree	Very High

Shown in Table 5 is the students' assessment of their utilization of the Freedom Wall in terms of emotional expression. A positive opinion of the Freedom Wall as a venue for emotional expression is indicated by the mean scores for statements 9, 10, 11, and 12, as well as the overall mean of 3.3, which all fall into the Very High and High categories. The Freedom Wall was seen as a useful instrument for expressing emotions, as evidenced by the total mean of 3.3, which falls into the Very High category. This shows that students think the platform does an excellent job of giving them a place to express their emotions and create communities. Statements 9, 11, and 12 show students' very high assessment of the Freedom Wall's role as these strongly support the idea that the Freedom Wall encourages the students to disclose issues that they find difficult to talk about in person. They strongly believe that the Freedom Wall has given them a secure and encouraging platform in which difficult and pleasant feelings can be freely divulged. Safe and secure, in the sense that they can say whatever they want under anonymity, without fear of being judged and talked about in public. Furthermore, students strongly agreed (mean = 3.3) on the thought that they feel accepted when they express themselves on the Freedom Wall knowing that other students can appreciate and relate to the emotional experiences they have shared. This simply suggests that when students experience a sense of acceptance and belonging in social settings, they are more likely to be open

and honest about their feelings. This helps to foster closeness and intimacy with others and lessen situational ambiguity (Pardede & Kovač, 2023). With the presence of a freedom wall, students tend to go to it and post whatever they have in mind.

In terms of Interactive Dialogues

Table 6. Students' Assessment on their Utilization of Freedom Wall in terms of Interactive Dialogues

INDICATOR	MEAN	SD	DESCRIPTION	INTERPRETATION
13. My involvement with the freedom wall has encouraged me and other students to have interactive conversations by giving us a forum where differing viewpoints can be acknowledged and shared.	3.2	0.551	Agree	High
14. I believe it has been a useful instrument for igniting lively debates on a range of subjects, encouraging participation from the community and scholarly exchange.	3.1	0.571	Agree	High
15. I can now have meaningful conversations and have a better understanding of my friends' opinions because of the freedom wall.	3.3	0.583	Strongly agree	Very High
16. The freedom wall has been extremely important in fostering open dialogue where I feel free to voice my thoughts and participate in productive discussions.	3.1	0.640	Agree	High
Composite	3.2	0.586	Agree	High

Table 6 reveals how important the Freedom Walls are among the students for encouraging interactive conversations. The freedom wall has a very high usage rate of 3.3, indicating that it is quite effective at fostering interactive student conversations. Statement 15 with a mean of 3.3, shows that the students strongly agreed on the idea that they can have meaningful conversations and have a better understanding of their friends' sentiments through the Freedom Wall. This suggests that the freedom wall's attributes, such as its flexibility and anonymity, can encourage polite discussion among students, assisting them in confronting their preconceptions and creating new ones. Consistently, statements 13, 14, and 16 show that the students agreed on the usefulness of the Freedom Wall to create conversations within their group. This only implies that the Freedom Wall encourages greater understanding and relationships among students by giving them a forum to express their individual experiences and points of view. Because of the anonymity and nonjudgmental character of the freedom walls, students may feel more empowered to express their thoughts, which could lead to a more engaged learning environment. Many teenagers use anonymity as a protective shield to avoid being singled out for harassment or cyberbullying. It provides shelter and safety from direct bullying because bullies find it more difficult to obtain enough information about targets when their names are hidden (Kuneff, 2021).

Summary

Table 7. Summary table of all domains

DOMAIN		MEAN	SD	DESCRIPTION	INTERPRETATION
Domain 1	Expressive Arts	3.20	0.537	Agree	High
Domain 2	Thoughts and Quotes	3.15	0.599	Agree	High
Domain 3	Emotional Expression	3.30	0.621	Strongly agree	Very High
Domain 4	Interactive Discussions	3.20	0.586	Agree	High
Overall		3.21	0.586	Agree	High

The emotional expression domain, as indicated in Table 7 conveying the summary results of all four domains, has the highest mean score of 3.3, indicating that students place a high value on the freedom wall's ability to facilitate emotional communication and exploration. Every mean is in the high or very high range, suggesting a broad consensus that the freedom wall is advantageous in every domain. This only implies that the students consider the crucial role of the Freedom Wall in expressing their emotions in terms of expressive arts, thoughts and quotes, emotional expression, and interactive dialogues. Hine et al. (2019) claimed that emotional expression in a social setting promotes beneficial reactions that address people's psychological needs. With the anonymity characteristic of the Freedom Wall, the students communicate their emotions for a variety of reasons, such as getting support and attention from others, asking for empathy, consolation, and comfort, having their feelings validated and given legitimacy, getting guidance, and fostering social bonds and ties.

3.3 Difference in Students' Assessment

Table 8. Test of difference in students' assessment

Variables		Mean	SD	T-values	p-value	Decision	Interpretation
Age	16	3.32	0.444	1.725	0.095	Fail to reject Ho	No significant difference in the students' assessment when grouped according to their age.
	17	3.08	0.269				
Sex	Male	3.04	0.271	2.065	0.048	Reject Ho	There is a significant difference in the students' assessment when grouped according to their gender
	Female	3.32	0.415				

Legend: Tested at Alpha= 0.05 level of significance

Table 8 conveys the significant difference in the student's assessment of their expressive arts, thoughts, quotes, emotional expression, and interactive discussions when grouped according to their age and gender. Since the p-value (.095) is greater than alpha 0.05, results suggest that there is no significant difference in the students' assessments of their expressive arts, ideas and quotations, emotional expression, and interactive dialogues in terms of age. Students' assessment did not significantly alter between the ages of 16 and 17. This only implies that respondents having near ages share the same preferences, sentiments, and values when it comes to the utilization of the Freedom Wall in expressing their emotions. The present study could not establish differences as to respondents' assessment of their Freedom Wall utilization since the involved students are between the ages of 16 and 17. The use of the freedom wall for expressive arts, quotes and thoughts, emotional expression, and interactive discussions does not seem to be significantly impacted by respondents' age, as their self-perception may not change between these near ages (16 and 17). However, concerning gender, the data indicates a notable distinction between the evaluations of these identical categories by male and female students. According to the findings, male and female students had differing perspectives on expressiveness, even if students of various ages (16 and 17) viewed it similarly. In terms of gender, results show that there is a statistically significant difference between the mean scores of male and female students on their assessment of the Freedom Wall evidenced by a p-value of 0.048 which is less than the alpha 0.05. This means that the student's gender has a significant impact on their utilization of the freedom wall for expressive arts, thoughts and quotes, emotional expression, and interactive dialogues. Female students tend to be more expressive and vocal when it comes to conveying their emotions and thoughts to the public. On the other hand, male students tend to be more secretive and suppressive with their emotions for fear of being judged by their masculinity. Gender stereotypes may have prevented males from expressing their true feelings, even while they are filled with powerful emotions (Dekin, 2021). Men and women both feel emotions on an equal basis. However, it can give the impression that males don't experience melancholy at all because it is socially unacceptable for a man to cry when he is down.

3.4 Emotional Benefits of Freedom Wall

Table 9. Themes on emotional benefits of the utilization of the freedom wall

Themes	Sig. statements
1. Emotional relief	It feels good. I feel relieved and my sadness is reduced. I feel relieved when I express or write my feelings on the freedom wall. Posting on the freedom wall can bring a sense of happiness and joy. My feelings were greatly improved by anonymously posting my thoughts. It feels safe for me to express my feelings on the freedom wall. Every time I make a post on the freedom wall, it's as though a weight has been lifted off my shoulders.
2. Confession of feelings	I like confessing my feelings through the freedom wall, and telling what I feel, and it inspires me. I confess my unsaid feelings. I use the freedom wall to convey my emotions that I cannot express and to express my negative thoughts that I cannot share to others. I feel good when I confess my feelings. It is better to understand other people's feelings by confessing their feelings on the freedom wall. I feel comfortable confessing my feelings on the freedom wall anonymously. I want to confess something through the freedom wall that I cannot say in person.
3. Initiate Conversations	I felt good when someone responded to my good morning greeting. I was surprised when someone shared an opinion about my post. I liked reading their responses in which I did not expect that someone will respond on what I have posted. I laughed when I got a funny response on my post.

The thematic analysis yields the common themes of emotional benefits of providing students with the freedom wall for emotional expression as claimed during the focus group discussion. Table 9 revealed the summary matrix of the themes with the corresponding students' responses regarding the emotional benefits of the Freedom Wall. In terms of the emotional relief benefit, one of the respondents felt good whenever she posted on the Freedom Wall which suggests a sense of pleasure or contentment associated with relief. This person feels a sense of lightness and ease after experiencing relief from their emotions. Respondents disclosing a sense of relief indicates a decrease in negative emotions such as sadness. As a result, this reduction of sadness contributes to an overall sense of emotional well-being. The act of self-expression through writing feelings seems to be cathartic for the students not just a feeling of relief but beyond such as feelings of happiness and joy. This implies that the act of posting on the Freedom wall serves as a source of positive emotions for the students, especially since they can post anonymously. The respondents feel a sense of security which contributes to the sense of relief they experience. These responses show that feeling emotionally relieved can result in a range of pleasant feelings, including joy, happiness, and an overall sense of well-being. They also stress the significance of feeling comfortable, being able to express oneself, and being anonymous in promoting emotional release. which is supported by the study of DiMenichi et al. (2019) stating that feeling comfortable in expressing one's emotions is quite comforting and writing about past failures and stressful events boosted mood and reduced cortisol levels. This supports the notion that writing as a technique of externalizing feelings could relieve stress and promote relaxation. This further emphasizes how cathartic writing can be on the freedom wall. The results suggest that writing on the freedom wall to express one's feelings enables the students to work through demanding situations and process their emotions. It can improve their happiness and general well-being to see their feelings on the wall. Little research has been done on the idea that a freedom wall could also be like a confession wall, in which the students can confess their feelings. The emotional advantage of putting their feelings on the freedom wall can be better understood by considering some related concepts. In the study of Rodriguez et al. (2023) it was emphasized that the anonymity feature of the Freedom Wall and the lack of consequences for whatever one has posted encourages the students to confess their feelings. This implies that individuals who are shy type and quiet are encouraged to disclose their feelings, especially if they confess using a pseudonym. Students acknowledged the benefit they got from the freedom wall. The responses shown in Table 9, implied that the freedom wall served as a supportive space for the students to share their experiences. However, one of the respondents disclosed:

"I am not comfortable in expressing my feelings relating to serious ones through the freedom wall because for me it is supposed to be expressed in private."

This response implied that the expression of feelings on the freedom wall depends on the degree of the emotions that they are willing to share, their personal beliefs, and preferences. Due to the widespread use of websites and apps, people can connect, start conversations, and share experiences and confessions. Engagements can also take place with the actual freedom wall. Such a forum is offered by freedom walls, which encourages greater participation in academic conversations and school life. This encourages candid discussion, analytical thought, and a more in-depth grasp of other viewpoints. Because of its open style, freedom walls allow students to express themselves artistically, which can inspire them and encourage greater engagement with a range of subjects. Table 10 revealed some of the statements posted on the freedom wall by the respondents which only imply that in the real world, the freedom wall is a feasible replacement that allows students to freely share their experiences and confessions without being identified.

"Good luck with this coming exam!"

"I feel nervous about the exam."

"Don't take the exam to avoid stress."

"But he is the one you like."

"Sorry, but he wants to become a priest."

"Because your "the-one" is not in school."

3.5 Challenges

Table 10. Themes on the challenges in the utilization of the freedom wall

Themes	Student Response
1. Area of location and anonymity	Ma'am, please put that outside the classroom, preferably in a wider area here in school. We feel embarrassed to post here because it can be known quickly that we are the ones who posted since it is very easy to see it here in the classroom. And they will gossip about it right away.
2. Physical maintenance	Sometimes, there is no space left for me to post on the Wall. The space is very limited. It is easily torn and runs out of the pin.

Although school Freedom Walls present stimulating chances for student participation and expression, there are drawbacks as well. Table 10 revealed the common themes that arise from thematic analysis. The issues presented by an offline school freedom wall differ from those of an online counterpart. Since users cannot see who posted, anonymity is safer when using an online freedom wall. But with a physical school freedom wall, particularly in each classroom, it can be difficult to remain anonymous because you always know who can see what you post there. An article by Barnes (2021) demonstrates how important safe spaces are to help uplift voices and encourage free speech. This translates to choosing a place for the freedom wall where it feels safe and will not be the target of intimidation or harassment. Being close to other staff members or teachers might increase this feeling of security. Students may be able to share their confessions without fear of judgment or recognition if this anonymity feature is applied to real freedom walls. Sharing confessions on a freedom wall can lead to unforeseen relationships and support from others going through comparable circumstances.

In terms of the Freedom Wall's physical upkeep, this poses several difficulties. Currently used in the classroom, the physical freedom walls take the shape of corkboards. The students can utilize the paper and pins whenever they want to post something. Because of this, the materials may experience deterioration, which could lessen their aesthetic value and affect their functionality. This only implies that a freedom wall that is both aesthetically pleasing and easily accessible draws greater attention and promotes involvement. An easily accessible and well-maintained wall promotes an atmosphere of transparency and interaction.

This study revealed how the freedom wall contributes to student well-being. With the gathered data, important realizations and insights were revealed by the study. Firstly, the present study demonstrated how important the freedom wall is in the adolescent phase, especially for students between the ages of 16 and 17. This emphasizes how crucial it is to give emotional expression platforms to meet the demands of this age group.

Second, there were clear gender differences, with female students using the freedom wall more frequently than their male peers. This insight calls for more investigation into the various ways that different genders use and view this kind of expressive platform. Thirdly, the freedom wall offers a variety of advantages, including acting as a space for the confession of feelings, an emotional expression, and a conversation starter, as revealed by the theme analysis through focus group discussions. Giving students creative and expressive outlets has been shown to have significant psychological effects, as seen by the positive outcomes that have been observed, including relief, greater engagement, and motivation. However, the study also highlighted issues, such as privacy problems in public areas and maintenance requirements. To guarantee a beneficial and long-lasting effect, this necessitates a thoughtful approach to the implementation of such platforms, taking practical concerns into account. In a broader context, the findings of this study highlight the significance of establishing environments that promote students' social interaction and emotional expression in a larger context. The freedom could be a tool for promoting a sense of community and assisting students' mental health despite obstacles. Furthermore, it would be important to address concerns that have been brought to light and investigate methods for improving the efficacy of the platform for expression such as the freedom wall. To guarantee a thorough grasp of the influence on a variety of student demographics, more study across age groups is also necessary. The insights gained from this research add to the current discussion on how to foster communication and mental health in learning settings.

5.0 Contributions of Authors

The authors have equally and significantly contributed to the research accomplishment through collaboration.

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The Relationship of Utilization of Digital Payment and Customer Satisfaction among DepEd Employees in Digos City

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Abstract. The research explored the relationship between digital payment utilization and customer satisfaction among DepEd employees in Digos City, with a specific focus on GCash services. It employs a descriptive-correlational design, analyzing responses from 100 DepEd employees to understand this dynamic. The findings indicate a high level of digital payment utilization and customer satisfaction, suggesting that digital payment methods are well-integrated and appreciated by the employees. A significant correlation exists between the frequency of digital payment use and customer satisfaction levels. This emphasizes the need for improved digital payment systems to enhance user experience and security. For instance, simplifying the transactional procedures, enhancing technical protection measures, and increasing the extent of digital payment use are identified as significant predictors of customer satisfaction, highlighting areas for potential improvement to increase satisfaction. The study underscores the importance of continuous innovation in digital payment systems to meet user needs and enhance satisfaction. The implications are particularly relevant for educational institutions transitioning to digital payments, as they can benefit from a more streamlined and secure payment process. The research recommends focusing on transactional efficiency, technical protection, and perceived benefits to improve user satisfaction and adoption rates. By addressing these areas, institutions can ensure that their digital payment systems are more user-friendly and secure, thereby increasing overall satisfaction and adoption. This study highlights the critical role of digital payment systems in modernizing financial transactions within educational institutions. Continuous improvement and innovation in these systems are essential to maintain high levels of user satisfaction and to support the broader adoption of digital payments.

Keywords: Digital payment; Customer satisfaction; Department of education.

1.0 Introduction

Providing superior customer value and satisfaction is essential for a company to be competitive (Deng et al., 2013, cited by Lee et al., 2016). However, Mohammed (2019) stated that customer satisfaction does not guarantee repurchase behavior. Additionally, customer satisfaction is a very poor predictor of future customer behaviors; the fact that a consumer expresses satisfaction does not guarantee that they will continue to utilize a company's goods or services (Tropp, 2019). It is challenging to determine whether the clients are satisfied with the availability of the good or service. Giving customers what they want is therefore not an easy undertaking because other factors must be considered (Khadka, 2017). The necessity to understand customer satisfaction levels is even greater if increasing customer satisfaction results in improved performance (Saeidi et al., 2015).

Customer satisfaction plays an important role in online marketing as it shapes customer loyalty (Oktaviani et al., 2019). It also shown that customer satisfaction is one of the tools for recognizing company goals like increasing sales, increasing profits, expanding market share, and so forth (Tjiptono et al., 2015). A study conducted by Mar'ati

and Sudarwanto (2016) also revealed that quality service and price have a significant influence on customer satisfaction. Customer loyalty is the result of consumer satisfaction and that would lead to repeat purchases in the future. Knowing what customers value most enables businesses to allocate resources for ongoing improvement based on their requirements and desires. According to research using the Customer Satisfaction Index (CSI), a company's profitability and market value can be predicted (Chiu et al., 2011). Consumer satisfaction measures how satisfied or dissatisfied a customer feels after utilizing a product or service and comparing the actual experience to their expectations (Okeke, 2019). Customer satisfaction is crucial because it shows whether your target market approves of what you're doing (Ying, 2020).

E-payment systems (EPS) have been made possible by the digital revolution. With the development of e-banking, e-registration, e-shopping, e-payment, e-learning, e-libraries, etc., this revolution has taken place (Vinitha & Vasantha, 2018). A digital payment system is one in which money is transferred between two parties electronically. The study by Abrazhevich (2001, cited by Vinitha & Vasantha, 2018) revealed that the consumer's perception of e-payment has a vital influence on its actual usage and that it depends on the consumer's attitude. The actual use of digital payment systems is influenced by customer attitudes, the viability of the technology, how the technology is perceived by consumers and other factors. Customer satisfaction can only be increased by better customer service, uninterrupted website download speeds, and the development of strategies for attracting new consumers and keeping existing ones. Furthermore, in their study, Vinitha and Vasantha (2018) concluded that customers' levels of e-payment usage satisfaction, their readiness for adopting a changed lifestyle, and what motivates and demotivates them to use e-payments.

This study aimed to determine the relationships between the utilization of digital payment and its relation to customer satisfaction among DepEd employees in one of the secondary schools in Digos City. The utilization of digital payment was only limited to the usage of GCash payment services.

2.0 Methodology

2.1 Research Design

This study utilized a descriptive-correlational research design. A descriptive research design is a method that collects data to systematically describe a phenomenon, circumstance, or population. More specifically, it helps in providing answers to the research problem's what, when, where, and how questions rather than its why (Chaudhari, 2022). While correlational research design examines the relationships between variables without the researcher being able to manipulate or control any of them. The degree and/or direction of the relationship between two (or more) variables is reflected in a correlation (Bhandari, 2022). In this study, descriptive research design was used to describe the level of utilization of digital payment and customer satisfaction. While correlational research design was used to measure the relationship between utilization of digital payment and customer satisfaction.

2.2 Research Participants

The respondents of this study were the DepEd employees of Digos City. The researchers employed a purposive sampling technique in selecting the respondents. Purposive sampling refers to several non-probability sampling procedures where units are chosen because they have the qualities that you need in your sample. In other words, in purposive sampling, units are chosen on purpose (Nikolopoulou, 2022). More specifically, the researchers selected 100 respondents who are employees of DepEd in Digos City.

2.3 Research Instrument

The study utilized an adapted research survey questionnaire for utilization of digital payment from (Kim et al., 2010) in their study "An empirical study of customers' perceptions of security and trust in e-payment systems" with a Cronbach alpha result of 0.97, comprised of six indicators, and has three to six items per indicator. An adapted research survey questionnaire for customer satisfaction from (Tella & Abdulmumin, 2015) in their study "Predictors of Users' Satisfaction with E-payment System: a Case Study of Staff at the University of Ilorin, Nigeria" with a Cronbach alpha result of 0.93, comprised of seven indicators, and has four items per indicator. Moreover, the survey questionnaire was subjected to reliability and validity tests.

2.4 Data Gathering Procedure

In gathering the information needed for the study, the researchers adhered to proper procedures to collect data from the respondents. The researchers asked permission from the Graduate School Dean to conduct the study. After that, the researchers asked for approval from the head of the office of the chosen institution. Then, the researchers selected 100 respondents for the study according to the set inclusion criteria and by utilizing a purposive sampling technique. The researchers sent a letter to the identified respondents, asking for their participation in the survey. The researchers then created the survey questionnaire using Google Forms, and the link to the Google Form was sent to the respondents' email accounts.

2.5 Ethical Considerations

In the conduct of the study, ethical considerations were observed. In addition, the study complied with the ethical standards by the UIC-REC (University of the Immaculate Conception-Research Ethics Committee) as such participation of the respondents was completely voluntary and they were treated with the utmost respect, their concerns were immediately addressed, their personal information obtained were treated with the utmost confidentiality, and they were given the full freedom to withdraw their participation from the survey in the event of any inconvenience. Additionally, the researchers made sure that the survey questionnaire did not contain any degrading, discriminating, or foul language; careful data collection to avoid gathering irrelevant data; and extra precautions to preserve respondents' well-being. The researchers strictly adhere to the principles of privacy and confidentiality of the information governed by the Data Privacy Act of 2012 of the Philippines (Republic Act 10173). The researcher assured also the respondents that the study's findings would only be used for academic and educational purposes.

3.0 Results and Discussion

3.1 Demographic Profile of Respondents

Table 1. Descriptive statistics of respondents' profile

Profile	Frequency	Percentage
Age		
21-30	37	37
31-40	31	31
41-50	31	31
51-60	1	1
Sex		
Male	32	32
Female	68	68
Type of Employment		
Teaching	89	89
Non-teaching	11	11

As can be seen in Table 1, the majority of the respondents belong to the 21 to 30 age group, with a total number of thirty-seven respondents, representing 37% of the respondents, suggesting a positive trend toward digital payment adoption. While 31 respondents belong to the 31 to 40 age bracket, representing 31% of the respondents, this result indicates varying levels of familiarity with the technology. Similarly, 31 respondents belong to the 41 to 50 age bracket, also representing 31% of the respondents, connoting varying levels of ease with the technology. Additionally, 1% of the respondents belong to the 51 to 60 age bracket, highlighting potential challenges in ensuring widespread adoption across all age groups. Most of the respondents are female, with a total of sixty-eight (68) respondents, representing 68% of the total, whereas males total thirty-two (32) respondents, representing 32%. This result suggests that gender-specific preferences and barriers must be considered to maximize engagement. On the other hand, most respondents belong to the teaching category, totaling eighty-nine (89) respondents and representing 89%. Meanwhile, 11 respondents are non-teaching, representing 11%. This indicates that the findings are more reflective of the former's experiences, necessitating tailored training and promotional efforts.

3.2 Utilization of Digital Payment

Table 2. Descriptive statistics on utilization of digital payment

Indicators	Mean	SD	Description
Transaction Procedures in Eps	4.1	0.36	High
Technical Protections in Eps	4.02	0.43	High
Security Statements in Eps	3.97	0.41	High
Perceived Security in Eps	3.9	0.52	High
Perceived Trust in Eps	3.87	0.44	High
Extent of Eps Use	3.98	0.45	High
Overall Mean	3.99	0.62	High

Presented in Table 2 are the ratings of the respondents on the level of utilization of digital payment in terms of transaction procedures in eps, technical protections in eps, security statements in eps, perceived security in eps, perceived trust in eps, and extent of eps use. The level of utilization of digital payment has an overall rating of 3.99 which is described as High. This high level of utilization suggests that digital payment methods are frequently used and well-integrated into the transaction procedures within the organization. The results align with the findings of Jiang et al. (2018) and Prastyarningsih et al. (2014), which assert that the success of a brand's services or goods is indicated by its significant impact on consumers and notable features that encourage utilization and spending. Transaction procedures in eps obtained the highest mean among the indicators of utilization of digital payment with a 4.1 category mean which is described as High, indicating that the respondents find these procedures highly efficient and user-friendly. This highlights the importance of streamlined transaction processes in fostering the adoption and continued use of digital payment systems. On the other hand, perceived trust in EPS received the lowest mean score among the indicators, at 3.87, although still described as high. This suggests that while trust in the security and reliability of digital payment systems is generally strong, it is the aspect that requires the most attention to further enhance user confidence.

3.3 Customer Satisfaction

Table 3. Descriptive statistics on customer satisfaction

Indicators	Mean	SD	Description
5.1 Perceived Security	3.9	0.5	High
5.2 Perceived Speed of E-Payment	4.12	0.43	High
5.3 Perceived Ease Payment	4.09	0.42	High
5.4 Convenience	4.14	0.38	High
5.5 Anonymity	4.04	0.40	High
5.6 Traceability	3.88	0.45	High
5.7 Satisfaction Of E-Payment System	3.97	0.44	High
Overall Mean	4.02	0.61	High

Presented in Table 3 are the ratings of the respondents on the level of customer satisfaction in terms of security, speed of e-payment, ease of payment, convenience, anonymity, traceability, and satisfaction with the e-payment system. The level of customer satisfaction has an overall rating of 4.02 which is described as High. This result means that customer satisfaction is often experienced by the Deped employees in Digos City. This high level of satisfaction supports the conclusions of Tella and Abdulmumin (2015), who identified perceived ease of payment as a key determinant of satisfaction. Additionally, the results align with Cabanillas et al. (2018), who found that ease of use is a crucial factor in technology adoption and customer satisfaction. Among the various indicators of customer satisfaction, convenience received the highest rating, with a mean score of 4.14, suggesting that users highly value the convenience offered by e-payment systems. Conversely, traceability received the lowest rating, with a mean score of 3.88, although it still falls within the "High" category. These findings imply that while all aspects of the e-payment system are generally well-received, there is a particular appreciation for the convenience it offers and a relative area for improvement in traceability. This highlights the importance of focusing on these factors to enhance overall user satisfaction and potentially improve the adoption rates of e-payment systems among employees.

3.4 Relationship between Utilization of Digital Payment and Customer Satisfaction

The findings from Table 4 indicate a significant relationship between the utilization of digital payment and customer satisfaction. Each indicator of digital payment utilization—Transactional Procedures in EPS ($r=.47$,

$p < .05$), Technical Protection in EPS ($r = .59$, $p < .05$), Security Statements in EPS ($r = .60$, $p < .05$), Security in EPS ($r = .46$, $p < .05$), Trust in EPS ($r = .55$, $p < .05$), and Extent of EPS Use ($r = .56$, $p < .05$)—shows a positive correlation with customer satisfaction. This implies that as the utilization of digital payment systems increases, customer satisfaction also improves. This finding supports those of Jiang et al. (2018) and Prastyarningsih et al. (2014), which assert that positive user feedback demonstrates the effectiveness of digital payment systems. Furthermore, the success of a brand's services or goods is significantly impacted by consumer satisfaction and the notable features of these digital payment systems that encourage utilization and spending. This underscores the importance of enhancing digital payment systems to boost customer satisfaction and overall business success.

Table 4. Correlation analysis between variables

Indicators Paired With Customer Satisfaction	r	p-value	Remarks
Transactional Procedures in Eps	.47	.00	Significant
Technical Protection in Eps	.59	.00	Significant
Security Statements in Eps	.60	.00	Significant
Security in Eps	.46	.00	Significant
Trust in Eps	.55	.00	Significant
Extent of Eps Use	.47	.00	Significant

*Significant at .01 level

3.5 Predictors of Customer Satisfaction

Table 5. Regression analysis of predictors of customer satisfaction

Indicators Paired with Customer Satisfaction	B	p-value	t	Remarks
Transactional Procedures In Eps	.22	.01	2.71	Significant
Technical Protection In Eps	.33	.00	3.56	Significant
Security Statements In Eps	.15	.21	1.28	Not Significant
Security In Eps	-.19	.07	-1.83	Not Significant
Trust In Eps	.12	.28	1.09	Not Significant
Extent of Eps Use	.34	.00	3.82	Significant
$r^2 = .55$				
$p = .00$				
$F = 19.33$				

The data in Table 5 demonstrates that among the six indicators of digital payment utilization, only transactional procedures in EPS, technical protection in EPS, and the extent of EPS use significantly predict customer satisfaction among DepEd employees ($p < .05$). This implies that improving these aspects can directly enhance customer satisfaction. Specifically, the beta coefficients of .22, .33, and .34 suggest that each unit improvement in transactional procedures, technical protection, and the extent of use would result in respective increases in customer satisfaction by .22, .33, and .34 units. Conversely, the other three indicators—security statements in EPS, security in EPS, and trust in EPS—do not significantly influence customer satisfaction on their own ($p > .05$). These indicators likely require the support of the more impactful factors to enhance customer satisfaction, indicating an interdependence among the variables. The r^2 value of .55 indicates that 55% of the variation in customer satisfaction can be explained by the combined influence of the six indicators, leaving 45% of the variation attributable to other factors not covered in this study.

These findings support the research by Junadi and Sfenrianto (2015), emphasizing that security is crucial in the digital payment experience. Additionally, they align with Xiao et al. (2020), highlighting that technical protection, including privacy, stability, and integrity, is essential for creating trust and security in electronic payment systems. This implies that enhancing customer protection regarding privacy concerns can further encourage the adoption of digital payments. However, the study's findings contradict Oney et al. (2017), who assert that trust in EPS is paramount for increasing the use of electronic systems. In this study, trust in EPS did not have a significant relationship with customer satisfaction, suggesting that other factors like transactional efficiency and technical protection play more critical roles in influencing satisfaction among DepEd employees.

4.0 Conclusion

The study covered 100 DepEd employees working in one secondary school in Digos City. Generally, the level of utilization of digital payment, as assessed by the DepEd employees, is high. This indicates that all domains of digital payment utilization are often employed, but not to a very high degree, suggesting that there is still room for improvement in digital payment utilization. Similarly, the level of customer satisfaction, as assessed by the DepEd employees, is high. This means that all domains of customer satisfaction are frequently experienced, though not exceptionally, indicating that customer satisfaction also requires further enhancement.

The study found a significant relationship between the utilization of digital payment and customer satisfaction. Specifically, this relationship holds for all domains of digital payment utilization examined in this study, which include transaction procedures in EPS, technical protections in EPS, security statements in EPS, perceived security in EPS, perceived trust in EPS, and the extent of EPS use. Among these indicators, only transactional procedures in EPS, technical protection in EPS, and the extent of EPS use could significantly predict customer satisfaction individually. This implies that improvements in these areas will result in increased customer satisfaction. Conversely, the other three indicators—security statements in EPS, perceived security in EPS, and perceived trust in EPS—require the support of the other indicators to influence customer satisfaction effectively.

Furthermore, only 55 percent of the variation in customer satisfaction can be attributed to the combined influence of the six indicators of digital payment utilization examined in this study. The results conform to the Expectancy Disconfirmation Theory, which posits that expectations and perceived performance together determine post-purchase satisfaction. In this study, the expectations and perceived performance relate to the utilization of digital payment (the independent variable), while post-purchase satisfaction pertains to customer satisfaction (the dependent variable). The research confirmed that higher utilization of digital payment leads to greater customer satisfaction, aligning with the findings of Segawa (2018), which revealed a substantial positive relationship between the use of electronic payments and customer satisfaction.

5.0 Contributions of Authors

All authors were involved in the conceptualization of the study, Author 1 was involved in the research design, Author 2 conducted the data analysis, Authors 3 and 4 were involved in the data gathering and the finalization of the manuscript, and Author 5 was data gathering and contributed to the revision.

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7.0 Conflict of Interests

The authors assert the absence of any conflicts of interest about the completion and the publication of this manuscript.

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Communicative Abilities of Pupils as Enhanced by Social Media

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Abstract. This study aimed to determine the communicative abilities of pupils as enhanced by social media. The researcher applied the descriptive-correlational design and considered the 854 Grade 1 pupils in public and private schools as the respondents of the study. The researcher utilized a standardized questionnaire in communicative abilities of pupils as enhanced by social media. She employed the percent, weighted mean, multiple regression analysis, and Mann-Whitney U Test for treating the data. The study revealed that the communicative abilities of pupils in English was enhanced due to the following factors: (a) the parents educational level are college graduate, (b) the learners frequently visited social media sites; "YouTube", "Facebook", and TikTok", (c) the learners frequently view television/ YouTube videos with parental guidance. Moreover, it was revealed that the parents' and learners' profile is significantly related to the level of ability in communicating in English. The study also found out that the parents' and teachers' perceptions on the learners' level of ability in communicating in English is significantly different. The study came to the conclusion that pupils' proficiency in English was improved by parents' educational background, the language used at home, watching both educational and non-educational videos, and using social media under parental supervision.

Keywords: Social media; Grade 1 pupils; Learner's profile; Communicative abilities.

1.0 Introduction

Learning a language starts within the comfort of a home. Parent's involvement in teaching the English language serves as a step towards promoting literacy and communication among children. Given that English is the world's standard language, children should be given the opportunity to learn it at a young age. Although learning a language is influenced by social environments such as home, school, and community, with the advent of technology and the Internet nowadays, children are exposed to large quantities of English language through social media.

All generations, including the youngest members of society, use social media, which has emerged as a significant communication tool. As ICT is incorporated into classrooms more and more, social media is changing the way that primary pupils learn. Additionally, youth utilize social media as a continuation of their offline and in-person interactions to have fun, establish and maintain relationships, share and find hobbies, explore identities, and strengthen family ties. Gulzar et al. (2022) affirms that social media can be utilized for a wide range of activities, such as emailing, speaking, learning, exchanging knowledge, and messaging. So far, social media provides authentic learning experiences even outside the halls of the classroom (Aljarrah et al., 2022) because it provides the audience with more exposure to socializing among friends, families, teachers, and even English native speakers (Yunus et al., 2019). Although the most used social media among teenagers is Facebook, YouTube is the most used social media among kids according to Pew Research Center survey. It was found that children used YouTube for entertainment such as watching videos.

Armstrong (2022) revealed that 83% of children ages 3-17 use YouTube. YouTube is a useful audiovisual resource for pronunciation practice since it offers sound in addition to recordings or movies (Andini & Zaitun, 2022). The language that learners frequently hear in the videos aids in their practice of accurately pronouncing English words. These examples come in well-crafted audio and visual compositions that appeal to the learners' interests, which is why they want to watch them again and over again (Purwanti, 2022). Other studies have looked at learning words to languages by watching movies on television and even videos online through YouTube and other media, and having access to these encourages kids to learn a foreign language, even if it isn't frequently used around them (Al-Nofaie, 2020).

Furthermore, watching educational programs in YouTube like Dora the Explorer, Blue's Clues, and Arthur is beneficial to children who are between 6 and 30 months old in terms of acquiring greater vocabulary as well as higher expressive language scores. In addition, the child's exposure to social media helps learners improve their comprehension and communication in English since these videos or programs are English-based in content.

Movies, videos, and online games, whether educational or non-educational, are available at the click of a button, and English-speaking countries dominate the production of the most famous content (Chavez et al., 2023). Research conducted in Iran by Ebadi et al. (2023) demonstrates that children's acquisition of the English language is significantly influenced by their engagement in activities within the home environment, such as watching movies and videos. This study emphasizes that the primary source of English language learning extends beyond the conventional domains of home and school to include the expansive realm of online platforms. Notably, social media emerges as a pivotal resource for language acquisition in contemporary contexts.

Studies caution parents about the drawbacks of digital media, but some educational TV shows or websites are valuable (Radich, cited in Futral, 2018). Research often looks at college students' speaking abilities related to social media (Mufta, 2022). This study focuses on Grade 1 pupils, examining their exposure to social media and their parents' educational background and home language, which may affect their speaking skills. While some studies focus on social media's role in academic writing (Ceniza, 2023), this one looks at how it impacts English communication skills at a young age.

2.0 Methodology

2.1 Research Design

The research design is descriptive- correlational and comparative survey. It identified the profile of the parents in terms of educational attainment, family income, and language used at home; and described the profile of the learners in terms of social media sites most visited, time spent on using social media, frequency of television viewing, and viewing of social media with parental guidance, and presented the level of ability of the learners in communicating in English. Furthermore, the study could be considered as comparative since the teachers' and parents' perceptions of the children's ability to speak the language were compared.

2.2 Research Participants

The respondents of the study were the 854 Grade 1 pupils belonging to private and public schools in Dumaguete City, Negros Oriental, Philippines. There were 1,139 Grade 1 pupils and 75% of them which is 854 were taken as samples. Using systematic sampling technique, every 2nd pupil in the list was the respondents.

2.3 Research Instrument

The researcher made use of a standardized questionnaires for the parents and teachers. The questionnaire is standardized because the indicators on communication abilities is based on the performance standard for Grade 1 under Oral Language Domain of the K-12 English Curriculum Guide. Part I of the parents' questionnaire consists of the disclosure statement that serves as adequate evidence of informed consent by the participants. Part II covers the profile of the parents. Part III covers the profile of the learners. Lastly, Part IV of the parents' questionnaire is the identification of the learners' ability to communicate in English. On the other hand, the second questionnaire is for the teachers of the learners. It consists of two parts: the first part is the disclosure statement, and the second part is the identification of the learners' ability to communicate in English.

2.4 Data Gathering Procedure

The researcher observed proper protocols in gathering the data. A letter requesting permission to conduct the study is addressed to the Schools Division Superintendent of Dumaguete City, and to the Administrators of the Private Schools with the endorsement of the university's dean of the graduate school. The request was delivered to the school principals and the appropriate pupil advisers after being signed and authorized. The researcher discussed the significance of the study and its objective with the teachers and parents during distribution. After the respondents answered to the questions, the questionnaires were collected. The results were totaled, analyzed, and interpreted using MS Excel and Megastat software.

2.5 Ethical Considerations

Throughout the course of the study, research ethics was upheld. The Ethical Committee of Foundation University Research Office was consulted for ethical approval. Furthermore, prior to the study's execution, informed consent was obtained from each participant. The right to self-determination, secrecy, and anonymity, as well as the advantages and dangers of the study, were clearly emphasized and explained to the respondents.

3.0 Results and Discussion

3.1 Profile of the Parents

In Terms of Educational Attainment

Table 1. shows the data on the profile of the parents in terms of educational attainment. As shown in the table, 33% of the mother's and 30% of the father's educational attainment falls under "college graduate". These findings indicate that the majority of the respondents are college graduates. Furthermore, the data reflect the percentage of the mother and father's educational attainment. The mothers' educational attainment for "college graduate" had a percentage of 31.50, and "master's degree" had "1.52" which will sum up to 33%, while the fathers' educational attainment for "college graduate" had 28.69 and "master's degree" had 1.87, both of which can be sum to 30%.

Table 1. Descriptive statistics of the profile of the parents in terms of educational attainment (n = 854)

Educational Attainment	Mother		Father	
	Frequency	Percentage	Frequency	Percentage
Elementary Level	61	7.14	66	7.73
Elementary Graduate	40	4.69	31	3.63
High School Level	96	11.24	105	12.29
High School Graduate	187	21.90	194	22.72
College Level	188	22.01	197	23.07
College Graduate	269	31.50	245	28.69
Master's Degree	13	1.52	16	1.87
Total	854	100.00	854	100.00

The findings showed that majority of the respondents are college graduates. Educational attainment is one of the factors that affect children's language learning in English because parental influence is significant in the family, and learning a foreign language may be influenced by their parents to a greater or lesser extent (Zhou, 2020). As such, prior studies have shown that environmental factors like parents having completed more schooling are more likely to provide their children with greater possibilities to become proficient in the English language (Le et al., 2018). Thus, the educational background of parents has a big impact on what their kids will learn in the future. Indeed, an educated parent can make a substantial contribution to their child's learning process, particularly when it comes to learning English. It can be supposed that parents who have higher education are better able to converse in English and actively assist with their child's academic work.

In Terms of Monthly Income

Table 2 presents the profile of parents in terms of monthly income. It shows that 58% of them have a "low income" classification for a family of five. It has been estimated that a family of five needs at least PhP 9,520 per month to meet their basic food requirements (Philippine Statistics Authority, 2018). The data in Table 1.2 further reflect the percentage of the parents' family income. The results indicate that the income cluster "poor" had a percentage of 18.62, while the "low income" had 38.99, which can be sum up to 58%.

Table 2. Descriptive statistics of the profile of parents in terms of monthly income (n = 854)

Income Cluster	Range	Frequency	Percentage
Poor	Less than ₱9,520	159	18.62
Low Income	Between ₱9,520 – ₱19,040	333	38.99
Lower Middle Income	Between ₱19,040 – ₱38,080	195	22.83
Middle Income	Between ₱38,080 – ₱66,640	125	14.64
Upper Middle Income	Between ₱66,640 – ₱114,240	34	3.98
Upper Income	Between ₱114,240 – ₱190,400	1	0.12
Rich	At least ₱190,400	7	0.82
Total		854	100.00

This displays that most of the learners' family belongs to low income classification. The Philippines is a developing nation that has high rates of low levels of both education and poverty. Despite public schools' poor academic standing, a lot of low-income families send their kids there because of free education (Garcia & de Guzman, 2020). On the one hand, Alam (2018) asserted that parents can engage tutors to help their kids do better in English if they have a bigger family income. Those with poor wages usually find it difficult to provide a stable home environment for their children that fosters learning. A secure family can be able to give more, particularly in the case of schooling demands.

In Terms of Language Used at Home

Table 3 illustrates the data in terms of language used at home. Data reveal that 87% “always” used Cebuano, 40.28% “sometimes” used English, and 11.12% “seldom” used Tagalog. Based on the data, Cebuano has a verbal description of “always”, which implies that most of the respondents used Cebuano language when communicating with their children.

Table 3. Descriptive statistics of the profile of the parents in terms of language used at home (n = 854)

Language Used at Home	Mean	Verbal Description	Percentage
English	3.31	Sometimes	40.28
Tagalog	2.34	Seldom	11.12
Cebuano	4.56	Always	87.47

Legend: 4.21 – 5.00 Always, 3.41 – 4.20 Frequent, 2.61 – 3.40 Sometimes
1.81 – 2.60 Seldom, 1.00 – 1.80 Never

It was found out that most of the respondents used Cebuano language when communicating with their children. People in the Philippines speak 183 different languages, making it a linguistically diverse nation. According to the country's constitution, regional languages must be taught as auxiliary languages in the areas where they are spoken, with English and Filipino serving as the official languages (Official Gazette, n.d.). In particular, Eberhard et al. (2019) concedes that there are 15,900,000 Cebuano speakers in the Philippines, the majority of whom reside in the regions of Central Visayas, Southern Leyte, and Northern and Southern Mindanao. Besides, Dreisbach and Demeterio III (2020) reported 9,125,637 individuals identified as ethnically Cebuano in the 2016 Philippine Statistics Authority census, with the Cebuano language serving as their mother tongue. Since local languages in the Philippines are spoken in the neighborhood and at home, and the respondents are more fluent in the vernacular, then it is safe to say that they have always spoken the Cebuano language at home.

3.2 Profile of the Learners

In Terms of Social Media Site Most Visited

Table 4 portrays the profile of learners in terms of the social media sites most visited. As shown in the table, YouTube is the most “frequently” visited social media site (59.60%), followed by YouTube Kids (46.49%), then Facebook (44.73%), and TikTok (36.65%). As revealed, these four social media sites are the most visited by the learners, YouTube, YouTube Kids, Tiktok, and Facebook, respectively.

Table 4. Descriptive statistics of the profile of the learners in terms of social media site most visited (n = 854)

Social Media Sites	Mean	Verbal Description	Percentage
1. YouTube	3.85	Frequent	59.60
2. YouTube Kids	3.44	Frequent	46.49
3. Tiktok	3.01	Sometimes	36.65
4. Facebook	3.12	Sometimes	44.73
5. Messenger	3.15	Sometimes	45.32
6. Roblox	2.32	Seldom	20.61
7. Instagram	1.61	Never	7.61
8. Twitter	1.36	Never	2.93
9. Pinterest	1.35	Never	2.81
10. Viber	1.35	Never	3.16

Legend: 4.21 – 5.00 Always, 3.41 – 4.20 Frequent, 2.61 – 3.40 Sometimes
1.81 – 2.60 Seldom, 1.00 – 1.80 Never

This depicts that YouTube is the most visited social media site by the learners. In recent years, children and their families all across the world have become increasingly familiar with YouTube and YouTube Kids. According to Temban et al. (2021), children have been watching videos online on these two sites. YouTube is by far the most popular and often frequented website among kids. To be specific, Armstrong (2022) revealed that 83% of kids between the ages of 3 and 17 use it. Moreover, Temban et al. (2021) stated that YouTube is an entertaining software for children that offers a world of learning opportunities.

In Terms of Time Spent in Using Social Media

Table 5 demonstrates the profile of the learners in terms of time spent using social media. The data show that in non-educational videos, PAW Patrol is “sometimes” watched by the learners (34.19%), followed by “Masha & the Bear” (28.34%). In terms of educational videos, “Kids Learning Tube” is “sometimes” watched by the pupils (30.21%). The data also reveal that a portion of the respondents’ time is spent exploring the different educational and non-educational programs. Hence, it indicates that the learners spent a greater amount of time using social media.

Table 5. Descriptive statistics of the profile of the learners in terms of time spent in using social media (n = 854)

Social Media Sites	Mean	Verbal Description	Percentage
Educational Videos			
1. Ted-Ed	2.03	Seldom	10.42
2. SciShow Kids	2.02	Seldom	10.42
3. BrainPOP	2.00	Seldom	9.72
4. Bright Side	2.17	Seldom	11.59
5. Art for Kids Hub	2.32	Seldom	14.75
6. T-Series Kids Hut	2.14	Seldom	12.88
7. Netflix Jr.	2.35	Seldom	19.67
8. Alphablocks	2.36	Seldom	20.37
9. Kids Learning Tube	2.61	Sometimes	30.21
Composite	2.22	Seldom	15.56
Non-Educational Videos			
10. Rugrats	2.22	Seldom	21.66
11. Blue’s Clues & You	2.60	Seldom	27.52
12. PAW Patrol	2.98	Sometimes	34.19
13. Sponge Bob Square Pants	2.73	Sometimes	24.71
14. Peppa Pig	2.74	Sometimes	27.52
15. Sesame Street	2.23	Seldom	17.56
16. Masha & the Bear	2.71	Sometimes	28.34
Composite	2.60	Seldom	25.93

This shows that in terms of non- educational video, PAW Patrol is sometimes watched by learners and Kids Learning Tube is also sometimes watched by them for educational videos. Nowadays, watching (or using a screen) has become a typical early childhood pastime. Children between the ages of two and five often watch television or videos for three (3) hours longer each day (Gunarti et al., 2023). In the study of Futralan (2018), it was discovered that children who watch and listen to various educational TV and digital media programs may mimic the words,

phrases, and short sentences they hear. In the same manner, Makananise and Madima (2020) also pointed out that imitation helps students become more proficient.

In Terms of Frequency of Television and Social Media Viewing with Parental Guidance

Table 6 reflects the profile of the learners in terms of frequency of television and social media viewing with parental guidance. The data show that learners “frequently” view television and social media sites with parental guidance. As shown, 69.44% of the learners “frequently” view television/ YouTube videos and 60.77% “frequently” view social media sites both with parental guidance. This suggests that parents see parental mediation as a crucial component of their child's media exposure.

Table 6. Descriptive statistics of the profile of the learners in terms of frequency of television and social media viewing with parental guidance (n = 854)

Social Media Sites	Mean	Verbal Description	Percentage
1. Social Media Sites	3.67	Frequent	60.77
2. Television/ YouTube Videos	3.93	Frequent	69.44

This reveals that learners view television and social media “frequently” with parental guidance. This suggests that even while many children are adept tech users even at a young age, the respondents see parental mediation as a crucial component of their child's media. One reason for watching with kids is that co-viewing activities can give kids' media usage a social context and give parents the chance to scaffold, that is, support or encourage their kids' learning process through media sailing (cited in Gunarti et al. 2023). Another is that, adult mediation of older preschoolers' television viewing can improve the children's acquisition of academic and prosocial skills as emphasized by Strouse et al. (2018). It appears that older children's increased screen time, both instructional and co-viewing, benefits the language development of younger children. It implies that continuing to use screens in a moderate way is advisable. For that reason, parental mediation is essential to enable parents to oversee, manage, or interpret media content for their kids.

3.3 Ability of the Learners to Communicate in English as Perceived by the Parents and their Teachers

Table 7 reflects the level of ability of the learners in communicating in English as perceived by the parents and their teachers. The data reveal that the parents perceive the learners' ability to communicate in English as “satisfactory,” while the teachers perceive it as “fairly satisfactory.” Furthermore, this finding shows a slight difference between the parents' and teachers' perceptions.

Table 7. Ability of the learners to communicate in english as perceived by the parents and their teachers (n=854)

The child can communicate in English...	Parents		Teachers	
	Mean	VD	Mean	VD
1. in responding to expressions such as greetings, leave takings, gratitude, apology, asking permission, and offering help.	3.93	S	3.29	FS
2. when using common expressions and polite greetings (Please, May I, Excuse me).	3.93	S	3.20	FS
3. My child can follow one-to-two step English directions.	3.76	S	3.19	FS
4. when asking simple question.	3.75	S	2.83	FS
5. when they talks about topics of interest (likes and dislikes).	3.62	S	2.95	FS
6. in relating their activities or responsibilities at home.	3.59	S	2.77	FS
7. 10. My child can give one-to-two step English directions.	3.58	S	2.70	FS
8. when telling details about people, places, and things.	3.54	S	2.80	FS
9. when talking about their personal experiences.	3.52	S	2.83	FS
10. when talking about stories heard (when and where it took place, the characters and some important details of the story).	3.52	S	2.86	FS
Composite	3.67	S	2.94	FS

Legend: 4.21 – 5.00 Very Satisfactory (VS), 3.41 – 4.20 Satisfactory (S), 2.61 – 3.40 Fairly Satisfactory (FS)
1.81 – 2.60 Poor (P), 1.00 – 1.80 Very Poor (VP)

Table 7 reveals that parents and teachers have different perceptions on the ability of learners to communicate in English. Aouad and Bento (2019) emphasized that for pupils to grow, parent-teacher contact must be regular because learners cannot succeed under the guidance of a teacher alone. Parents' support is needed in the child's education aspect. According to conventional wisdom, children's initial teachers of literacy are their parents. Parents are the individuals that the kids reside with. Since kids spend more time with their parents than with their

teachers, parents are more aware of their children's strengths and shortcomings. The teachers are the children's second parents and their primary goal is to teach children the necessary life skills. Consequently, indirect communication and a lack of teamwork are common causes of perception gaps between parents and teachers. For example, while parents were generally less engaged, teachers tended to organize less activities for parent involvement. Thus, open communication and cooperative connections between the parent and the teacher ensures alignment between classroom and home, allowing support to a child's development.

It can also be observed from the data that the indicator on responding to expressions such as greetings, leave-takings, gratitude, apology, asking permission, and offering help got the highest rating from both parents and teachers. This means that the pupils are seen to have the ability to respond appropriately to polite expressions. The study of Llorica and Sosas (2023) disclosed that Filipinos are always known to be submissive, polite, and respectful when speaking with the elderly. Similarly, Etikawati et al. (2023) noted that politeness is one of the elements defining kids' communication abilities. All in all, children's understanding of social norms or etiquette is a component of politeness and they could utilize manners in communicating at their age, such as being courteous while speaking with teachers, asking permission politely, and refraining from using harsh words.

3.4 Relationship Between Variables

Relationship Between the Profile of the Parents in Terms of Educational Attainment and Family Income and the Ability of the Learners in Communicating in English

Table 8 indicates the data in identifying the relationship between the parents' profile in terms of their educational attainment and family income and the learners' ability to communicate in English. Using Multiple Linear Regression Analysis, it is revealed that the F-test significance or overall p-value (0.000) is less than the level of significance (0.05). This finding guarantees the rejection of the null hypothesis and provides an idea that some of the profile variables can be predictors of the learners' ability to communicate in English.

Table 8. Analysis of the relationship between the profile of the parents in terms of educational attainment and family income and the ability of the learners in communicating in english (n = 854)

Variables	Coefficients	SE	t Stat	P-value
Intercept	1.882	0.070	27.020	0.000
Mother Ed. Attainment	0.113	0.020	5.805	0.000
Father Ed. Attainment	0.151	0.020	7.687	0.000
Family Income	0.000	0.000	11.288	0.000
R = 0.6819				
R ² = 0.4650				
adjusted R ² = 0.4632				
F-ratio = 246.30				
p-value = 0.000 (significant)				
Level of significance = 0.05				

The above data further show that the educational attainment of the mothers ($p = 0.000$) and fathers ($p = 0.000$) of the learners and their family income ($p = 0.000$) are significantly related to the learners' ability to communicate in English. This signifies that these variables can predict the learners' ability to communicate in English. All positive coefficients illustrate that parents who are educated and have enough family income tend to have learners who can better communicate in English. Several studies have revealed that a parent's level of education and income do have a significant impact on the child's personality. The parents' ability to assist their children with their early education has an impact on the level of the latter's expertise in their specific field. Moreover, Davis-Kean et al. (2021) put out the idea that parent education levels serve as a foundation for children's academic achievement in a way that is indirect and takes into account both the parents' expectations for and beliefs about their kids as well as the mental stimulation that parents offer both inside and outside the home. The knowledge, abilities, and values of children are significantly influenced by their parents' education. In addition, Gabrielli et al. (2022) affirms that children of parents with higher and intermediate socioeconomic status (SES) are exposed to a more conducive learning environment at home.

Relationship between the Profile of the Parents in Terms of Language Used at Home and the Ability of the Learners in Communicating in English

Presented in Table 9 are the data in identifying the relationship between the parents' profile in terms of the language used at home and the learners' ability to communicate in English. Employing the Multiple Linear

Regression Analysis, it is revealed that the F-test significance or overall p-value (0.000) is less than the level of significance (0.05). This finding allows the rejection of the null hypothesis, meaning one of the explanatory or independent variables is a significant predictor of the learners' ability to communicate in English. Moreover, evaluating the regression output reveals that the utilization of the English language at home ($p = 0.000$) is a significant predictor of the learners' ability to communicate in English. This further connotes that the more the English language is utilized at home, the better the ability of the learner to speak the language.

Table 9. Analysis of relationship between the profile of the parents in terms of language used at home and the ability of the learners in communicating in english (n = 854)

Variables	Coefficients	SE	t Stat	P-value
Intercept	2.037	0.164	12.396	0.000
English	0.462	0.021	22.074	0.000
Tagalog	-0.021	0.022	-0.961	0.337
Cebuano	-0.046	0.026	-1.782	0.075
R = 0.6303				
R ² = 0.3973				
adjusted R ² = 0.43951				
F-ratio = 186.75				
p-value = 0.000 (significant)				

Learning a language starts within the comfort of a home. In fact, parent involvement in English language teaching serves as a brilliant step towards promoting literacy and communication among children. There is a notion that English has been regarded as a global language, which urges parents to guide their children to be inclined toward English (Chavez et al., 2023). Similarly, the results of the study of Zhang et al. (2021) indicated that various home factors (e.g., family demographics, home literacy activities, language use, and parents' beliefs and motivations) were positively associated with young Asian children's English language abilities, literacy skills, phonological awareness, and interest in learning English.

Meanwhile, the utilization of Tagalog and Cebuano is not a significant predictor of the learner's ability to communicate in English (all p-values $> \alpha = 0.05$). In this regard, it is challenging for a child to understand and speak English when they are always exposed to their mother tongue at home. Correspondingly, Ju et al. (2023) found that emergent bilinguals whose parents speak a language other than English (native) more often at home during the former's kindergarten years began with poorer English reading proficiency but made more progress than kids whose parents speak in their native tongue less often. This goes to show that if the child is exposed to the target language, then it is easier for him or her to learn a second language. Thus, exposure is the key element of learning a language (Dagohoy, 2023).

Relationship between the Profile of the Learners in Terms of Social Media Site Most Visited and Their Ability in Communicating in English

Table 10 displays the data in identifying the relationship between the learners' profile in terms of social media sites most visited and their ability to communicate in English. The data show that the overall F-test is significant ($p = 0.000 < \alpha = 0.05$), an indication that some of the visited sites are related to their ability to communicate in the English language. Evaluating each of the p-values, one can see that visiting YouTube Kids ($p = 0.000$), Messenger ($p = 0.000$), Roblox ($p = 0.000$), and Instagram ($p = 0.024$) is positively related to the learners' ability to communicate. However, visiting Facebook ($p = 0.000$) has negative correlation with the learners' ability to converse in English. This finding implies that there are social media apps that help improve children's English language communication skills.

This indicates that some of the visited sites, YouTube Kids, Messenger, Roblox, and Instagram are related to their ability to communicate in the English language. This finding implies that there are social media apps that help improve children's English language communication skills. While Arulchelvan et al. (2019) believe that social networking is said to be the finest resource for learners to learn English and that certain features of social media help users acquire new information, improve their English proficiency, and quickly learn about current events, still Madigan et al. (2020) take the position that learning language acquisition using screens can be a passive or sedentary habit because children who are exposed to screens are not participating in verbal dyadic exchanges that facilitate language learning and communication.

Table 10. Analysis of the relationship between the profile of the learners in terms of social media site most visited and their ability in communicating in english (n = 854)

Variables	Coefficients	SE	t Stat	p-value
Intercept	2.822	0.106	26.540	0.000
YouTube	0.010	0.013	0.731	0.465
YouTube Kids	0.107	0.023	4.595	0.000
Tiktok	-0.045	0.025	-1.806	0.071
Facebook	-0.129	0.033	-3.911	0.000
Messenger	0.109	0.031	3.545	0.000
Roblox	0.106	0.022	4.732	0.000
Instagram	0.082	0.036	2.257	0.024
Twitter	-0.079	0.050	-1.573	0.116
Pinterest	-0.030	0.045	-0.665	0.506
Viber	0.032	0.040	0.792	0.428
R = 0.3070				
R ² = 0.0943				
adjusted R ² = 0.0835				
F-ratio = 8.773				
p-value = 0.000 (significant)				

Meanwhile, there is no significant relationship found between the learners' frequency of watching YouTube, TikTok, Twitter, Pinterest, and Viber and their ability to communicate in English. All their p-values are greater than the level of significance (0.05), which connote that changes in the frequency of visiting and watching these social media sites and the shifts in their ability to communicate are not significantly related. Moreover, this implies that the ability of the child to communicate in English is not only dependent on the frequency of viewing and watching social media.

Relationship between the Profile of the Learners in Terms of Time Spent in Using Educational Videos and Their Ability in Communicating in English

Table 11 describes that the overall F-test is significant ($p = 0.000 < \alpha = 0.05$). The regression output exposes that the learners' time spent on using educational videos like T-Series Kids Hut ($p = 0.018$) and Netflix Jr. ($p = 0.000$) is significantly and positively related to their ability to communicate in English. However, the learners' time spent watching Art for Kids Hub ($p = 0.033$) was found to be significantly and negatively related to their ability to communicate in English. The result also depict that the time spent on watching other educational videos like Ted-Ed, SciShow Kids, BrainPOP, Bright Side, Alphablocks, and Kids Learning Tube does not relate to how they communicate in English (all $p\text{-value} > \alpha = 0.05$). This result implies that there are social media apps or videos that do not promote children's language learning especially when it is not appropriately scaffolded by an adult or parent.

Table 11. Analysis of the relationship between the profile of the learners in terms of social media site most visited and their ability in communicating in english (n = 854)

Variables	Coefficients	SE	t Stat	p-value
Intercept	2.943	0.078	37.916	0.000
Ted-Ed	0.018	0.034	0.520	0.603
SciShow Kids	0.019	0.040	0.465	0.642
BrainPOP	0.033	0.040	0.843	0.400
Bright Side	-0.005	0.035	-0.137	0.891
Art for Kids Hub	-0.065	0.030	-2.141	0.033
T-Series Kids Hut	0.074	0.031	2.381	0.018
Netflix Jr.	0.088	0.024	3.588	0.000
Alphablocks	-0.001	0.025	-0.048	0.962
Kids Learning Tube	0.009	0.021	0.436	0.663
R = 0.2248				
R ² = 0.0505				
adjusted R ² = 0.0404				
F-ratio = 4.989				
p-value = 0.000 (significant)				

This data exposes that the learners' time spent on using educational videos like T-Series Kids Hut, and Netflix Jr. is significantly and positively related to their ability to communicate in English. According to Guzelyurt and Arslan (2023), children are becoming more adept at expressing themselves, interacting with their classmates, and

standing up for their rights. Not to mention that children's learning is aided by the use of technological instruments because of their flexibility, portability, and easy accessibility. These skills are developed through the use of technology, according to Gunindi (2022). However, it is believed that kids who stay at home during the pandemic are more likely to use technology to access a variety of content, some of which may be harmful to them (Aral, Aysu & Kadan, 2020). Although technology aids in children's access to knowledge and practice, excessive and unrestrained use of technology has a detrimental impact on a child's development (Guzelyurt & Arslan, 2023). Moreover, children who use technology excessively also have access to violent, inappropriate, and potentially dangerous content (Gökler & Turan, 2020).

On the other hand, time spent on watching other educational videos like Ted-Ed, SciShow Kids, BrainPOP, Bright Side, Alphablocks, and Kids Learning Tube does not relate to how they communicate in English (all p -value $> \alpha = 0.05$). This result implies that there are social media apps or videos that do not promote children's language learning especially when it is not appropriately guided by an adult or parent.

Relationship between the Profile of the Learners in Terms of Time Spent in Watching Non- Educational Videos and Their Ability in Communicating in English

Table 12 divulges that the overall F-test is significant ($p = 0.000 < \alpha = 0.05$). The regression output discloses that the learners' time spent watching non-educational videos like Blue's Clues and You ($p = 0.015$) and PAW Patrol ($p = 0.026$) is significantly and positively related to their ability to communicate in English. On the other hand, time spent on watching other non-educational videos like Rugrats, Sponge Bob Square Pants, and Sesame Street does not relate to how the learners communicate in English (all p -value $> \alpha = 0.05$). This implies that there are certain non-educational programs/ videos that does not promote language learning, all the more because they are not educationally-designed programs.

Table 12. Anaysis of the relationship between the profile of the learners in terms of time spent in watching non- educational videos and their ability in communicating in english (n = 854)

Variables	Coefficients	SE	t Stat	p-value
Intercept	3.033	0.083	36.734	0.000
Rugrats	0.042	0.026	1.577	0.115
Blue's Clues & You	0.069	0.028	2.430	0.015
PAW Patrol	0.067	0.030	2.224	0.026
Sponge Bob Square Pants	0.050	0.030	1.668	0.096
Peppa Pig	-0.082	0.028	-2.920	0.004
Sesame Street	0.018	0.027	0.684	0.494
Masha & the Bear	-0.056	0.025	-2.244	0.025
R = 0.2337				
R ² = 0.0546				
adjusted R ² = 0.0468				
F-ratio = 6.982				
p-value = 0.000 (significant)				

The data above discloses that the learners' time spent watching non-educational videos like Blue's Clues and You and PAW Patrol is significantly and positively related to their ability to communicate in English. Guzelyurt and Arslan's (2023) came to the conclusion that technology gadgets can be beneficial. For instance, children's educational films on YouTube can be a helpful resource for improving early English language ability (Kilag et. al., 2023). For example, the Blue's Clues program improves kids' early phonological awareness, language, and communication skills (Toy World- the business magazine, 2022). On the contrary, Sahriana et. al. (2018) argued that technological devices also have drawbacks that may have an impact on kids' development and growth. According to Subedar and Yates, as mentioned by Papadamou et. al. (2019), while most toddler-oriented content is harmless and actually enjoyable or instructional, recent publications have emphasized the trend of improper content targeting this demographic. In spite of presenting kid-related topics (e.g. cartoons, animation movies, etc.), there have been frequent uploads of media deemed inappropriate for specific audiences. These videos often contain disturbing, violent, sexual, or other inappropriate scenes, making them inappropriate for children (Papadamou, 2021).

Relationship between the Profile of the Learners in Terms of Viewing Social Media and TV/ YouTube with Parental Guidance and Their Ability in Communicating in English

Table 13 presents the relationship between the profile of the learners in terms of viewing social media and TV/ YouTube with parental guidance and their ability in communicating in English. As shown, the overall F-test is significant ($p = 0.000 < \alpha = 0.05$). The regression output also reveals that the learners' time spent on viewing and watching social media, TV, and YouTube with parental guidance is significantly and positively related to their ability to communicate in English (all p -values $< \alpha = 0.05$). This means that the higher the guidance of the parents to their children is, the more is the ability of the latter to communicate.

Table 13. Analysis of the relationship between the profile of the learners in terms of viewing social media and tv/ youtube with parental guidance and their ability in communicating in english (n = 854)

Variables	Coefficients	SE	t Stat	p-value
Intercept	2.500	0.089	28.045	0.000
Social Media Sites	0.084	0.028	2.988	0.003
Television/ YouTube	0.126	0.031	4.065	0.000
R = 0.3132				
R ² = 0.0981				
adjusted R ² = 0.0959				
F-ratio = 46.265				
p-value = 0.000 (significant)				

The data reveals that the learners' time spent on viewing and watching social media, TV, and YouTube with parental guidance is significantly and positively related to their ability to communicate in English. This means that the higher the guidance of the parents, the more is the ability of the children to communicate well in English. According to Spencer (2023), the American Academy of Pediatrics advises parents to interact with media technology alongside their young children, due to the following: first, parents who watch videos with their kids would be able to teach them more, including expanding their English vocabulary to include terms like alphabets, numbers, colors, and body parts (Imaniah et al. 2020); second, scaffolding by parents, teachers, or caregivers while young children use YouTube can aid with digital literacy; and third, parental mediation is thought to be a crucial component in promoting children's interactions with new media, according to Vygotsky's theory of child development and his idea of the proximal development zone (cited in Neumann & Herodotou, 2020). Therefore, it is an advantage when young children and parents use media together.

8.0 Conclusion

The study proved that the parent's educational background, language used at home, and family income are contributory to the learner's level of ability in communicating in English. It is also verified that learners' exposure to educational and non- educational programs in television and social media apps can enhance their ability to communicate in English. Moreover, parental guidance is also necessary when children are expose to television and social media at a younger age to help children better understand and think about what they see and learn on screen. This way, parents are able to connect and explain the information the children received. Vygotsky's idea of the Zone of Proximal Development emphasizes this claim.

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This work has a sole author. Her adviser evaluated and approved the completed manuscript.

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Challenges of Non-English Major Teachers in Teaching Senior High School English Subjects

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Abstract. This inquiry aimed to determine the challenges experienced by non-English major teachers in teaching Senior High School English subjects and their utilized coping mechanisms. It also sought to determine the relationship between the challenges encountered and the coping mechanisms applied. Moreover, the study aimed to discover the differences between teachers' baccalaureate courses, challenges, and coping mechanisms. The patterns and associations of the variables were ascertained by using descriptive-correlational design. The extent of challenges faced and coping mechanisms applied were revealed through the descriptive tool. Spearman Rank Correlation Coefficient was used to know the relationship between the said challenges and coping mechanisms, and the differences between the variables and teachers' baccalaureate courses were identified using the Kruskal-Wallis H Test. The study also employed the purposive sampling technique. The respondents of the study were the 50 teachers from Tanjay City Division, teaching in Tanjay City and Pamplona, Negros Oriental, Philippines. The researcher utilized a self-made questionnaire. The study revealed that non-English major teachers have challenges in teaching Senior High School English subjects specifically in the following areas: (a) teaching academic writing, (b) teaching writing one scene for one-act play applying the various elements, techniques, and literary devices, (c) teaching writing craft essay; (d) teaching speech writing; (e) selection of relevant resources specifically on choosing materials that are aligned in lesson objectives; and (f) deciding for curriculum-appropriate materials to use. The data also showed that online video tutorials, allowing colleagues/school heads/supervisors to observe their classes, and monitoring students' performance are the most utilized coping mechanisms. The study concluded that despite the challenges encountered by non-English major teachers in teaching Senior High School English subjects, these teachers are still tough in facing their daily battles, which provide them chances to learn outside their comfort zones.

Keywords: English teaching; Senior high school; English subjects.

1.0 Introduction

For teachers, each school day is a battle, especially for those teaching outside their expertise. To discover their challenges and coping strategies, this study was conducted and focused on non-English major teachers teaching Senior High School English Subjects. Teaching subjects outside of teachers' specialization has become common in many countries. According to Price et al., as mentioned in Hobbs and Porsch (2021), these nations include Australia, Ireland, England, Germany, Indonesia, and the United States of America (USA). In a survey, more than 38,400 Australian educators revealed the entire extent of out-of-field teaching in Australian classrooms. Based on the data, 24 percent of teachers conducting classes across all key learning areas in Australia lack specialized qualifications or training in the subject (Carey & Carroll, 2023). Moreover, in Washington, DC, the number of teachers appointed to teach subjects that do not correspond to their expertise continues to rise (Lopez & Roble, 2022). Among the subjects that have the greatest number of out-of-field teachers is the English subject. This issue has several causes, which include the education system, uneven distribution and lack of teachers, and conflicts

with class scheduling that honed teachers to be specialists (Hobbs & Porsch, 2021). UNESCO believed in the detrimental effects of this problem on teaching and learning.

In the Philippines, the government is committed to promoting quality education, and educators are encouraged to deliver quality education at all levels (Philippine Constitution, Article 14, Section 1, 1987). The Philippine Professional Standards for Teachers (Department of Education Order Number 42, 2017), in particular, serves as the foundation for all the learning and development initiatives of the Department of Education (DepEd) to guarantee that teachers are qualified to carry out the K-12 Program. Thus, there is a stringent procedure for hiring competent teachers with relevant qualifications and specialization to teach (Yumang, 2021). DepEd released an order that outlines the hiring procedures for teaching posts in Senior High School (DepEd Order 3, 2016). Despite these government initiatives, there is still a problem of supply and demand for in-field teachers (Talili et al., 2021). English is one of the learning areas taught by instructors who are not English majors in Senior High School. In some schools, only a limited number of English major teachers are hired, and yet, there are five to six English subjects in Senior High, multiplied by the number of sections. With this, those teachers who do not specialize in English are forced to teach subject areas that are beyond their specialization (Yumang, 2021). DepEd Enhanced Basic Education Information System (DepEd EBEIS) issued the result of the survey conducted in 2017-2018, indicating that almost 2000 out-of-field teachers in English were given English subjects as their teaching assignments (de la Fuente, 2022).

Thus, this study was carried out to explore the challenges and coping mechanisms of non-English major teachers teaching Senior High School English subjects. This problem has not yet been investigated, as has the relationship between the teachers' experienced challenges and their coping mechanisms. The findings of this research are deemed to contribute to future knowledge.

Hence, the researcher wanted to discover the challenges and coping mechanisms of non-English majors teaching English subjects. Furthermore, this inquiry would also seek to find out the significant relationship between the challenges in teaching English subjects and the coping mechanisms applied by teachers. Consequently, the results of this study would serve as the foundation for tailoring strategies or interventions meant to address the struggles faced by non-English major teachers.

2.0 Methodology

2.1 Research Design

The study is quantitative and uses a descriptive-correlational survey. It is descriptive because it (a) determines the extent of challenges experienced by teachers, and (b) determines the extent of utilization of coping mechanisms. Meanwhile, it is also correlational because the aforementioned variables were correlated and were compared based on the teachers' baccalaureate degrees. The design aligns with the research objectives as it provides patterns of the top challenges and coping mechanisms as the associations of the variables.

2.2 Research Participants

The study was conducted in selected 17 public secondary schools in Tanjay City Division (TCD), where most teachers in Senior High School experienced teaching subjects outside their expertise. These schools offer Senior High School education in Tanjay City and Pamplona, Negros Oriental, Philippines. All schools are accessible utilizing land transportation and have instructional classrooms that comply with the required DepEd safety and usability standards. The respondents of this study were 50 non-English major teachers teaching Senior High School English subjects. They were selected purposively because these teachers were able to respond to the inquiry in light of their own experiences.

2.3 Research Instrument

The study used a researcher-made questionnaire and was validated by three English teachers who are currently undertaking research and are doctorate holders. The Cronbach's alpha test was used to test the item reliability of the dry-run with the following results: 0.924 for building meaningful learning content, 0.871 for delivery and confidence, 0.822 for utilization of appropriate strategies, 0.930 for selection of relevant resources, 0.892 for online video tutorials, 0.922 for peer consultation, 0.746 for seminar or training participation, and 0.701 for teachers' reflection.

2.4 Data Gathering Procedure

In data gathering, the researcher adhered to the proper procedures. With permission from the graduate school dean of Foundation University, a letter to conduct the study was sent to the school division Superintendent of Tanjay City. During the distribution of the questionnaire, the researcher explained to the teachers the goal and significance of the study. The questionnaires were promptly collected from the teachers after the completion of survey questions. The findings were tallied using MS Excel and evaluated and interpreted.

2.5 Ethical Considerations

The researcher kept all information gathered confidential. Respecting the dignity and privacy of the individuals is also vital. Furthermore, the researcher ensured that possible threats to the respondents were avoided. The researcher also considered all relevant ethical concerns throughout the research. Concerning Foundation University's Ethics Committee, the researcher followed its ethical protocols. To ensure that the research problem was clearly sound, significant, and ethically appropriate, consultations with experts were done. The researcher also maintained a non-judgmental attitude during the data collection to avoid condemnation.

3.0 Results and Discussion

3.1 Challenges Encountered by Non-English Major Teachers in Teaching English Senior High School Subjects In terms of Building Meaningful Learning Content

Table 1 shows that the extent of challenges encountered by teachers in teaching Senior High School English subjects is “moderate” in general with a weighted mean of ($w\bar{x} = 3.38$) in terms of building meaningful learning content. It implies that it is moderately challenging for non-English major teachers to teach relatable content and allow students to apply what they know meaningfully. Learning should not only be about knowing but also about using or applying what you know. It is meant to be meaningful. MacPherson (2022) said meaningful learning involves relevance, experience, and impact. Learning becomes meaningful when students can actively engage, relate the topic to their prior knowledge, and be personally significant (Drew, 2023). However, this can be a challenge for teachers who do not have mastery of the subject, for instance, English subject.

Four indicators are categorized as “high.” These are teaching academic writing ($w\bar{x} = 4.10$), teaching writing one scene for a one-act play ($w\bar{x} = 3.68$), teaching writing craft essays ($w\bar{x} = 3.66$), and teaching speech writing ($w\bar{x} = 3.42$). The result suggests that it is highly challenging for non-English major teachers to teach English subjects specifically on teaching writing. Skill in writing appears to be the most common of these indicators. This is one of the five macro-skills to develop in learners in English subjects (Carolino & Queroda, 2018). Moses and Mohamad (2019) mentioned that one of the biggest problems of ESL teachers is writing. Several factors have determined the reasons for the challenges in writing, which include students’ lack of interest in writing (Anyiendah, 2017), parental indifference, and teacher’s lack of professional experience (Gündoğmuş, 2018).

Table 1. Descriptive statistics of the challenges encountered in terms of building meaningful learning content

Indicators	Mean	Interpretation
1. Teaching academic writing	4.10	High
2. Teaching writing one scene for a one-act play	3.68	High
3. Teaching writing craft essays	3.66	High
4. Teaching speech writing	3.42	High
5. Teaching writing analysis and interpretation of literary text	3.36	Medium
6. Teaching writing short literary pieces	3.30	Medium
7. Teaching speech delivery	3.28	Medium
8. Teaching effective use of communicative strategy	3.24	Medium
9. Teaching writing journal entries and other short compositions	3.24	Medium
10. Teaching writing professional correspondence	3.20	Medium
11. Teaching writing short poems	3.18	Medium
12. Teaching 21st-century literary genres.	3.14	Medium
13. Teaching writing commentary/critique on creative nonfictional text	3.14	Medium
Composite	3.38	Medium

Teaching academic writing ($w\bar{x} = 4.10$) is the highest among the challenges under the “high” category. This means that among the important competencies in teaching Senior High School English subjects, academic writing is difficult to teach because of its complexity. It does not only involve writing but also, reading, discussion, and

brainstorming. Thus, it would be more difficult to teach if the instructor had not enough expertise in teaching the content meaningfully. Fatimah (2018) revealed that in the process of teaching academic writing, students have difficulties organizing ideas and using appropriate language expressions, vocabulary, and grammar. These were also supported by Pablo and Lasaten (cited in Roxas, 2020) that students have problems in academic writing as it involves a variety of ideas, absence of connectedness, the use of incorrect words, the use of first and second-person pronouns, and lack of citations.

The said challenge is followed by “teaching writing one scene for a one-act play” ($w\bar{x} = 3.68$). The result suggests that teachers struggle with teaching writing a single scene for one act with a plot and a limited allotted time. Non-English major teachers may struggle because they will teach students on comprehensive story in a condensed amount of time. In addition, in teaching the said competency, students should learn it meaningfully so that students will hone their writing abilities within the boundaries of a one-act play. As a form of drama, the text should transform into a meaningful picture and teachers should further facilitate students to produce a satisfactory output (Abraham, 2018).

Teaching writing craft essays ($w\bar{x} = 3.66$) is also one of the indicators with “high” characteristics. The result connotes that the respondents find it challenging to provide instructions on essay writing techniques and properties of a well-written text. It is a heavy task for non-English major teachers teaching English subjects since they have to provide or create clear and efficient instruction so students can write proficiently. This resonates with the result of the study of Bulqiyah, Mahbub, and Nugraheni (2021) that one of the difficulties in teaching writing essays is the affective problems which include the giving of instructions and feedback to students. Producing well-written essays is expected (Ceylan, 2019) as an essay is one of the requirements for getting scholarships and even a job (Hidayati, 2018).

The last indicator under a “high” category is teaching speech writing ($w\bar{x} = 3.42$). This suggests that non-specialized teachers in English have challenges in teaching the principles of speech writing including the structure. Like other types of writing, speech writing is important so students will learn how to create a manuscript for public speaking in front of an audience (Syafryadin, Makhrian, & Wardhana, 2022). It is expected that Senior High School students are ready for this skill before they go to college because speech is one of the required subjects in tertiary education (Syafryadin, Makhrian, & Wardhana, 2022). This could be a challenging task for non-English major teachers. Thus, it is necessary to gain support systems and explore possible strategies.

Meanwhile, challenges are characterized as “moderate” in teaching writing analysis and interpretation of literary text ($w\bar{x} = 3.36$), teaching writing short literary pieces ($w\bar{x} = 3.30$), teaching speech delivery ($w\bar{x} = 3.28$), teaching effective use of communicative strategy ($w\bar{x} = 3.24$), teaching writing journal entries and other short compositions ($w\bar{x} = 3.24$), teaching writing professional correspondence ($w\bar{x} = 3.20$), teaching writing short poems ($w\bar{x} = 3.20$), teaching 21st-century literary genres ($w\bar{x} = 3.14$), and teaching writing commentary/critique ($w\bar{x} = 3.14$).

Teaching 21st-century literary genres and teaching writing commentary/critique has the lowest mean and is characterized as “moderate.” This finding suggests a balanced representation of challenges encountered in teaching in building meaningful learning content. Twenty-first-century literary genres include traditional writing and reflect technological culture (Franky, 2020) which include illustrated novels, graphic novels, and digital fiction. Teaching the rules of traditional writing is rudimentary but integrating technology makes the competency difficult to teach.

Also, teaching writing commentary/critique on creative nonfictional text has a moderate characteristic based on the result. It is challenging to teach because writing commentary closes the gap between academic and personal views which is produced in a text with public interest (Paul, 2019). More so in writing commentaries on creative nonfiction which involves narratives in literary journals, personal essays, memoirs, etc. (*Creative Writing*, 2022). However, writing commentaries on these texts can also be easy because these are true stories and thus, writers can easily relate as life stories are primitive (Shaw, 2023).

In Terms of Delivery and Confidence

Table 2 indicates the extent of challenges encountered by non-English major teachers in teaching Senior High School English subjects in terms of delivery and confidence with a composite mean ($w\bar{x} = 2.44$) in “the low” category. This connotes that non-English major teachers can handle easily the challenge of teaching English subjects in Senior High School in terms of delivery and confidence. This is contrary to the study of Kola and Sunday, as cited in Yumang (2021) that educators who are asked to teach subjects outside of their areas of competence frequently lack confidence, which can be seen in different ways, including creating lesson plans, selecting activities, responding to students’ inquiries, and igniting students’ curiosity and enthusiasm for the subject.

Table 2. Descriptive statistics of the challenges encountered in terms of delivery and confidence

Indicators	Mean	Interpretation
1. Pronouncing English words	2.88	Medium
2. Enunciating English sentences	2.86	Medium
3. Articulating my expressions	2.72	Medium
4. Speaking in front of the class	2.56	Low
5. Having communication breakdown in front of the class	1.98	Low
6. Doubting my capability as a teacher	1.64	Very low
Composite	2.44	Low

Despite the “low” composite mean of challenges in terms of delivery and confidence, certain indicators show balanced representations. Pronouncing English words ($w\bar{x} = 2.88$), enunciating English sentences ($w\bar{x} = 2.86$), and articulating expressions ($w\bar{x} = 2.72$) are in the “moderate” category. The highest among these indicators is pronouncing English words, which implies that non-English major teachers are not confident in uttering English words. This is contrary to the statement of Nugroho (2018), Al-Maqtri and Thabet (2013), and Richards (2010) that language proficiency is one of the qualities of exemplary language teachers, which includes the ability to make sounds of the English language. Since the respondents are not English majors, then, it cannot be expected that all of them always have an acceptable language proficiency.

Speaking in front of the class ($w\bar{x} = 2.56$) and having communication breakdowns in front of the class ($w\bar{x} = 1.98$) are characterized as “low.” This means that non-specialized English teachers who are teaching English subjects in Senior High School are confident in their lesson delivery and have minimal communication difficulties in the classroom (Khan, 2020). Based on the results, it can be inferred that non-specialized English teachers in Senior High School are competent and comfortable in delivering their lessons and have minimal communication challenges.

For indicator “doubting my capability as a teacher” ($w\bar{x} = 1.64$), the result is “very low.” This connotes that the indicator is not a challenge for non-English major teachers. With a positive attitude, teachers who have trust in themselves including the capacity of their students to learn are teachers who bear efficacy (Dowd, 2022). On the other hand, Dowd also expressed that self-doubt in facing large class sizes occurs even in the most dedicated teachers, who commonly practice as idealist teachers. Kola and Sunday (cited in Yumang 2021) also revealed that teachers who are asked to teach outside their expertise often lack confidence in delivering their lessons. This present undertaking opposes such a notion as the respondents have no challenges at all under the said indicator.

In terms of the Utilization of Appropriate Strategies

Table 3 exhibits the extent of the challenges encountered by non-English major teachers in teaching Senior High School English subjects in terms of utilization of appropriate strategies with a “moderate” composite mean. This implies a fair representation of the level of challenges. Non-English major teachers may struggle in teaching English subjects in Senior High School in terms of utilization of appropriate strategies because of the inadequate subject matter expertise of teachers teaching outside their specialization; they are unable to come up with new activities, are less imaginative, and adhere to the conventional mode of instruction (Abella, Co, & De Jesus, 2021). Thus, non-English major teachers teaching English subjects also experience difficulties in applying teaching strategies because they cannot apply the appropriate one that is based on the learners’ needs. The four indicators, managing the class ($w\bar{x} = 3.02$), creating/planning engaging lesson plans that fit the curriculum ($w\bar{x} = 2.98$),

deciding appropriate pedagogy ($w\bar{x} = 2.96$), and delivering the lessons ($w\bar{x} = 2.82$) are categorized as “moderate.” Managing the class is the highest among the 4 indicators under “moderate.”

Table 3. Descriptive statistics of the challenges encountered in terms of utilization of appropriate strategies

Indicators	Mean	Interpretation
1. Managing the class	3.02	Medium
2. Creating/Planning engaging lesson plans that fit the curriculum	2.98	Medium
3. Deciding appropriate pedagogy	2.96	Medium
4. Delivering the lessons	2.82	Medium
Composite	2.95	Medium

Hoy and Weinstein (cited in Berger, Girardet, & Crahay 2018) describe classroom management as the actions initiated to have a productive and organized learning environment, and thus, appropriate behavior is expected from the students with an effective learning environment (Levings, 2020). The result of the current undertaking shows a balanced characteristic of the respondents in terms of classroom management. It conveys that these non-English major teachers employ various strategies in managing the class however, there are some points that these strategies may not apply to some situations. The study of Apau (2022) supports that teachers who are engaged in out-of-field teaching are struggling in classroom management. Levings (2020) believes that classroom management can be a struggle for rookie and veteran teachers due to the growth of class sizes and expectations. Tingley (2020) emphasizes that classroom management is the biggest challenge for beginning teachers. However, some teachers already have a gift for managing a class.

In terms of Selection of Relevant Resources

Table 4 presents the extent of challenges encountered by non-English major teachers in teaching Senior High School English subjects in terms of the selection of relevant resources with composite ($w\bar{x} = 3.36$) “moderate” category. Indicators under “high” are choosing materials that are aligned with lesson objectives ($w\bar{x} = 3.64$) and deciding curriculum-appropriate materials to use ($w\bar{x} = 3.58$). This suggests that materials selection that will align with the objectives of the lesson and the curriculum is not easy for non-English major teachers teaching Senior High School English subjects. Han and Klein (2019) agree that choosing materials that match the learning objectives is important and should be meticulously chosen to help the learners achieve possibly the learning outcomes (Talbert, 2020). These out-of-field teachers who teach subjects that are not their specialization find this indicator difficult since the way they select materials is an effect of how they know about the subject matter knowledge and pedagogy (Tenorio, 2022).

Table 4. Descriptive statistics of the challenges encountered in terms of the selection of relevant resources

Indicators	Mean	Interpretation
1. Choosing materials that are aligned with lesson objectives	3.64	High
2. Deciding on curriculum-appropriate materials to use	3.58	High
3. Deciding on student-appropriate materials to use	3.32	Medium
4. Choosing appropriate materials (print, video, audio, audio-visual, gadgets/ devices, etc.)	2.90	Medium
Composite	3.36	Medium

The table also has two indicators with the “moderate” category, which are deciding on student-appropriate materials to use ($w\bar{x} = 3.32$) and choosing appropriate materials ($w\bar{x} = 2.90$). These indicators have mixed responses; however, the possibility of the challenge is still evident that non-English major teachers teaching Senior High School English subjects may struggle in selecting suitable materials for their learners. Choosing materials that are learner-appropriate is challenging because teachers should consider materials that are engaging, appropriately challenging for the learners, and usable for the teachers (Kaufman et al., 2020; Kaufman & Berglund, 2018).

3.2 Utilization of Online Video Tutorial as Coping Mechanism

Table 5 depicts that teachers have a “high” extent of utilization of online video material as a coping mechanism with a composite weighted mean of 4.05. Explicitly, teachers have “high” utilization of online video material as a coping mechanism in terms of building meaningful learning/teaching content ($w\bar{x} = 4.20$). This result suggests that non-English major teachers depend more on online tutorial videos to learn the content. The study of Atmojo

(2022) supports the current finding as teachers perceived online video tutorials through YouTube as support that increases interest and efficiency and enriches content.

Table 5. Descriptive statistics of the extent of utilization of online video tutorial as coping mechanism

Indicators	Mean	Interpretation
1. Online tutorial videos have helped me build meaningful learning/ teaching content.	4.20	High
2. Online tutorial videos have helped me in utilizing appropriate strategies for my lessons.	4.00	High
3. Online tutorial videos have helped me build my confidence and deliver my lesson.	3.96	High
Composite	4.05	High

Online tutorial videos are already significant for content learning even before the pandemic. It has a wide range of selections and almost all learning content is available and accessible. In Senior High School, not all subjects have books, Practical Research 1 and 2 subjects for instance. With this, teachers will not hesitate to look for online videos to teach the content meaningfully. They found it more effective than going to the library, purchasing books, or reading articles online.

Non-English major teachers also have “high” utilization of online video tutorials as coping mechanisms in indicators, utilizing appropriate strategies for my lessons ($w\bar{x} = 4.00$) and build my confidence and deliver my lesson ($w\bar{x} = 3.96$). This means that teachers highly rely on online tutorials to seek appropriate strategies and how to develop confidence and deliver the lessons. Video tutorials are indeed an effective way to learn different content because of their flexibility in which viewers can rewind, speed up, or slow down (Dinmore, 2019).

3.3 Utilization of Peer Consultation as a Coping Mechanism

Table 6 infers the extent of utilization of peer consultation as a coping mechanism for non-English major teachers teaching Senior High School English subjects with a composite weighted mean of 3.54 under the “high” category. Likewise, in terms of online video tutorials, teachers also rely on seeking help from their colleagues in indicators, my colleagues have helped me build meaningful learning/teaching content ($w\bar{x} = 3.78$), my colleagues have helped me build my confidence, and deliver my lesson ($w\bar{x} = 3.70$), and my colleagues have helped me in utilizing appropriate strategies for my lesson ($w\bar{x} = 3.44$) with a “high” extent.

Table 6. Descriptive statistics of the extent of utilization of peer consultation as coping mechanism

Indicators	Mean	Interpretation
1. My colleagues have helped me understand and build meaningful learning/teaching content.	3.78	High
2. My colleagues have helped me build my confidence and deliver my lesson.	3.70	High
3. My colleagues have helped me in utilizing appropriate strategies for my lesson.	3.44	High
4. My colleagues have helped me in selecting relevant resources for my lesson.	3.24	Medium
Composite	3.54	High

With this result, it is evident that when it comes to building meaningful learning/teaching the content, non-English major teachers are confident to seek assistance from their colleagues specifically those teachers who have a background and/or English majors. Undeniably, non-English majors have insufficient knowledge in teaching English, and although they are qualified as teachers, this makes them unqualified to teach English. Hence, due to their dedication and passion for teaching, seeking help from colleagues is at the top of their options.

In the study of Canaran (2023), peer coaching is seen to be effective during the pandemic. Similarly, the study by Lagria (2021) found that asking for assistance from co-teachers is one of the coping mechanisms of out-of-field Senior High School teachers in English and it is seen to be effective in the growth of teachers’ expertise. With this, non-English major teachers who are teaching English can feel that they are not alone in the battle and that the entire organization can help them grow even outside their expertise. DepEd also ensures that teachers should conduct collaborative learning sessions to address the shared challenges encountered through Learning Action Cell (LAC) sessions facilitated by the school head or the LAC leader (DepEd Order No. 35, 2016).

The last indicator perceived as “moderate” is my colleagues have helped me in selecting relevant resources for my lesson ($w\bar{x} = 3.24$). This could mean that non-English major teachers teaching Senior High School English subjects sometimes seek assistance from their colleagues in choosing relevant resources for their lessons. Teachers

should appreciate learning from their colleagues as a valuable practice and gain from their experience (Papay et al., 2020).

3.4 Utilization of Seminar or Training Participation as a Coping Mechanism

Table 7 indicates a “low” extent of utilization of seminar or training participation as a coping mechanism applied by non-English major teachers in teaching Senior High School English subjects with a composite mean of 2.33. Results also indicate a “low” extent of utilization of coping mechanisms through seminars or training in developing delivery and building confidence ($w\bar{x} = 2.52$) and seminars or training related to teaching English lessons ($w\bar{x} = 1.86$). This suggests that these teachers may not be pursuing opportunities for professional development specifically in teaching English subjects (Soomro, 2018).

Table 7. Descriptive statistics of the extent of seminar or training participation as coping mechanism

Indicators	Mean	Interpretation
1. I attended seminars or trainings related to the utilization of appropriate strategies.	2.62	Medium
2. I attended seminars or trainings in developing my delivery and building confidence.	2.52	Large
3. I attended seminars or trainings related to teaching English lessons.	1.86	Large
Composite	2.33	Large

Pioneering teachers in Senior High School have their mass training before their deployment and the focus is unpacking curriculum guides on core subjects and comprehensive training in their tracks. However, in the real field, some teachers are asked to teach outside of their training background and expertise. Follow-up training, such as In-Service training, and division-based training highlights addressing learners’ problems, innovation, strategies, etc. Lagria (2021) argued that out-of-field teachers can participate in webinars/training at their own expense to capacitate themselves and give them ideas of the content knowledge they need to teach.

The table also shows a “moderate” extent of utilization as coping mechanisms in indicator, I attended seminars or training related to my utilization of appropriate strategies ($w\bar{x} = 2.62$). This suggests that non-English major teachers teaching English subjects in Senior High School cope with the challenges they experience by attending seminars that are related to the use of appropriate strategies. Although it is a moderate extent, this could still require a proactive effort by the teachers to enhance their teaching skills in English.

3.5 Utilization of Teacher’s Reflection as a Coping Mechanism

Table 8 indicates that teachers have a “high” extent of utilization of teachers’ reflection as a coping mechanism with a 3.68 weighted mean. Indicator 1, I allowed my colleague/school head/supervisor to observe my class ($w\bar{x} = 4.32$), and indicator 2, I monitored students’ performance to assess their learning ($w\bar{x} = 4.24$) are categorized as “very high”. This is possible because teachers are required to have their classroom observation every quarter of the school year (DepEd Memorandum, number 008, series of 2023). Through classroom observation, teachers are given the chance to display their skills and will be given feedback by their mentors/school heads and so they can reflect on their practice. Teachers with higher reflective teaching practices were more attached to their job duties and had higher emotion regulation (Namaziandost, Heydarnejad, & Azizi, 2023). Thus, this is a commendable practice for those out-of-field teachers.

Table 8. Descriptive statistics of the extent of teacher’s reflection as coping mechanism

Indicators	Mean	Interpretation
1. I allowed my colleague/school head/supervisor to observe my class.	4.32	Very high
2. I monitored students’ performance to assess their learning.	4.24	Very high
3. I practiced making a teaching journal or reflection in my daily lesson.	3.52	High
4. I recorded myself while teaching to ensure I hit and delivered the lesson well and with confidence.	2.64	Medium
Composite	3.68	High

The table also reveals a “high” extent of utilization of teachers’ reflection as a coping mechanism in indicator 3, I practiced making a teaching journal or reflection in my daily lesson ($w\bar{x} = 3.52$). This means that teachers apply reflection as a tool to improve their teaching practice. With their observations in their practice, this could transform meaning and gain a better understanding (Gheith & Aljaberi, 2018) of what went wrong and right in their lesson. Similarly, indicator number 4, I recorded myself while teaching to ensure I hit and delivered the lesson well and with confidence ($w\bar{x} = 2.64$) is under the “moderate” category. This implies that non-English major teachers

teaching English subjects in Senior High School want to review their practice and continually aim to improve their teaching methods and delivery.

3.6 Relationship between Challenges Experienced Utilization of the Coping Mechanisms

Table 9 indicates the data identifying the relationship between the extent of challenges experienced by the non-English major teachers and their extent of utilization of the coping mechanisms. Using the Spearman Rank Order Correlation Coefficient, it is revealed that generally, a weak relationship exists. However, a moderate degree of relationship between the challenges of the teachers in terms of the utilization of appropriate strategies and their coping mechanisms in terms of peer consultation ($r_s = 0.424$) and seminar participation ($r_s = 0.334$) is noted.

Table 9. Correlation analysis between challenges experienced and utilization of the coping mechanisms

Challenges	Coping Mechanisms				
	Online Tutorial	Peer Consultation	Seminar Participation	Self-Reflection	Overall
1. Building Meaningful Learning Content	$r_s = 0.264$ (weak)	$r_s = 0.205$ (Weak)	$r_s = 0.230$ (Weak)	$r_s = -0.146$ (Weak)	$r_s = 0.201$ (Weak)
2. Delivery and Confidence	$r_s = 0.055$ (very weak)	$r_s = 0.073$ (Very Weak)	$r_s = 0.193$ (Weak)	$r_s = -0.034$ (Very Weak)	$r_s = 0.120$ (Weak)
3. Utilization of Appropriate Strat.	$r_s = 0.203$ (weak)	$r_s = 0.424$ (Moderate)	$r_s = 0.334$ (Moderate)	$r_s = 0.149$ (Weak)	$r_s = 0.476$ (Moderate)
4. Selection of Relevant Resources	$r_s = 0.003$ (very weak)	$r_s = 0.361$ (Moderate)	$r_s = 0.179$ (Weak)	$r_s = 0.112$ (Weak)	$r_s = 0.279$ (Weak)

This finding signifies that teachers who experience greater challenges in terms of the utilization of appropriate strategies tend to consult more on their peers and prefer seminar participation. This is because non-English major teachers teaching Senior High School English subjects are comfortable with seeking assistance from their colleagues as the latter are reachable and able to give contextualized examples based on the needs of the learners in their station. As a voluntary consultation (Damon and Meridith, 2018), peer coaching improves teachers' instructional and classroom management skills. In the same manner, it develops stronger relations between colleagues and school solidarity (Arslan Dönmez and Şahin, 2022).

Trainings/Seminars will run for a few days, involve collaborative talks with learning facilitators or resource speakers and provide opportunities to share different views and issues/trends about a certain topic (Morgan, 2021). Teachers prefer this strategy to cope with the challenge as it involves active participation and demonstration of learning. This is also the best avenue for non-English major teachers to ask questions about their challenges to the experts handling the training. IBIDAPO (2023) also revealed that training contributes to effectiveness and gives chances for professional growth.

The table also reflects that there is a moderate degree of relationship between the challenges of the teachers in terms of the selection of relevant sources and peer consultation ($r_s = 0.361$). This connotes that teachers who experience greater challenges in terms of the selection of relevant sources tend to consult with their peers or colleagues. With peer consultation, teachers can gather inputs and apply them in their lessons for successful learning outcomes. Educators who are compelled to teach subjects outside of their areas of expertise utilize peer mentoring and coaching as coping strategies (Yumang, 2021).

3.7 Difference between Teachers' Baccalaureate Degrees and Encountered Challenges and between Teachers' Baccalaureate Degrees and Utilization of Coping Mechanisms

Table 10 presents that those who specialize in BSEd PE ($w\bar{x} = 3.37$), BSEd Social Studies ($w\bar{x} = 3.23$), BSEd TLE ($w\bar{x} = 3.19$), BSEd Filipino ($w\bar{x} = 3.18$), and BSEd Math ($w\bar{x} = 3.14$), belong to the "moderate" category together with other courses like the CPTEs. Still, teachers specializing in these courses encountered greater challenges in teaching English subjects compared to CPTEs. who got the lowest weighted mean among other disciplines.

This could mean that these education major teachers who are not specializing in English subjects experienced greater difficulties in teaching English specifically in content, resources, and teaching methodologies. When these challenges are taken positively, it will yield great opportunities for learning new perspectives. In the study of Yumang (2021), it was found that educators who are teaching beyond their specialization are well-rounded educators and life-long learners.

Table 10. Analysis table on the difference between variables

Baccalaureate Degrees	N	Challenges		Coping Mechanism	
		Mean	Interp.	Mean	Interp.
BSEd Math	6	3.14	Medium	3.52	High
BSEd General Science	3	3.01	Medium	2.92	Medium
BSEd Filipino	5	3.18	Medium	3.28	Medium
BSEd PE	3	3.37	Medium	3.85	High
BSEd Social Science	6	3.23	Medium	3.12	Medium
BSEd TLE	2	3.19	Medium	3.79	High
Certificate of Proficiency in Teacher Education					
BS Eng'g. Courses	1	3.09	Medium	2.13	Large
BS Psychology	1	2.50	Large	4.00	High
BS Tourism	3	2.90	Medium	3.96	High
BS Accountancy	2	2.64	Medium	3.41	High
BS Business Admin.	5	2.77	Medium	2.98	Medium
Others	13	2.96	Medium	3.56	High

Table 10 also reveals that in terms of teacher's coping mechanisms, the BSEd PE ($w\bar{x} = 3.85$), BSEd TLE ($w\bar{x} = 3.279$), and BSEd Math ($w\bar{x} = 3.52$) majors utilize more coping mechanisms than the others like the BSEd General Science ($w\bar{x} = 2.92$), BSEd Social Studies ($w\bar{x} = 3.12$), and BSEd Filipino ($w\bar{x} = 3.28$) majors. The result suggests several factors, which include their academic background and teaching practice. According to Quennerstedt (2018), the real aim of physical education is more physical education, which results in a physically educated learning community. BSEd TLE is also a complex course with its teaching goal to develop students' theoretical and practical skills to prepare them for the world of livelihood (Calanog, 2021). BSEd Math involves showing mathematical concepts or ideas that are related and beneficial for students' application in the real world (Abramovich, Grinshpan, and Milligan, 2019). Hence, with their specific goals in academe and professional practice, it cannot be denied that what matters most is their aim whether they will mind the language they use in their instruction and/or the English language application. Adi and Khotimah (2018) believe that these instructors lack the necessary theoretical knowledge and practical basis for teaching English. With their lack of linguistic exposure and practice, it is appropriate to utilize different strategies to cope with the challenges of teaching English subjects in Senior High School.

4.0 Conclusion

Non-English major teachers teaching English subjects in Senior High School experience greater challenges in content, resources, and teaching strategies. With this result, the quality of education will be at stake because of teachers' difficulties in effectively delivering the necessary competencies and developing appropriate teaching strategies. Students' overall academic performance especially their language learning will be at risk if the current problems persist. Also, it certainly raises concerns about the resources and support provided to non-English major teachers, highlighting the need for possible training and professional development opportunities. Nonetheless, despite their struggles, non-English major teachers are resilient enough to cope with and face the battle by learning from online video tutorials, peer consultation, and teachers' reflections. Therefore, it is important to provide accessible resources, strengthen mentorship programs, and continuous assistance from experienced English teachers.

Moreover, the result of the study demonstrates that, despite a teacher's professional qualifications, there are situations that will challenge them. For instance, these teachers were hired in their expertise, but they were given tasks outside of their area of competence. Indeed, it was a painful experience at first. However, similar to the renowned mantra 'call of duty,' they persist with unwavering determination. With a positive spirit, the entire experience will provide the teachers with great opportunities to learn beyond their comfort zone. Thus, it may be difficult in the beginning, but a solid support system and continuous professional development will alleviate the challenges that will lead to better outcomes for both teachers and students.

5.0 Contributions of Authors

The researcher is the sole author of this work. Her adviser evaluated and approved the completed manuscript.

6.0 Conflict of Interests

Insofar as the study is concerned, the author claimed that there is no conflict of interest.

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Financial Practices among Foundation University Employees: Basis for Financial Plan

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Abstract. As an integral component of the university's wellness initiatives, a financial wellness program is designed to support and enhance the financial health of the employees. In order to improve and strengthen this, this study was conducted to identify the level of financial practices of Foundation University employees and how they correlate with their extent of investments. Data from 191 regular and full-time probationary employees from Foundation University were collected via a descriptive-correlational study using a validated questionnaire. Percent, weighted mean, multiple linear regression analysis, Kruskal Wallis Test, and Mann-Whitney U test were used by the researcher to treat the data. The study revealed that the majority of the employees demonstrate strong financial practices in managing their income, such as budgeting, tracking expenses, and avoiding debt. Nevertheless, there is room for improvement in terms of establishing emergency funds among a minority of employees. It was also found that employees demonstrate strong expenditure and savings practices. In terms of investment, it was revealed that employees engage in thorough research and assess risks before making decisions. They generally agree on regularly reviewing the returns on their investments, investing in bank products, and seeking advice from financial advisors to a moderate extent. Furthermore, it was found that their investment behavior is considered prudent and sound. A positive correlation between positive financial practices and higher investment levels was also manifested. Recommendations include establishing a financial clinic wherein they will offer workshops, training, and sessions focused on financial literacy topics, as well as inviting financial experts to assist employees in crafting their financial plans. Moreover, organizing a cooperative among employees is also recommended.

Keywords: Financial practices; Financial plan; Saving; Income; Investment; Expenditure.

1.0 Introduction

Everyone wants to achieve financial stability. To achieve this, it is imperative to engage in effective financial planning, which entails managing and assessing financial practices thoroughly. Financial practices significantly impact an employee's overall financial well-being, job satisfaction and productivity. These practices include a variety of behaviors, from budgeting and saving to investing and managing expenses and debts. Budgeting helps people manage their money wisely by organizing expenses according to priorities. Saving money builds financial security and helps achieve long-term goals. Responsible spending maintains a healthy balance between income and expenses. Making informed investment decisions can lead to long-term wealth growth. When these practices are managed well, the more one can improve his/her financial situation.

A 2023 report by the International Foundation of Employee Benefit Plan (IFEBC) found that majority of the employers in North America provide financial education due to concerns about their employees' lack of financial knowledge. The report revealed common challenges faced by employees, including debt, retirement savings, children's education expenses, basic living costs, and medical expenses. It also highlighted that personal financial issues impact job performance to varying extents for employees. Overall, the report underscores the significance

of employers addressing financial literacy and support for their workforce. The report is likewise evident in the study of Apawan et al. (2020) indicated that personal financial management significantly influences the quality of life of private employees. The study suggested that employers, such as One Puhunan and ASA Philippines Foundation, should persist in offering financial literacy programs to their employees. This initiative would furnish them with additional knowledge beneficial for their day-to-day financial dealings.

When employees get paid, they need to distribute their money wisely to meet various priorities and financial responsibilities. A significant portion of their income is typically allocated to cover everyday expenses like housing, groceries, healthcare, and insurance, with some set aside for savings and investments. The study of Johan et al. (2020) demonstrated that income significantly influences financial behavior, impacting individuals' ability to save or spend. According to a 2018 Consumer Finance Survey conducted by the Bangko Sentral ng Pilipinas (BSP), Filipino families, on average, spend more than they earn monthly. The survey indicates that urban areas, particularly the National Capital Region (NCR), have higher monthly expenditure levels compared to rural areas. Food expenses constituted the largest share of expenditures, followed by housing and utilities. Transportation, education, alcohol, beverages, tobacco, and healthcare also account for notable portions of expenditures. Despite these expenses, the survey highlights that the average monthly household income falls short of covering the expenditures.

Dumaguete City is known as a University Town due to its four universities and numerous colleges, including Foundation University. This university employs faculty and staff crucial for its operation. The university is diverse, representing various socio - demographic profiles and economic lifestyles. As an employee of Foundation University, the researcher aims to investigate the financial practices of the employees and how they relate to their current investments and reasons for investing. The researcher intended to use the findings as a basis for creating a financial plan.

2.0 Methodology

2.1 Research Design

The descriptive-correlational type of research was employed in this study. The level of financial practices and extent of investments were identified and these variables were correlated to each other.

2.2 Research Participants

The respondents of the study were the 191 full-time probationary and regular faculty and staff of Foundation University.

2.3 Research Instrument

The study used a paper-based and self -made validated survey questionnaire as the primary instrument for data collection. A dry run was performed to identify item reliability using the Cronbach's Alpha Test. Results showed the following Cronbach's Alpha Coefficients: 0.813 for income, 0.818 for expenditure, 0.841 for savings, 0.863 for investment and 0.799 for reasons for investing. All items are >0.70 , hence items in each area were reliable. To analyze the data, the researcher employed weighted mean and multiple linear regression analysis. Weighted mean was utilized in obtaining the level of financial practices of FU employees and the extent of their investments based on their reason for investing. Additionally, multiple linear regression analysis was used to identify the relationship between the level of financial practices and the extent of investments among FU employees in terms of current monthly investments availed; current yearly/annual investments; and reasons for investing. Furthermore, the researcher used arbitrary scale and verbal interpretations to describe the financial practices and extent of investments held by Foundation University employees.

2.4 Data Gathering Procedure

A formal request letter to carry out the study was forwarded to the Office of the Chancellor at Foundation University, Dumaguete City. This request was attached by an endorsement from the Dean of the Graduate school and signed by the student's thesis adviser. The researcher sought permission from the deans and department heads prior to conducting the data gathering and presented to them the approved request letter from the University Chancellor. The researcher personally communicated with the respondents, provided an overview of the questionnaire's scope and explained the research's purpose and significance. The questionnaires were collected

immediately after the respondents had completed them. For analysis, the gathered data were tallied and processed using MS Excel. The researcher conducted a thorough analysis and interpretation of the results, and ensured a comprehensive understanding of the research.

2.5 Ethical Considerations

The researcher took into account all essential ethical considerations. Informed consent was stated in the questionnaire. The responses of the respondents were kept strictly confidential. Given the sensitivity of financial practices, the researcher handled questions with care, providing support or resources if participants feel uneasy. The research design and procedures adhered to ethical standards and granted approval from the FU administration to conduct such study.

3.0 Results and Discussion

3.1 Financial Practices of FU Employees

In terms of Income

Table 1 financial Practices of FU employees based on their income with an overall weighted mean of 3.81. It can be noted that FU employees demonstrate commendable financial habits based on their income. They exhibit traits such as setting clear financial goals, reviewing regularly their financial goals, adhering to weekly or monthly budgets, living within their means and prioritizing essential expenses only.

Table 1. Descriptive statistics of the financial practices of the of FU employees based on their income (n = 191)

Indicators	Mean	Interpretation
1. I refrain from borrowing money to cover shortfall of income to pay for non-discretionary expenses (e.g. life necessities and needs)	3.99	Agree
2. I look for ways to make extra money.	3.97	Agree
3. I have a weekly or monthly budget that I follow.	3.89	Agree
4. I adopt a lifestyle that is below my means and on necessary expenses only.	3.88	Agree
5. I set clear financial goals.	3.84	Agree
6. I regularly review the progress of my financial goals.	3.70	Agree
7. I have an emergency fund.	3.40	Moderately Agree
Composite	3.81	Agree

Moreover, they look for ways to make extra money and avoid borrowing money to cover the shortfall of their income to meet non-discretionary expenses. These practices are reflected in the weighted mean scores ranging from 3.41 to 3.99, indicating agreement with these prudent financial practices. However, only a few of the employees have an emergency fund. As a general rule, emergency funds should be enough to cover your living expenses for three to six months. According to the study of Yustisiana et al. (2022), individuals aged 18-40 lack adequate understanding of emergency funds. It was noted in the study that a lack of emergency funds causes financial difficulties for many people in times of crisis, like the outbreak of COVID.

In terms of Expenditure

Table 2 displays the financial practices of FU employees regarding their expenditure, with an overall weighted mean of 3.83. The data reveals that employees generally endorse prudent expenditure management practices. They refrain from borrowing money for non-essential purchases and utilize discounts, coupons, and loyalty programs to save on regular purchases. Additionally, they prioritize needs over wants, avoiding impulse purchases. They consistently track their expenses by maintaining a detailed budget listing monthly expense.

Moreover, they compare prices across at least three stores before making significant purchases. These practices are evident in the weighted mean scores, ranging from 3.41 to 4.12, indicating agreement among employees regarding their practices in managing their expenditures. The finding is supported by Guillermo et al. (2018), which suggests that employees exercise caution when spending. They view spending as a form of self-reward, but only deem it suitable when purchasing items at discounted prices.

Table 2. Descriptive statistics of the financial practices of the of FU employees based on their expenditures (n = 191)

Indicators	Mean	Interpretation
1. I refrain from borrowing money to cover the discretionary expenses (e.g. perks, entertainment, luxury items)	4.12	Agree
2. I take advantage of discounts, coupons, and loyalty programs to save money on regular purchases.	4.10	Agree
3. I figured out what I really needed before buying.	4.09	Agree
4. I avoid impulse buying.	3.78	Agree
5. I consistently kept track of my expenses.	3.77	Agree
6. I created a detailed budget listing all my monthly expenses.	3.55	Agree
7. I check at least 3 stores before buying important things.	3.41	Agree
Composite	3.83	Agree

In terms of Saving Pattern

Table 3 displays the financial habits of FU employees based on their saving pattern, with an overall weighted mean of 3.84. It has been noted that FU employees agree on their savings practices. They prioritize debt reduction before saving and avoid unnecessary spending.

Table 3. Descriptive statistics of the financial practices of the of FU employees based on their saving pattern (n = 191)

Indicators	Mean	Interpretation
1. I prioritize reduction of debts before savings.	3.95	Agree
2. I reduce unnecessary spending.	3.94	Agree
3. I allocate a portion of my income to my savings.	3.88	Agree
4. Whenever I receive unexpected money (overtime pay, overload pay, bonuses, tax refunds, gifts), I consider saving a portion of it.	3.88	Agree
5. I save my money in bank deposits and other financial institution's deposit accounts.	3.75	Agree
6. I am disciplined in my financial habits.	3.66	Agree
Composite	3.84	Agree

Furthermore, they allocate a portion of their income to savings and seize opportunities to save extra money, such as overtime pay, bonuses, tax refunds, and gifts. Additionally, they save their money in bank deposits and other financial institutions. These practices are evident in the weighted mean scores, ranging from 3.66 to 3.95, indicating agreement among employees regarding their saving practices. The result is supported by the study of Manuel (2022) which states that employees practiced saving in the new normal. They tend to choose banks for their savings, even if it means earning lower interest, because they see banks as the safest and most convenient option compared to government nonbank financial institutions.

In terms of Investment

Table 4 shows the financial practices of FU employees based on their investment. As shown, FU employees exhibit sound investment practices, averaging a weighted mean of 3.48%. The data indicate that employees thoroughly review and comprehend investment products before entering into any investment transactions. They also assess the primary risks associated with investments prior to making decisions. Additionally, they educate themselves on various investment options by watching online videos or reading relevant information. Moreover, they invest in cooperative products and reinvest their earnings to generate further income. These practices are evident in the weighted mean scores, ranging from 3.45 to 3.76, indicating agreement among employees regarding their investment practices. This result is anchored to the study of Manulife (2023) on Know Your Ys and Zs which reveals a rising trend of investment interest among Filipinos, particularly among millennials and Generation Z. The study reports that 67% of millennials have already initiated investment activities, with an impressive 77% actively implementing investment concepts such as diversification and utilizing the latest investment products. Furthermore, 79% are looking for ways to grow their money.

On the other hand, they moderately agree on reviewing regularly the returns on their respective investments and investing in bank products, likewise, in seeking advice from financial advisors/experts with weighted mean scores, ranging from 3.17 – 3.38. According to the study of Linnainmaa et al. (2020), obtaining advice from financial advisors/counselors has greater benefits for those with less financial knowledge. The study suggested that the initiatives made by financial counselors to offer advice and assistance to clients and community members can enhance financial decision-making abilities, particularly among those who are most in need of support.

Table 4. Descriptive statistics of the financial practices of the of FU employees based on their investment (n = 191)

Indicators	Mean	Interpretation
1. I thoroughly review and understand the investment products' dynamics, terms and conditions, and contractual obligations before I enter into any investment transaction.	3.76	Agree
2. I understand what the key investment risks are and assess such risk before making investment decisions.	3.71	Agree
3. I watch online videos or read information to educate myself on different investment options, market trends, and financial news to make smart decisions.	3.53	Agree
4. I have invested in cooperative products (DCCCO, PHCCI, etc), including time deposits and/or share capital.	3.52	Agree
5. I use the money I make from investments to earn even more money over time.	3.45	Agree
6. I regularly review the returns on my respective investments.	3.38	Moderately Agree
7. I have invested in bank products such as time deposits, savings accounts, etc.	3.31	Moderately Agree
8. I seek advice from financial advisors and/or investment experts in managing my investments.	3.17	Moderately Agree
Composite	3.48	Agree

3.2 Extent of Investments held by FU Employees in terms of Current Investments

Table 5 shows the extent of investments held by FU employees in terms of current investments availed. As shown in the table, 61.26% of FU employees have invested monthly in a regular savings account at the bank (ATM/checking). This means that FU employees prefer investing in a regular savings account at the bank for the purpose of maintaining liquidity, easy access to funds and potentially earning interest on their savings. However, on a yearly investment, 47.12 % of the FU employees have invested in a regular savings account at the cooperative. This implies that FU employees make yearly investment from their regular savings at the cooperative. This is because cooperatives have higher interest rates compared to banks. According to Pagkatotohan (2023), major banks in the Philippines increase the funds in one's regular savings account by a modest rate of 0.10% to 0.25% annually. He emphasized that while this rate may suffice for managing daily expenses, it falls short if you have broader financial objectives and require faster growth for your funds. Cooperatives like DCCCO and PHCCI generate an annual interest of 2.5% or higher, surpassing the rates offered by banks.

Table 5. Descriptive statistics of the investments held by FU employees in terms of current investments (n = 191)

Indicators	Monthly Investment			Yearly Investment		
	f	%	Rank	f	%	Rank
1. Regular savings account at the bank (ATM/Checking)	117	61.26	1	78	40.84	2
2. Regular savings account at the cooperative	101	52.88	2	90	47.12	1
3. Insurance	80	41.88	3	58	30.37	3
4. Pag – ibig MP2	75	39.27	4	49	25.65	4
5. E-wallet	58	30.37	5	38	19.90	5
6. Time Deposit at the cooperative	32	16.75	6	28	14.66	6
7. Time Deposit Account at the bank (includes Certificate of Deposits/Money Market Funds)	26	13.61	7	17	8.90	8
8. Mutual Funds	25	13.09	8	19	9.95	7
9. Private Debt	16	8.38	9	6	3.14	11.5
10. Commodities	14	7.33	10	7	3.66	10
11. Marketable securities: Stocks or bonds	12	6.28	11	10	5.24	9
12. Foreign Exchange	8	4.19	12.5	6	3.14	11.5
13. Derivatives	6	3.14	14	3	1.57	15
14. Unit Investment Trust Funds (UITFs)	4	2.09	15	4	2.09	14
15. Crypto currency	8	4.19	12.5	5	2.62	13
Estimated Investment	P7,000			P76,000		

The table also indicates that 41.88% of the FU employees make monthly investment in insurance while 30.37% of the FU employees have it annually. This means that nearly half of the employees secured insurance coverage for themselves and their families. The perspective of consumers in the Philippines regarding insurance shifted significantly due to the COVID-19 pandemic in 2020, which leads to a notable increase in the contribution of the insurance industry to the GDP, particularly in 2021. According to Statista (2023), 36% of Filipino adults considered purchasing health insurance, while 34% expressed interest in acquiring life protection insurance.

Additionally, the table illustrates that 39.27% of FU employees currently invest in Pag-ibig MP2 monthly and 25.26% have it annually. This program, offered by Pag-ibig, is tailored for active members seeking to increase their savings and earn greater dividends alongside their Pag-ibig Regular Savings. This 2023, Pag-ibig MP2 dividend rates have reached 7.05%.

Moreover, the table indicates that a small percentage of FU employees invest monthly or annually in Unit Investment Trust Funds (UITFs), derivatives, foreign exchange, and cryptocurrency. This suggests that only a few employees have investments in these areas, likely due to limited knowledge and financial resources needed to sustain such investments. The table also indicates that FU employees have an aggregate annual investment of ₱76,000.00.

3.3 Extent of Investments held by FU Employees based on their Reasons for Investing

Table 6 shows the reasons of FU employees for investing, with an overall average weighted mean of 4.12. Data show that FU employees strongly agree that they invest to attain financial freedom for their families ($wx = 4.50$). This means that they wanted to attain financial freedom through investing. This result is true in the study of Panwar and Aggarwal (2018) which emphasized the importance of making strategic financial decisions to achieve stability and freedom. The study also found out that making the best investments can help secure your future.

Table 6. Descriptive statistics of investments held by FU employees based on their reasons for investing (n = 191)

Indicators	Mean	Interpretation
1. I want to attain financial freedom for my family.	4.50	Strongly agree
2. I prepare for aged-related diseases.	4.20	Agree
3. I invest for retirement.	4.19	Agree
4. I need to support others.	4.00	Agree
5. I have a plan to start a business.	3.95	Agree
6. I make it as my incremental income.	3.88	Agree
Composite	4.12	Agree

On the other hand, the table shows that FU employees agree on investing to prepare for age-related diseases and for retirement. They also invest to support others and plan to start a business. Most of the employees too agree that they invest to have an incremental income. These reasons are evident in the weighted mean scores, ranging from 3.88 to 4.20, indicating agreement among employees on their reasons for investing. This suggests that FU employees make investments not only for personal gain but also for the well-being of their families and loved ones. This finding is supported by the study of Almarez (2016), which revealed that young professionals primarily invest to establish emergency funds, generate passive income, and prepare for retirement. Majority of these individuals engage in thorough planning before investing, opting only for opportunities they comprehend fully. Furthermore, participants often prioritize portfolio diversification and potential returns when selecting investments.

3.4 Relationship between the Financial Practices and Investments

In Terms of Current Monthly Investment Availed

Table 7 exposes the data in identifying the level of financial practices and the extent of investments of the employees in terms of current monthly investment availed. Using Multiple Regression Analysis, it shows that the overall F Test is significant ($p = 0.002$). This finding means that some of the financial practices of the employees are significant predictors of their monthly investment availed. Examining the results, the data reflect that the financial practices of the FU employees in terms of expenditures ($p = 0.005$), saving pattern ($p = 0.040$), and investment ($p = 0.028$) are the significant determinants of their current monthly investment availed.

Considering the expenditures, the negative sign of the coefficient (-10,247.981) signifies that the higher the level of expenditure practices of the employees are, the lower are their monthly investment availed. This implies that as the level of expenditures of the FU employees increases, their monthly investments also tend to decrease. Such expenditure practices can impact one's capacity to invest. Overspending may hinder investment opportunities and restrict the potential for accumulating wealth. The study of Zhang (2023) found that overspending is often attributed to individuals who are unaware of their spending habits. In addition, the study recommends implementing financial literacy programs as a vital strategy to combat overspending. Moreover, it is important to learn money management skills early to help reduce overspending.

Table 7. Multiple regression analysis: financial practices and investments in terms of current monthly investment availed (n = 191)

Variables	Coefficients	SE	t Stat	P-value
Intercept	-4666.701	11480.726	-0.406	0.686
Income	601.988	4106.040	0.147	0.884
Expenditures	-10247.981	3537.424	-2.897	0.005
Saving Pattern	6594.353	3147.108	2.095	0.040
Investment	6320.273	2809.295	2.250	0.028
R = 0.4604				
R ² = 0.2119				
adjusted R ² = 0.1656				
F-ratio = 4.572				
p-value = 0.002 (significant)				

With regard to the positive coefficients of the saving pattern (6594.353) and investment (6320.273), this connotes that employees who tend to manifest higher saving patterns and investment tend to have higher monthly investment availed. This implies that as the savings and investment practices of FU employees improve, their monthly investments will also increase. This means that as employees develop better habits of saving and investing, they are likely to dedicate a larger portion of their income towards monthly investments. The study of Goud (2021) showed that saving and investing are closely linked and play a vital role in a person's financial well-being. The decisions regarding savings and investments are closely linked and significantly influence a person's financial well-being. Moreover, the saving and investment behaviors, as well as investment choices, of working professionals are influenced by various factors such as demographics, awareness about investments, spending habits, borrowing activities, investment behavior, financial goals, and risk tolerance.

In Terms of Current Yearly Investment Availed

Table 8 divulges that the level of financial practices of the employees in terms of income can significantly predict their yearly investment availed. The positive coefficient signifies that the changes in the financial practices of the employees in terms of income and the shifts in their yearly investment availed are significant. This further connotes that employees who have higher financial practices in terms of income tend to avail more the yearly investment. This means that FU employees who manage their income well are likely to opt for yearly investments, which could lead to higher returns. There are different investments they can consider for investing and growing their money for the long term. According to McBride (2023), a Certified Financial Analyst, one can generally anticipate higher earnings by leaving their money invested for longer periods. Long-term investments, good for retirement planning and wealth accumulation, tend to yield greater returns despite fluctuations, whereas short-term investments, recommended for urgent needs like emergency funds or house down payments, usually offer lower but safer returns on average.

Table 8. Multiple regression analysis: financial practices and investments in terms of current yearly investment availed (n = 191)

Variables	Coefficients	SE	t Stat	P-value
Intercept	-202806.312	181262.171	-1.119	0.268
Income	137625.510	60182.876	2.287	0.026
Expenditures	-143562.935	42497.894	-3.378	0.001
Saving Pattern	65284.734	47900.431	1.363	0.178
Investment	6201.977	37447.808	0.166	0.869
R = 0.4687				
R ² = 0.2197				
adjusted R ² = 50.1630				
F-ratio = 3.872				
p-value = 0.008 (significant)				

Furthermore, it also displays that the financial practices of the employees in terms of expenditures is significantly and inversely related to their yearly investment availed (the coefficient has a negative sign). This means that the higher the financial practices of the employees in this area are, the lower is their yearly investment availed. This could be because higher expenditure habits may lead to less available funds for investment, as more money is being allocated towards immediate expenses and lifestyle choices rather than long-term investments. Moreover, excessive spending habits may reflect a lower level of financial discipline, making it challenging for individuals to commit to larger, long-term investments. According to Azmi's study in 2018, when people know more about finances, they tend to spend better and avoid getting into financial problems.

In Terms of Reasons for Investing

Table 9 discloses that the financial practices of the employees in terms of expenditures ($p = 0.022$) and investment ($p = 0.002$) are the only significant predictors of their reasons for investing. The positive values of the coefficients imply that employees who have positive practices in these areas tend to have higher ratings on their reasons for investing. This means that employees who exhibit positive practices on spending and investing tend to have higher ratings in their reasons for investing. This implies that they have a greater understanding of the importance of being disciplined in spending and the benefits of investing.

Table 9. Multiple regression analysis: financial practices and investments in terms of reasons for investing (n = 191)

Variables	Coefficients	SE	t Stat	P-value
Intercept	1.691	0.318	5.323	0.000
Income	0.081	0.125	0.647	0.519
Expenditures	0.237	0.102	2.315	0.022
Saving Pattern	0.059	0.119	0.499	0.619
Investment	0.283	0.089	3.168	0.002
R = 0.5753				
R² = 0.3309				
adjusted R² = 0.3127				
F-ratio = 18.177				
p-value = <.001 (significant)				

On the other hand, according to Tikhomirova's (2020) research, millennials are less likely to invest due to insufficient capital and a lack of proper financial education. The study found that many traditional financial institutions are witnessing a decrease in interest from this demographic. The decline in interest is caused by this generation's lack of trust and changing values.

4.0 Conclusions

Good financial habits related to income management are prevalent among FU employees, who prioritize essential expenses, adhere to budgets, and actively seek additional income sources. However, there is room for improvement in terms of establishing emergency funds among a minority of employees. Employees demonstrate responsible expenditure practices by avoiding borrowing for non-essential purchases and actively seeking opportunities to save. Prudent savings behavior is evident, with a focus on debt reduction and consistent efforts to save. In terms of investments, employees engage in thorough research and assess risks before making decisions. While they show moderate agreement on investing in bank products and seeking advice from financial advisors, their overall investment behavior remains sound. Despite varying monthly investment levels, employees with positive financial practices tend to prioritize investments for financial growth. The study was solely to regular and full-time probationary faculty and staff of Foundation University. Confidentiality concerns led some respondents to withhold income and investment information, and a few declined to complete the survey. Additionally, the busy schedules of the employees caused delays and resulted in some responses not being collected. Overall, the study underscores the importance of establishing a financial clinic where financial literacy programs and personalized counseling are offered to further enhance employee financial well-being at FU.

5.0 Contributions of Authors

This study has a single author with her adviser providing review and approval for the final draft of the paper.

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7.0 Conflict of Interests

The author has stated that there are no conflicts of interest pertaining to this study.

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Evaluating the Influence of the Compensation and Position Classification System (CPCS) on Job Satisfaction and Performance among SSS Rank-and-File Employees

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Abstract. This study aimed to identify the perceptions of the SSS rank-and-file employees on the Compensation and Position Classification System (CPCS) and how they relate to the employees' job satisfaction and performance. The researcher utilized the descriptive-correlational survey and employed the random sampling technique in identifying the 118 employees from the SSS West 1 Division. The researcher used a validated questionnaire with the following Cronbach's Alpha coefficients: 0.941 for the perceptof the Compensation and Position Classification System (CPCS) and 0.918 for the job satisfaction. Findings suggest a moderate agreement among employees regarding the benefits and compensation structure under the Compensation and Position Classification System (CPCS). Additionally, the study reveals high job satisfaction and very satisfactory job performance among SSS rank-and-file employees. Importantly, significant correlations emerge between employees' perceptions on the Compofsation and Position Classification System (CPCS) and both their job satisfaction and performance levels. These findings underscore the importance of understanding employee perspectives on the Compensation and Position Classification System (CPCS) and its implications for organizational satisfaction and effectiveness.

Keywords: SSS rank-and-file employees; Compensation and position classification system; Job satisfaction; Job performance.

1.0 Introduction

Establishing a standardized salary structure is an important and globally significant challenge in the modern organizational management landscape. In a company, incentives and employee motivation play a vital role as they can be employed to steer employees toward achieving the organization's goals (Asaari et al., 2019). The Philippine Statistics Authority (PSA) released the most recent data on the 2022 Occupational Wages Survey (OWS) on September 22, 2023, showing that the average monthly salary for time-rated employees working full-time in 193 tracked occupations across selected business industries was PhP 18,423. This represents a rise of 11.7 percent from the average monthly pay rate of PhP 16,486 for these workers in 2020 and 1.7 percent from PhP 18,108 in 2018 (Philippine Statistics Authority, 2023). The amount is relatively low considering the current inflation rate.

Furthermore, Former Philippine President Rodrigo R. Duterte approved the Compensation and Position Classification System (CPCS) on October 1, 2021. In accordance with the duties and requirements associated with their positions, this Executive Order (EO) No. 150 of 2021 sets uniform pay ranges for officials and staff of Government-Owned and Controlled Corporations (GOCCs). In order to attract, engage, and retain talent while remaining compliant with current minimum wage regulations, the CPCS was established to ensure that the entire

compensation structure would, generally speaking, be identical to that of the private sector undertaking comparable work (Malacañang Records Office, 2021).

While previous research has investigated the influence of salary standardization law on teachers' socioeconomic status, work performance, motivation, and job satisfaction (refer to studies by Bjarin & Gonzales, 2019; and Ali, 2021), this study is unique in that it looks directly at how the CPCS affects rank-and-file employees' performance and job satisfaction within the Social Security System (SSS).

2.0 Methodology

2.1 Research Design

The study employed a descriptive-correlational survey methodology. It was descriptive as it aimed to understand (a) the perceptions of rank-and-file employees regarding the CPCS, (b) their level of job satisfaction, and (c) their job performance. However, given the interconnectedness of these factors, it also had a correlational aspect.

2.2 Research Participants

The participants in the study were regular rank-and-file employees of the SSS Visayas West 1 Division who were appointed and assumed their positions no later than October 1, 2021, coinciding with the implementation of the CPCS. 118 respondents were sampled out of the 159 rank-and-file employees, excluding SSS Dumaguete Branch, where the dry run was conducted.

2.3 Research Instrument

The researcher utilized a questionnaire and the Individual Performance and Commitment Review (IPCR) form during the first and second rating periods of 2022. The questionnaire, which was self-developed, underwent validation by at least three experts in business administration. Furthermore, the reliability of the survey instrument was evaluated by testing it on 24 respondents from the SSS Dumaguete Branch using the Cronbach's Alpha Test. The results indicated Cronbach's Alpha Coefficients of 0.941 for perceptions regarding CPCS and 0.918 for job satisfaction. These coefficients indicate consistency in responses, confirming the reliability of the items.

2.4 Data Gathering Procedure

This study used specific steps to ensure proper protocol in gathering data. The Vice President of the SSS Visayas West 1 Division received a formal written request for permission to conduct the study after it was approved by the Foundation University graduate school's dean. The authorized and signed request was then sent to the SSS Branches' administrative staff in order to distribute the survey or questionnaire to the relevant rank-and-file employees. The researcher discussed the significance and goal of the study with the administrative personnel of the SSS branches while the questionnaires were sent through courier. The administrative staff then relayed the instructions to the target respondents upon distribution. Once the respondents completed the surveys, they were retrieved. Subsequently, the data was totaled, examined, and explained.

The collected responses were tabulated and assessed according to predetermined criteria for data analysis. A scale ranging from 1 to 5 was utilized to describe the perceptions of rank-and-file employees and their level of job satisfaction, with corresponding verbal descriptions and extents of perception provided. Statistical tools such as Weighted Mean, Mean, and Spearman Rank Correlation Coefficient were employed to interpret the data and identify patterns or trends. These analytical techniques enabled the researcher to draw meaningful conclusions regarding the influence of the Compensation and Position Classification System (CPCS) on job satisfaction and performance among SSS rank-and-file employees.

2.5 Ethical Considerations

This research study followed ethical guidelines. Throughout the study, the researcher ensured all necessary ethical standards were met. Maintaining confidentiality was a priority since the study participants were human subjects. Protecting their privacy and dignity was crucial, along with minimizing any risks to participants.

3.0 Results and Discussion

3.1 Perception of SSS Rank-and-File Employees on the CPCS

Table 1 illustrates the perception of SSS rank-and-file employees regarding the CPCS, which provides a standardized compensation structure according to their job description and job level.

Table 1. Perception of SSS Rank-and-File Employees on the CPCS (n = 118)

Indicators	w $\bar{x}$	VD	EoP	% of Employees with SA and A Responses
1. Reviewing and enhancing the existing CPCS compensation structure will enable the employees to perform better.	4.17	A	H	79.66
2. Competent employees can be attracted & retained by the attractive pay & benefit package offered by the CPCS.	3.11	MA	M	33.90
3. My work-related experience and qualifications are appropriately compensated for under the existing CPCS compensation and benefit package.	3.11	MA	M	37.29
4. The CPCS's existing benefit and compensation package is sufficient to cover the continuous expense of living.	3.07	MA	M	33.90
5. The CPCS offers a competitive compensation and benefit package in comparison to other comparable GOCCs.	2.96	MA	M	31.36
6. My current salary is in line with what I believe it should be.	2.96	MA	M	30.51
7. Better performance is encouraged and rewarded by the existing CPCS benefit and compensation package.	2.92	MA	M	26.27
8. The CPCS offers a reasonable benefit & compensation package.	2.88	MA	M	21.19
9. The CPCS provides fair and reasonable compensation for every position and level in the organization.	2.85	MA	M	24.58
10. The ability to achieve self-interests like purchasing a car or developing my own home is made possible by the CPCS compensation.	2.76	MA	M	23.73
Composite	3.08	MA	M	

As depicted in the table, the majority of SSS rank-and-file employees "agree" that reviewing and enhancing the existing CPCS compensation structure will enable them to perform better ($w\bar{x} = 4.17$), which ranks first and is the only indicator that stood out among all other indicators. This finding suggests that addressing and potentially revising the compensation structure could yield positive outcomes for employee performance, motivation, and overall organizational effectiveness. It underscores the importance of regularly assessing and adapting compensation practices to meet the evolving needs and expectations of employees. The table further reveals that there are 79.66% of the employees who generally display positive views on the CPCS. Either they strongly agree or agree that "reviewing and enhancing the existing CPCS compensation structure will enable them to perform better". This result affirms the statement of Simbolon et al. (2023) that employee performance is favorably impacted by work-life balance, compensation, and human resource planning. This was also emphasized by Rasheed et al. (2020), who pointed out that the perception of equitable compensation and job design by employees is positively connected with their job motivation.

In addition to this, these employees "moderately agree" on the idea that competent employees can be attracted and retained by the attractive pay and benefit package offered by the CPCS, with a weighted mean of 3.11. The employees are somehow convinced that competitive pay and benefits can retain competent employees, suggesting room for improvement in perceived attractiveness. This result is an affirmation of the statement of Linh et al. (2022) that employee efficiency and improved work quality can be achieved by implementing a just compensation and reward system. It is also apparent in the table that 33.90% of the rank-and-file employees have "strongly agree" and "agree" responses on the mentioned indicators. This signifies that one-third of the rank-and-file employees have a positive outlook on the CPCS.

The table also exposes that they "moderately agree" on the notion that their work-related experience and qualifications are appropriately compensated for under the existing CPCS compensation and benefit package with the same weighted mean of 3.11. This viewpoint emphasizes the significance of fair compensation policies that acknowledge and compensate staff members based on their credentials and accomplishments, thus promoting organizational equity and justice.

The table also shows that the SSS rank-and-file employees "moderately agree" with the notion that the CPCS's existing benefit and compensation package is sufficient to cover the continuous expense of living ($w\bar{x} = 3.07$) and

with the perception that the CPCS gives them the ability to achieve self-interests like purchasing a car or developing their own homes ($wx^- = 2.76$), which ranks last among all indicators. The employees feel their current salaries are somewhat aligned with their expectations, although there may be room for improvement. This is affirmed by Bandonio et al. (2022), who state that nowadays, employees in any institution are primarily concerned with the issue of wages and remuneration.

The table also reflects that SSS rank-and-file employees have a “moderate” extent of perception that the CPCS offers a competitive compensation and benefit package in comparison to other comparable GOCCs, with a weighted mean of 2.96. They also “moderately” agree that their current salary is in line with what they believe it should be ($wx^- = 2.96$). The data point to possible areas for development to further strengthen the compensation package's perceived competitiveness in the corporate environment, which was also emphasized by Quan et al. (2022) that one of the most important parts of the socioeconomic policy framework is the wage policy, wherein it has a direct impact on the labor market, macroeconomic balances, and the lives of wage earners.

The table further displays that the SSS rank-and-file employees have a “moderate” degree of perception of the idea that better performance is encouraged and rewarded by the existing CPCS benefit and compensation package ($wx^- = 2.92$). The same is true with the notion that the CPCS offers a reasonable benefit and compensation package ($wx^- = 2.88$) and that the CPCS provides fair and reasonable compensation for every position and level in the organization, with a weighted mean of 2.85. The respondents feel like if they perform well, the organization rewards them fairly, but they are not completely sure. Atra et al. (2022) confirmed this, affirming that both competency and compensation significantly influence employee performance, which is further supported by the statement of Sadikin et al. (2023), who noted that compensation and motivation levels greatly influence the success of teachers in private schools.

3.2 Level of Job Satisfaction of SSS Rank-and-File Employees

Table 2 reveals the level of job satisfaction among SSS rank-and-file employees. Job satisfaction pertains to the level of happiness or contentment that employees experience regarding their jobs and work environment.

Table 2. Level of Job Satisfaction of SSS Rank-and-File Employees (n = 118)

Indicators	$w\bar{x}$	VD	LoS
1. I have a positive relationship with my colleagues and immediate head.	4.19	A	H
2. I enjoy my work and find it meaningful.	4.02	A	H
3. I understand what is needed to achieve my deliverables.	3.96	A	H
4. My role aligns with my abilities and job description.	3.75	A	H
5. The work environment fosters productivity and collaboration.	3.69	A	H
6. Tasks are fairly distributed within my team.	3.63	A	H
7. I have the autonomy in how I carry out tasks.	3.62	A	H
8. My job provides security and stability.	3.59	A	H
9. The organization supports my professional growth and well-being.	3.54	A	H
10. I have enough resources and manageable workload.	3.43	A	H
Composite	3.74	A	H

The table indicates that the SSS rank-and-file employees demonstrate a “high” level of satisfaction in terms of having a positive relationship with their colleagues and immediate head ($wx^- = 4.19$), which ranks first among all other indicators. This suggests that employees report a high level of satisfaction in their relationships with colleagues and immediate supervisors, indicating a supportive and collaborative work environment.

In addition, the SSS rank-and-file employees “agree” on the notion that they enjoy their work and find it meaningful, with a weighted mean of 4.02. This indicates that they find their work enjoyable and meaningful, contributing to overall job satisfaction and engagement. This finding affirms the study of Haitao (2022) stating that the recognition of employees by managers or supervisors affects their job happiness because the company values their existence, which is also in parallel with the study of Dreer (2024) emphasizing that job satisfaction and subsequent retention are significantly influenced by their job-related well-being, particularly by good feelings experienced at work.

Meanwhile, SSS rank-and-file employees “agree” that they understand what is needed to achieve their deliverables ($wx^- = 3.96$). They demonstrate a clear understanding of their job responsibilities and deliverables,

fostering a sense of clarity and purpose in their roles. The data also show that they “agree” on the notion that their respective role aligns with their abilities and job description ($wx^- = 3.75$), which means that they highly perceive alignment between their job roles, abilities, and job descriptions, indicating a good fit between individual capabilities and organizational expectations. This result affirms the statement of Karyatun et al. (2023), who stress that employee work satisfaction increases with the effectiveness with which a company implements sound corporate governance. As a result, highly motivated employees excel in achieving organizational goals, while undermotivated workers struggle and may deviate from objectives (Orpia, 2022).

Additionally, the employees feel that their work environment fosters productivity and collaboration ($wx^- = 3.69$), which denotes that the work environment is perceived as conducive to productivity and collaboration, enhancing job satisfaction and morale among them. Furthermore, they “agree” on the idea that tasks are fairly distributed within their team ($wx^- = 3.63$) and on the notion that they have enough resources and manageable workload ($wx^- = 3.43$), which simply means that their responsibilities are perceived to be fairly distributed within teams, promoting equity and teamwork among employees, and that they feel that they have enough resources and a manageable workload to prevent job burnout. This is in consonance with the study by Ortan et al. (2021), which states that a productive workplace enhances job satisfaction, well-being, and teacher retention while reducing attrition, burnout, emotional exhaustion, and teacher turnover.

Furthermore, the employees also show a “high” level of agreement on the notion that their current job provides security and stability ($wx^- = 3.59$) and that they also “agree” that the organization supports their professional growth and well-being ($wx^- = 3.54$). The data implies that these employees feel secure about their jobs, which is crucial for overall job satisfaction and well-being.

3.3 SSS Rank-and-File Employees’ Job Performance

Table 3 presents the level of job performance of SSS rank-and-file workers in the SSS Visayas West 1 Division for the first and second semesters of 2022, as documented in their individual Performance and Commitment Review (IPCR) forms. Job performance refers to how successfully a worker performs his duties. It matters how well he carries out his responsibilities, achieves his objectives, and supports the company.

Weighted Score	Adjectival Rating	1 st Sem. IPCR Rating		2 nd Sem. IPCR Rating	
		f	%	f	%
98% – 100%	Outstanding (O)	58	49.15	64	54.24
90% – 97.99%	Very Satisfactory (VS)	58	9.15	53	44.91
75% – 89.99%	Satisfactory (S)	2	1.70	1	0.85
Mean		96.26 (VS)		96.53 (VS)	
SD		3.08		2.82	

The table shows that the job performance of the SSS rank-and-file employees demonstrated a “very satisfactory” level with ratings of 96.26% in the first semester and 96.53% in the second semester. This consistency in performance reflects positively on the effectiveness of performance management systems in the organization and the overall dedication and competence of the whole SSS workforce. This finding is a confirmation of the study by Susanto et al. (2023), which pointed out that a strong sense of satisfaction for the task accomplished encourages workers to work more productively and generate higher-quality results.

3.4 Correlation between the Perception of the SSS Rank-and-File Employees on CPCS and Their Level of Job Satisfaction

Table 4 presents the data to identify the relationship between the perception of the SSS rank-and-file employees regarding CPCS and their level of job satisfaction.

Table 4. Relationship between the Perception of the SSS Rank-and-File Employees on CPCS and Their Level of Job Satisfaction (n = 118)

Variables	r_s	p-value	Decision	Remark
Perception on CPCS and Level of Job Satisfaction	0.482	<.001	Reject H_{01}	Significant

Level of significance = 0.05

Utilizing Spearman Rank Order Correlation, the data indicate that the p-value ($<.001$) is below the level of significance (0.05). This outcome suggests rejecting the null hypothesis. Therefore, there exists a significant relationship between the perception of SSS rank-and-file employees regarding CPCS and their level of job satisfaction. It implies that their level of job satisfaction is influenced by their perception of the CPCS. In other words, the higher the perception of the employees on CPCS is, the greater their extent of job satisfaction.

The perception of the CPCS significantly affects job satisfaction among SSS rank-and-file employees. A positive perception of the CPCS correlates with higher job satisfaction levels. This aligns with the study of Ali and Anwar (2021) pointing out, remuneration as a motivator significantly improves job satisfaction. Additionally, Asaari et al. (2019) also expressed that employee motivation will increase in proportion to compensation levels, which was also established in the findings of Bajarin and Gonzales (2019) that public school teachers' job satisfaction, motivation, and productivity are all significantly impacted by the Salary Standardization Law.

3.5 Correlation between the Perception of the SSS Rank-and-File Employees on CPCS and Their Extent of Job Performance

Table 5 reveals a significant relationship ($p = 0.018 < \alpha = 0.05$) between the perception of the SSS rank-and-file employees regarding CPCS and their extent of job performance.

Table 5. Relationship between the Perception of the SSS Rank-and-File Employees on CPCS and Their Extent of Job Performance (n = 118)

Variables	r_s	p-value	Decision	Remark
Perception on CPCS and Extent of Job Performance	0.216	0.018	Reject Ho2	Significant

This finding connotes that employees who perceive the CPCS highly tend to display better job performance. A positive correlation between pay and job performance has been verified by the study of Zafar et al. (2021), which reveals that public university administration should give employee salaries more thought as this will improve work performance. Furthermore, the statement of Al-Ali et al. (2019) affirms that increased employee productivity can be attributed to factors like recognition for meeting goals and receiving fair compensation aligned with their workload. Therefore, when compensation schemes and performance evaluations satisfy employees' demands, they will be more motivated at work and less likely to think about leaving the company (Aburumman et al., 2020).

4.0 Conclusion

This study has contributed significantly to advancing our understanding of the relationship between the Compensation and Position Classification System (CPCS), employee satisfaction, and organizational performance within the context of the Social Security System (SSS). The positive perception of the CPCS reflects fair and adequate compensation, boosting morale, motivation, and retention. Addressing areas needing improvement, like enhancing and reviewing the CPCS, is vital for ensuring employee satisfaction and retention, thus enhancing organizational performance and engagement. On another note, the high job satisfaction among SSS rank-and-file employees indicates a supportive work environment fostering positive relationships, meaningful work, and growth opportunities. This environment enhances employee well-being, productivity, and collaboration, which are vital for achieving organizational goals and fostering a high-performance culture. Future research could delve deeper into specific organizational practices and interventions that contribute to fostering such supportive work environments, thereby enriching our understanding of effective employee engagement strategies. Furthermore, the consistently high job performance ratings, with most employees achieving "Outstanding" or "Very Satisfactory" ratings, highlight a competent and motivated workforce aligned with organizational objectives. This underscores the effectiveness of the organization's performance management system and emphasizes the importance of continuous monitoring and recognition initiatives to sustain and enhance employee performance. Future studies could explore innovative performance management approaches or examine the impact of specific interventions on employee performance outcomes, offering valuable insights for organizational leaders and practitioners.

5.0 Contributions of Authors

The authors have both made equal and substantial contributions to the research achievement through collaborative efforts

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This research was conducted without financial assistance from any funding agency.

7.0 Conflict of Interests

The author declared that he has no conflicts of interest as far as this study is concerned.

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Customs Broker Services Operational Performance: Basis for the Development of Corporate Strategy

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Abstract. This study investigated the operational performance of customs brokers and its implications for developing a corporate strategy. In total, 277 respondents participated, comprising 121 customs brokers and 156 importers from the Philippines, providing demographic information and responding to self-administered questionnaires. We evaluated operational performance based on quality, speed, dependability, flexibility, and cost using a 4-point Likert scale. The findings revealed that both groups of respondents highly rated customs brokers in terms of quality, dependability, flexibility, and cost. Specific examples illustrating these high ratings were noted. We analyzed differences based on demographic profiles between customs brokers and importers, including gender, speed, and educational attainment. Significant differences were found based on gender and speed. Additionally, variations in educational attainment were identified regarding dependability and flexibility. A significant difference was observed between customs brokers and importers regarding operational performance objectives in terms of speed, with customs brokers rated higher than importers. Addressing this identified difference by implementing targeted measures to enhance speed can contribute to overall operational improvement, meeting the time-sensitive needs of importers and further strengthening the reputation of customs brokers. These findings have practical implications for developing a strategy to enhance the operational performance of customs broker services. By recognizing their strong performance in quality, dependability, flexibility, and cost, customs brokers can continue to prioritize and maintain high standards in these areas, thereby improving overall service delivery.

Keywords: Customs brokers; Operational performance; Corporate strategy.

1.0 Introduction

Importation and exportation are crucial to the success of national economies, and they produce great business opportunities as they are part of global foreign trade and significant to business supply chain management (World Bank, 2018). These activities are under the supervision of different government bodies in every country, which provide various policies referred to as "Trade facilitation," which refers to a set of rules that make it easier for goods to enter or leave a country for international trade. These rules are both technical and legal. As a result, trade facilitation includes all border processes, from the electronic exchange of shipment data to the simplification and standardization of trade documentation. As mentioned by Go (2018), Trade Facilitation measures may include behind-the-border policies like domestic business regulations and standards that importers and exporters must meet before importing and exporting; logistics systems that physically move and store goods from their point of origin to their destination; port infrastructure and facilities; and procedures and requirements that must be met once a shipment reaches the importing country.

In the Philippines, the increase in demand for manufactured goods and imports of raw materials is the result of demand in global manufacturing (Tirona, 2021). In the latest UN Global Survey on Digital and Sustainable Trade Facilitation report, the country's overall performance keeps getting better. In 2021, it got a score of 86.02%, which

is up from 80.65% in 2019, and was third among other Southeast Asian nations. The improved performance of the Philippines in trade facilitation is attributed to the efforts and initiatives of the Bureau of Customs. As stated in an annual report, despite the challenges, the Bureau of Customs is still consistent with its mandate to collect lawful revenues and exceeded the intended annual collection goal for 2021 by 4.7%, or P29.06 billion (BOC Annual Report 2021). Part of this initiative are the Customs Brokers, who specialize in navigating the complex procedures and regulations related to customs, tariffs, and trade laws of different countries. According to the Bureau of Customs (2019) "The practices of the customs broker profession are imbued with public service, as they involve the collection of taxes, which is the lifeblood of the government, and the facilitation of international trade, which affect the economic development of the country." For this reason, a customs broker must always act by accordance with the established set of standards to perform his duties and responsibilities, accordingly.

A customs broker in the Philippines is a licensed individual registered by the Professional Regulatory Commission and accredited by the Bureau of Customs. They assist importers and exporters in complying with the laws that govern the importing and exporting countries. Using a customs broker is the best option for accelerating the process of importing and exporting. Hiring a customs broker can shorten the amount of time it takes for an importer to have their goods released from the custody of the Bureau of Customs. Additionally, customs brokers ensure that the correct duties and taxes are collected in the government's favor and that technical smuggling of goods is minimized, according to Medin (2021). Most manufacturing producers that participate in international trade utilize the use of customs brokers, and brokers usually handle large amounts of trade for more than one manufacturing company. As of 2021, there were 2,345 licensed customs brokers and 16,053 regular importers accredited by the Bureau (BOC, 2022).

They ensure all requirements are met, prepare documentation, and make sure that shipments' corresponding duties and taxes will be collected by the government. Customs brokers confirm if the goods are correctly classified based on the Tariff and Customs Laws. They are experts in classifying goods to be imported and can apply the appropriate HS Code in the declaration of shipments to the Bureau of Customs. Customs brokers help merchants choose the right HS code, "Harmonized System Code," or other product classification codes. These harmonized codes aid authorities in understanding how to handle your items and are, to some extent, internationally identifiable. It is not as simple as "googling it" to find the right categorization code (Hall, 2021). Another thing is that a customs broker can help your items get through customs and other government agencies at the border. The professional services offered by customs brokers can save importers from any penalties that may be imposed on them in the event of a wrong shipment declaration.

Some importers and exporters are not sufficiently knowledgeable about the procedures involved in exportation and importation. Therefore, there are instances where shipments arrive at their destinations without the necessary permits. This lack of awareness leads to delays and penalties since importers are unaware that different government agencies require shipment permits. Importers often have a limited understanding of the laws governing importation and exportation. Given the complexity of importing and exporting goods, many companies opt to hire customs brokers who can act on their behalf. These customs brokers handle interactions with government agencies, facilitate the shipment clearance, and ensure every shipment reaches its final destinations.

Due to the limited study in the field of customs brokerage, this study was undertaken to support the customs broker profession in the Philippines. The study developed a recommended corporate strategy program to enhance and improve the operations of customs brokers. An exceptional customs broker plays a crucial role in aiding the government by ensuring the accurate collection of duties and taxes in favor of the government. They also assist the importers in maintaining high professional standards, transparency, and efficiency.

2.0 Methodology

2.1 Research Design

The study employed a descriptive, quantitative research design. Descriptive research aims to describe and present the characteristics, behaviors, or phenomena of a particular subject or population (Smith & Johnson, 2018). It is used to gather and interpret quantifiable data from the profile of the respondents' profile, including gender, highest educational attainment, and length of service. The researchers also identified the operational performance objectives assessed by the respondents, specifically in terms of quality, speed,

dependability, flexibility, and cost. The data collected through this research design were analyzed and interpreted to gain insights into the respondents' perceptions and assessments of the operational performance objectives. These results were then utilized in the development of a corporate strategy program.

2.2 Research Participants

The study was conducted in Parañaque City, chosen due to its proximity to the Ninoy Aquino International Airport, where a significant number of customs brokers operate. This location provided convenient access to engage with customs brokers and importers, who are likely concentrated in this area due to their work nature. A total of 277 respondents participated in the study, comprising 121 Customs Brokers and 156 Importers from respective populations of 216 and 352, with response rates of 87% and 85%. The required number of respondents was determined using the Raosoft formula, computed with 95% confidence and a 5% margin of error. Population data were retrieved from the website of the Bureau of Customs. Given the limited number of participants, a purposive sampling method was employed for participant selection based on specific criteria: customs brokers must be practicing professionals registered at the Bureau of Customs and located in Parañaque, while importers must have direct transactions with customs brokers, be registered at the Bureau of Customs, and also be located in Parañaque City.

2.3 Research Instrument

A self-made questionnaire was utilized by the researcher to collect primary data and information from the two groups of respondents. The questionnaire comprised two sections. The first section requested the respondent's demographic profile, including age, gender, educational attainment, and length of service. The second section of the survey inquired about the operational performance objectives of customs brokers, specifically focusing on quality, speed, dependability, flexibility, and cost.

Before full implementation, a pilot test was conducted and administered to thirty (30) qualified participants. The self-made questionnaire underwent validation using Cronbach's alpha to determine the reliability score, as depicted in Table 1. Overall, Cronbach's alpha results fell under the categories of good ($0.9 > \alpha \geq 0.8$) and excellent ($\alpha \geq 0.9$), indicating a high level of internal consistency for our scale. It's important to note that while a high Cronbach's alpha score suggests internal consistency among the scale's components, it does not necessarily imply that the scale is unidimensional; rather, it indicates that the components of the scale are internally consistent.

Table 1. Results of Reliability Test – Cronbach's Alpha

Variables Tested	Cronbach's Alpha	Interpretation
Quality	0.894	Good
Speed	0.861	Good
Dependability	0.918	Excellent
Flexibility	0.843	Good
Cost	0.832	Good

2.4 Data Gathering Procedure

The questionnaire was personally administered to each group of respondents. The researcher conferred, discussed the significance of the study, and gave ample time to answer the survey. The questionnaire was also distributed through the online platform using Google Forms. The distribution and retrieval of the questionnaires were done on a one-on-one basis since the researcher went directly to the respondents.

2.5 Data Analysis

The data gathered were interpreted through the following statistical procedure:

Frequency and Percentage. In the first section of the questionnaire, descriptive statistics such as frequency distribution were used to describe the profile of the respondents in terms of age, gender, highest education attainment, and length of service.

Weighted Mean. Weighted Mean is simply the average score of distribution. This was used to determine the customs broker performance objectives based on the respondents' assessment. The mean was determined by summing all the values and dividing by the total number of values. In this paper, a 4-point Likert-type Scale was used.

Kruskal-Wallis H-test and Mann-Whitney U-test. This tool was used to determine the significant differences in the assessment of respondents when they were grouped according to their respective demographic profiles. This test is considered a non-parametric test that is used to determine if there are statistically significant differences between two or more groups of variables.

T-test. This tool was used to test the significant differences in the assessment of the customs brokers and importers on the operational performance objectives. The null hypothesis will be tested at the level of 0.05 significance.

2.6 Ethical Considerations

The following ethical issues are considered:

Informed Consent. The researcher gave the people who took part in this study an informed consent form. All the information gathered was kept confidential. This consent served as a record that the participants agreed to take part in the study knowingly, voluntarily, and intelligently, and clearly and distinctly.

Confidentiality. Participants' names, ages, and other essential data are kept confidential. The researcher will not share valuable information with non-participants. No identities will be mentioned. During the reporting of the findings from this study, no individual identities will be discussed in any way.

Respect for privacy. The researcher respects the participant's views if they refuse to report personal information, as they regard it as a breach of privacy.

Right to withdraw. Any participant who initially agrees to participate in this study has the right to withdraw from the study at any point and the right to refuse to answer any particular questions or participate in a particular set of procedures.

3.0 Results and Discussion

3.1 Profile of the Customs Brokers and Importers

Table 2. Frequency and percentage distribution of respondents

	Customs Broker		Importer		Overall	
	f	%	f	%	f	%
Age						
21-30 years old	18	14.88	62	39.74	80	28.88
31-40 years old	69	57.02	72	46.15	141	50.90
41-50 years old	31	25.62	19	12.18	50	18.05
51 years and above	3	2.48	3	1.92	6	2.17
Gender						
Male	85	70.25	58	37.18	143	51.62
Female	36	29.75	98	62.82	134	48.38
Educational Attainment						
Bachelor's degree	116	95.87	152	97.44	268	96.75
Master's degree	5	4.13	3	1.92	8	2.89
Doctorate	0	0.00	1	0.64	1	0.36
Length of Service						
1-5 years	10	8.26	48	30.77	58	20.94
6-10 years	25	20.66	62	39.74	87	31.41
11-15 years	55	45.45	27	17.31	82	29.60
16-20 years	17	14.05	16	10.26	33	11.91
21 years and above	14	11.57	3	1.92	17	6.14

Table 2 represents the frequency and percentage distribution of respondents in terms of age, gender, educational attainment, and length of service. It shows that the majority of both customs brokers and importers belong to the 31-41 age bracket, comprising 57.02% and 46.15%, respectively. Among customs brokers, there is a significant difference in numbers between males (70.25%) and females (29.75%), while among importers, females (62.82%) outnumber male importers (37.18%). Additionally, among customs brokers, the majority of respondents graduated with a bachelor's degree (95.87%), a trend also seen among importers (97.44%). Furthermore, customs brokers (45.45%) typically have 11-15 years of experience in the field, while importers (39.74%) have 6-10 years of service, indicating that most importers are less experienced than customs brokers.

Based on these findings, customs brokers with 11-15 years of experience are already well-established and capable of providing quality services to their clients. Overall, the results indicate that most respondents are in the established phase of their careers, characterized as employees developing entry-level job skills and gaining work

experience to become more competitive and relevant. Employees are building foundational job skills, gaining work experience, and working towards becoming more competitive and valuable in their respective fields (Anjum, 2020). According to Ji and Kim's study (2018), employee turnover was significantly influenced by factors such as satisfaction with the current work department, job satisfaction, organizational commitment, and job stress, collectively playing a crucial role in shaping individuals' decisions to leave the organization.

3.2 Operational Performance of Customs Brokers and Importers *Quality*

Table 3. Assessment of customs brokers and importers in terms of quality

INDICATOR	MEAN	INTERPRETATION
1. Documents are prepared professionally, and they indicate essential information such as the country of origin, classification code, invoice value, weight, and quantity of the goods accurately and in good faith.	3.88	Strongly Agree
2. Challenges encountered during the customs clearance process are effectively managed.	3.84	Strongly Agree
3. The complicated customs clearance process is simplified, and the proper regulatory documents are prepared from the different government agencies.	3.83	Strongly Agree
4. Importers are assisted concerning classification, valuations, and determination of the country of origin for imports on matters relating to government requirements accordingly.	3.87	Strongly Agree
5. Import technical issues are responded to promptly.	3.82	Strongly Agree
6. Clients are defended and educated when dealing with customs or other government entities.	3.75	Strongly Agree
7. A high level of professional standards, transparency, efficiency, and business ethics are upheld.	3.85	Strongly Agree
8. Responsibilities are carried out with the utmost diligence and integrity, ensuring a high level of overall service delivery standards.	3.86	Strongly Agree
Composite	3.84	Strongly Agree

Table 3 displays the extent of operational performance in terms of quality. The results from two groups of respondents regarding the operational performance of customs brokers indicate an overall mean score of 3.84, which corresponds to "strongly agree" in terms of quality. This suggests that both groups strongly agree that the quality of the customs brokers' operational performance is high, reflecting a high level of satisfaction with it. According to Excelsior (2022), importers will need to rely on shipping experts to make informed decisions and enhance their overall efficiency and competitiveness in the global market. Utilizing a high-quality customs broker can significantly enhance a business's efficiency, cost-effectiveness, and compliance in international trade. The expertise and services provided by professional customs brokers enable businesses to navigate the complexities of global trade seamlessly, ensuring smooth operations and competitive advantage.

Speed

Table 4. Assessment of customs brokers and importers in terms of speed

INDICATOR	MEAN	INTERPRETATION
1. Always updated with the latest trade industry trends.	3.84	Strongly Agree
2. Shipments are customs cleared from customs custody as scheduled.	3.81	Strongly Agree
3. Shipments are delivered in accordance with the client's specified delivery date or schedule.	3.81	Strongly Agree
4. Client needs, and demands are responded to and assisted immediately and effectively.	3.84	Strongly Agree
5. Necessary special permits from various government agencies are applied for on time.	3.79	Strongly Agree
6. Clients' needs in identifying complex problems related to import transaction activities are responded to promptly.	3.83	Strongly Agree
7. Clients are kept up to date on the latest developments during the clearance process at customs custody.	3.81	Strongly Agree
8. Billings and other handling charges are turned over to customers on time.	3.74	Strongly Agree
9. Any discrepancy report regarding entry location and documentation is immediately responded to, avoiding any delays.	3.86	Strongly Agree
10. Refunds for overpayment or any adjustments are collected ahead of time from shipping lines.	3.67	Strongly Agree
Composite	3.80	Strongly Agree

Table 4 illustrates the extent of operational performance in terms of speed. The overall responses from two groups of respondents regarding speed, with a mean of 3.80, were described as "strongly agree." This indicates that both customs brokers and importers agree that the speed of services meets their expectations. While there is general agreement on the speed of operations performance, it's important to substantiate these findings with relevant studies. Research conducted by Lai et al. (2022) investigated how speed and punctuality of services influence customer satisfaction in the logistics industry. Their findings indicated that customers prioritize timely delivery and prompt resolution of issues or delays. This aligns with the high average scores obtained in this research,

suggesting that both customs brokers and importers appreciate the ability of customs brokers to deliver shipments on specified schedules and promptly address any issues that may arise.

Dependability

Table 5. Assessment of customs brokers and importers in terms of dependability

INDICATOR	MEAN	INTERPRETATION
1. A reliable and visible customs clearance schedule is maintained to clear shipments on time.	3.84	Strongly Agree
2. Shipments are delivered in an agreed timely manner.	3.80	Strongly Agree
3. Accurate declaration of shipment information is ensured in customs entry declarations.	3.85	Strongly Agree
4. Transaction records and documents of clients are kept confidential.	3.86	Strongly Agree
5. Recent changes to trade policies, such as customs regulations, are consistently monitored to avoid any delays during clearance.	3.84	Strongly Agree
6. Customs procedures and practices in clearing goods are transparent and synchronized.	3.84	Strongly Agree
7. Effective and efficient communication with officials of the Bureau of Customs and other government agencies is maintained throughout the clearance process to ensure smooth transactions.	3.84	Strongly Agree
8. Strong working relationships with government agencies are established, gaining trust and allowing timely transactions.	3.80	Strongly Agree
9. We maintain a strong partnership with different local transport services specializing in the quick and effective delivery of shipments.	3.83	Strongly Agree
10. Consulting or advice on the correct procedures to meet various regulatory requirements is provided.	3.84	Strongly Agree
Composite	3.83	Strongly Agree

Table 5 depicts the extent of operational performance in terms of dependability. The overall mean score for customs brokers' services in terms of dependability, scoring 3.83, indicates that respondents strongly agree, on average, that customs brokers are reliable in their services. This positive rating suggests that customs brokers consistently meet client expectations and fulfill their responsibilities in a trustworthy manner. Importers perceive customs brokers as dependable partners capable of efficiently and effectively handling various aspects of the importation process. This high level of dependability reflects the professionalism and commitment customs brokers demonstrate in delivering their services.

A study conducted by Magbagbeola (2018) aimed to support these findings on the dependability of customs brokers by examining the significance of trust and confidentiality in the customs brokerage field. The study highlighted the importance of upholding the confidentiality of transaction records and documents for fostering trust between customs brokers and importers. According to the study, customers place greater importance on customs brokers who strongly commit to protecting their private data, as this helps build trust and professionalism in the business partnership. The outcomes of this study align with the high mean scores obtained, indicating that both customs brokers and importers highly prioritize the dependability of customs brokers in maintaining transaction records and document confidentiality. Additionally, the research underscores customs brokers' moral and occupational obligations in upholding privacy norms and emphasizes the importance of trust and discretion in the customs brokerage sector.

Flexibility

Table 6. Assessment of customs brokers and importers in terms of flexibility

INDICATOR	MEAN	INTERPRETATION
1. Capabilities include adopting the latest trends in the import and export industry.	3.83	Strongly Agree
2. The ability to adjust to the latest rulings on customs regulations and other international trade-related information is demonstrated.	3.84	Strongly Agree
3. Adoption of the most recent technology, staying up-to-date on changing trends, and possessing other capabilities for customs clearance procedures are maintained.	3.85	Strongly Agree
4. The ability to resolve and catch up with irregularities encountered and adopt measures upon the clearance of shipments in customs custody is demonstrated.	3.86	Strongly Agree
5. Capacity to find other third-party industry partners to meet customer demands is ensured.	3.80	Strongly Agree
6. The capacity to adopt new strategic decisions, such as product or service development or new market adoption, is demonstrated.	3.85	Strongly Agree
Composite	3.84	Strongly Agree

Table 6 presents the extent of operational performance in terms of flexibility. The overall mean score for customs brokers' services in flexibility, scoring 3.84, indicates strong agreement among respondents. This means that, on average, participants perceive customs brokers' services to be prompt and efficient. The high mean score suggests that customs brokers can handle tasks and processes quickly, meeting the expectations and demands of their clients. This positive assessment highlights the effectiveness of customs brokers in delivering timely services and reflects their commitment to providing efficient customs clearance and logistics operations.

To validate the results regarding customs brokers' flexibility, a study conducted by Richey et al. (2022) investigated the importance of adaptability and responsiveness in the field of logistics. The study focused on examining how customs brokers navigate complex international trade systems, emphasizing their ability to adapt to evolving trends and regulations. According to this research, customs brokers who exhibit flexibility in embracing current industry trends and adapting to changing customs regulations are more capable of satisfying the varied requirements of their clients. These findings align with the high mean scores obtained in this study, suggesting that both customs brokers and importers perceive customs brokers as capable of embracing flexibility in their operations. Furthermore, the study underscores the significance of customs brokers staying current with technological advancements and industry best practices, as this enhances their capability to offer efficient and responsive customs clearance procedures. Flexibility is shown to be valuable in customs brokers' operational performance by these findings, showcasing its role in meeting the dynamic demands of the import and export industry.

Cost

Table 7. Assessment of customs brokers and importers in terms of cost

INDICATOR	MEAN	INTERPRETATION
1. Customs clearance and transport services are delivered without any hidden charges.	3.76	Strongly Agree
2. Services are provided within the expected cost.	3.81	Strongly Agree
3. Competitive trucking charges for the delivery of goods are maintained.	3.77	Strongly Agree
4. Competitive service rates that fit the needs and specifications are offered.	3.81	Strongly Agree
5. Irregularities or costly mistakes are avoided to prevent potential penalties.	3.84	Strongly Agree
6. The ability to recommend other alternative legal requirements to reduce costs, such as legal tariff reduction and other fees, is demonstrated.	3.84	Strongly Agree
Composite	3.80	Strongly Agree

Table 7 displays the extent of operational performance in terms of cost. The combined mean score for both respondents regarding cost is 3.80, indicating a strong agreement. This suggests that respondents perceive the cost aspect to be well-managed, and they have a positive view of the cost-effectiveness of customs brokerage services.

The study suggests that customs brokers who can identify alternative legal obligations such as tariff reductions and fee reductions play a critical role in minimizing importers' expenses. This finding supports the high average scores obtained in this study, indicating that both importers and customs brokers view customs brokers as capable of offering cost-saving strategies and suggestions. Additionally, the study highlights the importance of customs brokers in ensuring transparency and preventing concealed fees throughout the customs clearance and transportation process. These findings emphasize the significance of customs brokers in cost management and providing transparent and competitive pricing. By participating in import operations, customs brokers can contribute to improving cost efficiency.

3.3 Difference in Respondents' Evaluation of Operational Performance Based on Demographic Profiles

Age

Table 8 presents the Kruskal-Wallis results of the analysis examining the difference in the assessment of operational performance objectives among respondents based on their age. The operational performance objectives assessed include quality, speed, dependability, flexibility, and cost. The p-values are provided to evaluate the significance of the differences. Regarding quality, with a p-value of 0.465. Since the p-value is higher than the predetermined significance level of 0.05, the null hypothesis cannot be rejected. This indicates that there is no significant difference in the assessment of quality among respondents of different age groups. For speed, with a p-value of 0.717. Similar to the previous case, the p-value is higher than 0.05, indicating that there is no significant difference in the assessment of speed based on age.

Table 8. Kruskal-Wallis analysis results for differences in assessment of operational performance objectives by age group

CATEGORY	AGE	MEAN RANK	P-VALUE	DECISION	INTERPRETATION
Quality	21-30 years old	129.11	0.465	Failed to reject Ho	There is no significant difference
	31-40 years old	141.86			
	41-50 years old	147.49			
	51 years and above	132.83			
Speed	21-30 years old	134.58	0.717	Failed to reject Ho	There is no significant difference
	31-40 years old	143.81			
	41-50 years old	131.82			
	51 years and above	144.67			
Dependability	21-30 years old	127.81	0.242	Failed to reject Ho	There is no significant difference
	31-40 years old	140.55			
	41-50 years old	153.08			
	51 years and above	134.50			
Flexibility	21-30 years old	129.61	0.451	Failed to reject Ho	There is no significant difference
	31-40 years old	142.41			
	41-50 years old	145.68			
	51 years and above	128.50			
Cost	21-30 years old	131.19	0.424	Failed to reject Ho	There is no significant difference
	31-40 years old	139.28			
	41-50 years old	151.64			
	51 years and above	131.17			
Overall Assessment	21-30 years old	132.76	0.814	Failed to reject Ho	There is no significant difference
	31-40 years old	140.58			
	41-50 years old	142.54			
	51 years and above	155.67			

In terms of dependability, with a p-value of 0.242. Similarly, the p-value is higher than 0.05, failing to reject Ho, which means that there is no significant difference in the assessment of dependability based on age. Regarding flexibility, with a p-value of 0.451. Since the p-value exceeds the predetermined significance level of 0.05, the null hypothesis cannot be rejected. This indicates that there is no significant difference in the assessment of flexibility in terms of age. Concerning cost, with a p-value of 0.424. The p-value exceeds the critical value of 0.05, suggesting that there is no noteworthy difference in the evaluation of cost based on age. This demonstrate that age does not greatly affect how operational performance objectives are perceived.

Gender

Table 9 illustrates these findings by examining respondents' gender using the Mann-Whitney test. This analysis aims to compare their evaluation of operational performance objectives, including quality, speed, dependability, flexibility, and cost. The p-values allow the researcher to evaluate the importance of the distinctions.

Table 9. Mann-Whitney test results for differences in assessment of operational performance objectives by gender

CATEGORY	GENDER	MEAN RANK	P-VALUE	DECISION	INTERPRETATION
Quality	Male	143.22	0.305	Failed to reject Ho	There is no significant difference
	Female	134.49			
Speed	Male	149.55	0.016	Reject Ho	There is a significant difference
	Female	127.74			
Dependability	Male	139.17	0.966	Failed to reject Ho	There is no significant difference
	Female	138.81			
Flexibility	Male	143.46	0.248	Failed to reject Ho	There is no significant difference
	Female	134.24			
Cost	Male	143.41	0.270	Failed to reject Ho	There is no significant difference
	Female	134.29			
Overall Assessment	Male	146.48	0.100	Failed to reject Ho	There is no significant difference
	Female	131.02			

The obtained result in terms of quality with a p-value of 0.305. When considering speed, it is noteworthy that the p-value, determined to be 0.016, falls below the significance level of 0.05. The survey findings suggest that when it comes to customs brokers, male respondents tend to complete their job tasks with greater speed and efficiency compared to their female counterparts. These results imply a potential difference in the pace at which men and women in the customs brokerage field handle their responsibilities. According to the World Bank Group (2022), the findings suggest that the Philippines can enhance its trade facilitation policies to cater to the specific needs of

female traders. This can be achieved by enhancing female traders' awareness and comprehension of official border regulations and procedures through focused information sessions, workshops, and training programs, among other measures, by emphasizing the importance of the newly established National Trade Facilitation Committee and incorporating gender sensitivity into its action plan. By streamlining the process of regular government consultations with the private sector and implementing these recommendations, governments can gain a better understanding of trade obstacles and formulate policies that optimize the advantages of trade for women, enabling their increased participation in the economy. While these changes can empower females and contribute to their effectiveness, it's important to note that the goal is not to make women work "like men," but rather to create a more equitable and supportive environment where individuals of all genders can excel in their roles with greater speed and efficiency (Ellemers, 2018). The findings suggest that maintaining board gender diversity is essential for transport and logistics firms to achieve positive outcomes in their investments in environmental performance (Shakil et al., 2022). In terms of dependability, the corresponding p-value equals 0.966. With regards to flexibility, with a p-value of 0.248. In the same vein, the p-value surpasses the significance threshold, implying that there is no difference in the appraisal of flexibility related to gender. Concerning cost, with a p-value of 0.270.

The survey indicates that male customs brokers tend to work faster and more efficiently than their female counterparts. To address this, the compznies can enhance trade facilitation policies by providing targeted training and workshops for female traders, emphasizing gender sensitivity, and involving women in policy consultations. This approach aims to create a supportive environment for all genders. Additionally, maintaining gender diversity on boards is essential for positive environmental performance in transport and logistics firms.

Educational Attainment

Based on respondents' educational attainment, Table 10 presents the Kruskal-Wallis outcomes of the analysis examining the difference in assessing operational performance objectives among respondents. The obtained p-values below 0.131 pertain to quality. Regarding speed, the p-value exhibits the result of 0.190. When considering dependability, the researcher observed a p-value of 0.039. Yet, the p-value is statistically significant, implying a meaningful difference in the appraisal of dependability between respondents with diverse educational attainment levels. This finding suggests that the educational backgrounds of the respondents play a crucial role in shaping their perceptions of dependability. In other words, individuals with different educational attainment levels appear to hold differing views or judgments on their jobs regarding dependability.

Table 10. Kruskal-Wallis analysis for differences in assessment of operational performance objectives by educational attainment

CATEGORY	EDUCATIONAL ATTAINMENT	MEAN RANK	P-VALUE	DECISION	INTERPRETATION
Quality	Bachelor's degree	139.13	0.131	Failed to reject Ho	There is no significant difference
	Master's degree	152.06			
	Doctorate	1.00			
Speed	Bachelor's degree	139.69	0.190	Failed to reject Ho	There is no significant difference
	Master's degree	132.69			
	Doctorate	4.00			
Dependability	Bachelor's degree	138.32	0.039	Reject Ho	There is a significant difference
	Master's degree	178.81			
	Doctorate	2.00			
Flexibility	Bachelor's degree	138.19	0.019	Reject Ho	There is a significant difference
	Master's degree	183.50			
	Doctorate	1.00			
Cost	Bachelor's degree	138.97	0.100	Failed to reject Ho	There is no significant difference
	Master's degree	157.38			
	Doctorate	1.00			
Overall Assessment	Bachelor's degree	139.30	0.202	Failed to reject Ho	There is no significant difference
	Master's degree	146.13			
	Doctorate	1.00			

Education is an essential component of boosting productivity and driving economic growth. It also has a ripple effect, as human capital acts as a catalyst for innovation, and a highly educated workforce fosters creative ideas. This leads to more dependable employees and more employment opportunities of higher quality (GGI Insights, 2023). People primarily pursue a master's degree with the objectives of securing a promotion and a higher income, advancing within their current career or transitioning to a new one, personal development, earning prestige, or

attaining self-actualization (Amani et al., 2022). Obtaining a doctorate is crucial for career success, as it is often considered an essential requirement for many job positions. Although some may view the doctorate as equivalent to a period of professional experience, most graduates acknowledge that completing their doctorate has resulted in better salaries, career advancement opportunities, and dependability (Bryan & Guccione, 2018). In summary, the relationship between educational attainment and job performance, particularly dependability, is complex. While a higher level of education can contribute positively to job dependability, it's essential to recognize that other factors, such as work experience and personal qualities, also play a significant role in shaping an individual's job performance.

With regard to flexibility, the p-value is 0.019. This could mean that individuals with different educational backgrounds perceive flexibility differently or that there are measurable differences in flexibility scores among these groups. Collaborating with flexible customs brokers is essential for businesses involved in international trade. These brokers can customize customs clearance and compliance procedures to meet unique demands, industry standards, and the ever-changing global trade environment. By doing so, they help to facilitate the seamless movement of import and export goods across international boundaries, contributing to the success of businesses in the global marketplace. Furthermore, customs brokers with higher levels of education are known to exhibit greater flexibility in their work, making them an even more valuable partner for businesses looking to stay ahead in the challenging world of international trade (Global eTrade Services, 2023). Being flexible in their operations, they can configure their product lines to meet various requirements and also make quick adjustments to these product lines to accommodate new demands. Flexibility is closely linked to the speed objective, which means that a company should be able to produce high-quality products or services while also adapting its operations to suit different market conditions, like changing rules and regulations for customs clearance, which cause additional customs-related transaction costs (Yanikkaya & Koral, 2018). Those who graduate with a study in logistics demonstrate a commendable level of engagement across a spectrum of industry sectors, highlighting their capacity for versatility and adaptability. Employers consistently express satisfaction with the caliber of these graduates, attesting to their high-quality standards and adept skill levels. This feedback underscores the success of educational efforts in producing graduates who not only meet but surpass industry expectations, contributing significantly to various facets of the dynamic and rapidly growing transport and logistics sector (Mudunkotuwa & Edirisinghe, 2017). If customs brokers have an advanced education, like a master's degree or doctorate, they exhibit even greater flexibility and effectiveness in their work, as their in-depth knowledge of international trade and customs regulations equips them to navigate the changing complexities of the global market.

Concerning cost, the p-value is 0.100. The p-value is above the significance level, implying a rejection of the null hypothesis, meaning that there is no significant difference in the assessment of cost among individuals with various levels of educational attainment. Overall, education plays a crucial role in enhancing job performance, particularly in fields like customs brokerage where flexibility is essential. Higher levels of education, such as master's degrees or doctorates, contribute to greater adaptability and effectiveness in navigating the complexities of international trade. This underscores the importance of investing in education to cultivate a skilled and versatile workforce capable of meeting the evolving demands of the global marketplace.

Length of Service

Based on participants' length of service, Table 11 presents the results obtained from the Kruskal-Wallis test analyzing differences in evaluating operational performance objectives. In terms of quality, the p-value is 0.214, suggesting that there is not enough statistical proof to reject the null hypothesis with a significance level of 0.05. Accordingly, there is no noticeable distinction in the appraisal of quality among individuals with different tenures.

Regarding speed, the corresponding p-value is 0.075, exceeding the significance level, indicating no significant difference in the assessment of speed based on length of service. Concerning dependability, with a p-value of 0.160, the lack of statistical significance suggests no notable distinction in the evaluation of reliability among participants with varying lengths of service. For flexibility, the p-value is 0.343, surpassing the significance level, indicating no noteworthy difference in the assessment of flexibility according to length of service. Regarding cost, the corresponding p-value is 0.079, exceeding the significance level, implying no significant difference in the assessment of cost among individuals with varying lengths of service.

Table 11. Kruskal-Wallis analysis for differences in assessment of operational performance objectives by length of service					
CATEGORY	LENGTH OF SERVICE	MEAN RANK	P-VALUE	DECISION	INTERPRETATION
Quality	1-5 years	127.87	0.214	Failed to reject Ho	There is no significant difference
	6-10 years	133.41			
	11-15 years	147.64			
	16-20 years	137.58			
	21 years and above	166.68			
Speed	1-5 years	137.49	0.075	Failed to reject Ho	There is no significant difference
	6-10 years	134.74			
	11-15 years	147.87			
	16-20 years	113.82			
	21 years and above	172.03			
Dependability	1-5 years	122.77	0.160	Failed to reject Ho	There is no significant difference
	6-10 years	137.98			
	11-15 years	142.67			
	16-20 years	146.52			
	21 years and above	167.32			
Flexibility	1-5 years	125.89	0.343	Failed to reject Ho	There is no significant difference
	6-10 years	140.13			
	11-15 years	142.30			
	16-20 years	139.15			
	21 years and above	161.74			
Cost	1-5 years	130.41	0.079	Failed to reject Ho	There is no significant difference
	6-10 years	133.38			
	11-15 years	143.36			
	16-20 years	136.15			
	21 years and above	181.56			
Overall Assessment	1-5 years	130.79	0.108	Failed to reject Ho	There is no significant difference
	6-10 years	132.66			
	11-15 years	146.75			
	16-20 years	129.00			
	21 years and above	181.47			

In light of the insignificant p-values for all operational performance objectives, it can be determined that there is no considerable disparity in the assessment of these objectives among survey respondents with varying tenure. This demonstrates that the length of service does not greatly affect how operational performance objectives are perceived.

3.4 Difference in Operational Performance of Customs Brokers and Importers

The T-test was employed to test the significant difference in operational performance objectives between customs brokers and importers. Table 12 presents the T-test results exploring how Customs Brokers and Importers assess the Operational Performance Objectives of Customs Brokers. The table provides the means, standard deviations, F-values, and p-values for each indicator: quality, speed, dependability, flexibility, and cost.

When examining indicators of Quality, Dependability, Flexibility, and Cost in this study, the obtained p-values were higher than anticipated at levels of (Quality= 0.059), (Dependability= 0.186), (Flexibility= 0.118), and (Cost= 0.237). Consequently, the researcher cannot refute the null hypothesis, implying that there is no notable distinction in the assessment of these operational performance objectives between Customs Brokers and Importers. In contrast, regarding Speed as a measure of operational performance, with a p-value (0.008) below the significance level, the researcher has enough evidence to reject the null hypothesis. This suggests a considerable variation in the speed estimation among the two categories.

Table 12. Differences in the assessment of customs brokers and importers on the operational performance

INDICATORS	RESPONDENTS	MEAN	SD	F-VALUE	P-VALUE	DECISION	INTERPRETATION
Quality	Customs Broker	3.87	0.262	7.64	.059	Failed to	There is no
	Importer	3.80	0.315			Reject Ho	significant difference
Speed	Customs Broker	3.85	0.288	3.55	.008	Reject Ho	There is a significant
	Importer	3.75	0.333				difference
Dependability	Customs Broker	3.86	0.316	1.38	.186	Failed to	There is no
	Importer	3.81	0.308			Reject Ho	significant difference
Flexibility	Customs Broker	3.87	0.307	1.50	.118	Failed to	There is no
	Importer	3.81	0.318			Reject Ho	significant difference
Cost	Customs Broker	3.83	0.351	0.16	.237	Failed to	There is no
	Importer	3.78	0.337			Reject Ho	significant difference

According to the ratings, Customs Brokers reported a higher mean score of 3.85 for task and process completion speed, while Importers scored 3.75. It can be inferred from this statement that Customs Brokers have the belief that they can competently and timely execute their tasks. In contrast, Importers perceive the speed of customs brokers to be insufficient and below their expectations. Customs brokers' services are seen as potentially having delays, inefficiencies, or inadequate responsiveness according to importers' perspective. According to Garvey (2022), delivering goods or services on time is crucial for increasing customer satisfaction, and customers often have expectations regarding when they will receive the products or services they've paid for. Meeting or exceeding these expectations can lead to increased customer satisfaction and loyalty. Conversely, delays or late deliveries can lead to dissatisfaction and a negative impact on a business's reputation.

A supporting study consistent with these findings regarding differences in speed perceptions between customs units and importers is the research study conducted by Restuputri et al. (2022) which aimed to explore the perception of speed in the logistics industry from the perspective of service providers and customers. The findings revealed a trend, where logistics providers reported higher service speed compared to customer evaluations. This difference indicated a relationship between perceived delivery speed and actual speed between the providers. Importantly, the study highlighted the importance of addressing this discrepancy to meet customer expectations and increase overall satisfaction. The findings of this study support the results of the current study, highlighting the need for news organizations to better understand and bridge the gap between perceived speed and customer expectations so they will improve their services. The success of the customs clearance process, the standard of infrastructure, the seamlessness of international transportation, competitive pricing, the caliber of personnel and service quality, and the speed delivery of materials in the procurement procedure are all crucial factors to consider when meeting customer satisfaction (Yusufkhonov et al., 2021).

4.0 Conclusion

The study revealed that most of the respondents are importers, particularly those within the 31–41 age group, characterized by females with bachelor's degrees and service experience ranging from 6 to 10 years. On the other hand, within the same age group of 31–41, customs brokers predominantly comprise males holding bachelor's degrees and having 11–15 years of service experience. The findings revealed that both the customs brokers and importers had similar assessments of the customs brokers' operational performance objectives, indicating a mutual agreement on the excellence of services provided. The result was observed across dimensions such as quality, speed, dependability, flexibility, and cost. Gender was found to have a significant impact on the perception of speed, indicating that individuals perceived speed differently based on their gender. Educational attainment was another influential factor, affecting dependability and flexibility, although it did not significantly impact quality, speed, or cost. On the other hand, both the group of age and length of service were not observed to have a significant influence on the perception of operational performance objectives. There is a difference in perception between customs brokers and importers when it comes to the speed of operations. Customs brokers had a higher perception of their speed compared to what importers perceived. This discrepancy highlights a gap between perceived speed and customer expectations.

The research findings have important implications for the customs brokerage industry. The agreement between customs brokers and importers on service excellence is positive for industry standards. Notably, gender influences perceptions of speed, while education impacts dependability and flexibility. Although age and service length don't significantly affect perceptions, businesses should be mindful of workforce diversity. Having a gender diversity

training program that focuses on enhancing communication and responsiveness to meet the specific expectations of both males and females can help them better align their services with the diverse needs of their customers. This will create a more equitable and supportive environment where individuals of all genders can excel in their roles with greater speed and efficiency. The observed gap between customs brokers and importers in the perception of operational speed emphasizes the importance of aligning services with customer expectations. Given the observed gap, customs brokers should adapt to strengthen the speed in the operation. There is a need for improved coordination and communication between the two groups. Customs brokers should work closely with importers to ensure shipments are delivered by the specified delivery date or schedule and respond immediately to any discrepancies to prevent delays and meet the customer's satisfaction. Also, Implement a culture of continuous skill development, should provide opportunities for ongoing professional growth, training, and skill enhancements to ensure that all customs brokers and staff are dependable, flexible, and well equipped to meet customer expectations. Finally, encourage a culture of continuous quality improvement within the organization. Emphasize the importance of feedback from both importers and employees to drive positive change in operations. Regularly review and update the operational process, emphasizing accuracy, efficiency, and transparency. Regularly monitor and analyze KPI's, such as clearance times, error rates, and customer feedback, to identify areas for improvement and measure the success of your efficiency initiatives.

The study's insights provide useful information for enhancing the customs brokers services by adapting to changing needs and improving overall performance and customer satisfaction. Customs brokers can continue to prioritize and maintain high standards in these areas, thereby improving overall service delivery. Further studies should be conducted on the organizational developments for customs brokers that can contribute to their operations through the on-going improvement and adaptation of customs brokerage practices and standards to meet the evolving needs of international trade.

5.0 Contributions of Authors

The study was conceived and conducted, solely by the author, encompassing all stages from inception to completion.

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This work is funded by the author.

7.0 Conflict of Interests

The author declares no conflict of interest.

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Examining the Correlation and Predictive Power of Metacognitive Domains on Mathematics Performance Among Senior High School Students

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Abstract. This study aims to determine the correlation and predictors of students' performance in mathematics based on the eight domains of metacognition: declarative, procedural, conditional, planning, information management strategy, comprehension monitoring, debugging strategy, and evaluation. This study employed a descriptive-correlational research design conducted with 272 Senior High School Grade 11 students enrolled in the academic track. The research instruments utilized were the Metacognitive Awareness Inventory to assess students' metacognitive awareness while the multiple-choice test was used to measure students' performance in mathematics, with reliability coefficients of .853 and .790, respectively. Descriptive and inferential statistics, such as Chi-square and multiple regression analysis, were employed to interpret and analyze the data. Utilizing the descriptive statistics, results reported that metacognitive knowledge attained a mean score of 3.69 while the metacognitive control/regulation obtained a mean score of 3.65 with an overall mean score of 3.67 interpreted as aware, respectively. Furthermore, the results revealed a significant association between students' performance in mathematics and their metacognitive awareness. The study highlighted that high-performing students in mathematics were those who effectively utilized and managed their metacognitive awareness. Moreover, it was found that greater awareness of metacognitive thinking correlated with better performance in mathematics. Additionally, the results indicated that 75.3% of metacognitive domains contributed to students' success in mathematics. However, only declarative, procedural, conditional, and debugging strategies significantly predicted students' success in mathematics. This suggests that students who effectively use and manage these specific metacognitive skills are more likely to excel in mathematics. In essence, this study highlights the crucial role of metacognition in mathematics learning. By fostering students' awareness and utilization of these powerful thinking strategies, teachers can empower learners to excel in mathematics and beyond.

Keywords: Mathematics performance; Metacognitive domains; Senior high school.

1.0 Introduction

The COVID-19 pandemic significantly aggravated pre-existing learning gaps, particularly in General Mathematics. Several factors contributed to this challenge were limited opportunities for self-verification due to restricted teacher-student interaction, thus hindering students' ability to verify their understanding through real-time feedback and clarification. Additionally, the implementation of remote learning reduced access to immediate support hindering timely clarification of doubts and addressing learning roadblocks. Hence, remote learning presented challenges in comprehensively assessing various mathematical skills due to limitations in traditional methods such as giving quizzes and quarterly exams. While DepEd Order No. 031, series 2020, emphasized written works (40%) and performance tasks (60%) to assess learning objectives, solely relying on these methods limits the evaluation of diverse mathematical capabilities. This approach aimed to gauge content knowledge,

abilities, and skills through learning portfolio, self-reflection and evaluation based on rubrics. Furthermore, the absence of quarterly exams hindered the ability to gauge students' progress throughout the learning period. These limitations collectively contributed to a situation where students might possess weaker foundational mathematical skills. This, in turn, could negatively impact their preparedness for more advanced coursework, potentially hindering their academic progress.

These findings highlight the pressing need for intervention to address the identified learning gaps. This study, driven by a desire to comprehend the underlying challenges, has the potential to serve a critical role in informing and shaping such interventions. While factors like the pandemic and potential pre-existing issues likely contribute to the observed performance, further exploration is crucial to fully understand the root causes of these learning gaps. Delving into the cognitive processes of students can be a valuable first step in this endeavor.

The present study investigates the association between metacognitive awareness and mathematics performance among students. It further explores the predictive power of eight metacognitive domains (declarative, procedural, conditional, planning, information management strategy, debugging strategy, comprehension monitoring, and evaluation) on mathematics performance. By gathering and analyzing this information, teachers can gain a deeper understanding of how students think and learn mathematics. This enhanced understanding can then inform the development and implementation of more effective interventions tailored to address individual student needs and learning gaps, ultimately leading to improved mathematics performance.

Metacognition, a concept initially introduced by Flavell (1979), refers to the capacity for self-reflection and control over one's cognitive processes. This involves self-awareness, monitoring learning progress, and critically evaluating learning strategies. While Kuhn and Dean (2004) emphasize awareness and management of thoughts, Swanson (1990) highlights how metacognition allows for strategic problem-solving and self-regulation in learning. Moreover, Flavell (1979), Efklides (2008; 2011) underscore the importance of recognizing and employing key strategies like planning, information management, monitoring, and evaluation for optimal learning. Metacognition encompasses the capacity to leverage existing knowledge in strategizing, problem-solving, and critical evaluation within learning contexts (Wilson & Conyers, 2016). This dynamic process involves applying prior understanding to formulate tailored approaches, actively monitoring progress, reflecting on outcomes, and flexibly adapting strategies as required. By fostering metacognitive skills, individuals can tailor their learning approach, strategize effectively, and cultivate higher-order thinking.

Flavell's (1979) influential work identifies metacognitive knowledge and metacognitive control/regulation as the foundational components of metacognition. Metacognitive knowledge encompasses self-understanding of one's cognitive processes, strengths, and limitations. This awareness includes optimal learning styles and knowledge of task-appropriate strategies. Crucially, accurate self-assessment underpins effective problem-solving, as inaccurate perceptions can lead to the use of unsuitable strategies. Flavell further categorizes metacognitive knowledge into three domains: person variables - the individual cognitive, emotional, and behavioral tendencies; task variables - understanding how the inherent nature of tasks dictates optimal approaches; and strategy variables - knowledge of diverse problem-solving strategies and their context-specific effectiveness.

Building metacognition, as described by Schraw and Dennison (1994), involves developing three key skills: declarative knowledge - understanding your strengths and weaknesses as a learner; procedural knowledge - knowing how to implement various learning strategies; and conditional knowledge - recognizing when and why to use specific strategies for optimal learning. Declarative knowledge refers to factual knowledge and understanding about oneself as a learner. This includes awareness of one's own skills, strengths, weaknesses, and learning resources. Additionally, it encompasses the information a student needs to grasp before engaging in critical thinking or analysis within a specific subject. Talks, demonstrations, and presentations are effective methods for conveying this type of knowledge (Schraw and Dennison, 1994). Procedural knowledge involves understanding how to apply specific learning strategies to accomplish tasks. Knowing the steps involved and when to use strategies in different contexts is crucial. Students develop procedural knowledge through problem-solving, cooperative learning, and discovery-based activities (Schraw and Dennison, 1994). Conditional knowledge involves understanding when and why to apply specific learning strategies for optimal effectiveness. It helps determine the best methods or skills to use in different situations. Students can develop conditional

knowledge through simulations that demonstrate how declarative and procedural knowledge are applied in various contexts. This knowledge allows them to adapt their tactics and utilize their strengths to overcome learning challenges (Schraw and Dennison, 1994).

Furthermore, metacognitive control and regulation allow an individual to manage their own thought processes using their knowledge. It involves practices that help direct their learning and thinking (Ozsoy & Ataman, 2009). This means controlling one's behavior and motivation to optimize their learning experience and overcome obstacles. According to Schraw and Dennison (1994), metacognitive control/regulation includes five key skills: planning, information management strategy, comprehension monitoring, debugging strategies, and evaluation. Planning includes goal setting, resource allocation, and outlining the steps to achieve a learning objective. This helps students identify what they already know, what they need to learn, and potential learning approaches. Information management strategy employs organizing, summarizing, and selective focusing to process information effectively. It helps students prioritize relevance, identify key points, and connect new knowledge with their existing understanding. Comprehension monitoring involves students tracking their understanding and evaluating their chosen strategies. Encourages students to monitor their progress and evaluate how well they comprehend new material. Debugging strategies help resolve misunderstandings and performance issues. Students reassess assumptions when facing confusion and seek clarification from others. Evaluation helps students analyze their performance and the effectiveness of their chosen strategies. Students judge their overall success in completing a learning task.

2.0 Methodology

2.1 Research Design

The present study used a descriptive-correlational research design. According to Creswell (2009), this study design elaborates on and quantifies the degree of association connecting two or more variables or sets of variables. This design is supported by the Pearson-r correlation, which further clarifies the strength of the connection between variables having linear relationships. This approach aligns with Sousa, Driessnack, and Mendes (2007) who emphasize that descriptive-correlational designs are valuable for examining naturally occurring relationships between variables. In this study, the researcher aimed to assess the correlation between metacognition and the mathematics performance of the Grade 11 students at Kapayapaan Integrated School. Furthermore, the present study explored the predictors of mathematics performance based on the eight metacognitive domains, necessitating an understanding of the existing association, making this design an appropriate choice.

2.2 Research Participants

A total of 272 respondents participated in the study. To ensure representatives across the different strands, a stratified random sampling procedure was employed. This involves dividing the population into strata based on their strand and then randomly selecting a proportionate number of participants from each stratum. The sample included students from three strands: 85 from ABM, 136 from HUMSS, and 51 from STEM. Following the stratification, simple random sampling was used within each strand to obtain the final sample of 272 students. This method ensured that each student within a specific strand had an equal chance of being selected, further contributing to the overall representatives of the sample.

2.3 Research Instrument

The researcher employed a researcher-made multiple-choice test to assess the mathematical performance of Grade 11 students. The test consisted of fifty (50) multiple-choice items and was designed by the Department of Education's guidelines for General Mathematics, focusing on topics such as relations and functions, rational functions, and exponential and logarithmic functions. To ensure the validity and reliability of the research instrument, the researcher sought the assistance of three (3) master teachers in mathematics for validation purposes. The test was pilot-tested with thirty (30) Grade 12 students and underwent item analysis. Using the Kuder-Richardson method, the overall reliability coefficient was determined to be .853, indicating that the test is highly reliable as a classroom assessment tool. The learner's performance was interpreted as high performing with a score ranging from 38-50, average performing with a score of 28-37, and low performing with a score of 0-27.

The Metacognitive Awareness Inventory, originally developed by Schraw and Dennison (1994), was used in this study. It consists of eight domains such as declarative, procedural, conditional, planning, information

management strategy, debugging strategy, comprehension monitoring, and evaluation. The domains were assessed using a 52-item questionnaire. Participants responded to each item using a five-point Likert scale ranging from 1 (never), 2 (seldom), 3 (sometimes), 4 (frequent) and 5 (always). To ensure the validity and reliability of the instrument, the researcher sought the help of the master teachers to assess the validity and suitability of the items in each indicator. The questionnaire was then pilot-tested to thirty (30) Grade 12 students and underwent Cronbach's alpha analysis, resulting in an alpha coefficient of 0.79, which indicates high internal consistency.

2.4 Data Gathering Procedure

The researcher employed a comprehensive and ethically responsible data gathering procedure. First, a formal letter was sent to the School Head to ask permission to conduct the study. This is to ensure the alignment with school policies and establish trust with the school administration. After the approval of the letter, the researcher then proceeded to the target respondents, clearly explaining the study's purpose, and requesting their voluntary participation in answering the survey questionnaire. After all the permissions were granted, the survey questionnaires were administered to the target respondents. After data collection was completed, the gathered information was meticulously organized and tallied. Subsequently, appropriate statistical tools were employed to analyze the data, allowing for the extraction of meaningful insights and interpretation of results.

2.5 Data Analysis

The data gathered were interpreted descriptively and inferentially.

2.6 Ethical Considerations

Throughout the research process, the researcher placed great importance on upholding ethical standards. This involved showing respect for the voluntary participation of the respondents. The researcher made sure that the respondents fully understood the implications of the study and willingly took part, without any form of pressure or coercion. The survey instruments used were free from any bias, discrimination, or offensive content. Additionally, the researcher was diligent in acknowledging and crediting the source materials used. The researcher took care to provide accurate citations, giving proper recognition to the work of other authors. Furthermore, the researcher prioritized the confidentiality and security of the data collected. The information was treated with the utmost respect and used solely for academic purposes, by the Data Privacy Act of 2012.

3.0 Results and Discussion

3.1 Students' Metacognitive Awareness in terms of Metacognitive Knowledge and Control/Regulation

Metacognitive knowledge, defined as an individual's understanding of their own learning processes, including factors influencing performance, available strategies, and the appropriate application of those strategies (Lai, 2011). Table 1 presents the distribution of metacognitive knowledge levels among the respondents. The results showed that the conditional knowledge had the highest mean score ($\bar{x} = 3.75$) on the metacognitive knowledge scale compared to the procedural ($\bar{x} = 3.66$) and declarative ($\bar{x} = 3.64$) domains. This mean score along with the overall mean score of 3.69, falls within the range interpreted as "aware". These findings suggest that, on average, students demonstrated a level of awareness about their thinking process.

Table 1. Descriptive statistics of students' metacognitive awareness in terms of metacognitive knowledge and control/regulation

DOMAIN	MEAN	S.E. OF MEAN	SD	MINIMUM	MAXIMUM	INTERPRETATION
Metacognitive Knowledge						
Declarative	3.64	.035	.580	2.00	5.00	Aware
Procedural	3.66	.037	.603	1.75	5.00	Aware
Conditional	3.75	.040	.662	2.00	5.00	Aware
Overall Mean	3.69	.034	.556	2.04	4.96	Aware
Metacognitive Control/Regulation						
Planning	3.75	.034	.556	2.43	5.00	Aware
Information Management Strategy	3.56	.035	.574	1.70	5.00	Aware
Comprehension Monitoring	3.57	.037	.604	1.14	4.86	Aware
Debugging Strategy	3.68	.034	.554	2.06	5.00	Aware
Evaluation	3.58	.037	.602	2.17	5.00	Aware
Overall Mean	3.65	.030	.511	2.08	4.85	Aware
Metacognitive Awareness						
Overall Mean	3.67	.031	.517	2.06	4.85	Aware

Several studies highlight the importance of metacognitive knowledge in mathematics achievement. Chytry et al. (2020) identified it as a key factor alongside mathematical intelligence. Their findings suggest that students with stronger metacognitive knowledge tend to perform better in mathematics. Similarly, Radmehr and Drake (2020) observed that students with greater metacognitive awareness in integral calculus were more successful in solving related problems. This positive correlation between metacognitive knowledge and academic performance extends beyond mathematics. Özçakmak et al. (2021) reported that individuals with higher levels of metacognitive understanding exhibit enhanced cognitive abilities, suggesting benefits across various academic domains. Supporting this notion, Md. Yunus & Ali (2008) also found a link between stronger metacognitive awareness and improved academic performance in general.

Moreover, metacognitive control and regulation, as defined by Ozsoy & Ataman (2009), refer to the self-directed management of thought processes through the application of learned knowledge. This involves utilizing specific practices to guide one's learning and thinking. In essence, it equips individuals to control behavior and motivation to optimize learning experiences and overcome challenges. The table below presents the distribution of metacognitive control/regulation levels across the different strands among the study respondents.

Analysis revealed that the planning achieved the highest mean score ($\bar{x} = 3.75$) on the metacognitive knowledge, followed by the debugging strategy ($\bar{x} = 3.68$), evaluation ($\bar{x} = 3.58$) and comprehension monitoring ($\bar{x} = 3.57$). However, the information management strategy obtained the lowest mean score ($\bar{x} = 3.56$). All domains, including the overall sample with a mean score of 3.65 fell within the range interpreted as "aware" on the scale. These findings suggest that, on average, students demonstrated a level of awareness about their self-regulation strategies. This suggests a baseline level of awareness across different academic specializations regarding their understanding of metacognitive strategies and their ability to apply these strategies to manage their learning. However, it is essential to acknowledge that a score within the "aware" range does not necessarily indicate the ability to effectively apply these strategies to manage learning.

Metacognitive skills, as defined by Schraw & Moshman (1995) and Du Toit & Kotze (2009), encompass the ability to manage learning and thinking activities. Research suggests a strong link between metacognitive skills and students' success (Belet & Guven, 2011; Menz & Xin, 2016; Nongtodu & Bhutia, 2017). Students with higher metacognitive abilities demonstrate stronger mathematical problem-solving and thinking skills (Menz & Xin, 2016; Nongtodu & Bhutia, 2017). Furthermore, studies have shown a positive correlation between metacognitive awareness and academic achievement. Students with strong metacognitive skills can identify areas of difficulty, choose appropriate learning strategies, assess their effectiveness, and adapt their study plans (Stanton et al, 2021). Teachers play a crucial role in fostering these skills by implementing teaching strategies that enhance student learning, promote self-monitoring, and control, and encourage social metacognition during collaboration work (Stanton et al., 2021).

3.2 Students' Metacognitive Awareness According to their Mathematics Performance

Table 2. Frequency distribution of students' metacognitive awareness according to their mathematics performance.

Table 2: Frequency distribution of students' metacognitive awareness according to their mathematics performance.															
	METACOGNITIVE KNOWLEDGE					METACOGNITIVE CONTROL/REGULATION					OVERALL				
	HP	AP	LP	Total	%	HP	AP	LP	Total	%	HP	AP	LP	Total	%
HA	43	7	0	50	18.4	40	7	0	47	17.3	42	4	0	46	16.9
A	34	103	1	138	50.7	36	93	1	130	47.8	36	108	0	144	52.9
MA	1	54	23	78	28.7	2	66	21	89	32.7	0	54	26	80	29.4
SA	0	2	4	6	2.2	0	0	6	6	2.2	0	0	2	2	.80
Total	78	166	28	272	100	78	166	28	272	100	78	166	28	272	100

Legend: FA – Highly Aware; A – Aware; MA – Moderately Aware; SA – Slightly Aware; HP – Highly Performing; AP – Average Performing; LP – Low Performing

Table 2 shows the distribution of students' metacognitive awareness about their mathematics performance. The data revealed that over half (50.7%) of students demonstrated an aware level of metacognitive knowledge. Additionally, a substantial portion (28.7%) exhibited a moderate level of awareness, while 18.4% showed a high level of awareness. Only a small percentage (2.2%) fell into the slightly aware category. In terms of metacognitive regulation, a similar pattern emerged. Nearly half (47.8%) of the students displayed an awareness level of control, with 32.7% at a moderate level. A noteworthy finding is the relatively high proportion (17.3%) of students in the

very high category. As with metacognitive knowledge, a small percentage (2.2%) belonged to the slightly aware group.

Furthermore, none of the respondents reported a “not aware” level of metacognitive awareness, whether metacognitive knowledge or metacognitive control/regulation. Analyzing student groupings based on their mathematics performance reveals interesting patterns. Among the 78 high-performing students, 42 (53.8%) exhibit high metacognitive awareness, and 36 (46.2%) are categorized as “aware.” This suggests a strong association between high metacognitive awareness and strong math performance. Meanwhile, as the data shifts with average performers, only 4 out of 166 (2.4%) are highly aware, while 108 (65.1%) are “aware,” and 54 (32.5%) are moderately aware. This indicates a wider range of metacognitive awareness levels within the average group, suggesting other factors might also contribute to their performance. Moreover, in the low performing group, 26 (92.9%) are moderately aware, and 2 (7.1%) are slightly aware. This limited data suggests the possibility of lower metacognitive awareness within this group, but further investigation is needed due to the small sample size.

While the presented data hints at a possible link, the statement mentions a chi-square test result in Table 3. Conducting this statistical test would determine if the observed association between metacognitive awareness and mathematics performance is statistically significant. These findings suggest that metacognitive awareness might indeed play a role in mathematics performance.

3.3 Test of Association between Mathematics Performance and Metacognitive Awareness

The presented table summarizes the analysis of the association between students’ mathematics performance and the level of metacognitive awareness. The results indicate a statistically significant correlation ($p\text{-value} < 0.01$) between the two variables. This finding suggests that students with higher levels of metacognitive awareness tend to demonstrate stronger performance in mathematics.

Table 3. Test of association between students’ performance in mathematics and their metacognitive awareness.

	VALUE	DF	ASYMP. SIG. (2-SIDED)
Pearson Chi-Square	190.353 ^a	6	.000
Likelihood Ratio	154.703	6	.000
Linear-by-Linear Association	114.724	1	.000
N of Valid Cases	272		

^aSignificant at $p < .01$

Metacognition, defined as the ability to leverage prior knowledge to plan learning activities, solve problems, reflect on and evaluate findings, and adapt approaches (Wilson & Conyers, 2016), has been linked to positive academic outcomes. Studies by Yunus & Ali (2008) and Abdelrahman (2020) demonstrate a correlation between stronger metacognitive awareness and higher academic achievement while Stanton et al. (2021) highlight how these skills empower students to navigate learning challenges and adjust strategies effectively.

Research further suggests that incorporating metacognitive strategies into instruction can enhance learning, particularly within mathematics. Abari & Tyovenda (2021) found that students using these strategies in math education significantly outperformed students exposed to conventional methods. Similarly, Jacobse & Harskamp (2009) reported that metacognitive prompts during problem-solving improved both comprehension and strategic application, while Kramarski & Friedman (2014) suggest that these prompts can foster self-regulation skills by promoting self-awareness of situations requiring additional support. These findings contribute to the understanding that metacognition, while potentially an inherent ability, can be actively nurtured through instructional practices. By encouraging students to utilize metacognitive skills during learning activities, teachers can potentially contribute to improved performance, particularly in subjects like mathematics.

However, it is important to acknowledge that the statement by Ayodele & Adeoye (2022) regarding metacognition as an “inbuilt” skill and “automatic behavior” requires further clarification and nuanced research. Metacognitive development is likely a complex process influenced by various factors, and further investigation is needed to fully understand its multifaceted nature. Overall, this body of research underscores the potential benefits of integrating metacognitive strategies into educational practices to enhance student learning and achievement.

3.4 Metacognition as Predictor of Mathematics Performance

Table 4 reveals a predictive relationship between metacognitive domains and students' mathematics performance. The analysis indicates that metacognition explains a substantial portion (75.3%) of the variation in math scores ($R^2=0.753$). Further, the F-test revealed a statistically significant relationship between metacognition and mathematics performance ($R^2 = 0.753$, $Df = 271$, $F = 100.417$, $p<.05$). This means that 75.3% of the variation in students' mathematics scores can be explained by the metacognitive domains. Furthermore, table 4 demonstrates the specific metacognitive domains - declarative, procedural, conditional, planning, IMS, comprehension monitoring, debugging strategy, and evaluation - all individually act as significant predictors of math success.

Table 4 presents that the metacognitive domains found to significantly predict students' mathematics performance. Analysis revealed that declarative (t-value=4.192, p-value<.01), procedural (t-value=3.719, p-value<.01), conditional (t-value=1.704, p-value<.05), and debugging strategy (t-value=2.323, p-value<.05) emerged as significant predictors.

Table 4. Regression Analysis on the Effect of Metacognitive Domain to the Mathematics Performance

MODEL	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS	T	SIG.	INTERPRETATION
	B	Std. Error	Beta			
1 (Constant)	2.360	1.191		1.982	0.049	Significant
Declarative	2.066	0.493	0.225	4.192	0.000	Significant
Procedural	1.906	0.513	0.216	3.719	0.000	Significant
Conditional	0.850	0.499	0.106	1.704	0.048	Significant
Planning	0.533	0.579	0.056	0.920	0.358	Not Significant
Information Management Strategy	0.929	0.606	0.100	1.533	0.126	Significant
Comprehension Monitoring	-0.351	0.570	-0.040	-0.616	0.538	Not Significant
Debugging strategy	2.428	1.045	0.052	2.323	0.021	Not Significant
Evaluation	0.436	0.457	0.049	0.953	0.341	Not Significant

R=.868 (Strong Relationship); $R^2=.753$; Adjusted R=.746; SE=2.686; $F=100.417$; $p<.05$

Research suggests a positive link between metacognitive ability and mathematical achievement in high school (Van der Stel et al., 2010; Veenman et al., 2005). Abdelrahman (2020) further highlights metacognition's role as a strong predictor of academic success, with interventions enhancing metacognitive skills and subsequently, academic performance. These findings align with Yunus et al. (2009) who identified specific metacognitive knowledge domains, such as declarative, procedural, and conditional knowledge, as significant contributors to mathematics achievement. However, other studies present a more nuanced picture. Zulkiply (2008) emphasized the predictive power of planning, while Malekian & Saheb (2010) focused on information management strategies and control/monitoring processes. Similarly, Farnam & Anjomshoaa (2020) identified planning and cognitive awareness/strategy as having significant effects on students' academic motivation and achievement, respectively.

4.0 Conclusion

The analysis of student performance revealed valuable insights into their use of metacognitive knowledge and debugging strategies when tackling mathematical activities. The results suggest that students were generally effective and efficient in applying these skills. This finding implies a potential shift towards students relying more heavily on their strategic knowledge rather than simply recalling factual information. This positive trend indicates that students are becoming more strategic in their approach to mathematics. They are not only acquiring knowledge but also developing a deeper understanding of their own cognitive processes. This includes an awareness of their strengths and limitations when it comes to mathematical problem-solving.

Furthermore, the analysis suggests that students have developed an understanding of when and why to use the most appropriate method in different situations. This indicates their ability to apply both factual and procedural knowledge strategically. This skill can be further honed by incorporating simulations into the learning process. Simulations can effectively demonstrate how both types of knowledge are applied in various mathematical contexts. Additionally, the successful application of metacognitive knowledge suggests that students have likely been exposed to learning strategies like problem-solving, cooperative learning, and discovery-based activities. These activities play a crucial role in developing and reinforcing metacognitive awareness. Through these strategies, students learn to recognize when and why to utilize specific approaches for optimal learning. Through these strategies, students could ask clarifying questions to strengthen their understanding. Students reassess

assumptions when facing confusion and seek clarification from others. Therefore, it is necessary to practice students to ask questions so that proper feedback could be address to the learning situations.

In essence, the results suggest that students are adept at using their existing knowledge to overcome mathematical challenges. They also demonstrate a growing awareness of when to implement different strategies to address specific mathematical problems. This highlights the importance of building upon existing skills and encouraging students to become more independent and strategic learners. Asking clarifying questions results in a more successful mathematical problem-solving strategy.

Given the limitations of the current study, particularly the sample size and the specific academic setting, future research is recommended to explore this topic further with a large and more diverse participant pool. Additionally, incorporating other relevant variables into the research design could provide a more comprehensive understanding of the phenomenon under investigation.

5.0 Contributions of Authors

The single-authored study aimed to develop and recommend a strategy for addressing a problem in General Mathematics. The author conceptualized the research design, implemented the study, and prepared the manuscript. Future research with a larger team could explore the generalizability of the findings and refine the proposed strategy.

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7.0 Conflict of Interests

The author declares no conflict of interest.

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Lived Experiences of Indigenous People's Education (IPED) Teachers in Integrating the IPED Curriculum

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Abstract. The IPED Program aims to provide marginalized ethnic groups with an inclusive curriculum that respects their cultural identity. Department of Education recognizes that access to culture-responsive primary education is a crucial issue that needs to be addressed among Indigenous Peoples, given its significance in achieving the country's Education for All (EFA) targets. This study was conducted to determine the lived experiences of IPED teachers in integrating the IPED curriculum. Participants were assigned from different IPED-implementing schools in the Division of Misamis Occidental. They were selected through purposive sampling. Face-to-face interviews were conducted to gather the data from the participants. The study employed a qualitative research design, and the researcher used the transcendental phenomenological approach. Responses were analyzed using Braun and Clarke's thematic method of data analysis. Findings revealed that IPED teachers faced various challenges in integrating the IPED curriculum, including additional workload, difficulty in Subanen Orthography, limited IPED instructional materials, and disinterest in the Indigenous Program. The participants also gained meaningful opportunities to become IPED teachers, such as understanding the Subanen culture and receiving awards and recognition as IPED teachers. To cope with the mentioned challenges, IPED teachers had to seek assistance from I.P. leaders in the community, attend IPED seminars and workshops, and observe flexibility and open-mindedness. These suggest that addressing the workload, cascading intensive Subanen Orthography workshop, supplying adequate IPED instructional materials and teaching resources, boosting IPED learners' interests, and increasing I.P. community involvement are essential steps toward improving the educational experience for both teachers and students.

Keywords: Challenges encountered; IPED curriculum; IPED teachers; Lived experiences; Qualitative approach.

1.0 Introduction

The pursuit of providing Indigenous Peoples with culturally rooted education that caters to their specific needs has become a significant concern for numerous nations and local and international organizations (Montaner, 2020). However, the struggle for inclusive education remains a poignant challenge in countries where particular ethnic groups face marginalization. The increasing influx of immigrants into Europe places additional pressure on educational systems to understand and address the requirements of immigrant students. Meanwhile, indigenous peoples residing in rural areas in Asia present a pressing issue (Cucio & Roldan, 2020). In the Philippines, the Department of Education recognizes that access to culture-responsive primary education is a crucial issue that needs to be addressed among Indigenous Peoples, given its significance in achieving the country's Education for All (EFA) targets, Millennium Development and Basic Education Sector Reform Agenda (BESRA).

However, implementing this program has resulted in mixed reactions from teachers of Indigenous People's Education (IPEd). Integrating indigenization and technology in the teaching-learning process poses opportunities and challenges for indigenous education in the Philippines (Tolentino et al., 2020). The success of program implementation is influenced by factors such as the teacher's knowledge of the learner's culture and traditions, the relevant training attended by implementers, the socioeconomic status of I.P. families, and the availability of necessary resources and facilities (Bangcas et al., 2022). A study conducted by Cucio and Roldan (2020) focused on implementing the IPEd curriculum in Cabadbaran City, highlighting the dominance of the Manobo tribe and the orientation provided by DepEd. The localization and indigenization of the curriculum, as well as stakeholder engagement, have been integral to the institutionalization of Indigenous People's Education within the Division.

Ocampo, Rufino, and Gonzales (2021) conducted a study on the policy creation processes that integrate inclusion and social justice in the education policies for indigenous people within the K to 12 Basic Education Program. Their investigation uncovered the profound capacity of education tactics and procedures that are tailored to specific contexts and empower individuals, to bring about significant changes not only in policies but also in the individuals who create those policies. This implies that policymakers have the ability to bring about significant transformation by adopting educational strategies that are based on the cultural background of indigenous people. This will result in the promotion of greater inclusivity and social justice within the education system.

Therefore, while previous research has focused on the development and policy aspects of IPED, more needs to be understood regarding the practical challenges and successes teachers face in implementing this curriculum. By examining teachers' experiences, this study will provide valuable insights into the obstacles encountered, strategies employed, and the impact of IPED on students' learning and cultural identity. The findings will improve teacher training, curriculum implementation, and policy development, ultimately enhancing the effectiveness of IPED initiatives.

2.0 Methodology

2.1 Research Design

This study utilized qualitative research, which conducted face-to-face interviews and direct observation methods in a transcendental phenomenological approach. The participants' interview transcripts were scrutinized and analyzed through in-depth reading to achieve the target interpretation for this part of the study. Husserl primarily created a philosophical approach to qualitative research methodology known as transcendental phenomenology, which aims to comprehend human experience. Pure transcendental phenomenological research is grounded in the concept and conditioned upon setting aside all preconceived ideas to see phenomena through unclouded glasses, thereby allowing the true meaning of phenomena to emerge naturally and within their own identity (Husserl & Moran, 2012). Through this lens, the study utilized the method to investigate the real-life experiences of teachers teaching the IPED curriculum. Statements of the respondents that were essential to the conduct of this study were transcribed, bearing the lived experiences of teachers teaching the IPED curriculum. The participants were permitted to speak in the language they were comfortable talking. This design was employed since the study will use non-numerical data to interpret and analyze people's experiences and actions. As such, the study aimed to obtain the informants' perspectives and perceptions from the vantage points of their experiences. This study also utilized open-ended conversational communication through personal interviews with the informants.

2.2 Research Participants

The study participants, who were selected through purposive sampling, included only ten (10) teacher-participants from IPEd-implementing schools in the Division of Misamis Occidental as suggested by Morse (2000) that at least 6 participants are required for phenomenological studies. The following are the criteria in the selection of the participants: (1) at least five years of experience working as a public elementary teacher in an IPED school within the Division of Misamis Occidental, (2) has been teaching IPEd classes using IPEd curriculum, (3) within the age bracket of 25-55 years old and (4) with no pending administrative case.

2.3 Research Instrument

This study used researcher-made interview guide questions. A researcher-made guide question, also known as an interview protocol, is a set of open-ended questions developed by the researcher to guide the qualitative data collection process, such as in-depth interviews. In this study, the researcher created interview guide questions. A

collection of open-ended questions created by the researcher to direct the qualitative data-collecting process, such as in-depth interviews, is called an interview protocol or researcher-made guide question set. There are four (4) sections to it. The participants' demographic profile is covered in the first section. The second part is about the participants' experiences, either positive or challenging experiences. The third part asks about the coping mechanisms of participants with the challenges they experienced, and the last part addresses participants' aspirations as IPED teachers. The researcher-made interview protocol is usually based on the research objectives and theoretical framework and is reviewed and validated by experts to ensure their relevance and clarity. The experts in the Division of Misamis Occidental were the following: (1) Education Program Supervisor in LRMDs, Multigrade, and IPED; (2) Principal of IPED implementing school; (3) IPED Focal Person. A guide question guarantees that essential subjects and themes are covered organized and methodically while allowing for flexibility and adaptation in the data collection process.

2.4 Data Gathering Procedure

This research commenced after obtaining authorization from the Dean or Program Head of the Graduate School to carry out the investigation. The researcher also obtained consent from the Schools Division Superintendent of the Division of Misamis Occidental. After obtaining consent, the researcher chose ten (10) teachers from different IPED-implementing schools in the Division of Misamis Occidental and scheduled an interview with them. The researcher employed a face-to-face interview method to avail the advantages of seeking clarifications, posing further probing inquiries, and observing non-verbal cues. Furthermore, using a voice recorder proved advantageous for the researcher in retrospectively examining the events that occurred throughout the interview.

The informants were apprised of the study's objective both orally and using a consent letter. The participants were cognizant of the fact that their involvement in the interview was optional and that they had the freedom to end it at any time without providing an explanation. Declining to participate would not incur any penalty or forfeit any rewards. Participants were aware that all items were confidential and should only be utilized for the purpose of this study.

After gathering and verifying the data, they were reviewed and analyzed using thematic analysis by identifying the themes related to this study. The thematic analysis procedure was used to classify the perspectives and significance of the views in the transcript of each participant (Clarke & Braun, 2013). In the phenomenology approach, the participant's sense of the life experience comprises the main thematic points in the conclusions (Polit, 2010). Statements made in the vernacular by the research participants are to be transcribed without changing the end of the speech, and commonalities are to be found among their accounts to identify them by theme. Moreover, the responses of the participants were labeled per category.

2.5 Ethical Considerations

Throughout the study, the participant's rights, privileges, and health came first. During the inquiry, the following ethical considerations were applied and recorded.

Informed Consent. The first step was the use of consent letters. It was made available to the participants a few days before the event so they could think about their options and, if they like, sign a document confirming their voluntary involvement. They had plenty of time to freely offer their full cooperation, support, and involvement in the study or decline to participate if they did not want to. The consent letter informing participants of the study's goals, benefits, and drawbacks was crucial. Thus, throughout the study's execution, deception was avoided.

Confidentiality. The researcher guaranteed the security and anonymity of the data obtained and the confidentiality of the participant's personal information and identities. As a result, after gathering data, the researcher handled and discarded any documents (printed or digital) holding the informants' data with extreme caution.

3.0 Results and Discussion

This study used a direct observation method in the transcendental-phenomenological approach, in which the interview transcripts of the participants were scrutinized through thorough reading to achieve the target interpretation for the content of this part of the study. Statements of the respondents that were essential to the conduct of this study were transcribed, bearing the lived experiences of IPED teachers in integrating the IPED

curriculum. The significant statements disclosed by the participants in this research were grouped and arranged under the pre-identified themes, which were considered main themes: Experiences and Challenges of IPED Teachers, IPED Teacher Opportunities, and Effective Strategies.

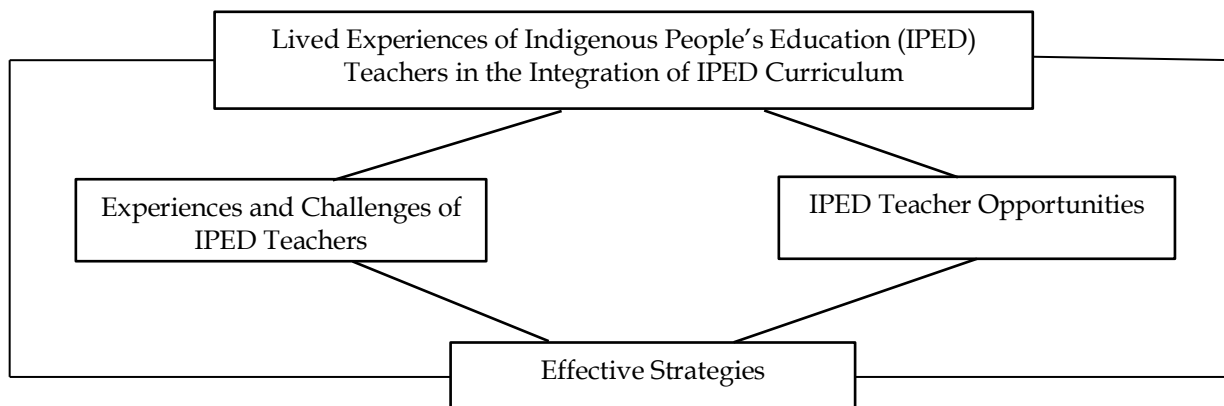


Figure 1. Schematic Diagram of the Study

Theme 1: Experiences and Challenges of IPED Teachers

The following emergent themes were formulated after exploring the challenges encountered by IPED teachers in the integration of IPED curriculum: (1) Additional Workload; (2) Difficulty in Subanen Orthography; (3) Limited IPED Instructional Materials and Teaching Resources; (4) Disinterest in Indigenous Program.

Additional Workload. Most IPED teachers' assignments are in hinterland areas where the school is in the Subanen ancestral domain. Integrating the IPED curriculum is considered an additional workload for IPED teachers handling combination or multigrade classes. The following statements of the participants reinforced these claims during the interview:

"Our school is only a primary school that offers kindergarten to grade 4 classes. There are only two teachers in our school. I am handling a multigrade class consisting of Kindergarten, Grade 1, and Grade 2. As an IPED teacher, I considered the integration of the IPED curriculum as an additional workload. Although I found teaching the beauty of Subanen culture interesting, I need more time to prepare the instructional materials since I handle two and three classes daily."
(P10:SS2)

"I love teaching IPED lessons, especially to lower-grade learners. However, sometimes, I fail to teach them because I am busy with other equally important tasks. I am handling a combination class of Grades 1 and 2. I teach all the learning areas of both grades. Being an IPED teacher is genuinely exciting, but it requires more time to fulfill since it is an additional workload for me." (P1:SS3)

"The integration of the IPed curriculum added tasks for us teachers. We make lesson plans with motivations or springboards like stories, poems, and songs translated into Subanen that conform to the Subanen Cultural Standards or IKSPs. While we pursued marrying the Subanen Core Values and IKSPs to DepEd competencies, sometimes drawn deeper with the tasks, we were astonished at how beautiful and unique our culture is." (P8:SS1)

Based on the feedback, teachers report that teaching multigrade courses and incorporating IPED curriculum is a tiring experience. Insufficient management of tasks such as drafting lesson plans for several grade levels, developing instructional materials for all topics, assessing and documenting students' work, and handling student conduct can result in time conflicts. Furthermore, the inclusion of IPED lessons into teachers' already burdensome workload exacerbated the problem for them.

The findings were supported by the study of Jumoad et al., 2021, which states that workload significantly influences teacher burnout. Their workload also impacts teachers' productivity. Teachers juggle various responsibilities at home and school, so they have a lot on their minds. Workload problems are a significant source

of stress for teachers. The job's demands can be overwhelming, particularly when meeting deadlines and managing multiple tasks. A study by the National Education Association (NEA) found that over half of teachers reported that their workload was so heavy that it prevented them from having enough time to plan and prepare for instruction (NEA, 2021).

Difficulty in Subanen orthography. Most of the IPED teachers were not native speakers of Subanen. Though they were Subanen in blood, Visayan was their native tongue. Integrating IPED lessons became challenging when teachers needed to master speaking and correctly writing the Subanen orthography. According to a study by Otxero (2022), the main issues are the need for culturally relevant learning resources and teachers' need for experience in localizing instruction. Therefore, it is imperative to tackle the many issues the implementers face and consider the suggested intervention program for the comprehensive execution of the IPED program. The responses of the participants supported these during the interview:

"Integrating the IPED curriculum is very hard since I am not a dialect speaker, much more of the kids." (P2:SS1)

"Despite being a Subanen in blood, I have never lived in a community where people speak the Subanen dialect frequently. Thus, I am not used to it. Therefore, I needed help communicating and teaching Subanen lessons." (P3:SS1)

"I am a proud Subanen by blood, but unfortunately, I only learned to speak a few Subanen words. It was challenging to teach the IPED curriculum since I only had limited knowledge of the Subanen dialect. Though I love to talk in the Subanen dialect, teaching its complicated orthography was more challenging to master." (P4:SS1)

"Being an IPED teacher is one of my most challenging tasks in the DepEd family since I am not a native speaker of the language. I find it very hard to pronounce, spell, and understand even the simplest Subanen words. That is why I need to study and review the lessons before presenting them to my learners. I need to learn how to revive the dying culture and language of Subanen." (P5:SS1)

"I admit that I found it very difficult to implement the IPED Curriculum because I am Subanen by blood, but I don't know how to speak the dialect. I am confused about how to teach it, so I looked for DepEd-corrected resources that can fit into my teaching, but until now, I only found a few." (P7:SS1)

"The challenge was to integrate the DepEd competencies with Subanen Cultural Standards, and sad to say, most of us do not practice and speak the dialect even at home." (P8:SS2)

The interview findings indicated that teachers encountered challenges when they had not mastered speaking and writing the Subanen dialect orthography. Due to its complicated sounds and spelling, speaking, and writing, the Subanen dialect requires careful integration of its correct orthography. Most of the IPED teachers were Subanen in blood but unable to speak the Subanen dialect fluently. They were familiar with some basic Subanen words but needed help communicating using longer Subanen sentences or phrases.

Quimbo's 2023 study confirms that cultural homogenization poses a serious challenge in safeguarding the Indigenous knowledge systems and practices (IKSPs) and indigenous learning systems (ILSs) of the I.P.s. The process of globalization poses a threat to the cultural heritage of indigenous communities, which could result in the loss and potential disappearance of their traditions. This would have a detrimental effect on the development of identity for indigenous learners.

These experiences were also consistent with David Perkins' Difficulty hypothesis (2007). Teachers faced obstacles and complexities in adopting the IPED curriculum. There is still a shortage of educators who are skilled in the language of intellectual property rights (IPs) and indigenous cultural communities (ICCs). This is because most subjects taught in the mother tongue focus on local dialects and languages, rather than the language spoken by indigenous people (Eduardo & Gabriel, 2021). Enhancing language literacy is one of the primary educational goals of the Philippine K-12 curriculum. The language literacy enhancement for teachers of Indigenous Peoples Education (IPED) is challenging due to many obstacles that may have impacted the language learning proficiency of Indigenous learners (Saysi & Batuctoc, 2022).

Restricted availability of IPED instructional materials and teaching resources. As per RA 10533 (Enhanced Basic Education Act 2013), it is essential to incorporate contextualized instructional materials into the K to 12 curricula. The stipulation requires the curriculum to be flexible enough for schools to customize, incorporate local elements, and enhance it based on their specific social and educational contexts. The Department of Education's selected perspective for comprehending the local context is centered around the learner, emphasizing explicitly that Philippine Education is focused on the needs and development of the learner. The Philosophy of Inclusion, as outlined in the DepEd Order of 2015, encompasses previous attempts to promote diversity and acknowledges the various cultures present in the Philippines.

Teaching IPED lessons requires enough supplementary teaching materials to help IPED teachers produce quality instruction. The Division of Misamis Occidental provided IPED workshops and write shops for IPED teachers to integrate the IPED curriculum. However, some IPED teachers needed more IPED teaching resources and instructional materials. This statement was evident when four participants remarked the following:

"The challenge I have encountered in integrating the IPED curriculum is the need for teaching resources. They do not have a book or BOW that will serve as our guide." (P1:SS2)

"One of the challenging experiences I encountered in teaching IPED lessons was the experience of having only limited teaching resources that would fit our daily lessons." (P2:SS2)

"It is challenging because I need more knowledge, training, and materials to learn about IPED. So, I need to know more deeply and be skillful enough about the IPED curriculum and have these materials to use for IPED learners." (P3:SS2)

"One of the challenges I encountered was having limited instructional materials and teaching resources for IPED integration. I believe that our Division was doing its best to cater to these needs. In my own little way, I created some indigenous instructional materials, but they were limited only to a specific competency because I still have more core subjects to teach other than the IPED curriculum." (P4:SS2)

According to the responses, IPED teachers needed help integrating IPED lessons due to limited IPED instructional materials and teaching resources. Participants felt the need for the availability of standardized IPED lesson plans throughout the Division. Though our Division trained most IPED teachers to create IPED lessons, they wondered if their teaching materials aligned with the Subanen standards. Participants find it challenging to teach IPED lessons without an IPED guide and IPED instructional materials.

Indigenous children have often received an education of varying quality. Teachers lack the necessary preparation and resources to effectively teach children with intellectual disabilities, hindering their ability to develop their capacities and skills (Robiños et al., 2020). Extensive research and data suggest that teachers, despite their zeal and devotion, lack a sufficient understanding of how to implement instructions and navigate the intricate aspects of indigenous knowledge, cultures, and identities. This claim was substantiated when three participants made the following remarks:

"Another challenge I am facing is the scarcity of I.P. I.M.s and resources. But even with those experiences, I am very happy because I know that I am helping to preserve the culture soon." (P5:SS2)

"It would be more effective to teach the IPED curriculum if there were enough IPED teaching resources such as BOW, Teacher's Guide, and lesson plans. Regarding instructional materials, I am having a hard time delivering some IPED competencies because I need to create my own instructional materials before I can proceed to the topic. Having limited teaching resources and instructional materials for the IPED curriculum was considered one of the challenges I encountered." (P6:SS1)

"Due to limited IPED teaching resources, I am hesitant and afraid to be blamed for teaching the learners the wrong information." (P7:SS2)

The study conducted by Quimbo et al. (2024) provided further support for the findings. The study included extensive teacher training programs, collaborative platforms for educators to exchange effective historical teaching methods, and the creation of teaching materials that are both historically accurate and culturally relevant. The purpose of this methodical historical approach was to guarantee a unified and coherent integration of Indigenous Knowledge Systems and Practices (IKSPs) into the educational framework. This technique attempted to make sure that the incorporation of indigenous knowledge inside the formal education system was both historically relevant and beneficial, resulting in a more efficient and fair system. The process of education also emphasized and rejuvenated indigenous language. Nevertheless, the absence of written material impeded teachers from retaining and efficiently conveying the language (Mercado, 2021).

Disinterest in Indigenous Program. Some I.P. learners in the I.P. community need more chances to witness the Subanen dialect and practices. Sinugbuanong Binisaya was their native tongue, and I.P. learners blended modernization into their lifestyle. Subanen culture in some areas was dying due to the influence of social media. IPED teachers found it challenging to teach the IPED lesson when learners were not interested in indigenous knowledge, skills, and practices. These experiences were mentioned by the participants in the following interview responses:

"My experiences in integrating the IPED curriculum are inspiring and exciting. At first, while introducing the Subanen words to my learners, they found it very difficult to speak because they were not interested in learning since they were not practicing it daily in the community. Though they are Subanen by blood, they do not use the Subanen dialect." (P1:SS1)

"I encountered many challenges because it is not the native tongue of our community. Sometimes, a learner would tell me that I was telling nonsense and didn't understand me. They would ask why I was teaching this, making it hard for them. Despite all that I have experienced, I am thankful to the Lord for giving me an enlightened mind." (P7:SS3)

"Sometimes, the learners are not interested in learning the Subanen words because they are hard to pronounce. They already had difficulty reading Visayan words, so how much more the Subanen?" (P10:SS1)

The study's findings showed that IPED learners' disinterest in learning the Subanen dialect added to the IPED teacher's difficulty performing tasks. IPED learners should learn to master the Subanen dialect as part of their culture. Teaching uninterested IPED learners was challenging for teachers because they could not proceed to their objectives when IPED learners were not motivated to learn.

The findings were supported by Vygotsky's Sociocultural Theory of Cognitive Development (1978), which states that culture is a critical element affecting people's learning ability. He believed that children acquire attitudes and ideas from their culture's values. This theory is appropriate to this study since integrating IPED lessons, the cultures, traditions, beliefs, and values, and how I.P.s interact with others are considered their way of life. Language is viewed as a part of living or intangible heritage and, as such, is transmitted from generation to generation. For indigenous communities, the function of language is beyond communication. It is integral to their identities and the preservation of their cultures (Lucasan et al., 2020).

Theme 2: IPED Teacher Opportunity

Understanding of the Subanen culture. In integrating the IPED curriculum, IPED teachers and I.P. learners shared a common goal: to learn the Subanen knowledge, skills, and practices and to understand their rich culture. Through numerous IPED workshops and seminars, IPED teachers gained essential knowledge in implementing the IPED curriculum. The following statements of the participants reinforced these claims during the interview:

"And as an IPED teacher, I have had opportunities to interact with my Subanen brothers and sisters, love our culture even more, and help them in a way that allows us to preserve and reminisce about our culture and traditions." (P3:SS3)

"I am grateful to be an IPED teacher because it has allowed me to learn and love the Subanen culture more deeply. The different seminars and workshops conducted by the Department of Education allowed me to explore the rich culture of the Subanen people in terms of their dialect and traditions." (P4:SS3)

"On the other hand, I also encountered opportunities like attending training, seminars, and lectures, which allowed me to go to nice places, eat sumptuous foods, and meet my co-teachers in IPED. These experiences led me to a deeper understanding of our culture." (P5:SS3)

"It also enables us teachers to appreciate the dialect we speak, learn more, and feel confident about our culture without thinking that ours is inferior to others. Soon, all of us will master our dialect and be able to impart our culture to our pupils who are waiting for our own culture to be appreciated and recognized." (P8:SS3)

"One of the advantages of being an IPED teacher was the chance to participate in the IPED Summit, where all IPED-implementing schools in the Division showcase the different delicacies, songs, dances, rituals, and stories of the I.P. community. Through this, I have witnessed how rich the Subanen culture is. IPED integration is an interesting journey, and I also learned a lot of amazing things about Subanen culture and related them to everyday teaching." (P9:SS1)

"As an IPED teacher in the Division of Misamis Occidental, I have had the opportunity to learn and understand the Subanen culture. Exploring its rich culture and witnessing its celebrations gives me pride and motivates me to teach IPED lessons in my classes." (P10:SS4)

According to the responses, IPED teachers enjoyed the opportunities and benefits of being an IPED teacher in the Division of Misamis Occidental. Attending different IPED celebrations and seminars like I.P. Summit, I.P. Day, IPED Retooling, and IPED Curriculum Workshop increased their knowledge and understanding of the Subanen culture. Witnessing the Subanen rituals and indigenous practices gave them pride and gratification as Subanen descendants. Enjoying the Subanen delicacies and exploring the rich Subanen culture through songs and dances inspired them to teach better and love deeper.

Awards and recognitions as IPED teacher. Every year, outstanding DepEd teachers receive awards and recognition at the school, district, Division, and regional levels. Recognizing teachers' excellent contribution to inclusive education boosts one's confidence and ignites their passion to teach even better. These experiences were mentioned by the participants in the following interview responses:

"Also, my best experience as an IPED teacher was being awarded as the Most Outstanding IPED Teacher in our district during the 2022 Golden Jar Awards. It was really fulfilling to be recognized and receive an award. For me, it was more advantageous to be an IPED teacher during the nomination because only three IPED teachers submitted documents for this category. Therefore, I had a bigger chance of winning. Compared to non-IPED teachers, they had more nomination entries." (P3:SS4)

"The most fulfilling part of being an IPED teacher is the opportunity to receive awards and recognition as the Most Outstanding IPED Teacher in the Division of Misamis Occidental during the 2023 Asenso Awards. Because of this, I have been nominated as one of the finalists during the Search for the Most Outstanding IPED teachers in Region 10 during the Pasidungog sa Amihanang Mindanao 2023. This experience is the best opportunity I have gained as an IPED teacher." (P5:SS4)

"On the other hand, being an IPED teacher opens many opportunities for my professional growth and development. In fact, I was awarded as the Most Outstanding IPED teacher not just in the Division of Misamis Occidental but to the entire Region 10 during the Pasidungog sa Amihanang Mindanao 2022. Because of these awards and recognition, I have gained meaningful experiences that I will always treasure as a proud Subanen." (P6:SS2)

The study findings showed that IPED teachers' efforts are recognized and valued by the DepEd Misamis Occidental Division. They are happy to be awarded a recognition plaque and cash incentive. This opportunity boosted their confidence and increased their pride as IPED teachers. They thank their administrators for nominating them as one of the most outstanding teachers in the IPED category. They considered this opportunity as their most significant achievement in life.

D.O. 9, S. 2001 supported the findings with the heading Creating the Department of Education's Program on Awards and Incentives for Service Excellence (Praise). Encouraging, recognizing, and rewarding employees—individually or in groups—for their recommendations, creative ideas, inventions, discoveries, heroic deeds,

exemplary behavior, extraordinary acts or services in the public interest, and other individual efforts that contribute to improving the effectiveness, economy, and efficiency of government operations that lead to organizational productivity is the goal of this DepEd Order.

Theme 3: Effective Strategies

Support from intellectual property (I.P.) leaders. Participants have actively and effectively implemented ways to overcome problems in implementing the National Indigenous People Education Policy Framework and Indigenous Knowledge System and Practices. Their endeavor demonstrates an admirable dedication to surmounting challenges and effectively incorporating these policies and practices into the educational system. These programs demonstrate a strong commitment to creating an inclusive and culturally sensitive learning environment for Indigenous individuals. The participants' comments corroborated these findings during the interview:

"To overcome those challenges, I will seek assistance from the Gukom or Elders/Bae so that they can help me translate the Subanen words." (P1:SS4)

"To effectively teach the IPed curriculum, we need to make friends with the community because they will help us prepare not only the learners but also us teachers who are still learning it." (P2:SS3)

"To overcome those challenges, I need to seek help from the community's elders, for without them, I.P. education will not be realized." (P5:SS5)

The interview findings indicated the strong support of the I.P. community in the educational process. The community's I.P. leaders assisted whenever the IPED teachers asked for help. Their collaboration resulted in quality and reliable outputs that conformed to the IPED learning competencies and Subanen community standards. It is important to note that teachers work intimately with their learners, colleagues, parents, and the entire community to ensure the success of the teaching-learning experiences. Teaching culture is improved when learning communities maximize and deliver collaboration and empowerment among teachers, break down walls of isolation, create collective responsibility, and secure continuous professional learning. Another three participants claimed this statement through the following responses:

"Through interaction with the elders and other co-teachers, we improved our skills in contextualizing lesson plans, learned more words in Subanen, and grasped its importance in the educative process." (P8:SS4)

"The best way to overcome those challenges is to learn the culture. As for me, I learned through communicating with our I.P. elders. I involved them in school activities and had them share something about their identity, be it through rituals, dance, a showcase of talents and artifacts, or even simply sharing their experiences as I.P.s. These things helped me a lot to understand them, overcome those challenges, and turn them into opportunities." (P9:SS2)

"We asked local volunteers as community resources who gave us lectures, taught us to sing their songs, execute their dance moves, and make things relative to their lives in the past." (P10:SS3)

The study of Villagrancia (2019) supported the findings and shed light on the significant factors that contribute to the effective implementation of the Indigenous Peoples Education (IPed) program. Her research indicates that the support of stakeholders, particularly in learning materials development, plays a crucial role in enhancing the program's instructional design, monitoring, and evaluation. When stakeholders are actively involved in developing high-quality learning materials, it positively influences the implementation of the IPed curriculum. Localization, allowing schools or local officials to modify the curriculum to meet local needs and connect it with the local environment, is a primary strategy for mainstreaming IKSP (Grande, 2018). There is no need to educate the I.P. community on their indigenous knowledge because they already have it. What is necessary is to make them more engaged in their I.K. by nurturing their sense of identity and sense of self as indigenous people. Through this, it will lead to positive self-esteem and a sense of belonging to their cultural community and heritage (Natano, 2023).

IPED Seminars and Workshops. The Department of Education has always done its best to provide inclusive education. It has allocated significant funds to the IPED program. IPED teachers are willing to attend weeklong seminars and workshops to gain relevant information about I.P. Education. The responses of the four participants supported these during the interview:

"The seminars and trainings help me a lot as an IPED teacher. Although I still have limited knowledge, at least I already have an idea and guide on how to teach Subanen culture. I am thankful to DepEd-Mis. Occ. because I am always one of the participants in different seminars for free." (P1:SS5)

"Our Division should conduct additional training for IPED teachers on pronouncing the Subanen words correctly since it is one of the reasons we had difficulty teaching. It is challenging to teach children the wrong information because everything we teach for them is right." (P2:SS4)

"I can say that for IPED teachers to be more proficient in teaching IPED, it requires a strong foundation, materials, and training for IPED teachers." (P3:SS5)

"Cultural sensitivity training, incorporation of indigenous knowledge, teacher professional development, and curriculum adaptation are among the strategies I develop in coping with those challenges." (P6:SS3)

According to the responses, the ongoing IPED seminars, workshops, and I.P. celebrations have helped IPED teachers cope with the challenges they have experienced. They are thankful for these experiences, which give them opportunities for professional development and cultural preservation and equip them with the tools needed in the teaching and learning IPED curriculum. The support of the Division of Misamis Occidental helps them cope with the difficulties they experienced along the way.

Moreover, it is crucial for the school to establish and enhance effective multi-level units within the Department of Education (DepEd) that are responsible for devising, executing, and overseeing Indigenous Peoples (I.P.) education initiatives. These units should also incorporate Indigenous Knowledge Systems and Practices (IKSPs) into the curriculum, pedagogy, content, and assessment of all subjects (Manuel & Queroda, 2018). Curricular inclusion mitigates detrimental perceptions regarding indigenous peoples in educational curricula and institutions. By utilizing this method, educators can effectively instruct students about tribal cultures and histories with precision. By incorporating genuine cultural material into the curriculum and implementing culturally responsive teaching methods, native students are provided with valuable opportunity to engage with their own cultures in a meaningful manner (Hopkins, 2020).

Flexibility and Open-Mindedness. Positive teacher attitudes are crucial in achieving inclusive education due to the many benefits they generate for schools and social contexts. Several studies have shown that teachers' attitudes and beliefs positively affect inclusive classroom education (Navarro et al., 2019). This claim was evident when three participants remarked the following:

"To be effective IPED teachers, we need to be open-minded and versatile. We need to start with the most accessible concepts/words and use songs and stories because it is easier to learn a language that way." (P5:SS6)

"I must approach indigenous education with respect, empathy, and willingness to listen and learn from indigenous perspectives." (P6:SS4)

"It would be best if you learned to love the culture and immersed yourself in the I.P. community. If you learn to love and understand them, integrating the IPED curriculum will always be in your heart." (P9:SS5)

The study findings showed that IPED teachers possess flexibility and open-mindedness as essential values in coping with their challenges while integrating the IPED curriculum. Being optimistic and open-minded allows them to accept difficulties with a happy heart and a teachable mind. The complexities of the IPED program become more manageable for them when they can learn the IPED within the I.P. community where they reside or are assigned. Immersing themselves in the traditions, practices, and dialect of the Subanen indigenous people gives them real-life learning for a lifetime.

4.0 Conclusion

IPED teachers faced various challenges in integrating the IPED curriculum, including additional workload, difficulty in Subanen Orthography, limited IPED instructional materials, and disinterest in the Indigenous Program. Despite these challenges, IPED teachers gained meaningful opportunities such as a deeper understanding of Subanen culture and recognition as IPED educators. Teachers sought assistance from community I.P. leaders to address these challenges, attended IPED seminars and workshops, and demonstrated flexibility and open-mindedness. These underscore the importance of addressing workload issues, providing intensive Subanen Orthography workshops, and ensuring adequate IPED instructional materials.

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The authors indicate equal contribution to each section. The authors reviewed and approved the final work.

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Socialist Feminism in the Select Poems of Maya Angelou

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Abstract. Maya Angelou is one of the most inspirational African-American poets, novelists, activists, and feminists, who has also been recognized as a prominent and influential voice in literature. This study aimed to engage in an analytical investigation of socialist feminism in the select poems of Maya Angelou using biographical approach and Johanna Brenner's socialist feminism perspective. The select poems included *Woman Work*, *Alone*, *On Working White Liberals*, *When You Come to Me*, *When I Think about Myself* and *Caged Bird*. The research method of textual analysis was used in the literary investigation of the select poems. The study revealed that Maya Angelou had a challenging and colorful life. Her range of experiences from childhood to adulthood had influenced how she wrote. Her vision and legacy as mirrored in her works especially in her poetry continue to inspire others to fight for equality of all forms in the society. It was also found out that there are a number of significant factors that aided in the development of her work as a writer and a poet. Her life experiences along with her education recreated the way she saw the world. The socio-cultural environment in Arkansas during her period also contributed to her profound writings. The salient characteristics of socialist feminism of Brenner such as representation of women, images of women at home and in the workplace and role of women in the society are highly evident in her body of work. As a socialist feminist, Brenner yearns to end the exploitation of women at home, in the workplace, and in the community. Since this research found out that Angelou is regarded a socialist feminist, it is recommended to analyze other types of feminism such as eco-feminism, liberal, and radical feminism to explore other salient characteristics of feminism embedded in Angelou's works.

Keywords: Socialist feminism; Maya Angelou; Biographical approach; Textual analysis.

1.0 Introduction

Literature is life itself. It is one of the most interesting and significant expressions of life depicting its beautiful art that transcends through time. It is the result of the expressions of feelings of the author and his imagination which mirrors a portrait of life. Among the varied modes of discourse, literature is one that elevates man's understanding about life on the level of the symbolic. Man's array of thoughts and emotions and his compendium of attitudes and actuations are often expressed in a language that is all at once beautiful, creative, and memorable but also universally signified through objects and milieu.

Poetry, as quoted by Edgar Allan Poe, one of the greatest American writers of all time, is defined as "the rhythmical creation of beauty in words". It is one of the literary works that has different forms and characteristics. It is the product of human ingenuity that is embedded in the arrangement of words that create meaning. The essential elements of poetry are meter, sounds of words, patterns of rhyme, rhythm and themes that are highly significant in the life of the poet and the life to be conveyed to the readers. A poem can be understood in so many ways, and it highly depends on how the reader views it. Moreover, poetry is "the idea or mind of the poets flowing as a media to express a certain kinds of perceptions, feelings, and thoughts" (Shumanker, 1965). It is a deep-seated

wonder how poets could evoke a sense of persuasion and awaken a sense of vulnerability through their literary works.

Maya Angelou, one of the most inspirational African-American poets, novelists, activists, and feminists, has also been recognized as a prominent and influential voice in the United States. A plethora of her literary pieces especially poems highlight on the discrimination and immense struggle of the African-Americans, racism, and identity issues. With her captivatingly raw experiences and her undeniable connoisseurship of the language of poetry, Maya Angelou employed feminism approach in some of her masterpieces detailing the women's oppression, discrimination, and maltreatment. Some of this poetry largely depicted her seemingly unbearable struggles in life and how she survived and rose above these unfortunate situations.

Maya Angelou wrote and risked rejection and misinterpretation and altered life through her powerfully breathing words. Her body of writings aims to exude experiences into a certain language that is accessible and readable and attempt to capture and reveal the beauty and struggle of her life to continue to inspire not only the African-Americans but everyone who empathize with her story (Todd, 1983).

This study assumed that Maya Angelou's select poems reveal the connections of the life experiences of the poet and the development and refinement of her work. This explains that her fair share of struggles and tumults has ultimately led to better prune and polish her gift of story-telling through her poetry. Moreover, it also argues that socialist feminism is relevant and reflective in some of her works. To prove this assumption, the basic procedures of literary criticism are employed to analyze and criticize the select poems. Underpinning theories of this study are biographical theory of Samuel Johnson and socialist feminism theory by Johanna Brenner.

A biography is a story about the progression of an individual's life which not only consists of a description of the individual's socio-demographic situation and facts about his or her life but also reflects the individual's subjective experience and interpretation of events. Moreover, it pertains to the social reality that affects the course of an individual's life. It relates to those processes and events that a person wishes and is able to tell about, that is, his or her subjective experience and emotions. It is a mirror of the interaction between social development, social changes and processes, prevailing routine and custom, and the individual's experience (Pranka, 2015).

Biographical theory was first coined by Samuel Johnson which dates way back to the Renaissance Period. Johnson is regarded as one of the first theorists to put biographical criticism into great practice. This is based on a central concept that literature is written by real people. In hopes of effectively comprehending the intricacy in the writer's work, there is an immense need to survey the author's range of indispensable experience (Stuart, 1922).

This approach starts with the simple but central insight that literature is written by actual people and that comprehending the life of an author can help readers more thoroughly understand the work. Thus, it often affords a practical method by which readers can better understand a text. The biographical critic focuses on elucidating the literary work by employing the meaning provided by knowledge of the author's life (Kennedy & Gioia, 1995).

One method of interpretation which has long been under debate is the method of biographical reading. Biographical criticism as determined by Frank H. Ellis involves "the relation between the written work and the biographical experiences of the writer" (Ellis, 1951). Furthermore, a biographical understanding of the author can help illuminate a reader's understanding of an author's work. The use of biographical approach in examining the author's work allows us to view the expression of deep concern and conflict of the author (Guerin, 1979). Since the premise of biographical criticism maintains that the author and his or her literary work cannot be separated, critics look for glimpses of the author's consciousness or life in the author's work.

This study also considered the socialist feminism theory by Johanna Brenner in attempt to understand the salient components and characteristics of socialist feminism theory reflected in the select poems. Brenner (2014) argues that the entry of women into the labor force and the increasing influence of women trade unionists, the impact of feminism on the perception of women's family roles, and the increasing organization of professionals and grassroots constituencies around family/work issues make it possible for the first time since the emergence of industrial capitalism to challenge women's assignment to unpaid caring work. Socialist feminists reasonably

argue for households' universal need for social provisions that will help them carry out their responsibilities for raising children and caring for adults. Brenner (2014) focuses on the theoretical and strategic questions at the heart of the socialist-feminist project.

Socialist feminists start where most feminists begin that the emancipation of women must come from women ourselves, but cannot be achieved all by themselves (Brenner, 2000). They believe that all women suffer as a result of women's oppression in class society, including under capitalism, and therefore are in favour of uniting all women who want to fight against that oppression under the banner of women's liberation, there is a need to understand that it is working-class women who suffer most acutely: whether it be from the lack of abortion facilities, from sexual harassment or from economic discrimination in the workplace (Graf, 2012). There is a need to understand the inability of nineteenth century feminists to develop solutions adequate to the oppression of women less as a failure of their political imagination or boldness than as a reflection of the state of historical development of capitalism and of male supremacy (DuBois, 1998).

Eisenstein (1979) argues that socialist feminism has a political and intellectual commitment to understanding the problems of women's oppression in terms of a real synthesis between the traditions of Marxist analysis and feminist theory. Furthermore, Ehrenreich (1976) has detailed the three major kinds of evidence of the persistence of sex inequality as occupational segregation by sex; sexual objectification; low representation of women in positions of political leadership.

Socialist feminists asserted that capitalism was by no means the root of maledominance and that new theory was needed to understand its structures and continued reproduction. The distinctive mark of socialist feminism was its view that autonomous structures of gender, race, and class all participated in constructing inequality and exploitation (Gordon, 2013).

Socialist feminism, while centered around the question of gender constitution and oppression, sees history in the materialist tradition. Socialist feminist analysis thus focuses on the institutions and social practices as these affect women, and attempts to understand the relations of gender and class in the course of social change (Kuhn & Wolpe, 1978). Socialist feminism involves a commitment to "the practical unity of the struggle against capitalism and the struggle for women's liberation" (Young, 2005).

In summary, the three notable characteristics of socialist feminism revolve around the representation of women in general, image of women at work and the division of labor and the role of women in the society.

The researchers aimed to analyze her select poems through the biographical lens. This study sought to recognize the relationship between the author's life and her profound work as reflected from her masterful and provoking poems. Moreover, this also hoped to unravel how she shedded light on socialist feminism and how she empowered women effectively as evident from her body of work.

2.0 Methodology

2.1 Research Design

This literary investigation of the select poems used the research method of textual analysis. The purpose of textual analysis is to describe the content, structure and functions of the messages contained in the text. It involves close reading which would lead to unit-by-unit and ended up by whole-textual reading. This textual analysis was undertaken towards biographical criticism retrieval of literariness of the text. This verbal analytical discussion was based on logical statements describing the connections between the poet and the text. Hence, statistical quantification was not needed as it was focused on descriptive analysis of the subject.

2.2 Research Participants

The study did not employ research participants since it involved analysis of texts only.

2.3 Research Instruments

The main sources of data of this study were taken from the select poems by Maya Angelou, whereas, the theoretical data sourced out were internet theses and journals, books, and descriptions that support the study.

Syntheses of meanings were generated logically and verbally utilizing the biographical theory of Samuel Johnson and social feminism theory by Johanna Brenner.

2.4 Data-Gathering Procedures

The data of this study were taken from Maya Angelou's poems. In collecting the data, the researchers read and comprehended Maya Angelou's poems namely *Woman Work*, *Alone*, *On Working White Liberals*, *When You Come to Me*, *When I Think about Myself* and *Caged Bird*. The researchers noted marks on every part of the poem relevant to the problem of the study and categorized the data based on the problem of the study. The process of generating the analytical verbal data followed three phases: *Phase One: The Biography of Maya Angelou* where it presents the life, education, and socio-cultural environment of Maya Angelou across the different stages of her life; *Phase Two. The Biographical Analysis of Maya Angelou's Select Poems* where it focused on the biographical background of Maya Angelou's select poems; and *Phase Three: The Socialist Feminism Reflected in the Select Poems* where it focused on the salient characteristics of socialist feminism reflected in the select poems of Maya Angelou. The poetic lines from the poems were dissected and analyzed as to how the life, education and/or socio-cultural environment of Maya Angelou were reflected in the lines. Afterwards, how the text structured gender ideologies to support the social stature of the poet was drawn out.

2.5 Ethical Considerations

The researchers manifested the necessary ethical consideration during the conduct of the study. Proper citations and attributions were provided to ensure respect of intellectual property. Furthermore, all in-text citations were reflected in the references.

3.0 Results and Discussions

3.1 The Biography of Maya Angelou

The first phase of this analysis was to examine the biography of the poet. This included the different significant life experiences of her life, her education and socio-cultural environment.

Table 1. The biography of Maya Angelou

Stages in Life	Significant Life Experiences	Education	Socio-Cultural Environment
Childhood	-Real name is Marguerite Annie Johnson. -Born on April 4, 1928 at St. Louis, Missouri, United States. -Separation of parents at three years old -Raped by her mother's boyfriend at eight years old -Spent years as a virtual mute in Arkansas -Recovery from being virtual mute	-Development of her love for books and literature with the help of her teacher, Bertha Flowers -Discovery of the world around her	-Harsh economy among African American -Crash of stock market in 1929 -Drought and devastation of crops and farmlands in Arkansas
Adolescence	-Moved in with her mother at fourteen -Gave birth to her son at sixteen -Worked as the first black female streetcar conductor in San Francisco. -Worked a number of jobs to support herself and her son	-Studied in George Washington High School -Won a scholarship to study dance -Completed her studies at the California Labor School	-Onset of World War II. -Fundamental social and economic changes in Arkansas
Adulthood	-Married Tosh Angelos and got separated in 1954 -Married to Vusumzi Make unofficially and separated in 1962 -Married Paul du Feu in 1974 and got divorced in 1983 -Danced professionally in clubs around San Francisco -Worked as a market researcher in Watts -Appeared off-Broadway in Calypso Heat Wave and released her first album Miss Calypso -Became member of the Harlem Writers Guild -Organized and starred in the musical revue Cabaret -Served as the SCLC's northern coordinator -Lived in Egypt and Ghana -Held a position at the University of Ghana -Angelou was recognized for remaining on The New York Times' paperback nonfiction best-seller list for two years -Authored the critically acclaimed I Know Why the Caged Bird Sings	-Took modern dance classes	-Assassination of Martin Luther King Jr.

Table 1 presents the biography of Maya Angelou. Her biography is divided into three stages: Childhood; Adolescence; and Adulthood life. In each stage of her life, the following biographical components were discussed: significant life experiences; education; and socio-cultural environment.

Childhood Stage

Significant Life Experiences. As shown in Table 1, Angelou's real name is Marguerite Annie Johnson. As an African American, she was born on April 4, 1928 at St. Louis, Missouri, United States of America. At the age of three, she was a victim of a broken family. This was brought about by the separation of her parents. As a child, Angelou experienced violence. At the age of eight, she was raped by her mother's boyfriend. The event made her a virtual mute.

Education. The third column of Table 1 presents that Angelou developed her love for books and literature in school. Miss Bertha Flowers played a significant role in her learning. Moreover, Angelou spoke again. She became widely aware of the world around her.

Socio-Cultural Environment. Column 4 in Table 1 shows the socio-cultural environment during Angelou's childhood life. History tells that Arkansas is experiencing harsh economy in the late 1920's. There is a crash of the stock market of America in 1929. A year after, 1930, a great drought devastated the crops and farmlands of Arkansas. African American in Arkansas experience economic difficulty (Whayne et al., 2013).

Adolescence

Significant Life Experiences. As shown in the second row of Table 1, at fourteen, she and her brother moved in with their mother once again. At sixteen, she gave birth to her son, Guy. She worked as the first black female streetcar conductor in San Francisco. Also, she worked in a number of jobs to support herself and her son.

Education. The third column of the table also presents that Angelou studied in George Washington High School but did not finish there. As a matter of fact, she won a scholarship to study dance and acting at the Labor School. She attended and completed her studies at the California Labor School.

Socio-Cultural Environment. As presented in the fourth column, it was the onset of World War II where Arkansas underwent fundamental social and economic changes that affected all parts of the state. Families in Arkansas had to endure the worry and fear of sending family members off to war while at the same time struggling with the many changes taking place on the home front (Whayne et al., 2013).

Adulthood

Significant Life Experiences. The last row of Table 1 shows significant life experiences of Angelou as an adult. In 1951, Angelou married Tosh Angelos and got separated in 1954. Her second marriage with Vusumzi Make in 1961 was unofficial and then got separated in 1962. Then, she was married to Paul du Feu in 1974 and they got divorced in 1983. She danced professionally in clubs around San Francisco which was how she earned money to sustain herself and her children. She worked as a market researcher in Watts and had witnessed the riots in the summer of 1965.

Angelou appeared off-Broadway in Calypso Heat Wave and released her first album Miss Calypso. In 1960, she became a member of the Harlem Writers Guild. After, she organized and starred in the musical revue Cabaret for Freedom as a benefit for the Southern Christian Leadership Conference (SCLC). She served as the SCLC's northern coordinator. In the 1960s, she spent most of her time living in Egypt and Ghana. She held a position at the University of Ghana for a time. In 1995, Angelou was recognized for remaining on The New York Times' paperback nonfiction best-seller list for two years - the longest-running record in the chart's history. She authored the critically acclaimed *I Know Why the Caged Bird Sings*.

Education. Table 1 also shows that during her adult life, she took modern dance classes to improve her skills in dancing. She was able to benefit from these skills when she worked in clubs as professional dancer.

Socio-Cultural Environment. As reflected in Table, 1, in 1968, Martin Luther King Jr., a black American activist, was assassinated. He considered him as one of her heroes. This led her to fight of the rights of the black people.

In 1960, Maya Angelou accepted the position of northern coordinator of the New York office of the Southern Christian Leadership Conference (SCLC) for only six months. It was this time when Angelou met Martin Luther King. On the other hand, he was thankful to her for her contributions in several fundraising ventures. After hearing King speak at a church in Harlemin early 1960, Angelou resolved to help the SCLC raise funds by staging a show entitled Cabaret for Freedom which was an utter success (Angelou, 1981).

Angelou (1981) posited in a letter, "I join with millions of black people the world over in saying 'You are our leader'". From then on, Maya made it a legacy to continue fighting for equality no matter the color or race, the same cause of Martin Luther King.

In summary, the biography of Maya Angelou shows that her life experiences, education, and the socio-cultural environment have a great influence on the themes of her writings. Her select poems namely *Woman Work*, *Alone*, *On Working White Liberals*, *When You Come to Me*, *When I Think about Myself* and *Caged Bird* were analyzed in the perspective of her biography.

3.2 The Biographical Analysis of Maya Angelou's Select Poems

This part of the paper focused on the biographical analysis of Maya Angelou's select poems. The poems were examined and analysed in relation to the significant stages of the life of the writer as well as her education and socio-cultural environment.

Table 2. The biographical analysis of the select poems of Maya Angelou

Maya Angelou's Select Poems	Stages of Life	Education	Socio-Cultural Environment
When You Come To Me	Lines 1 – 4 Reminiscence of painful childhood		Lines 1 – 4 Story of unnoticed oppression and exploitation
Caged Bird	Lines 15 – 22 Tragic experiences		Lines 1 – 14 Outright evidence of slavery and inequality
Alone	Lines 7 – 10 Troubled adolescence of a single mother	Lines 11 – 13 Education of the realities of life	Lines 3 – 5 An economic struggle in their place
When I Think about Myself	Lines 8 – 10 Working for the white people	Lines 8 – 9 Working and attending school at the same time	Lines 17 – 21 A racial prejudice or discrimination during her period in Arkansas
Woman Work	Lines 1 – 14 Juggling into many professions for survival	Lines 20 -23 Learned from her plethora of experiences	Lines 1 – 14 Women stereotypes
On Working White Liberals	Lines 10 – 12 Her legacy to fight the rights of the black people		Lines 7 – 9 White supremacy and inequality in the society

Table 2 discusses the different stages of Maya Angelou's life, education and socio-cultural environment as reflected in her select poems. Selected lines from each of the six poems are drawn out and analysed vis-à-vis the three components.

Stages of Life

The poem *When You Come to Me* tells the painful childhood memories of the author. These are expressed in the following lines:

- 1 "When you come to me, unbidden,
- 2 Beckoning me
- 3 To long-ago rooms,
- 4 Where memories lie."

The words on the first line, especially “when you come to me, unbidden” signify something which has come uninvited. This uninvited guest might be a thought arising from the consciousness of the person without exerting any effort. The referral of “you” in Line 1 could be a representation of a traumatic event that happened to her that influenced how she saw the world she was living in. This kept on haunting her even if she did not seek for it. The unbidden thought is being qualified by the succeeding three lines that tell, “Beckoning me to long-ago rooms where memories lie.” “Long-ago rooms” can be signification of a person’s past experiences that are not consoling. The biography of Maya Angelou tells that one of her significant childhood life experiences is the sexual violence at the age of eight (Egan, 2009).

The poem seems to be a reminiscence of that traumatic incident that happened to her. In the poem, she seems talking about losing something that she valued greatly in her life. This could be her femininity which was taken away from her. She was young and innocent at that time impartially oblivious of what was going on. The innocence of her childhood stripped bare. Her sense of the world she lived in rushed into the light. There are images in the poem that speak of the emotional weight being carried on by Angelou on her shoulders. This could be the feeling of worthlessness after being sexually maltreated. The poem explores her inner struggle of redemption after a stormy childhood (Kite, 2006).

On the other hand, the poem *Caged Bird* tells of a caged bird whose feet are tied and wings clipped, placed in a cage that prevents it from flying away. Lines 16 and 17 “With a fearful trill of things unknown” speak of the persona’s unfortunate state. The succeeding lines describe the plight of a misused, captured creature. Despite the fear, it “sings of freedom” as evident in Line 22. This describes how she was imprisoned by the tragic experiences that happened to her where she felt hopeless and helpless. These feelings are reflected in these verses:

15 *“The caged bird sings*
16 *with a fearful trill*
17 *of things unknown*
18 *but longed for still*
19 *and his tune is heard*
20 *on the distant hill*
21 *for the caged bird*
22 *sings of freedom.”*

The poem *Alone* resembles of the traumatic childhood and troubled adolescence of Maya Angelou. In order to survive life’s trials, she needed to toughen herself and continue to strive.

7 *“And I don't believe I'm wrong*
8 *That nobody,*
9 *But nobody*
10 *Can make it out here alone.”*

Her self-imposed muteness explained how she wanted to deal with her trauma all by herself. Her traumatic childhood and troubled adolescence were unimaginable as they were imprinted largely in her mind and heart. She had to bear everything all by herself. She even had to sacrifice her own happiness (Angelou, 1981).

The poem *When I Think about Myself* has a very close reference to Maya Angelou. Racism had been an issue Angelou was fighting for all her life. As an African American, Angelou experienced first-hand racial prejudices and discrimination in Arkansas. She also suffered at the hands of a family associate around the age of seven (Angelou, 1981).

8 *“Sixty years in these folks' world*
9 *The child I works for calls me girl*
10 *I say “Yes ma'am” for working's sake.”*

As evident from the poem especially on the first line, her parents were working hard for the white people but only got the waste of the fruit of their labor. Line 9 shows she was a child during that time. This may be an indirect

effect of racism. Sometimes, in pondering how cruel and inhumane the world is, she had to deal with it in the best way possible by existing in it for there was no other escape.

The poem *Woman Work* could be a perfect reflection of who Maya Angelou was. She was a woman of many professions. She had to juggle into many a countless profession just to survive and feed her child.

- 1 *"I've got the children to tend*
- 2 *The clothes to mend*
- 3 *The floor to mop*
- 4 *The food to shop*
- 5 *Then the chicken to fry*
- 6 *The baby to dry*
- 7 *I got company to feed*
- 8 *The garden to weed*
- 9 *I've got shirts to press*
- 10 *The tots to dress*
- 11 *The can to be cut*
- 12 *I gotta clean up this hut*
- 13 *Then see about the sick*
- 14 *And the cotton to pick."*

It can be inferred from the lines that she is a mother as reflected in Lines 1 and 6, a housekeeper in Line 2 to 3 and 9-10, a cook in Lines 4 to 7, hostess, gardener as reflected in Line 8, and the list goes on.

In the poem, the readers are given the strong impression of an exhausted woman, aged beyond her physical years, while dealing with a tough life and situation within the borders of her slaver's home and business. The woman in the title may refer entirely to Angelou considering her range of experiences. The intricacy of the building up of emotions reflected in the poem speaks highly of the personal touch that the author put on the poem. Angelou greatly learned from her plethora of experiences which she incorporated in her poetry.

In her biography, as a young adult, she juggled into different professions such as a waitress, cook, dancer, singer, actress, performer, prostitute, writer, poet screenplay writer, producer, teacher, newspaper editor among others just to sustain her son (Angelou, 1981). The poem *On Working White Liberals* is a reminder of Angelou's fight against white supremacy as reflected in these lines,

- 10 *"This rocky road is not paved for us,*
- 11 *So, I'll believe in Liberals' aid for us*
- 12 *When I see a white man load a Black man's gun."*

The line, "This rocky road is not paved for us", may mean that there could never be the possibility of two races to unite. This is further illustrated in a condition set by the speaker when he said that "So, I'll believe in Liberals' aid for us when I see a white man load a Black man's gun" as shown in Lines 11 and 12.

It has been one of her legacies to stand up against the issue on white liberalism which was unfortunately popular and evident during her time. As a matter of fact, many of her poems are very personal in nature. The themes of racism, women's power and liberation including women's sexual and romantic experiences are also evident (DeGout, 2009).

As an author, she had gained consciousness to be a civil activist fighting for the freedom of the black people believing there should be equality in this nation. He was inspired by Martin Luther King and other civil rights leaders. Angelou emphasized the need for them to be respected and heard.

Education

Almost implicitly, some of the lines in the selected poems of Angelou may speak of her education in relation to the significant experiences that occurred in her life.

Having a traumatic childhood, she imposed self-muteness to herself. This period of silence taught her to listen and observe the world around her developing her love for reading and literature until her teacher helped her slowly overcome this muteness. After a period of silence, she began to speak again. However, she had to experience another challenge when she worked and attended school at the same time. The following lines from the poem *"When I Think about Myself"* justify the earlier statement:

8 *"Sixty years in these folks' world*
9 *The child I works for calls me girl"*

During her high school, her education was rather troubled because of an unwanted pregnancy. She was still very innocent but she had to carry the weight of the world on her shoulders. The following lines from the poem *Alone* explain how being a mother at a very young age opened her mind to the realities of life as reflected in Lines 11-13:

11 *"Alone, all alone*
12 *Nobody, but nobody*
13 *Can make it out here alone."*

The poem *Woman Work* shows that Angelou greatly learned from the hurdles and plethora of life experiences she experienced. She used these as inspirations in creating her poems, autobiographies and other literary works. Her exquisite gift in writing has been instrumental in inspiring the readers to face every circumstance that life offers as mentioned in these lines:

20 *"Storm, blow me from here*
21 *With your fiercest wind*
22 *Let me float across the sky*
23 *'Til I can rest again."*

Her writings mirror her life experiences that intend to portray the author's quest for her selfhood, her physical and spiritual identities. She dealt with domestic issues and finished with universal questions, such as race, cultural differences and femininity, further on contemplating on Angelou's place as a black female in a patriarchal white man's world. Her poems do not only manifest control as a whole, but also feminist psyche in control of femininity, while embodying woman on three different levels: racial, biographical and universal (Ghani & Naz, 2007).

Socio-Cultural Environment

The poem *When You Come to Me* as discussed in the previous paragraphs may be a representation of a sexual exploitation that happened to others. The rape incident that happened to Angelou may be one of the different stories of women oppression and exploitation that were told but went unnoticed. Because of how women were treated, these might be a causal factor why similar stories such these were kept or perhaps buried to the ground.

In the poem *Caged Bird*, somehow, it is an outright reflection of slavery and negritude and how the black people struggle with these issues which she experienced first-hand. The following verses speak of these:

1 *"A free bird leaps*
2 *on the back of the wind*
3 *and floats downstream*
4 *till the current ends*
5 *and dips his wing*
6 *in the orange sun rays*
7 *and dares to claim the sky.*
8 *But a bird that stalks*
9 *down his narrow cage*
10 *can seldom see through*
11 *his bars of rage*

12 *his wings are clipped and*
13 *his feet are tied*
14 *so he opens his throat to sing."*

The images of a free bird and caged bird set the difference between a slave and a free man. Lines 1-7 show a picture of a free bird "that floats downstream", "dips his wing in the orange sun rays" and "dares to claim the sky" while Lines 8-14 depict an image of a caged bird that "stalks down his narrow cage", "his wings are clipped" and "his feet are tied". The differences implicitly explain the free men and the slaves. During her time, slavery is an issue that people keep on fighting against.

The poem *Alone* paints a picture of an economic struggle in Arkansas as reflected in these lines:

3 *"How to find my soul a home*
4 *Where water is not thirsty*
5 *And bread loaf is not stone"*

The images of "water" and "bread" are symbols of the drought that hit the Arkansas destroying the crops and their farmland (Whayne et al., 2013). If taken literally, the line "How to find my soul a home" may be speaking of the emotional struggle she faced having to live with her family in an unfortunate and underprivileged life.

In the poem *When I Think about Myself*, it was evident there was racial prejudice or discrimination during her period in Arkansas. Racism was rampant. Black people had the image of being slaves. These lines prove this:

17 *The tales they tell, sound just like lying,*
18 *They grow the fruit,*
19 *But eat the rind,*
20 *I laugh until I start to crying,*
21 *When I think about my folks.*

During the World War II, oftentimes, women are viewed as incapable of doing great things. Gender inequality and stereotypes were evident. This reality is somehow reflected in the poem *Woman Work*:

1 *"I've got the children to tend*
2 *The clothes to mend*
3 *The floor to mop*
4 *The food to shop*
5 *Then the chicken to fry*
6 *The baby to dry*
7 *I got company to feed*
8 *The garden to weed*
9 *I've got shirts to press*
10 *The tots to dress*
11 *The can to be cut*
12 *I gotta clean up this hut*
13 *Then see about the sick*
14 *And the cotton to pick."*

During her time, white supremacy was an issue. White peoples reigned over blacks. This was brought about by inequality in the society.

7 *"I'm afraid they'll have to prove first*
8 *That they'll watch the Black man move first*
9 *Then follow him with faith to kingdom come."*

In summary, Angelou's life experiences, her education and the socio-cultural environment are largely mirrored in her poetry. Praseedha (2010) affirms that her life experiences paved way for the development of her works as an author and as a poet. Moreover, the significant events that happened during her period in Arkansas were instrumental in developing some of her works as a poet.

3.3 The Socialist Feminism Reflected in the Select Poems

This part of the paper discusses the characteristics of socialist feminism reflected in the select poem and how socialist feminists view such characteristics. Each poem will be discussed vis-à-vis the three salient characteristics namely representation of women, images of women at home and in the workplace and role of women in the society. Different lines from the poem will be drawn out and analyzed whether these validate or invalidate the aforementioned characteristics.

Table 3. The socialist feminism of Johanna Brenner reflected in the select poems of Maya Angelou

Maya Angelou's Select Poems	Representation of Women (Empowerment of Women)	Images of Women		Role of Women in the Society (Women Liberation)	Significant Findings Reflected in Brenner's Socialist Feminism
		Home (Welfare of Women)	Workplace (Economic Independence)		
When You Come To Me	Lines 1 – 14 Representation of women as weaker sex	Lines 1 – 14 Women being left in the house	Lines 20 – 23 Unequal standing of both sexes at work	Lines 1 – 14 Women live in a society with observed gender inequality Lines 7 – 10 Co-existence of men and women	In general, wives are economically dependent and disempowered. Brenner's perspective focuses on ending the exploitation of women at home, in the workplace, and in the community. Socialist feminists start where most feminists begin that the emancipation of women must come from women ourselves, but cannot be achieved all by themselves. Brenner believes in the complementation of men and women.
Caged Bird	Lines 7 – 10 Women compliment men				Socialist feminists share liberal feminism's commitment to individual rights and equal opportunity. Brenner hopes to address the problems of working women, ease their burden and improve women's and especially mothers' position on the labor market.
Alone	Lines 1 – 3 Liberalization and discrimination of women		Lines 4 – 6 Exploitation of women at work	Lines 7 – 12 Promotion of equal respect and footing no matter the color, race or gender	Social feminists believe in the power of the state to assist the situation of women as they entered the market economy.
When I Think about Myself	Lines 5 – 9 Women as vulnerable beings and objects that can be infantilized		Line 10 Limiting the physical work that women can do	Lines 5-9 Women as more capable than what the society's standards set	
Woman Work	Lines 8 – 12 Undervaluing and oppression of women		Lines 8 – 12 Women being at a disadvantage at work	Lines 17 – 21 Existence of social inequality or oppression	Social feminists agree that women have been oppressed in virtually all known societies and their different relations to productive work, reproduction, socialization of children and sexuality in patriarchy give her lesser economic and psychological power in relation to men.
On Working White Liberals	Lines 27 – 30 Women being weak and vulnerable	Lines 8 – 14 Women are not free to do what they want		Lines 15 – 22 Rights of women	Socialist feminists emphasize that within the workplace women face challenges of job market segregation, lower wages for the same work, and sexual harassment.

Woman Work

Representation of Women in the Society. As presented on the first column, the poem *Woman Work* explains how women are represented as the weaker sex. This gender inequality or stereotyping is evident where women are viewed as only good for household works and that they are not capable of doing great things. These household women remain to be awfully busy with the domestic chores as reflected in the following poetic lines:

1 *"I've got the children to tend*
 2 *The clothes to mend*
 3 *The floor to mop*
 4 *The food to shop*
 5 *Then the chicken to fry*
 6 *The baby to dry*
 7 *I got company to feed*
 8 *The garden to weed*
 9 *I've got shirts to press*
 10 *The tots to dress*
 11 *The can to be cut*
 12 *I gotta clean up this hut*
 13 *Then see about the sick*
 14 *And the cotton to pick."*

Because of these stereotypes, women are regarded as the "weaker sex". In reality, women can do much more than society decides. They can excel in other fields or disciplines. Brenner (2014) convincingly documents the inconsistency of gender identity in the face of the powerful forces. With these, women struggle for independence.

Images of Women at Home and in the Workplace. In the same lines of the aforementioned poem, they explain how women are left in the house tending the children, doing household chores. The poem listlessly enumerates everyday habits of a housewife to prove her point. She has to mop the floor. She has to clean the house. She has to bathe and dry the kids. She has to prepare the children for school. She has to buy food. She has to cook for her family. She has to weed the garden. She is fed up with this boring life. She has no source to enjoy life.

Since the poem looks at the idea of women being overwhelmed by housework with no time for themselves, it presents an argument often made by socialist feminists stating that women are often used as an unpaid laborer at home, alienated from themselves. The speaker's desire for freedom indicates her need to be valued for her work, the need to be acknowledged for her contribution.

This adheres very much to the concern of socialist feminists as it presents gender inequality. There is unequal standing of both sexes in work. Women are left in the house tending the children, doing household chores while men are perceived to be the ones responsible in earning for the family.

Brenner (2014) implies that socialist feminists reasonably argue for households' universal need for social provisions that will help them carry out their responsibilities for raising children and caring for adults. This speaks of the significant role of the welfare of women in general which the socialist feminist perspective continues to promote. In the workplace, women are economically dependent and disempowered as evident in Angelou's poetry. This becomes one of the causes of socialist feminism which is to put a stop to the exploitation of women at home and in the workplace.

Role of Women in the Society. Lines 1-14 as mentioned above explain that the stature of women in the society is a vivid representation of how women are not fared equal with men. Women are regarded to live a boring and monotonous life making the sacrifices for their children. Having lived in a society with observed gender inequality, women experience exploitations in the community. With this, Brenner believes that this prejudice or bias has to be eliminated in the community so that women can obtain liberation and freedom and act accordingly.

Alone

Representation of Women in the Society. As shown on the second column, Lines 6-10 of the poem *Alone* explains that women compliment men and that both sexes are created equal. It also explains the coexistence of man and woman, that each sex is dependent on another. Both must strive to exist for the world we live to continue revolving. Nobody makes it alone in this world. This is somehow relevant to the maxim that states, "No man is an island but a part of a whole". Sometimes, no one can survive with only him in the world. We are all a part of something. A man needs a woman for a reason; a woman lives with a man. We are intertwined with one another as reflected in these lines:

7 *"And I don't believe I'm wrong*
 8 *That nobody,*
 9 *But nobody*
 10 *Can make it out here alone."*

Moreover, the persona seems to have something important to say about the state of society and the suffering of the human race. It calls for togetherness and that, humans souls have to work together for the common good of all. As humans, we are social animals. We, people, need people.

Role of Women in the Society. The poem *Alone* explicates the necessity of a woman for the society or the world to exist. This socialist feminists' perspective explains the role of women in the society. This poem continues to inspire those who want to live in a world where equality, justice, and transparency apply to all, regardless of skin, creed or sexual orientation. Social feminists argue that the society continues to exist because of men and women alike. Women are regarded as equally important as men. Moreover, socialist feminists start where most feminists begin that the emancipation of women must come from women ourselves, but cannot be achieved all by themselves (Brenner, 2014). This perspective of Brenner explains the complementation of men and women as a major characteristic of feminism.

On Working White Liberals

Representation of Women in the Society. The poem *On Working White Liberals* implicates how women are discriminated and liberalized. They are perceived as helpless and hopeless. In this poem, the poet pleads for something as explicated in these lines:

1 *"I don't ask the Foreign Legion*
 2 *Or anyone to win my freedom*
 3 *Or to fight my battle better than I can"*

Socialist feminists believe that all women suffer as a result of women's oppression in class society, including under capitalism, and therefore are in favour of uniting all women who want to fight against that oppression under the banner of women's liberation, there is a need to understand that it is working-class women who suffer most acutely: whether it be from the lack of abortion facilities, from sexual harassment or from economic discrimination in the workplace (Graf, 2012). This discrimination of women shows a form of women disempowerment. This concerns Brenner's perspective that individual rights and equal opportunity should be offered to all (2014).

Images of Women at Home and in the Workplace. Table 2 presents that Lines 4 – 6 of the poem *On Working White Liberals* speak about how women are exploited at work and that, there is unequal division of labor.

4 *"Though there's one thing that I cry for*
 5 *I believe enough to die for*
 6 *That is every man's responsibility to man."*

Brenner (2014) asserts that social feminists look to an expansive and activist state to address the problems of working women, to ease the burden of the double day, to improve women's and especially mothers' position on the labor market, to provide public services that socialize the labor of care and to expand social responsibility for care.

Role of Women in the Society. The poem *On Working White Liberals* somehow does not only talk about supremacy or superiority in terms of color but also race. Black women are regarded as inferior to white women. This perception can be traced back in the history of our world. Moreover, the poem recreates another tale of racial or women discrimination as reflected in these lines:

7 *"I'm afraid they'll have to prove first*
 8 *That they'll watch the Black man move first*
 9 *Then follow him with faith to kingdom come.*
 10 *This rocky road is not paved for us,*
 11 *So, I'll believe in Liberals' aid for us*

Socialist feminists promote equal respect and footing no matter the color, race or gender. According to Brenner (2014), socialist feminists share liberal feminism's commitment to individual rights and equal opportunity. These two ideas and causes of Angelou and Brenner are perfectly in sync. While it is true that both of them clamor for the same causes, this reality takes time to accomplish or achieve.

When You Come to Me

Representation of Women in the Society. The poem *When You Come to Me* reminded Angelou of the past that kept on haunting her and creeping up on her time and again. This could be anything that affected how she lived in the society. Women by nature are vulnerable to pain. They are capable of feeling hurt and pain.

The aforementioned poem tells of a woman being exploited because of her vulnerability. This highly speaks of social feminism as women are seen as objects who can be infantilized and hurt.

5 "Offering me, as to a child, an attic,
6 Gatherings of days too few.
7 Baubles of stolen kisses.
8 Trinkets of borrowed loves.
9 Trunks of secret words,
10 I CRY."

Women are seen as vulnerable beings and perceived as objects that can be infantilized and hurt. Femininity is always associated with weaknesses and frailties. Since women are emotional more than logical, they easily feel disempowered.

Images of Women at Home and in the Workplace. At work, women are limited with the physical activities that they can do. Taking care of babies and small children, as a type of work done overwhelmingly by women, socializes women and men to have different identities, personalities and skills. In the modern times, this is very evident as women are more perceived to be in office work or any job that requires a limited physical work. With this, social feminists believe in the power of the state to assist the situation of women as they entered the market economy (Brenner, 2014).

Role of Women in the Society. These women stereotypes continue to be largely affecting how society sees the women. Socialist feminists believe that women are more capable than what the society's standards set.

When I Think about Myself

Representation of Women in the Society. The poem *When I Think about Myself* may talk about social injustice or inequality in the society where Maya Angelou thrived. Women are undervalued. This poses a tremendous burden on the part of the women and they could only hold for too long and may begin cracking anytime soon. Moreover, the poem sheds light on social inequality or oppression, a very clear socialist feminism perspective. However, this also talks about pride and survival. Similar with her other poems, she narrated the placement and displacement of the author as a southern black girl and establishes that her range of experiences of racial discrimination, rape, and numerous other oppressions did not deter her; on the contrary, they encouraged and reinforced her, thus committing her to survival at all costs.

8 "Sixty years in these folks' world
9 The child I works for calls me girl
10 I say "Yes ma'am" for working's sake.
11 Too proud to bend
12 Too poor to break,
13 I laugh until my stomach ache,
14 When I think about myself."

According to Hochschild (1979) as cited in Graf (2012), social feminists also agree that women have been oppressed in virtually all known societies, but the nature of this oppression has differed because of the different economic realities.

Images of Women at Home and in the Workplace. In the same aforementioned lines, women are undervalued or oppressed. Moreover, women are at a disadvantage at work as they are paid less. According to Mitchell (1972), women's different relations to productive work, reproduction, socialization of children and sexuality in patriarchy give her lesser economic and psychological power in relation to men. Brenner (2014), as mentioned above, highlights that social feminists believed in the power of the state to assist the situation of women as they entered the market economy. However, this challenge cannot be organized by feminists alone, nor with old forms of feminist organization. It requires a broad and militant mobilization from below incorporating movements for democratic rights that are far more inclusive, new more social and political forms of trade-union struggle.

Role of Women in the Society. Socialist feminists believe in the existence of social inequality or oppression as reflected in these lines:

17 *The tales they tell, sound just like lying,*
18 *They grow the fruit,*
19 *But eat the rind,*
20 *I laugh until I start to crying,*
21 *When I think about my folks.*

According to Hochschild (1979) as cited in Graf (2012), gender inequality in society is connected to unpaid domestic labor. Women do twice the domestic labor of men. Socialist feminists push for the recognition and respect of all work in society (Graf, 2012).

Caged Bird

Representation of Women in the Society. The poem *Caged Bird* clearly shows how women are perceived and represented in the society. They are considered as weak and vulnerable. They can be controlled and manipulated as found in these lines:

27 *"But a caged bird stands on the grave of dreams*
28 *his shadow shouts on a nightmare scream*
29 *his wings are clipped and his feet are tied*
30 *so he opens his throat to sing."*

Line 27 describes a caged bird who "stands on the grave of dreams" which may be a reflection of how fate favors to few people. The bird's "wings are clipped" and "feet are tied" as elucidated in Line 29. These powerful images may refer to women who do not have the freedom to do what they want. The unfairness of life makes them highly vulnerable.

Images of Women at Home and in the Workplace. The poem *Caged Bird* also posits that women are not free to do what they want. They are limited with their activities.

8 *"But a bird that stalks*
9 *down his narrow cage*
10 *can seldom see through*
11 *his bars of rage*
12 *his wings are clipped and*
13 *his feet are tied*
14 *so he opens his throat to sing."*

As interpreted in the previous paragraphs, women may be controlled with their lives. Just like the caged bird, they are being watched and observed making their actions rehearsed. According to Hochschild (1979) as cited in

Graf (2012), socialist feminists emphasize that within the workplace women face challenges of job market segregation, lower wages for the same work, and sexual harassment (Graf, 2012).

Role of Women in the Society. Socialist feminists believe in the rights of the women.

15 *"The caged bird sings*
16 *with a fearful trill*
17 *of things unknown*
18 *but longed for still*
19 *and his tune is heard*
20 *on the distant hill*
21 *for the caged bird*
22 *sings of freedom."*

Socialist feminists start where most feminists begin that the emancipation of women must come from women ourselves, but cannot be achieved all by themselves (Jenner, 2014).

In summary, Maya Angelou has reflected the social feminism in some of her poetry. She continues to primarily fight for gender equality specifically the rights of women. She promotes equal respect and footing no matter the color, race or gender. The salient characteristics of Johanna Brenner's socialist feminism which include representation of women, images of women at home and in the workplace and the role of women in the society are mirrored in Angelou's works. Specifically, Angelou clamored for similar feminist perspectives that Brenner posits such as empowerment of women, women liberation and welfare reform or economic independence.

4.0 Conclusion

In view of the analyses and findings of the study, the following conclusions were drawn out:

- a.) Maya Angelou had a challenging and colorful life. Her range of experiences from childhood to adulthood had influenced how she wrote. Her vision and legacy as mirrored in her works especially in her poetry continue to inspire others to fight for equality of all forms in the society.
- b.) There are a number of significant factors that aided in the development of her work as a writer and a poet. Her life experiences along with her education recreated the way she saw the world. The socio-cultural environment in Arkansas during her period also contributed to her profound writings.
- c.) Angelou embodies a woman who continues to wage war against gender inequality, discrimination, racial prejudice and other imminent issues in the society. Her works explicitly and implicitly describe how these issues rampantly create imbalance and division in the society. The salient characteristics of socialist feminism of Brenner such as representation of women, images of women at home and in the workplace and role of women in the society are highly evident in her body of work. As a socialist feminist, Brenner yearns to end the exploitation of women at home, in the workplace, and in the community having known that women have been oppressed in virtually all known societies. All these cause of Brenner coincide with what Angelou portrayed in her poetry.
- d.) This research work concludes that Angelou's select poems reveal the connections of the significant life experiences of the poet, her education and the socio-cultural environment. These factors are indispensable in the development and refinement of her work. Moreover, the socialist feminist perspective is relevant and reflective in the select poems studied and analyzed in this research.
- e.) Based on the findings of this study, both Maya Angelou and Johanna Brenner clamor or cry for the same socialist feminist perspectives. Since wives are economically dependent and disempowered as reflective of Angelou's poetry, Brenner hopes to end the exploitation and oppression of women at home, in the workplace, and in the community and commit to individual rights and equal opportunity for all. While Angelou has portrayed in her poetry that women face challenges with regard to how they are represented, how they are viewed at home and in the workplace and how they perform their roles in the society, Brenner also hopes to address the problems of working women, ease their burden and improve women's and especially mothers' position on the labor market.

- f.) Since the biography of the poet reflects his body of work, it is recommended that teachers and students alike should study and analyze the biography of the writer before attempting to discuss the literary piece. This will provide them noteworthy information on how to further analyze the piece.
- g.) It is recommended that the aside from the life experiences of the author, the education should also be taken into consideration because it may have an effect on the poet's works. Moreover, the socio-cultural environment of the author should also be taken into account because this would somehow shape the author's treatment of his works.
- h.) Since this research found out that Maya Angelou is regarded a socialist feminist, it is recommended to future writers or authors to attempt to analyze other types of feminism such as eco-feminism, liberal, and radical feminism to explore other salient characteristics of feminism embedded in Angelou's works.
- i.) Literary critics and researchers should consider utilizing other significant approaches aside from feminism and biography in evaluating the works of Angelou to encourage literary dialogue and discussion.
- j.) Angelou and her works should be incorporated in literature classes to understand how they mirror the social and cultural backgrounds of the past and how the readers can learn from these in shaping their present thoughts and perspectives.

5.0 Contributions of Authors

The authors confirm their equal contribution to every part of this research. Both authors reviewed and approved the final version of this paper.

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7.0 Conflict of Interests

The authors declare no conflicts of interest.

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Effects of the Single-Entry Approach Program on Labor Disputes as Implemented by the Department of Labor and Employment

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Abstract. The study aimed to determine the effects of the Single-Entry Approach program on labor disputes as implemented by the Department of Labor and Employment in Negros Oriental Field Office. The researcher employed a descriptive-correlational design. The 120 respondents (60 requesting parties and 60 responding parties) were randomly selected clients who were involved in the SEnA program of the DOLE Negros Oriental Field Office. The researcher used a validated questionnaire to gather data and applied statistical methods such as percentage, weighted mean, mean, and Spearman's rank order correlation coefficient. The findings revealed high awareness and satisfaction for both the requesting and responding parties, indicating a correlation between clients' awareness of the SEnA program and their satisfaction levels. However, the fact that RFAs are still being referred to other agencies only shows that certain aspects of the program require more enhancement. Specifically, the client's awareness of the SENA program, communication effectiveness, and conciliation-mediation skills could lead to increased settlement rates and reduced referrals to the NLRC.

Keywords: Single-entry approach program; Labor disputes; Awareness; Settlement; Satisfaction.

1.0 Introduction

Conflicts are common in the workplace and can arise between individuals, teams, departments, employers, employees, and various aspects of industrial relations (Pinheiro et al., 2019). In settling conflicts, mandatory arbitration agreements have been scrutinized for over a decade, and recently proposed legislation in the US seeks to void pre-dispute mandatory arbitration agreements in a range of disputes (Sharma, 2020). In addition, mediation, as an alternative dispute resolution method, can be used to facilitate negotiations between involved parties to reach a mutually acceptable solution (Folorunsho, 2018). However, low participation and enforcement levels in dispute resolution mechanisms hinder consumer protection goals, and incorporating dispute avoidance tools and trust-building measures can improve regulation and common enforcement mechanisms (Nicuesa, 2018).

In the Philippines, despite the country's violent history, it maintains its traditions of conflict resolution, with a focus on enhancing local peace-building organizations instead of institutionalizing conflict resolution (Gonzales, 2022). Moreover, innovative methods for effective conflict management in contemporary workplaces have been explored, such as regular training for conciliators and mediators, to improve their conflict resolution skills and commitment to assisting laborers (Rebayla et al., 2023). Lastly, the insights obtained from the research regarding the conflict management process offer new and innovative approaches to managing conflicts effectively in contemporary workplaces and organizations (Ilac & Presbitero, 2022).

Similarly, the Department of Labor and Employment's Single-Entry Approach (SEnA) program in the Philippines stands as a significant example of an alternative dispute resolution (ADR) initiative (Department of Labor and Employment, n.d.). Although the DOLE Negros Oriental Field Office (DOLE-NOFO) has achieved commendable settlement rates of 88.89% in 2021 and 88.00% in 2022, surpassing the office target of 70.00% (DOLE7 Memo No. 638 s-2022), a slight decline in these rates is observed. This decline underlines the necessity for continuous improvement, particularly in the context of quality service in government. As noted by Ocampo et al. (2019), the responsiveness aspect requires the most enhancement when it comes to delivering quality services. This sentiment resonates with the understanding that the quality of government service delivery is closely linked to the level of national happiness (Helliwell & Wang, 2020). Hence, the research study will bridge this gap including the knowledge and research by providing a localized perspective on the SEnA program in DOLE-NOFO, as no prior studies have been conducted that examine the effects of the SEnA program in the country.

Given the stated situation, there is a pressing need to conduct a research study on the matter. As such, with the necessary qualifications and competence of the researcher, who has a thorough background in conciliation and mediation in the DOLE SEnA program as well as Labor Relations and Labor Standards, this research was carried out. Furthermore, by examining the effects of the SEnA program on labor disputes, this study aimed to produce valuable insights that could contribute to enhancing the DOLE program's outcomes, updating policy and practice, and ultimately promoting better labor relations and governance in the province.

2.0 Methodology

2.1 Research Design

The study is a descriptive-correlational type. It identified (a) the common issues raised by the requesting parties and answered by the responding parties relative to employment; (b) the clients' awareness of some important areas; (c) the level of clients' satisfaction; and (d) the average performance rate of the SEnA program. Also, in this study, the clients' awareness of the SEnA program and their level of satisfaction were correlated.

2.2 Research Participants

The study's respondents comprised clients, referred to as requesting parties and responding parties, engaged in DOLE-NOFO's SEnA program. Employing a simple random sampling technique, 120 respondents were chosen, evenly split between requesting parties—comprising actively employed individuals, terminated, resigned, or retired—and responding parties, which included establishment owners, managers, employers, and management representatives. This sample size effectively captured data pertinent to the study's objectives.

2.3 Research Instrument

The researcher used a self-made questionnaire as an instrument to collect data. He believed that the questionnaire would gather data faster than any other method. Besides, the respondents could easily respond to the questionnaire since they were directly involved in the conduct of the SEnA process. Moreover, the questionnaire was drawn out based on the researcher's readings, reviewed articles, and published literature related to the study. The items in the questionnaire cover relative aspects of the common issues of employment and answer the specific questions under the statement of the problem.

For validation purposes, the researcher presented the questionnaires to three experts in the field in addition to the panel members who first evaluated the entire research proposal. These experts assessed the accuracy of the instrument used in this study in terms of grammar, format, alignment of questions, construct, and criterion. The researcher then adopted and integrated all the corrections and suggestions of the panel members and validators for more clarity and definiteness.

To guarantee reliability, a dry run was conducted with 30 randomly selected clients participating in the SEnA program serving as the respondents. The items were tested for their reliability using Cronbach's alpha test, which essentially measures the consistency of a measurement in assessing a concept. Cronbach's alpha test serves as a method to quantify the strength of that consistency. Typically, a desirable range falls between 0.70 and 0.90, or even higher depending on the nature of the research. When Cronbach's Alpha values are 0.7 and above, it indicates that all the variable indices or dimensions demonstrate acceptable internal consistency (Adeniran, 2019). The

results of the dry run involving thirty respondents yielded a value of > 0.70 , satisfying that all items in the questionnaire are reliable.

2.4 Data Gathering Procedure

After the design hearing, the researcher adopted all the corrections and suggestions of the panel members. A letter of request to conduct the study was sent to the OIC Chief of DOLE-NOFO and the Regional Director of DOLE. The signed and approved request was presented to all individuals and authorities concerned, and then to the respective respondents. During the questionnaire distribution, the researcher explained to the respondents the purpose and importance of the research. The sets of questionnaires were distributed every day from Mondays to Fridays until the target of 120 respondents was reached. The retrieval of the questionnaires was done right after the respondents finished answering the questions. The results were then consolidated and tallied using MS Excel and were analyzed and interpreted.

2.5 Data Analysis Procedure

The researcher utilized several analytical tools, including percentages, to illustrate the relationship between parts and the whole. This method effectively presented the common issues raised by the requesting parties and addressed by the responding parties concerning employment. Moreover, the weighted mean was used to determine the degree of the client's awareness of the SenA program and their satisfaction with its implementation. The mean was also utilized to assess the average performance of the SenA program. Spearman's rank-order correlation coefficient was applied to identify the degree of relationship between the client's awareness of their rights, access to information about the SenA program, communication with the SEADO, and their level of satisfaction. Throughout the analysis, specific interpretations were applied to describe the client's awareness and satisfaction levels with the SenA program.

2.6 Ethical Considerations

In maintaining the highest standards of ethical research, careful consideration of ethical principles is paramount. Therefore, this study diligently pursued ethical clearance from both the university graduate school, where the researcher is enrolled, and DOLE-NOFO, the site of study. Before their inclusion, participants received comprehensive information regarding the study's objectives and procedures, and their informed consent was solicited. They were assured of their right to withdraw from the study at any point, free from coercion or intimidation. Stringent confidentiality measures were enacted to safeguard the privacy of all shared information, and measures were taken to minimize potential risks to participants.

In alignment with the ethical guidelines set forth by the Ethics Committee of Foundation University, the researcher meticulously adhered to prescribed procedures. Consultation was undertaken to ensure the research topic's soundness, significance, and ethical appropriateness. Throughout the research process, the researcher maintained a non-judgmental stance to prevent any hint of bias. Moreover, participants were actively engaged in the consent process, indicating their full comprehension of the potential risks and benefits associated with their participation in the study.

3.0 Results and Discussion

3.1 Clients' Awareness

In terms of Knowledge of Their Rights

Table 1 depicts the data on the level of awareness of the clients in terms of knowledge about their rights. As depicted the composite scores for both requesting parties and responding parties indicate a relatively very high ($w\bar{x} = 4.25$) and high ($w\bar{x} = 4.17$) level of awareness, respectively.

Table 1. Descriptive statistics of the level of awareness of the clients in terms of knowledge about their rights (n=120)

Indicators	Requesting Party (n=60)		Responding Party (n=60)	
	$w\bar{x}$	LoA	$w\bar{x}$	LoA
1. The right to a settlement agreement that is fair and just.	4.40	FA	4.28	FA
2. The right to due process of the parties during the SenA proceedings.	4.23	FA	4.22	FA
3. The right to file a complaint with the SenA program if there is a labor issue or conflict with the employer or vice versa.	4.21	FA	4.07	A
4. The right to confidentiality during the SenA proceedings.	4.13	A	4.10	A
Composite	4.25	FA	4.17	A

Among the requesting parties, the respondents are “fully aware” of their right to a settlement agreement that is fair and just ($w\bar{x} = 4.40$), the right to due process of the parties during the SEnA proceedings ($w\bar{x} = 4.23$), and the right to file a complaint with the SEnA program if there is a labor issue or conflict with the employer or vice versa ($w\bar{x} = 4.21$). Furthermore, the table reveals that the requesting parties are “aware” of their right to confidentiality during the SEnA proceedings ($w\bar{x} = 4.13$).

On the one hand, the responding parties are “fully aware” of their right to a settlement agreement that is fair and just ($w\bar{x} = 4.28$) and the right to due process of the parties during the SEnA proceedings ($w\bar{x} = 4.22$). In addition, they are “aware” of their right to file a complaint with the SEnA program if there is a labor issue or conflict with the employer or vice versa ($w\bar{x} = 4.07$) and the right to confidentiality during the SEnA proceedings ($w\bar{x} = 4.10$).

These findings connote that requesting and responding parties are fully aware of their rights in SEnA proceedings contributing to the effectiveness of information dissemination efforts by DOLE-NOFO and other government agencies involved in labor dispute resolution (Daen, 2018). During the conduct of SEnA, the SEADO explained and discussed the primary objective of the Program which is to achieve an amicable settlement and prevent disputes from escalating to formal litigation. Requesting and responding parties were informed about their rights and obligations under laws and the potential benefits of undergoing the SEnA program. Similarly, in their study, Soriano et al. (2022) observed a high level of awareness among respondents regarding mediation rules, procedures, and ethical standards for mediators. Additionally, Toohey (2018) noted an increasing awareness of non-determinative dispute settlement processes such as mediation, which are increasingly gaining attention as effective methods for resolving disputes.

Despite the overall high level of awareness, there are minor differences in awareness levels among specific rights between the parties. This unveils potential areas for targeted educational interventions or enhancements in communication strategies to ensure equal understanding among all stakeholders, reinforcing the importance of effective communication as a key element in resolving both relationship and task conflicts (Adham, 2023).

In terms of Access to Information about SENA Program

Table 2 presents the data on the level of awareness of the clients in terms of access to information about the SEnA program. As shown, the composite scores for both requesting parties and responding parties unveil a generally high ($w\bar{x} = 4.08$) and high ($w\bar{x} = 3.97$) level of awareness, respectively.

Table 2. Descriptive statistics of the level of awareness of the clients in terms of access to information about the SENA program (n=120)

Indicators	Requesting Party (n=60)		Responding Party (n=60)	
	$w\bar{x}$	LoA	$w\bar{x}$	LoA
1. The SEnA program is available to all workers, whether regular, contractual, or probationary, workers separated from employment, or even on the part of the employer.	4.32	FA	4.08	A
2. Dissemination of information about the SEnA program through DOLE's website, offices, and the Public Employment Service Office (PESO).	4.10	A	3.97	A
3. Contact information for the SEnA program, including phone numbers, email addresses, and physical address of the DOLE-NOFO office.	3.95	A	3.80	A
4. Comprehensive overview of the SEnA program, including its objectives, procedures, and benefits.	3.95	A	4.02	A
Composite	4.08	A	3.97	A

Among the requesting parties, the respondents are “fully aware” that the SEnA program is available to all workers, whether regular, contractual, or probationary, workers separated from employment, or even on the part of the employer ($w\bar{x} = 4.32$). Moreover, they are “aware” of the dissemination of information about the SEnA program through DOLE's website, offices, and PESO ($w\bar{x} = 4.10$), Contact information for the SEnA program, including phone numbers, email addresses, and physical address of the DOLE-NOFO office ($w\bar{x} = 3.95$), and a Comprehensive overview of the SEnA program, including its objectives, procedures, and benefits ($w\bar{x} = 3.95$).

On the other hand, the responding parties are “aware” of the SEnA program being available to all workers, whether regular, contractual, or probationary, workers separated from employment or even on the part of the employer ($w\bar{x} = 4.08$), Dissemination of information about the SEnA program through DOLE's website, offices, and PESO ($w\bar{x} = 3.97$), Contact information for the SEnA program, including phone numbers, email addresses, and physical address of the DOLE-NOFO office ($w\bar{x} = 3.80$), and a Comprehensive overview of the SEnA program, including its objectives, procedures, and benefits ($w\bar{x} = 4.02$).

These findings imply that both requesting and responding parties have a generally high level of awareness regarding communication with the SEnA program, which affirms that dissemination expresses a proactive idea that extends beyond mere accessibility and distribution of governmental information (Daen, 2018). Additionally, Singer (2018) offers advice to those involved in disputes to help them analyze their situations and goals. However, the lack of knowledge about methods of settling disputes, particularly among financially challenged employees, could be a barrier to accessing the program (Francisco et al., 2022). With a notable rise in information accessibility, this edition explores how utilizing information can improve governance and public service delivery (Kosec & Wantchekon, 2020).

In terms of Communication with SEADO Handling the Clients' RFA

Table 3 stipulates the data on the level of the clients' awareness of communication with the SEADO handling the Client's RFA. The data show that the composite scores for both requesting parties and responding parties indicate a relatively high ($w\bar{x} = 4.04$) and high ($w\bar{x} = 3.89$) level of awareness, respectively.

Table 3. Descriptive statistics of the level of awareness of the clients in terms of communication with the SEADO handling the client's RFA (n =120)

Indicators	Requesting Party (n=60)		Responding Party (n=60)	
	$w\bar{x}$	LoA	$w\bar{x}$	LoA
1. Confidentiality of the Clients' communication with the SEADO.	4.22	FA	4.00	A
2. The SEADO communicates with clients in a language that they understand.	4.22	FA	3.98	A
3. Communication with the SEADO through various means, including phone calls, emails, and in-person meetings in the Office.	3.92	A	3.85	A
4. Contact information of the SEADO handling the RFA.	3.82	A	3.73	A
Composite	4.04	A	3.89	A

Specifically, the requesting parties are “fully aware” of the Confidentiality of the Clients' communication with the SEADO ($w\bar{x} = 4.22$) and the SEADO communication with clients in a language that they understand ($w\bar{x} = 4.22$). Moreover, they are “aware” of Communication with the SEADO through various means, including phone calls, emails, and in-person meetings in the Office ($w\bar{x} = 3.92$) and Contact information of the SEADO handling the RFA ($w\bar{x} = 4.04$).

The responding parties, on the other hand, are “aware” of the Confidentiality of the Clients' communication with the SEADO ($w\bar{x} = 4.00$), the SEADO communication with clients in a language that they understand ($w\bar{x} = 3.98$), Communication with the SEADO through various means, including phone calls, emails, and in-person meetings in the Office. ($w\bar{x} = 3.85$), and Contact information of the SEADO handling the RFA ($w\bar{x} = 3.73$).

These findings signify that both requesting and responding parties have a generally high level of awareness regarding communication with the SEADO, which affirms that dissemination expresses a proactive idea that extends beyond mere accessibility and distribution of governmental information (Daen, 2018). Furthermore, alongside managing the communication flow, mediators exert influence over the communication by directing, through explicit statements, the shaping narrative that parties can agree upon (Silbey & Merry, 2018). Sillars and Wilmot (2013) also believe that having appropriate control over the communication process can potentially result in more equitable, humane, and satisfying forms of conflict contrasting with a touch of idealism.

3.2 Clients' Satisfaction with SENA

In terms of Timeliness of Resolution

Table 4 manifests the data on the level of client satisfaction with the implementation of the SEnA program in terms of timeliness of resolution. The composite scores for both requesting parties and responding parties indicate a generally high ($w\bar{x} = 4.34$) and high ($w\bar{x} = 4.19$) level of satisfaction, respectively.

Table 4. Descriptive statistics of the level of clients' satisfaction with the implementation of the SEnA program in terms of timeliness of resolution (n = 120)

Indicators	Requesting Party (n=60)		Responding Party (n=60)	
	w $\bar{x}$	LoS	w $\bar{x}$	LoS
1. The DOLE-NOFO responds promptly to the client's request for assistance (RFA).	4.50	VS	4.28	VS
2. The SEADO initiates the fast-tracking of resolving disputes notwithstanding the 30-day process cycle time.	4.37	VS	4.20	S
3. The SEADO adheres to the 30-day timeline set under the SEnA program in disposing of the RFA.	4.33	VS	4.13	S
4. The SEnA program reduces the time taken to resolve disputes between parties.	4.17	S	4.13	S
Composite	4.34	VS	4.19	S

Specifically, the requesting parties are “Very Satisfied” with the following: the DOLE-NOFO responds promptly to the client's RFA ($w\bar{x} = 4.50$); the SEADO initiates the fast-tracking of resolving disputes notwithstanding the 30-day process cycle time ($w\bar{x} = 4.37$); and The SEADO adheres to the 30-day timeline set under the SEnA program in disposing of the RFA ($w\bar{x} = 4.33$). Moreover, the requesting parties are “Satisfied” with the SEnA program reducing the time taken to resolve disputes between parties. ($w\bar{x} = 4.17$).

Likewise, the responding parties are “Very Satisfied” with the DOLE-NOFO responding promptly to the client's request for assistance ($w\bar{x} = 4.28$). Moreover, they are “Satisfied” that SEADO initiates the fast-tracking of resolving disputes notwithstanding the 30-day process cycle time ($w\bar{x} = 4.20$), the SEADO adheres to the 30-day timeline set under the SEnA program in disposing of the RFA ($w\bar{x} = 4.13$), and the SEnA program reduces the time taken to resolve disputes between parties ($w\bar{x} = 4.13$).

These findings would mean that both requesting and responding parties are highly satisfied with the timeliness of resolution within the SEnA program which points out the effectiveness of the program in delivering timely assistance and dispute resolution services to clients. This affirms that both the promptness of response and the successful resolution of issues significantly influence satisfaction with complaint handling (Mattila & Mount, 2006). On the other hand, minor differences in satisfaction levels among specific indicators can be observed between parties. This indicates the need for continued efforts to ensure consistent service quality and responsiveness across all aspects of the program, which affirms that customer satisfaction is influenced by the quality of service provided (Vu, 2021).

In terms of Fairness and Impartiality

Table 5 indicates the data on the level of client satisfaction with the implementation of the SEnA program in terms of fairness and impartiality. The composite scores for both requesting parties and responding parties indicate a generally high ($w\bar{x} = 4.35$) and high ($w\bar{x} = 4.23$) level of satisfaction, respectively.

Table 5. Descriptive statistics of the level of clients' satisfaction with the implementation of the SEnA program in terms of fairness and impartiality (n = 120)

Indicators	Requesting Party (n=60)		Responding Party (n=60)	
	w $\bar{x}$	LoS	w $\bar{x}$	LoS
1. The SEADO shows consistency in its decision-making process.	4.42	VS	4.22	VS
2. The SEADO is neutral and impartial in facilitating the resolution process.	4.38	VS	4.23	VS
3. The parties involved in the dispute resolution are treated fairly.	4.37	VS	4.23	VS
4. The parties are given equal opportunities to express their rights to be heard.	4.25	VS	4.25	VS
Composite	4.35	VS	4.23	VS

The results show that the requesting parties are “Very Satisfied” with the following: SEADO showing consistency of the SEADO in its decision-making process ($w\bar{x} = 4.42$), the SEADO is neutral and impartial in facilitating the resolution process ($w\bar{x} = 4.38$), the parties involved in the dispute resolution are treated fairly ($w\bar{x} = 4.37$), and the parties are given equal opportunities to express their rights to be heard ($w\bar{x} = 4.25$).

Correspondingly, the responding parties are “Very Satisfied” that the SEADO shows consistency of the SEADO in its decision-making process ($w\bar{x} = 4.22$), the SEADO is neutral and impartial in facilitating the resolution process ($w\bar{x} = 4.23$), the parties involved in the dispute resolution are treated fairly ($w\bar{x} = 4.23$), and the parties are given equal opportunities to express their rights to be heard ($w\bar{x} = 4.25$).

These findings suggest that both requesting and responding parties are highly satisfied with the fairness and impartiality of the SEnA program which affirms that impartiality plays a crucial role in the conflict resolution process by ensuring that disputants receive a sense of justice and fairness (Lutta, 2022). Meanwhile, there are no indications of dissatisfaction or significant differences in satisfaction levels among specific indicators between the parties stressing how the concept of fairness is closely linked to the rules and societal norms governing the allocation of benefits and consequences (Jordan et al., 2021). Mediators frequently discuss the key principle of impartiality, which is central to the mediation process (Rosamund, 2018).

In terms of Communication and Responsiveness

Table 6 exhibits the data on the level of client satisfaction with the implementation of the SEnA program in terms of communication and responsiveness. It is exhibited that the composite scores for both requesting parties and responding parties indicate a generally high ($w\bar{x} = 4.30$) and high ($w\bar{x} = 4.29$) level of satisfaction, respectively.

Table 6. Descriptive statistics of the level of clients' satisfaction with the implementation of the SEnA program in terms of communication and responsiveness

Indicators	Requesting Party (n=60)		Responding Party (n=60)	
	$w\bar{x}$	LoS	$w\bar{x}$	LoS
1. The SEADO communicates with clients in a respectful and professional manner.	4.43	VS	4.30	VS
2. The clients are provided with information on the scheduled SEnA Conferences.	4.37	VS	4.28	VS
3. SEnA program is communicated clearly and effectively to clients.	4.22	VS	4.28	VS
4. The clients are provided with clear and concise information on how to access the program.	4.20	S	4.30	VS
Composite	4.30	VS	4.29	VS

Based on the data, the requesting parties are "Very Satisfied" that the SEADO communicates with clients in a respectful and professional manner ($w\bar{x} = 4.43$), The clients are provided with information on the scheduled SEnA Conferences ($w\bar{x} = 4.37$), and the SEnA program is communicated clearly and effectively to clients ($w\bar{x} = 4.22$). Further, requesting parties are "Satisfied" that the clients are provided with clear and concise information on how to access the program ($w\bar{x} = 4.20$).

Similarly, the responding parties are "Very Satisfied" that the SEADO communicates with clients respectfully and professionally ($w\bar{x} = 4.30$), The clients are provided with information on the scheduled SEnA Conferences ($w\bar{x} = 4.28$), the SEnA program is communicated clearly and effectively to clients ($w\bar{x} = 4.28$), and the clients are provided with clear and concise information on how to access the program ($w\bar{x} = 4.30$).

These findings connote that both requesting and responding parties are highly satisfied with the communication and responsiveness of the SEnA program, indicating the effectiveness of the program in providing clear, timely, and respectful communication to clients. This reaffirms the importance of employing efficient methods and strategies to facilitate direct communication between parties and successfully overcome blocks (De Ramos & Pasion, 2023). More so, there are no indications of dissatisfaction or significant differences in satisfaction levels among specific indicators between both parties. This implies a consistent perception of communication and responsiveness throughout all aspects of the program, reinforcing the idea that active listening and the perception of responsiveness cultivate an interpersonal connection that benefits both individuals and parties (Itzhakov & Reis, 2023).

In terms of Clarity and Comprehensiveness of Information

Table 7 displays the data on the level of client satisfaction with the implementation of the SEnA program in terms of clarity and comprehensiveness of information. The composite scores for both requesting parties and responding parties indicate a generally high ($w\bar{x} = 4.30$) and high ($w\bar{x} = 4.29$) level of satisfaction, respectively. In particular, the requesting parties are "Very Satisfied" that there is easy access to information on the program's services, process, and requirements ($w\bar{x} = 4.42$), Clients are given the opportunity to know the possible outcome when passing through the SEnA program ($w\bar{x} = 4.37$), the SEnA program provides clear and concise information to clients in terms of the issues raised ($w\bar{x} = 4.33$), and the SEnA program considers the language, race, and cultural needs of clients ($w\bar{x} = 4.33$).

Table 7. Descriptive statistics of the level of clients' satisfaction with the implementation of the SEnA program in terms of clarity and comprehensiveness of information (n = 120)

Indicators	Requesting Party (n=60)		Responding Party (n=60)	
	w $\bar{x}$	LoS	w $\bar{x}$	LoS
1. There is easy access to information on the program's services, process, and requirements.	4.42	VS	4.25	VS
2. Clients are given the opportunity to know the possible outcome when passing through the SEnA program.	4.37	VS	4.25	VS
3. SEnA program provides clear and concise information to clients in terms of the issues raised.	4.33	VS	4.25	VS
4. SEnA program considers the language, race and cultural needs of clients.	4.33	VS	4.30	VS
Composite	4.30	VS	4.29	VS

Also, the responding parties are “Very Satisfied” that there is easy access to information on the program's services, process, and requirements ($w\bar{x} = 4.25$), Clients are given the opportunity to know the possible outcome when passing through the SEnA program ($w\bar{x} = 4.25$), the SEnA program provides clear and concise information to clients in terms of the issues raised ($w\bar{x} = 4.25$), and the SEnA program considers the language, race, and cultural needs of clients ($w\bar{x} = 4.30$).

These findings illustrate that both requesting and responding parties are highly satisfied with the clarity and comprehensiveness of the information provided by the SEnA program. This underscores the effectiveness of the program in ensuring that clients have access to clear and relevant information to navigate the dispute resolution process. It reinforces the importance of ensuring clarity in language and intent to enable parties to enforce their preferred jurisdiction, choice of law, and forum when disputes arise (Hannaway & McKenzie, 2021). Additionally, in a rapidly evolving labor environment, obtaining legal clarity on the outcome of a dispute is of utmost importance to both employers and employees who cannot afford delays (Ilies, 2022).

3.3 Clients' Awareness and Their Level of Satisfaction

Table 8 discloses the information regarding the relationship between the clients' awareness of the SEnA program and their level of satisfaction. Using Spearman Rank Order Correlation, it unveils that all p-values are less than the level of significance (0.05). This finding allows the rejection of the null hypothesis. Considering also the values of r_s , the data signify that (a) there is a significant and “moderate” relationship between the requesting party's awareness or knowledge of their rights and their level of satisfaction, and (b) there is a significant and “strong” relationship between the responding party's awareness or knowledge of their rights and their level of satisfaction.

Table 8. Correlation analysis for the relationship between the clients' awareness and satisfaction (n = 120)

Variables correlated to the overall level of satisfaction...	r_s	p	Decision	Remark
Requesting Party				
Knowledge about Their Rights	0.392	0.002	Reject H_0	Significant
Access to Information about SEnA Program	0.654	<.001	Reject H_0	Significant
Communication with the SEnA Desk Officer Handling the RFA	0.611	<.001	Reject H_0	Significant
Responding Party				
Knowledge about Their Rights	0.634	<.001	Reject H_0	Significant
Access to Information about SEnA Program	0.695	<.001	Reject H_0	Significant
Communication with the SEADO handling the RFA	0.705	<.001	Reject H_0	Significant

Level of significance = 0.05

Moreover, the data expose that there is a significant (p -values $< \alpha = 0.05$) and strong (r_s -values > 0.50) relationship between the requesting party's level of satisfaction and the following areas of their awareness about the SEnA program: (a) knowledge about their rights; (b) access to Information about SEnA Program; and (c) communication with the SEADO handling the RFA. The same results are evident in the responding party's response.

The findings above signify that the higher the extent of awareness of the requesting and responding parties about the SEnA program, the higher also is their level of satisfaction (Curado et al., 2022). This correlation is attributed to various factors. Primarily, enhanced awareness empowers parties with a better grasp of their rights and available resources, facilitating effective navigation of the dispute resolution or SEnA process. In concurrence, the presence of clear communication channels through the SEADO handling the RFA and access to relevant information contribute to a smoother resolution process, thereby alleviating frustration and boosting satisfaction

(Adu-Oppong & Agyin-Birikorang, 2014). Furthermore, when parties feel adequately supported and informed throughout the process, they are more inclined to perceive the outcome as fair and satisfactory emulating the notion that, communication involves a reciprocal process of mutual influence, fostering interdependent exchanges that contribute to feelings of satisfaction (Mehra & Nickerson, 2019). Additionally, Soriano et al. (2022) found a correlation between clients' level of awareness and the extent of mandatory mediation implementation, as determined by the number of submitted and disposed civil cases.

In summary, the analysis highlights the significant positive correlation between clients' awareness of the SEnA program and their level of satisfaction, underscoring the importance of effective communication and access to information in enhancing the client's level of satisfaction.

4.0 Conclusion

The SEnA program of the DOLE-NOFO provides insights into the program's performance and impact on client satisfaction. The prevalence of the common issues of last salary/final pay, separation pay/indemnity pay, and non-payment of 13th-month pay underscores the need for interventions to address these recurring issues effectively. Moreover, the assessment of clients' awareness levels regarding their rights and the SEnA program reveals generally high levels of awareness for both requesting and responding parties. However, there are opportunities for further improvement in access to information about the program and facilitating better communication. Additionally, the high levels of client satisfaction with various aspects of the SEnA program including timeliness of resolution, fairness, communication, and information clarity, reflect the program's effectiveness in addressing labor disputes and meeting client expectations. The SEnA program's performance rate within 30 days indicates high settlement rates across the three years. The low percentage of RFAs referred to NLRC reduced the burden on formal legal processes. Eventually, the significant relationship between clients' awareness of the SEnA program and their level of satisfaction emphasizes the importance of promoting awareness to enhance client satisfaction. Despite the high level of client awareness, and satisfaction, and the program's better performance rates in settling RFAs over the past three years (2021-2023), there persists a notable number of labor cases referred to the NLRC. This is the challenge that will stress the importance of DOLE-NOFO's continued efforts to further enhance the implementation of the SEnA program in Negros Oriental, ensuring that labor disputes are addressed effectively and efficiently.

5.0 Contributions of Authors

Rodolfo O. Sildora Jr. conceived the initial idea, developed the conceptual framework, formulated the research questions, and designed the overall methodology. Mon Carlo D. Frejoles led the writing of the initial draft, organized the manuscript structure and drafting the discussion sections. Mick Ian M. Cornelia performed the statistical analysis, conducted the literature review, and significantly enhanced the clarity and coherence of the manuscript. All authors engaged in discussions of the results and approved the final version of this paper.

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7.0 Conflict of Interests

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Financial Challenges Among Public School Teachers: Basis for Proposed Program

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Abstract. Financial challenges can arise from various personal and external factors, and understanding the intersection of individual perspectives and societal influences is crucial for addressing these challenges effectively. To understand the lived experience of financial challenges, a qualitative research design, precisely Moustakas' Transcendental Phenomenological approach, was employed. The selected public school teachers of District 5, Division of Oroquieta City, served as the key informants. The prevailing financial challenges teachers encounter in public schools represent a pressing matter that warrants attention and proactive measures. The study revealed that public school teachers face financial challenges due to their family needs, education for their children, stagnant salaries, rising healthcare expenses, and the necessity of personally funding classroom supplies. The prevailing issue of teachers' loans has become increasingly over the years due to their commitment to provide for the needs of their family, personal, and even work. Their financial literacy practices could better determine how they manage their finances. Thus, authorities should discuss the salary wages of public school teachers, giving incentives and other funds to support any contingency that might occur to alleviate the financial constraints they experience.

Keywords: Financial challenges; Public school teachers; Transcendental phenomenological study; Teacher salary challenges.

1.0 Introduction

Teachers are the cornerstone of education because they are the designers who transform information into skills that last a lifetime. In addition to teaching curriculum and interpreting concepts, they also serve as facilitators, designing captivating lessons that arouse learners' interest and encourage critical thinking. They also act as mentors and role models, giving learners a secure environment to overcome obstacles, gain confidence, and pursue their interests. They also profoundly impact young minds through their behavior and attitude, which goes beyond the classroom. Moreover, teachers are innovators who modify their approaches to stay up with the rapidly changing world rather than just being information providers. They ensure that their knowledge remains current and equip learners with the opportunities and challenges for innovative and creative ways to engage learners. Teachers, like all individuals, encounter various challenges in their lives. Besides the challenges they face within the school environment, such as managing students, teachers confront external difficulties, including financial challenges.

Undeniably, many public school teachers face significant challenges in maintaining their financial well-being. This situation is exacerbated by the rising prices of goods and services, which strain teachers' salaries and make it challenging to meet their families' needs, especially during emergencies. From the latest survey by the Department of Education (2021), public school teachers collectively owe a staggering amount of P319 billion in debts, marking an increase of P18 billion in just over two years. The breakdown provided by the Department of Education includes P157.4 billion owed to the Government Service Insurance System (GSIS) as of May 2021 and P162 billion

in outstanding loans to accredited private lenders as of June 2021. Notably, these figures only account for loans with automatic deductions from teachers' salaries by the DepEd. The total debt could be much higher as it does not include loans from unaccredited lenders, commonly known as loan sharks, who impose exorbitant interest rates.

On the other hand, financial problems arise when individuals struggle to effectively manage their expenses (Plaza & Jamito, 2021). Among teachers, a common issue revolves around their economic conditions, which can lead to significant challenges. When spending is not adequately controlled, it creates a chain reaction of financial difficulties. This is particularly evident when spending exceeds income, meeting basic needs, and fulfilling financial obligations, which are increasingly more work due to limited cash flow. Consequently, this can initiate a cycle of accumulating late fees and debts, further exacerbating teachers' economic pressures and impacting their overall well-being.

Furthermore, Tagupa (2018) stated that many public school teachers perceive themselves as low-wage workers despite their educational qualifications. Their salaries often need help to keep up with the rising cost of living, making it challenging to afford necessities compared to other professions. While the government has implemented salary increases, they often need to adequately address the teachers' financial needs, especially in light of the increased reliance on online technology in education. The accessibility of technology, coupled with economic conditions, contributes significantly to teachers' financial challenges.

2.0 Methodology

2.1 Research Design

This study employed a qualitative research design using transcendental phenomenological research. Qualitative research using transcendental phenomenology adds depth. In the context of the study, transcendental phenomenological research design was used to explore the financial challenges of public schools. The design is also used to capture the coping mechanisms of public school teachers regarding the economic challenges they face. Moreover, the researcher will set aside any personal observations, including experiences regarding the topic of study.

2.2 Research Participants

The study participants were the public school teachers from the District 5 of Oroquieta City Division. A total of twenty (20) teachers were purposefully chosen to take part in the study. Pur, which had 56 teachers and three schools: Dolipos Bajo Elementary School, Talairon Central Elementary School, and Talairon National High School. Being open and willing to participate and communicate experiences and opinions thoughtfully and expressively is crucial. There were ten (10) participants: elementary teachers, five (5) junior high school teachers, and five (5) senior high school teachers.

2.3 Research Instrument

The study employed a researcher-developed in-depth interview guide questionnaire to interview participants. The interview guide is structured to ensure a systematic and thorough exploration of participants' experiences and perspectives relevant to the research objectives. The interview process began with an introduction where the interviewer introduced themselves professionally, discussed the study's purpose, obtained informed consent, outlined the interview structure (including audio recording and note-taking), addressed any participant questions, and tested audio equipment for quality assurance, all while creating a comfortable atmosphere.

2.4 Data Gathering Procedure

The researcher followed the proper study protocol upon the approval of the adviser, the panel, and the Research Ethics Committee. A request letter endorsed by the Dean of the Graduate Program was submitted to the school division Superintendent of the Division of Oroquieta City to allow the researcher to conduct the study in the Division. The researcher also sought permission to survey the district supervisor of the chosen district, who employed the teachers as the participants.

2.5 Ethical Considerations

The ethical considerations about informed consent, confidentiality, anonymity, privacy, and compassion were involved in the study. The approval required from the Research Ethics Committee was obtained regarding the issue of informed consent, including comprehensive details regarding the study's objectives, advantages, and any hazards. Personal meetings were held in advance with the participants and the schools chosen to participate in the research.

Trustworthiness of the Study. Furthermore, honouring the participants' right to privacy was always observed by concealing their identities and maintaining their anonymity through pseudonyms. The researcher ensured that the participants were treated respectfully and that their cooperation was secured. Participants were informed from the beginning that they were always free to withdraw from the research study at any time without any obligation. The researcher adhered to the terms that were agreed upon regarding the permission to conduct the survey and extended ethical measures into the actual writing and dissemination of the final research report throughout the research process.

3.0 Results and Discussion

This study used a direct observation method in the metaphysical–phenomenological approach, in which the interview transcripts of the participants were scrutinized through thorough reading to achieve the target interpretation for the content of this part of the study. The significant statements disclosed by the participants in this research were grouped and arranged under the pre-identified themes, which were considered main themes: Securing Financial Resources, Promoting Financial Wellness, Optimizing Financial Wellness, Empowering Through Financial Literacy, Handling Financial Matters Independently, and Mismanaging Money.

Table 1. Categories and Themes

Categories	Themes
Supporting and financial responsibility	Securing financial resources
Acquiring loan	
Practicing conscious consumption	Promoting financial wellness
Practicing financial discipline	
Budgeting and financial management	Optimizing financial wellness
We are utilizing resources and generating income	
Building financial stability	Empowering through financial literacy
We are educating ourselves on financial literacy	
We are exploring financial literacy	
Having financial literacy programs for teachers	
They are seeking financial improvement	
Having a financial support system	Handling financial matters independently
We need support to handle financial management	
Mishandling of money	Mismanaging of money

Theme 1: Securing Financial Resources

The theme refers to the strategies and efforts employed by public school teachers to manage and obtain necessary financial support. Most teachers revealed that they are responsible for imparting knowledge and skills to their students and managing their finances. This includes budgeting for living expenses, paying bills, and providing for their families. Financial responsibility is essential for individuals to maintain stability, freedom, and security. Participant said:

"My husband has no regular work, so I am the one who will pay for our food, medicine, bills, and the tuition of my children."
P10-1

This statement underscores the pressing need for teachers to secure financial resources effectively. Their ability to manage finances impacts their quality of life and capacity to fulfill their teacher roles. Therefore, authorities must address issues such as stagnant salaries, rising healthcare costs, and the necessity of self-funding classroom supplies. Providing adequate support and incentives can alleviate the financial constraints experienced by

teachers, allowing them to focus more on their primary role of educating the future generation. According to Ferreras-Listán et al. (2021), the financial responsibility of public school teachers to their families is a complex and demanding facet of their profession. Many public school teachers suffer from financial issues due to several interconnected factors. These include inadequate salaries that fail to keep pace with the cost of living, the burden of rising healthcare expenses, and the necessity to fund classroom supplies and other educational resources personally. These financial strains are exacerbated by the need to support their children's education and meet family needs.

Theme 2: Promoting Financial Wellness

Like many individuals, public school teachers may find it beneficial to budget and make lists to control their spending. With limited resources and competing demands on their income, such as classroom supplies and personal expenses, creating a grocery list helps ensure they stay within their budget and avoid unnecessary purchases. They understand the importance of prioritizing needs over wants, especially when faced with tight budgets. They recognize that focusing on essential expenses, such as housing, utilities, and education, is crucial for financial stability and long-term security. Moreover, there are public school teachers who practice tithing as a way to give back to their communities. Despite their financial constraints, teachers often prioritize charitable giving, reflecting their commitment to helping others and making a positive impact beyond their classrooms. This is true when the participants said:

"I do budgeting, and I list down what I need to buy in a grocery store to make sure that I only get what is necessary because I am tempted to buy sometimes if I do not have a list." P2-5

"I give what is due to the Lord. I give 10% of my salary as a tithe." P4-6

This corroborates the study by Nwoko et al. (2023), which underscored the significance of mindful spending habits in alleviating financial stress, especially among individuals with constrained financial means, such as public school teachers. Adopting mindful spending practices can significantly improve economic well-being and reduce stress levels in this demographic. In addition, Karim et al. (2023) found that examining conscious consumption revealed notable advantages in teachers' long-term financial planning. Teachers can better manage their finances by being more aware of their spending, leading to better economic stability and preparedness for future needs.

Theme 3: Optimizing Financial Wellness

Optimizing financial wellness among public school teachers hinges on implementing effective budgeting and financial management strategies. Teachers can exert greater control over their financial circumstances by carefully monitoring their income and expenses and adhering to a well-structured financial plan. Most teachers have expressed that they have experienced a sense of empowerment and security in their financial lives through such measures. With a clear understanding of their financial situation and goals, they are better equipped to make informed decisions regarding their spending and saving habits. Moreover, teachers prioritize proactive financial planning to ensure their day-to-day needs are met and sufficient funds are available for the entire month. This proactive approach helps them maintain financial stability and avoid financial stressors. They often employ structured budgeting methods to allocate their earnings wisely. This is true when the participants said:

"I budget our day-to-day finances in order to meet our needs and make it sufficient for the month." P12-5

"I buy groceries for the whole month so that I can budget well my finances." P10-5

The present findings were supported by the study conducted by Reitano (2020), which discovered that implementing efficient budgeting techniques and effective financial management practices can substantially influence an individual's overall economic well-being. One crucial element of budgeting entails the capacity to allocate resources to expenses by distinguishing between necessities and discretionary items. It has been observed that teachers can strategically allocate their income to meet their basic needs, such as housing, utilities, groceries, and insurance, before considering any discretionary spending.

Theme 4: Empowering through Financial Literacy

The theme refers to the collective awareness among teachers of the importance of financial literacy and a proactive attitude toward improving their financial management skills. While some teachers recognize their current average

level of financial literacy due to a lack of formal training or seminars on the subject, others demonstrate initiative by engaging in self-directed learning, such as reading articles to enhance their understanding of financial management. Participants confirmed this sentiment by emphasizing the need for accessible resources and training programs tailored to educators' specific financial challenges and needs. They highlighted the value of workshops, webinars, and professional development opportunities focused on financial literacy, budgeting techniques, and retirement planning.

Furthermore, fostering a culture of financial literacy benefits individual teachers and contributes to a more financially resilient teaching community. Educators can support each other in navigating financial challenges and achieving long-term financial goals through collaboration and knowledge-sharing. This collective empowerment through financial literacy lays the foundation for a more financially secure and prosperous teaching profession. This is true when the participants said:

"The method I used is resources regarding how to improve financial management." P16-4

"Yes the division personnel had a talk about how to manage finances effectively." P4-7

"As of now, I explore what is more efficient to do because aside from budgeting I haven't done anything else. Especially since I am married, we talked with my husband about whether that thing is necessary to buy." P2-6

This supports the study of (Karim et al., 2023), who found that acquiring financial literacy equips teachers with the ability to assume control over their financial well-being and engage in prudent financial decision-making. Moreover, (Carrillo & Mondragón, 2021) also highlighted that the empowerment of public school teachers through the acquisition of financial literacy skills represents a multifaceted undertaking that not only possesses practical implications but also harmonizes with the overarching objective of education, namely, the preparation of students for their forthcoming lives. The provision of financial education can have a positive impact on individuals' financial behaviours and outcomes.

Theme 5: Handling Financial Matters Independently

A public school teacher entails various inherent challenges, and the absence of support in financial management can further augment the burden and stress associated with this profession. Most teachers frequently need help managing their finances, mainly due to the limited income related to their profession. Hence, financial literacy is crucial for navigating everyday life, especially for educators. Teachers often face economic challenges due to their modest salaries. This is true when the participants said:

"For me, it is a no; I don't think there is a support system provided by the school to help me manage my finances." P8-7

"No, I can't remember that there is a support system provided by the school. I only remember the GSIS." P9-7

The absence of adequate financial support can significantly influence a teacher's capacity to effectively concentrate on their fundamental responsibility of imparting knowledge to students. This supports the study (Nelius & Onyango, 2022), which revealed that the absence of adequate financial support and guidance had a significant impact on the participants, resulting in heightened anxiety levels and a notable decline in job satisfaction. Moreover, (Beckker et al., 2019) have shed light on the detrimental effects of insufficient financial backing for teachers. This study revealed a strong correlation between inadequate support for teachers and elevated rates of turnover, as well as diminished morale within the education sector.

Theme 6: Mismanaging of Money

Despite their role in teaching children, teachers often face financial challenges due to their modest salaries. This is particularly true in the Philippines, where public school teachers navigate a complex economic landscape. Teachers also experienced mishandling of money. The mishandling of funds among public school teachers is a significant concern, as it can potentially lead to wide-ranging consequences. This is true when the participants said:

"I am in the average level because I mismanage my money and I need to improve myself on that level." P1-3

"I am in the average level because I mismanage my money and there is always a room for improvement." P6-3

The mishandling of funds by teachers within the public school system can undermine the general public's confidence in the education sector, thereby giving rise to legal and ethical implications. This corroborates the study of (Cornman et al., 2021), who observed that the mishandling of funds can be attributed to inadequate financial literacy and teacher training. Moreover, a study conducted by (Chai, 2022) elucidated that teachers' mismanagement of financial resources not only has ramifications on the educational materials and opportunities accessible to students but also engenders a detrimental perception of the education system among the general populace.

4.0 Conclusion

Public school teachers face numerous financial challenges, including providing for their families, covering their children's education expenses, coping with stagnant salaries, dealing with rising healthcare costs, and personally funding classroom supplies. Over the years, the burden of teachers' loans has intensified due to their dedication to meeting their family, personal, and professional obligations. Implementing financial literacy practices could offer a better approach to managing their finances. They earnestly hope that DepEd will address the issue of public school teachers' salaries by providing incentives and additional funding to alleviate any unforeseen financial challenges. Such measures would go a long way in easing the financial constraints they endure.

5.0 Contributions of Authors

The authors confirm the equal contribution in each part of this work. All authors reviewed and approved the final version of this work.

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7.0 Conflict of Interests

The author declares that they have no conflicts of interest.

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Factors Influencing Quiet Quitting and Employee Commitment in Casino Gaming Workplaces: Implications for Employee Retention Strategies

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Abstract. Employee turnover, particularly through "quiet quitting," presents significant challenges for the casino gaming industry, impacting operational efficiency and profitability. This study examined the factors influencing quiet quitting and employee commitment within casino gaming workplaces, providing insights into effective employee retention strategies. The researcher employs One-Way Analysis of Variance (ANOVA) and Chi-Square Test to examine and interpret data. This discussion elucidates the methodologies of these tests, focusing on their applications, assumptions, and interpretations. The findings indicate respondents exhibit low levels of quiet quitting related to psychological empowerment. However, most participants expressed that their job retention is driven by necessity, indicating a high dependence on their current employment. Additionally, the study revealed low levels of employee commitment across affective, continuance, and normative dimensions. Notably, many respondents expressed a tendency toward considering leaving their current jobs. These findings suggest that addressing quiet quitting behaviors is crucial for enhancing employee commitment and retention in the casino gaming industry.

Keywords: Quiet quitting; Employee commitment; Employee retention; Casino gaming industry; Psychological empowerment.

1.0 Introduction

The traditional management slogans such as "We can find someone who'll replace you" and "If you cannot adapt to our style, the door is open" reflect an outdated mindset that many employees have long dreaded. These attitudes, emphasizing relentless hustle and grinding, are increasingly being rejected by a more progressive workforce, particularly among Generation Z and Millennials. According to TJ Ramos-Guzman, vice president of Guthrie-Jensen Consultants, modern companies must now practice empathy as conventional management approaches are becoming ineffective. A prevalent sentiment among employees, captured in the phrase "whether you work excessively or just enough, you'll still earn the same," has contributed to the phenomenon known as "quiet quitting."

In the summer of 2022, the concept of quiet quitting gained significant public attention. Employees expressed frustration with companies and managers who continually demanded increased productivity without showing reciprocal care. As noted by Salvucci (2023), there are typically three ways to approach work: as outlined in job descriptions, as executed by the employee, and as expected by employers. Quiet quitters often choose to perform only the bare minimum required, reflecting their disengagement and dissatisfaction with their work conditions, as described by Richard (2023).

This trend differs from the Great Resignation, where individuals actively sought new employment opportunities offering better compensation, flexibility, and fewer hours (Klotz & Bolino, 2022). Quiet quitters, however, do not leave their jobs but rather disengage, seeking a better work-life balance and minimizing their professional responsibilities. This passive form of withdrawal often goes unrecognized by employers, complicating efforts to address the underlying issues. Due to a lack of scholarly literature on the subject, there is an evident empty space on "quiet quitting" in the context of the casino gaming workplace. This study fills the gap in the literature by investigating what contributes to employee quiet quitting and employee commitment in the casino gaming industry. It could be beneficial for academics and business to investigate its effects on organizational dynamics, employee happiness, and possible treatments. In particular, there is still an absence of research on the frequency, causes, and effects of quiet quitting in the setting of casinos.

This research investigated the causes of quiet quitting within the Philippine casino gaming industry and its effects on both employees and organizations. The study sought to identify the factors contributing to quiet quitting behavior among casino gaming employees and assess their level of commitment to their employers. Understanding these dynamics is crucial for developing effective employee retention strategies. By addressing the specific needs and challenges of this sector, companies can foster a healthier and more satisfying work environment, ultimately retaining valuable human resources.

2.0 Methodology

2.1 Research Design

A descriptive survey design was selected for this study. Sirisilla (2023) affirms that the descriptive correlational study design is an effective tool used by researchers to gather data on specific groups or phenomena. This type of study provides a comprehensive and accurate depiction of the characteristics and behaviors of a particular group or subject. Descriptive research yields critical insights that can inform future investigations and enhance researchers' understanding of specific issues through observation and data collection on a defined topic. This design is appropriate since the goal is to assess the perceptions and views of employees in the casino gaming workplace regarding quiet quitting and job commitment, aligning with the study's objectives. This approach accurately describes the characteristics, thoughts, and experiences of the employees concerning these issues.

2.2 Research Participants

This study was conducted at a major resort and casino located in Pasay, National Capital Region (NCR), Philippines. The casino's table games department, which employs approximately 600 individuals, including croupiers and supervisors aged 25 to 45, served as the primary focus. Both male and female employees work full-time in this department. The pandemic has notably impacted employee loyalty and commitment within the industry. This observation is based on the author's firsthand experience and interactions with coworkers. Additionally, the issue of "quiet quitting" has been identified as a global phenomenon affecting various sectors. To ensure a focused and manageable scope for data collection and analysis, the study is confined to a specific area in Pasay, Metro Manila, encompassing one of the leading resorts and casinos. The research covered two years from 2023 to 2024, enabling the examination of trends and changes over time.

The company employs a total of 4,700 individuals, with 600 employees specifically in the table games department. From this department, 240 participants will be selected to participate in the study. This sample size was determined using the Yamane formula, balancing the need for comprehensive data collection with practical constraints such as time and financial resources. A random or stratified sampling technique was employed to select the participants, ensuring a representative sample across various positions, workloads, and demographics. This approach enhances the accuracy and reliability of the data collected.

2.3 Research Instrument

The data collection instrument employed in this study is a structured questionnaire. It consisted of thirty-four (34) adopted questions designed to gather data on employee perspectives regarding factors contributing to quitting and their commitment to their employer.

2.4 Data Gathering Procedure

The questionnaire was administered via a Google Form, allowing participants to provide written responses. The questionnaire was distributed to participants to assess their knowledge and views on these topics.

2.5 Ethical Considerations

To ensure the study's ethical standards, the rights to self-determination, anonymity, informed consent, and confidentiality were strictly observed. Informed consent was obtained from participants before they completed the questionnaires. Participants were informed of their right to refuse participation voluntarily and to withdraw from the study at any time without any consequences. The study's objectives, data collection methods, and assurances of no associated risks or costs were thoroughly explained to the participants. Additionally, participants were assured that their responses would be kept confidential and used exclusively for academic research purposes.

2.6 Data Analysis

The data gathered were cleansed, tabulated, and analyzed descriptively and inferentially.

3.0 Results and Discussion

3.1 Demographic Profile: Sex, Job Position, Service Length, and Age

Table 1. Demographic profile of participants in terms of sex, job position, length of service, and age

	FREQUENCY	PERCENTAGE
Sex		
Male	99	41.3
Female	141	58.7
Job Position		
Supervisor	152	63.3
Dealer	88	36.7
Length of Service		
1-5 years	65	27.1
6-10 years	78	32.5
11-15 year	97	40.4
Age		
23-28 years	63	26.3
29-34 years	73	30.4
35-39 years	67	27.9
40-45 years	37	15.4

The demographic profile of the participants is presented in Table 1. The majority of participants fall within the age range of 29 to 34 years (73 or 30.40%), followed closely by those aged 35 to 39 (67 or 27.90%). Additionally, a significant portion of participants are aged between 23 and 28 years (63 or 26.30%). This distribution aligns with the age demographics typically found among workers in the casino industry, where employees are commonly at least 23 years old. Regarding sex, the findings indicate that a majority of participants are female (141 or 58.80%), while the minority are male (99 or 41.30%). This suggests a higher representation of female workers in resorts and casinos in Pasay compared to males. This trend is consistent with the observation that casinos frequently employ women as casino dealers, as reported by Female First (2022).

In terms of job position, the demographic profile reveals that the largest proportion of participants hold supervisory roles (152 or 63.30%), while the fewest are dealers (88 or 36.70%). This suggests that the majority of participants who voluntarily engaged in the study are supervisors. Regarding length of service, the data indicates that the majority of participants have been employed as casino workers for 11 to 15 years (97 or 40.40%), followed by those with 6 to 10 years of experience (78 or 32.50%). Conversely, the smallest proportion of participants have recently entered the industry, with 1 to 5 years of experience (65 or 27.10%).

3.2 Quiet-Quitting Among Employees

The analysis of quiet quitting among workers in resorts and casinos covers various aspects, including workload, perceived career development opportunities, perceived pay for performance, affective organizational

commitment, work conditions, job satisfaction, employee well-being, psychological empowerment, and quiet quitting intentions.

Table 2. Summary of quiet-quitting behaviors among participants

VARIABLES	MEAN	SD	INTERPRETATION
Workload	1.79	0.53	Strongly Agree
Perceived Career Development Opportunities	2.09	0.61	Agree
Perceived Pay for Performance	2.10	0.68	Agree
Affective Organizational Commitment	2.27	0.63	Agree
Work Condition	2.25	0.69	Agree
Job Satisfaction	2.30	0.58	Agree
Employee Wellbeing	2.06	0.82	Agree
Psychological Empowerment	2.31	0.64	Agree
Quiet Quitting Intention	2.06	0.57	Agree
Overall	2.13	0.64	Agree

The participants have not reported experiencing quiet quitting in their jobs, particularly concerning work overload (Mean = 1.79, SD = 0.53). This suggests that, on average, employees do not feel overwhelmed by their workload to the extent that it would lead to quiet quitting behavior. Regarding perceived career development opportunities, the majority of participants agreed that their organization offers attractive career opportunities (Mean = 2.09, SD = 0.61). This suggests that the organization provides avenues for career growth, potentially reducing the likelihood of quitting due to a perceived lack of advancement prospects.

In terms of perceived pay for performance, most participants indicated that the incentives provided encourage them to perform better at work (Mean = 2.10, SD = 0.68). This implies that participants do not perceive their pay as a reason for quitting, as they feel adequately rewarded for their efforts. Affective organizational commitment was also assessed, with the majority of participants expressing a strong sense of belonging to the organization (Mean = 2.27, SD = 0.63). However, this also suggests a slight level of quiet quitting in terms of affective organizational commitment, indicating potential areas for improvement in fostering emotional attachment among employees.

Regarding work conditions, most participants agreed that the workplace climate is comfortable (Mean = 2.25, SD = 0.69). However, it's noteworthy to mention that previous incidents, such as the 2017 attack on a resort casino in Pasay, may trigger fears among employees and impact their perception of safety and well-being at work. Employee well-being was also assessed, with participants indicating competence and capability in activities important to them (Mean = 2.06, SD = 0.82). However, neglecting employee well-being may lead to low morale and minimum work performance, contributing to quiet quitting behaviors.

In terms of psychological empowerment, participants generally agreed that their jobs hold great significance to them (Mean = 2.31, SD = 0.64). Regarding quiet quitting intentions, participants generally reported slight levels of quiet quitting intentions (Mean = 2.06, SD = 0.57), various factors such as stress and poor work-life balance, as identified by Hamilton (2023), may contribute to quiet quitting behaviors among employees.

3.3 Affective, Continuance, and Normative Commitment Among Employees

Table 3 summarizes employee commitment among the participants across all variables, including normative commitment, affective commitment, and continuance commitment.

Table 3. Summary of employee commitment assessment

VARIABLES	MEAN	SD	INTERPRETATION
Affective	2.27	0.79	Agree
Continuance	2.17	0.58	Agree
Normative	2.09	0.52	Agree
Overall	2.18	0.63	Agree

Participants' affective commitment towards their organization is moderate, as indicated by their agreement that they would be satisfied to work for the company for the remainder of their careers (Mean = 2.27, SD = 0.79). However, this also suggests that as time progresses, employees may experience changes in their attachment to the

company, potentially leading to quiet quitting behaviors. Regarding continuance commitment, the result (Mean = 2.17, SD = 0.58) indicates only slight levels of continuance commitment. This implies that while participants feel a need to remain in their current organization, it may not necessarily reflect a strong commitment to the company itself. Furthermore, the findings reveal that normative commitment is the most prominent form of commitment among participants towards their organization (Mean = 2.09, SD = 0.52). This suggests that participants feel a sense of responsibility and obligation towards their company, motivating them to remain committed. In summary, the participants exhibit varying levels of commitment to their organization across different dimensions. While normative commitment appears to be the most prevalent, affective commitment is moderate, and continuance commitment is relatively slight. These findings suggest that while participants may feel a sense of obligation towards their company and some satisfaction with their work, they may not necessarily feel deeply attached or committed to remaining with the organization in the long term.

3.4 Correlation of Quiet Quitting and Employee Commitment

Table 4. Pearson correlation: quiet quitting and employee commitment

		AFFECTIVE	CONTINUANCE	NORMATIVE
Work Overload	Pearson Correlation	.180	.256	.205
	Sig. (2-tailed)	.005	.000	.001
Perceived Career Development Opportunities	Pearson Correlation	.382	.330	.330
	Sig. (2-tailed)	.000	.000	.000
Perceived Pay Performance	Pearson Correlation	.289	.330	.208
	Sig. (2-tailed)	.000	.000	.001
Affective Organization Commitment	Pearson Correlation	.296	.287	.203
	Sig. (2-tailed)	.000	.000	.002
Work Condition	Pearson Correlation	.319	.251	.304
	Sig. (2-tailed)	.000	.000	.000
Job Burnout	Pearson Correlation	.404	.398	.339
	Sig. (2-tailed)	.000	.000	.000
Employee Well Being	Pearson Correlation	.221	.184	.218
	Sig. (2-tailed)	.001	.004	.001
Psychological Empowerment	Pearson Correlation	.370	.467	.320
	Sig. (2-tailed)	.000	.000	.000
Quiet Quitting Intention	Pearson Correlation	.241	.286	.148
	Sig. (2-tailed)	.000	.000	.022

Table 4 presents the outcomes of the Pearson Correlation Analysis conducted to explore the relationship between quiet quitting and employee commitment. The analysis revealed a notable association between quiet quitting and employee commitment across all measured variables, as evidenced by the significance values falling below the standard threshold of 0.05. The table showcases the significant relationships between various dimensions of quiet quitting and employee commitment. The highlighted significance values underscore that these correlations are statistically meaningful, leading to the rejection of the null hypothesis. Consequently, it can be inferred that a significant relationship exists between quiet quitting and employee commitment factors among the participants.

These findings indicate a reciprocal influence between quiet quitting behavior and employee commitment. Specifically, a casino worker who quietly quits demonstrates a diminished commitment to the organization. Likewise, employees exhibiting lower levels of commitment are more prone to engaging in quiet quitting behaviors. In summary, the results suggest that quiet quitting significantly impacts employee commitment, and conversely, employee commitment influences quiet quitting tendencies among participants in the casino industry.

3.5 Variation on Quiet Quitting According to Profile

Age Group

Table 5 presents the outcomes of the conducted One-Way ANOVA analysis, examining the potential variations in causes of quiet quitting among participants based on age-based groupings. The study accepts the null hypothesis, as indicated by computed significance values exceeding the predetermined alpha value of 0.05.

Table 5. One-Way ANOVA: quiet quitting across age group

		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Work Overload	Between Groups	.282	3	.094	.324	.808
	Within Groups	68.440	236	.290		
	Total	68.722	239			
Perceived Career Development Opportunities	Between Groups	.291	3	.097	.261	.854
	Within Groups	87.914	236	.373		
	Total	88.206	239			
Perceived Pay Performance	Between Groups	1.308	3	.436	.938	.423
	Within Groups	109.757	236	.465		
	Total	111.065	239			
Affective Organization Commitment	Between Groups	.351	3	.117	.293	.830
	Within Groups	94.237	236	.399		
	Total	94.588	239			
Work Condition	Between Groups	3.918	3	1.306	2.839	.059
	Within Groups	108.577	236	.460		
	Total	112.496	239			
Job Burnout	Between Groups	.267	3	.089	.259	.855
	Within Groups	81.279	236	.344		
	Total	81.546	239			
Employee Well Being	Between Groups	5.144	3	1.715	2.593	.053
	Within Groups	156.039	236	.661		
	Total	161.183	239			
Psychological Empowerment	Between Groups	.570	3	.190	.463	.708
	Within Groups	96.835	236	.410		
	Total	97.406	239			
Quiet Quitting Intention	Between Groups	1.076	3	.359	1.119	.342
	Within Groups	75.627	236	.320		

These results suggest that there is no statistically significant variation in causes of quiet quitting across different age groups among participants. Regardless of age, participants do not exhibit significantly different tendencies toward quitting. In essence, age does not appear to be a determining factor influencing the propensity for quiet quitting among participants in this study.

Job Position

As observed in Table 6, there is no statistically significant difference in quiet quitting among participants when grouped according to their job positions, as evidenced by computed significance values exceeding the alpha threshold of 0.05. Consequently, the study accepts the null hypothesis. This indicates that participants job positions do not significantly influence their tendencies toward quitting. Regardless of their specific roles within the organization, participants exhibit similar patterns of quiet quitting behavior.

Length of Service

Based on the analysis depicted in Table 7, the findings indicate that there is no significant difference in quiet quitting among participants when categorized based on their duration of service. This conclusion is drawn from the computed significance values, all of which exceed the alpha threshold of 0.05, leading the researcher to accept the null hypothesis.

This suggests that the duration of service, whether short or long, does not contribute significantly to the quiet quitting tendencies of participants. In other words, regardless of the length of time a casino employee has been with their company, it does not appear to influence their likelihood of engaging in quiet quitting behavior.

Table 6. One-Way ANOVA: quiet quitting across job position

		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Work Overload	Between Groups	.149	1	.149	.516	.473
	Within Groups	68.573	238	.288		
	Total	68.722	239			
Perceived Career Development Opportunities	Between Groups	.035	1	.035	.095	.758
	Within Groups	88.170	238	.370		
	Total	88.206	239			
Perceived Pay Performance	Between Groups	.000	1	.000	.000	.983
	Within Groups	111.065	238	.467		
	Total	111.065	239			
Affective Organization Commitment	Between Groups	.190	1	.190	.479	.489
	Within Groups	94.398	238	.397		
	Total	94.588	239			
Work Condition	Between Groups	1.411	1	1.411	3.022	.083
	Within Groups	111.085	238	.467		
	Total	112.496	239			
Job Burnout	Between Groups	.041	1	.041	.121	.729
	Within Groups	81.505	238	.342		
	Total	81.546	239			
Employee Well Being	Between Groups	.023	1	.023	.034	.854
	Within Groups	161.160	238	.677		
	Total	161.183	239			
Psychological Empowerment	Between Groups	.001	1	.001	.002	.967
	Within Groups	97.405	238	.409		
	Total	97.406	239			
Quiet Quitting Intention	Between Groups	.022	1	.022	.067	.795
	Within Groups	76.681	238	.322		

Table 7. One-Way ANOVA: quiet quitting across service length

		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Work Overload	Between Groups	.327	3	.109	.376	.770
	Within Groups	68.395	236	.290		
	Total	68.722	239			
Perceived Career Development Opportunities	Between Groups	.961	3	.320	.866	.459
	Within Groups	87.245	236	.370		
	Total	88.206	239			
Perceived Pay Performance	Between Groups	.199	3	.066	.141	.935
	Within Groups	110.866	236	.470		
	Total	111.065	239			
Affective Organization Commitment	Between Groups	1.343	3	.448	1.133	.336
	Within Groups	93.245	236	.395		
	Total	94.588	239			
Work Condition	Between Groups	7.262	3	2.421	5.429	.001
	Within Groups	105.234	236	.446		
	Total	112.496	239			
Job Burnout	Between Groups	.606	3	.202	.589	.623
	Within Groups	80.940	236	.343		
	Total	81.546	239			
Employee Well Being	Between Groups	1.248	3	.416	.614	.607
	Within Groups	159.936	236	.678		
	Total	161.183	239			
Psychological Empowerment	Between Groups	.539	3	.180	.438	.726
	Within Groups	96.867	236	.410		
	Total	97.406	239			
Quiet Quitting Intention	Between Groups	.735	3	.245	.761	.517
	Within Groups	75.968	236	.322		

Sex

Based on the calculated significance values obtained from the unpaired t-test (Table 8), all values surpass the alpha threshold of 0.05. Consequently, the decision is made to accept the null hypothesis. This suggests that there is no significant difference among participants in their factors of quitting when grouped according to their sex. In essence, sex does not appear to be a significant factor influencing the various aspects related to quiet quitting behaviors observed in the study.

Table 8. T-test for Equality of Means

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Work Overload	Equal variances assumed	.178	.673	-.451	238	.653	-.03174	.07043	-.17048	.10701
	Equal variances not assumed			-.451	212.313	.652	-.03174	.07031	-.17034	.10687
Perceived Career Development Opportunities	Equal variances assumed	.345	.557	.199	238	.842	.01590	.07982	-.14134	.17314
	Equal variances not assumed			.202	220.271	.840	.01590	.07879	-.13938	.17119
Perceived Pay Performance	Equal variances assumed	2.541	.112	.200	238	.842	.01791	.08957	-.15853	.19435
	Equal variances not assumed			.196	196.546	.845	.01791	.09124	-.16203	.19785
Affective organization Commitment	Equal variances assumed	1.095	.296	1.094	238	.275	.09019	.08246	-.07224	.25263
	Equal variances not assumed			1.068	192.238	.287	.09019	.08445	-.07638	.25676
Work Condition	Equal variances assumed	.859	.355	-	238	.119	-.14034	.08969	-.31702	.03634
	Equal variances not assumed			1.565	223.206	.113	-.14034	.08814	-.31402	.03334
Job Burnout	Equal variances assumed	2.967	.086	-.305	238	.760	-.02343	.07674	-.17460	.12775
	Equal variances not assumed			1.592	188.744	.767	-.02343	.07893	-.17913	.13228
Employee Well being	Equal variances assumed	.944	.332	-.602	238	.548	-.06490	.10783	-.27732	.14751
	Equal variances not assumed			-.592	197.777	.555	-.06490	.10968	-.28119	.15138
Psychological Empowerment	Equal variances assumed	.031	.860	-.586	238	.558	-.04914	.08382	-.21428	.11599
	Equal variances not assumed			-.589	215.077	.556	-.04914	.08337	-.21347	.11518
Quiet Quitting Intention	Equal variances assumed	.582	.446	.789	238	.431	.05867	.07434	-.08778	.20512
	Equal variances not assumed			.792	214.012	.429	.05867	.07405	-.08728	.20463

4.0 Conclusion

The phenomenon of quiet quitting, where employees disengage from their work without overtly expressing dissatisfaction, presents notable hurdles to maintaining optimal levels of employee engagement within organizations. This disengagement can result in diminished productivity, morale, and retention rates, a subdued kind of disengagement known as "quiet quitting" is frequently the result of employee discontent with their employer, Hong (2023). Recognizing and addressing quitting is imperative for sustaining robust employee engagement and retaining key talent.

The findings of this study reveal several pertinent insights. The majority of participants fall within the 29-34 age bracket, identify as female, hold supervisory roles, and have tenures ranging from 11 to 15 years within their respective organizations. While participants generally report limited experiences of quiet quitting due to work overload, subtle instances were identified stemming from perceptions of limited professional growth prospects,

inadequate performance compensation, emotional organization, working conditions, employee well-being, and psychological empowerment. Moreover, a notable proportion of participants express intentions indicative of quitting, such as seeking opportunities to relax, prioritizing minimal effort, and avoiding overtime.

The study underscores that participants exhibit modest levels of commitment across affective, continuance, and normative dimensions toward their organizations. Quiet quitting behaviors, even at subtle levels, may signify underlying issues within organizational culture and leadership, particularly concerning emotional attachment and normative obligations. Normative commitment pertains to a sense of duty to remain with the organization, while affective commitment denotes emotional allegiance to the workplace.

Quiet disengagement among employees may manifest when there is perceived incongruence between personal values and organizational culture, or when employees feel unsupported by leadership. This can manifest as diminished enthusiasm, reluctance to exceed expectations, or reduced participation in organizational activities. Importantly, the study reveals no significant disparities in quitting concerning demographic variables such as age, gender, position, or tenure. However, a notable correlation exists between quiet quitting and employee commitment.

Moreover, delving into the psychological factors underlying "quiet quitting" behavior could provide valuable insights. Research could explore employees' attitudes, perceptions of organizational support, and the psychological contract between employees and employers in the casino gaming industry. Understanding how factors such as job satisfaction, perceived fairness, and psychological well-being influence the decision to silently disengage can inform interventions aimed at enhancing employee commitment and retention.

Additionally, investigating the impact of workplace stressors, such as irregular schedules, high-pressure environments, and exposure to gambling-related issues, on employee commitment is essential. Examining how these stressors contribute to burnout, turnover intentions, and "quiet quitting" behavior can guide the development of targeted interventions to mitigate their negative effects and promote employee well-being in the casino gaming workplace.

Furthermore, exploring the role of social networks and peer relationships in influencing employee commitment and turnover behavior is an area ripe for exploration. Research could examine the impact of social support, organizational citizenship behaviors, and informal communication channels on employees' decisions to quietly quit or remain committed to their roles. Understanding the dynamics of social interactions within the workplace can provide valuable insights into strategies for fostering a supportive and cohesive work environment that encourages employee engagement and retention.

In summary, this study sheds light on the dynamics of quiet quitting and its impact on employee engagement within the unique context of the casino gaming industry. By examining employee behaviors, organizational culture, and management practices, valuable insights into the prevalence and ramifications of quitting have been gleaned.

The study advocates for proactive measures to mitigate quiet quitting within the casino gaming sector, emphasizing the importance of fostering a supportive work environment, facilitating avenues for professional advancement, and enhancing communication between management and employees. These strategies are essential for safeguarding employee engagement and organizational success in the face of quiet quitting tendencies.

5.0 Contributions of Authors

As the sole author of the thesis, I have contributed significantly to every aspect of the research and writing process. My dedication, creativity, and perseverance have driven the project forward from conceptualization to completion.

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7.0 Conflict of Interests

The author declares no conflicts of interest about the publication of this paper.

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Utilization of Literacy Strategies for the Development of Students' English Language Proficiency

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Abstract. This study investigated the effectiveness of literacy strategies on students' English language proficiency in vocabulary, reading comprehension, and written expression. It also sought to determine whether the students' perceived effectiveness of these strategies influenced their English language proficiency. The researchers employed a quasi-experimental and descriptive-correlational design. The participants were the 10th-grade students of Camanjac National High School. The study used parallel 45-item English pre-and posttests and a survey questionnaire to fit the purpose of the study. These tests and survey questionnaires were subjected to content validation by experts. The respondents underwent the entire procedure: the pretest, the utilization of literacy strategies, and the posttest. The researchers used weighted mean, percentage, *t*-test, and Spearman rank correlation coefficient in treating the data. In the pretest, the students scored below expectations in vocabulary, reading comprehension, and written expression, with mean scores of 73.42 percent, 69.27 percent, and 70.58 percent, respectively. The posttest revealed that the level of English proficiency after using literacy strategies improved to 82.19 percent in vocabulary, 81.72 percent in reading comprehension, and 82.08 percent in written expression. Furthermore, the *t*-test results indicate that the students' performance significantly improved. In addition, the data disclosed a significant relationship between reading strategies and the students' reading comprehension levels. However, there is no significant relationship between vocabulary strategies and the students' vocabulary level, nor between writing strategies and the students' written expression level.

Keywords: Literacy strategies; English language proficiency; Reading comprehension; Vocabulary; Written expression.

1.0 Introduction

English is crucial for communication, academic advancement, and professional success in a globalized world (Rao, 2019). It is the mediator of cultural, political, and economic exchange in the context of globalization (Mohammed, 2020). Since English is used for most global communication, it is essential for academic and professional activities (Rao, 2019). However, English proficiency has declined worldwide. A recent UNESCO study showed that the ability to learn English declined sharply between 2010 and 2015 in countries worldwide (UNESCO, 2018). The impact of the COVID-19 pandemic on students' reading comprehension has led to overall changes in achievement gaps within student groups (Ludewig et al., 2022). Additionally, the EF English Proficiency Index shows how levels of English proficiency are changing at different rates in different countries, including some countries with declining English proficiency (EPI, 2022).

Meanwhile, poor academic performance in English in the Philippines has also been a long-time concern. In fact, the English curriculum for grades K to 12 was developed in response to students' poor performance in NAT across

all subjects (Barrot, 2019). Furthermore, research shows a decline in English proficiency among Filipino learners. In the Program for International Student Assessment (PISA) 2018 rankings, the Philippines ranked last in reading and second to last in science and mathematics among the 79 participating countries. Filipino students continue to underperform on PISA tests; over 80 percent do not reach even basic reading proficiency (OECD, 2019). Likewise, the Philippines ranked 22nd out of 111 countries in the EF English Proficiency Index (EPI) for 2022 (EPI, 2022). The declining proficiency levels among Filipinos are making their graduates less competitive globally (Bawa, 2020). Moreover, recent studies show a gradual decrease in English proficiency among Filipinos, attributed to the impact of inexperienced and ineffective teachers (Bernardo et al., 2022). With the Philippines no longer Asia's most English-speaking country, this has worrying implications for domestic and international companies, prompting the Department of Education (DepEd) to increase its efforts to improve students' English proficiency (Suelto, 2018). The decline in English proficiency highlights the need for effective English teaching and a clear strategy to enhance English proficiency tailored to the needs of Filipino learners (EPI, 2022).

There have been studies that examined the relationship between English proficiency and academic performance and found that there is a strong positive relationship between learners' English proficiency and academic performance (Devi, 2023) and that teaching and learning English in the Philippines has been largely successful, although there are areas for improvement (Santos et al., 2022). Some studies have focused on the general outcomes of literacy strategies in relation to language proficiency (Chen, 2022). Bawa (2020) has also shown that language learning strategies (LLS) have been proven to have a positive relationship with language proficiency. Since most studies have found that LLS use is associated with higher levels of language proficiency, this study focuses specifically on the role of literacy strategies and how they may contribute to the development of English language proficiency among Filipino students.

Considering the above premise, the researchers sought to investigate the effectiveness of literacy strategies on the students' English language proficiency, focusing on vocabulary, reading comprehension, and written expression. Thus, this study attempts to provide insights into the connection between these literacy strategies and the students' academic performance, with the goal of improving the English language proficiency of Filipino students.

2.0 Methodology

2.1 Research Design

The study used a quasi-experimental and descriptive-correlational research design. It is quasi-experimental because the study evaluates the effects of interventions in real-world settings where randomization is not available (Shadish et al., 2002). Students' English language proficiency was assessed before and after the intervention, that is, the implementation of literacy strategies. The researchers evaluated any changes or improvements in participants' skills, knowledge, or outcomes due to the intervention. It is also descriptive-correlational because it seeks to describe the relationships between variables (Tupou, 2013). In this context, the study determined whether students' perceived effectiveness of these strategies influenced their English proficiency.

2.2 Research Participants

The participants were the Grade 10 students of Camanjac National High School enrolled during the academic year 2023-2024. In this study, cluster sampling was used to select the participants. Three sections (Beryl, Diamond, and Garnet) were randomly selected from the four Grade 10 sections. The resulting sample size was 118 students.

2.3 Research Instrument

This study used two instruments: a test and a survey questionnaire. This study used an adapted division-made English 10 test, while the researchers developed the other test items based on the third quarter's English 10 learning competencies. The test consists of 45 questions, which have three parts: vocabulary, written expression, and reading comprehension, each with 15 items. This test measures the learners' ability to understand and communicate effectively in the language. The entire test underwent content validation and cross-checking by three experts to ensure consistency with the specific problems of the study. The test was also subjected to a dry run to ensure its reliability, and a reliability test-retest of 0.876 was obtained.

The second instrument is the researcher-made survey questionnaire, divided into two parts. Part I contains the disclosure statement in which the students consented to the researcher collecting data/information while

maintaining data confidentiality. This also includes the purpose of conducting the study. Part II deals with the students' perceived effectiveness of the literacy strategies used, which consists of three components: strategies for building vocabulary (10 items), reading strategies (10 items), and writing strategies (10 items). It was subjected to expert validation and a dry run to determine the validity of the questionnaire. Moreover, Cronbach's alpha test was used to assess the reliability of the items. The following Cronbach's Alpha Coefficients were obtained: 0.844 for vocabulary, 0.844 for written expression, and 0.829 for reading comprehension.

2.4 Data Gathering Procedure

The research procedure began with assessing the students' English language proficiency to establish their baseline language level, serving as the pretest of the study. Following this, classes were conducted over the third quarter of the school year 2023–2024, during which specific literacy strategies were employed to enhance the students' English language proficiency. The intervention consisted of 14 class sessions, each lasting one and a half hours per session, aimed at actively integrating these literacy strategies into the teaching-learning process to create a consistent and structured environment conducive to language development.

The implemented literacy strategies were explicit instruction and metacognitive strategies for reading comprehension, contextualized use and graphic organizers for vocabulary-building strategies, and contextual grammar and communicative language teaching (CLT) for writing strategies. The teacher-researcher seamlessly integrated these strategies into daily instructions and reflected them in lesson plans.

After each class session, formative tests were administered to evaluate the students' vocabulary, reading comprehension, and written expression. Following the completion of the intervention, the participants underwent a retest using the same English language proficiency test administered in the pretest. The primary focus of the data analysis was to compare the pre- and posttest scores, enabling the assessment of the impact of literacy strategies on participants' English language proficiency. Following the posttest, the participants completed the survey questionnaire, determining their perceived effectiveness of the literacy strategies utilized. During the questionnaire distribution, the researchers explained the study's goals and significance to the students. Upon completion of the survey questions, the questionnaires were promptly collected. The collected data were consolidated, processed using MS Excel, analyzed, and interpreted.

2.5 Data Analysis

The data were treated and analyzed using descriptive and inferential statistics, including mean, percentage, weighted mean, independent samples *t*-test, probability value, and Spearman rank correlation coefficient. The percentage was used to present students' English language proficiency in the pretest and posttest. The mean was used to determine students' average performance during the pretest and posttest. The weighted mean was used to determine the extent of students' perceptions of the effectiveness of the literacy strategies used. Independent samples *t*-test was used to determine the significant difference between students' pretest and posttest performance. The *p*-value was used to determine the significance of the differences in the pre- and posttest averages. A significance level of $\alpha = 0.05$ was applied. Spearman rank correlation coefficient was used to determine the degree of relationship between students' English proficiency level and literacy strategies.

2.6 Ethical Considerations

The researchers followed the established protocols of the Ethics Committee of the University Research Office when conducting the study. Maintaining the anonymity of the participants' identities further upheld the assurance of information confidentiality. Moreover, the researchers maintained a nonjudgmental attitude during the data collection process to prevent condemnation.

3.0 Results and Discussion

3.1 Students' Language Proficiency Before the Utilization of the Literacy Strategies

Table 1 shows the students' level of language proficiency in vocabulary, reading comprehension, and written expression before the literacy strategies were utilized. As for the students' level of language proficiency in vocabulary, 6.78 percent obtained an outstanding rating, 0.85 percent received a very satisfactory rating, 7.63 percent were satisfactory, 20.34 percent were fairly satisfactory, and 64.40 percent did not meet expectations. The students' overall vocabulary proficiency is 73.42 percent, with a verbal description of "did not meet expectations."

This result is consistent with Susanto's (2021) study, in which students encountered various challenges in vocabulary, including selecting appropriate word meanings, using words in context, and distinguishing word meanings based on context.

Table 1. Descriptive statistics of language proficiency level of the students before the utilization of the literacy strategies (n = 118)

Rating	Verbal Description	Vocabulary		Reading Comprehension		Written Expression	
		f	%	f	%	f	%
90 – 100	Outstanding (O)	8	6.78	---	---	---	---
85 – 89	Very Satisfactory (VS)	1	0.85	---	---	2	1.69
80 – 84	Satisfactory (S)	9	7.63	2	1.70	5	4.24
75 – 79	Fairly Satisfactory (FS)	24	20.34	11	9.32	20	16.95
≤74	Did Not Meet Exp. (DNME)	76	64.40	105	88.98	91	77.12
Mean		73.42% (DNME)		69.27% (DNME)		70.58% (DNME)	
SD		7.69		4.33		5.42	

On the other hand, in terms of students' proficiency level in reading comprehension, most students (88.98 percent) did not meet expectations; 9.32 percent were fairly satisfactory; 1.70 percent were satisfactory; and none obtained an outstanding and very satisfactory rating. The students' overall reading comprehension level is 69.27 percent, with a verbal description of "did not meet expectations." This result confirms the statement of Tomas et al. (2021) that studies show poor reading comprehension among Filipino students due to limited availability of quality reading materials, inadequate reading instructions, and a lack of focus on specific sub-skills. There is then a need to improve the reading comprehension of junior high school students through scaffolded instruction, focusing on students' perspectives and discussing the effectiveness of the intervention reading program, as demonstrated in the study of Muzammil (2021).

In terms of written expression, 77.12 percent did not meet expectations, 16.95 percent were fairly satisfactory, 4.24 percent were satisfactory, 1.69 percent were very satisfactory, and no student received an outstanding performance rating. Similar to vocabulary and reading comprehension, the overall level of written proficiency is 70.58 percent, with a verbal description of "did not meet expectations." This is the level where students need help understanding prerequisites and fundamental skills (DepEd, 2012). A similar finding was manifested in the study of Caraig and Quimbo (2022), who found that grammar in written expression among Filipino learners has identified several barriers that contribute to poor or limited language skills. Saavedra (2020) also confirmed that existing Filipino grammars have limitations in processing a wide range of sentence patterns, making it impossible to develop strong grammar manually, resulting in challenges with language structure analysis.

3.2 Students' Language Proficiency After the Utilization of the Literacy Strategies

Table 2 shows the students' language proficiency in vocabulary, reading comprehension, and written expression after the utilization of literacy strategies.

Table 2. Descriptive statistics of language proficiency level of students after the utilization of the literacy strategies (n = 118)

Rating	Verbal Description	Vocabulary		Reading Comprehension		Written Expression	
		f	%	f	%	f	%
90 – 100	Outstanding (O)	25	21.19	6	5.09	8	6.78
85 – 89	Very Satisfactory (VS)	25	21.19	36	30.51	30	25.42
80 – 84	Satisfactory (S)	16	13.55	31	26.27	38	32.20
75 – 79	Fairly Satisfactory (FS)	25	21.19	27	22.88	24	20.34
≤74	Did Not Meet Exp. (DNME)	27	22.88	18	15.25	18	15.26
Mean		82.19 (S)		81.72 (S)		82.08 (S)	
SD		8.97		6.61		5.97	

In terms of vocabulary, 21.19 percent of students demonstrated outstanding proficiency, while an equal percentage achieved very satisfactory ratings. In addition, 13.55 percent of the students were at a satisfactory level, while another 21.19 percent performed at a fairly satisfactory level. In contrast, 22.88 percent did not meet expectations. This is consistent with the study by Ghalebi et al. (2020), which revealed that students use vocabulary strategies to develop their vocabulary knowledge and understanding. Research shows that contextualized vocabulary learning improves retention and comprehension by using words in meaningful and memorable ways

(Godwin-Jones, 2018). Meanwhile, some studies show that implementing word mapping strategies can significantly improve students' vocabulary mastery, as evidenced by higher scores and successful results on vocabulary tests (Safitri, 2020).

Table 2 also depicts the students' reading comprehension after using literacy strategies. The results show a nuanced distribution of students at different proficiency levels, with 30.51 percent obtaining a very satisfactory level, 26.27 percent achieving a satisfactory level, 22.88 percent performing at a fairly satisfactory level, and 15.25 percent below expectations. Only 5.09 percent of the students had outstanding proficiency in reading comprehension. Reading strategies are targeted and systematic approaches that readers use to understand and interpret written texts (Bogaert et al., 2023). Likewise, Dikkatli and Kürüm (2023) showed that the use of explicit reading strategies led to a positive result in terms of second-language reading comprehension. In addition, a research study found that implementing metacognitive strategies in the classroom can significantly improve reading comprehension in the context of English as a foreign language (Iobidze, 2019).

Furthermore, the table displays data on the students' language proficiency in written expression after utilizing writing strategies. The distribution of students across proficiency shows that the majority were in the satisfactory range, with 32.20 percent displaying satisfactory performance, 25.42 percent obtaining a very satisfactory level, and 20.34 percent of students being classified as fairly satisfactory. Furthermore, 15.26 percent are classified as "did not meet expectations," while only 6.78 percent of students demonstrated outstanding proficiency in written expression. This result affirms the statement of Armea et al. (2022) that grammar instructions have been used to improve students' writing skills. In addition, Yang (2020) demonstrated that the use of contextualized materials as a pedagogical approach to teaching English grammar results in higher levels of writing proficiency. Mastery of grammar is, therefore, a fundamental aspect of language skills and plays a crucial role in improving effective written communication in the English language (Sioco & De Vera, 2018).

3.3 Difference Between English Language Proficiency Before and After the Utilization of the Literacy Strategies

Table 3 presents the analysis of the difference between the English language proficiency of the students before and after the utilization of the literacy strategies.

Table 3. T-test for the difference between the English language proficiency level of students before and after the utilization of literacy strategies (n = 118)

Areas of Proficiency	Pretest	Post-test	D	t-value	p-value	Decision	Remark
Vocabulary	73.42	82.19	8.77	9.178	<.001	Reject Ho1	Significant
Reading Comp.	69.27	81.72	12.45	17.162	<.001	Reject Ho1	Significant
Written Expression	70.58	82.08	11.50	17.168	<.001	Reject Ho1	Significant
Overall	71.09	82.00	10.91	18.852	<.001	Reject Ho1	Significant

Level of significance = 0.05

Using the *t*-test for dependent data, the table shows that all p-values are less than the level of significance (0.05), which means that there is a significant difference between students' pretest and posttest English language proficiency in terms of vocabulary, reading comprehension, and written expression. This further implies that the utilization of literacy strategies is effective and enables the students to score better in the posttest.

The finding confirms the claim of Habók et al. (2022) that there is a positive relationship between the use of strategies and the level of competence. Vocabulary strategies could lead to better performance in the posttest (Peery, 2021). Li et al. (2022) also supported the notion that the use of literacy strategies, particularly in reading comprehension, could lead to better academic performance and higher posttest scores. In addition, reading comprehension strategies improve students' ability to comprehend texts (Almutairi, 2018). Similarly, Yang (2020) emphasized the use of contextualized and realistic grammar instruction to help ESL teachers and students successfully achieve their learning goals.

3.4 Perceived Effectiveness of Literacy Strategies and Students' English Language Proficiency

Table 4 shows the relationship between the perceived effectiveness of literacy strategies and the students' English language proficiency level. Using Spearman rank order correlation, the table reflects that the students' reading strategies and reading comprehension levels are significantly related ($p = 0.007 < \alpha = 0.05$). This finding implies that students who highly perceive the reading strategies utilized by the teachers tend to acquire a higher level of reading comprehension.

Table 4. Correlation analysis for the relationship between the perceived effectiveness of literacy strategies and students' English language proficiency level

Variables	rs	p-value	Decision	Remark
Vocabulary Strategies and Vocabulary Level	0.150	0.105	Fail reject Ho2	Not significant
Reading Strategies and Reading Comprehension Level	0.245	0.007	Reject Ho2	Significant
Writing Strategies and Written Expression	0.081	0.383	Fail reject Ho2	Not significant

Level of significance = 0.05

Research by Buterbaugh (2021) supports this notion that students' reading comprehension level influences their attitudes towards reading. Mohammed (2022) likewise revealed that students with excellent grades use a wide variety of reading strategies and vice versa. Pedagogically, teachers can use more reading strategies to increase their students' reading self-efficacy, which will lead to improvement in reading skills. This suggests that students perceive reading strategies as valuable and effective tools for reading comprehension. Similarly, Oranpattanachai (2023) exposed that there is a significant positive relationship between students' reading comprehension ability and their perceived reading strategies.

Meanwhile, Table 4 also reflects that the vocabulary strategies utilized by the teachers are not significantly related ($p = 0.105 > \alpha = 0.05$) to the students' vocabulary level. This means that regardless of how the students view the vocabulary strategies utilized by the teachers, the students' vocabulary levels do not vary. As stressed by Getie (2020), students have individual preferences for vocabulary acquisition that could influence their engagement and efforts to expand their vocabulary, regardless of their opinions on the strategies used by teachers. Additionally, students can choose different vocabulary learning strategies that suit their learning styles and preferences, allowing them to develop their vocabulary regardless of their opinions on the effectiveness of teacher-led strategies (Lin, 2019). Kassa et al. (2022) also found a moderately positive relationship between students' attitudes toward vocabulary learning and their English vocabulary knowledge's depth, breadth, and fluency.

Moreover, the table reveals that there is no significant relationship ($p = 0.383 > \alpha = 0.05$) between the utilization of the writing strategies of the teachers and the written expression level of the students. This result signifies that the changes in the level of student's perceptions of the writing strategies of the teachers are not associated with the shifts in the level of their written expression. In other words, several factors can influence the development of writing skills in students. As Myhill et al. (2023) noted, students responded well to teaching approaches that gave them more autonomy and choice. This positive response indicates that teaching strategies, rather than the specific writing strategies used by teachers, played an essential role in motivating students. Furthermore, Lundin et al. (2023) stipulated the effectiveness of writing consultations in increasing the student's confidence in their writing skills and emphasized that factors such as individual writing skills, practice, and commitment, in addition to their written expression skills, have a crucial part in students' perceptions of teacher-directed writing strategies. Chen and Hendricks (2023) also disclosed that students' perceptions of the writing strategies used by teachers may not be directly correlated with an improvement in their written expression level, suggesting the existence of additional influencing factors in improving students' writing skills.

4.0 Conclusion

It is evident that teachers' utilization of literacy strategies has a significant impact on improving students' English language proficiency, with notable improvements in vocabulary, reading comprehension, and written expression ranging from "did not meet expectations" to "satisfactory" levels after the implementation of these literacy strategies. This difference is statistically significant, indicating the effectiveness of literacy strategies in enhancing language skills. This finding highlights the importance of teachers actively integrating these tailored literacy strategies into their teaching practices to promote their students' language development and competence. Moreover, the findings emphasize the importance of teachers constantly refining their pedagogical approaches to ensure holistic language development for learners.

5.0 Contributions of Authors

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7.0 Conflict of Interests

The authors declared that they have no conflict of interest.

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Breaking the PSYCHcle: Impact of Psychoeducation on the Attitudes Towards Mental Illness of Two Barangays in Bataan, Philippines

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Abstract. In the Philippines, pervasive stigma surrounding mental health care presents a formidable obstacle to addressing psychological concerns. This study delves into the impact of psychoeducation on the attitudes toward mental illness within two barangays in Bataan. Employing a quasi-experimental approach, participants were divided into two groups: an experimental group ($n=15$) engaged in a comprehensive six-module psychoeducation program, and a control group ($n=15$) attending a single session. Utilizing the 21-item Community Attitudes Towards the Mentally Ill (CAMI) scale by Taylor and Dear for both pre- and post-intervention evaluations, the research revealed a significant enhancement in attitudes among participants from both experimental ($p = 0.001$) and control ($p = 0.024$) groups. Interestingly, the effect size was more pronounced in the control group ($0.658 > 0.369$), emphasizing the potent impact of psychoeducation. These findings underscore the transformative potential of psychoeducational initiatives in cultivating a more inclusive and empathetic community approach to mental health, advocating for their integration into comprehensive mental health strategies across the Philippines.

Keywords: Psychoeducation; Attitudes; Mental illness; Quasi-experiment; Mental Health; Philippines

1.0 Introduction

Mental illness, historically shrouded in stigma and misunderstanding, remains a critical challenge across the globe, affecting millions yet often marginalized in public health discourse, particularly in developing countries (American Psychiatric Association, 2024; Ahad et al., 2023; Subu et al., 2021). The Philippines, a nation with a rich cultural heritage, is no exception to this global issue. However, stigmatization of mental health problems in Filipino communities significantly hinders individuals' willingness to seek help, exacerbating the societal and personal burdens of mental disorders (Martinez et al., 2022; Martinez et al., 2020).

In response to this complex issue, innovative approaches that transcend traditional methods of mental health care are being explored and implemented. Among these, psychoeducation has emerged as a crucial tool in altering public perceptions and attitudes towards mental illness, promoting understanding, and reducing stigma (Bahrami & Khalifi, 2022; Kaisser et al., 2022; Onnela et al., 2021). It involves educating individuals about mental health conditions, treatment options, and coping strategies, aiming to empower affected individuals and their communities. Research has shown that psychoeducational interventions can significantly improve attitudes

towards mental illness and increase support for affected individuals (Burke et al., 2024; Song et al., 2023; Shim et al., 2022; Brooks et al., 2021).

But despite the proven benefits of psychoeducation, there is a notable gap in research focusing on its impact within the specific context of Philippine barangays. Most existing studies are generalized or conducted in Western settings, leaving a gap in understanding how these interventions translate into the Filipino population (Hechanova, 2019, as cited in Cleofas, 2023). This research aims to bridge that gap by focusing on localized interventions, such as in the research locale – Bataan.

As a province in the Philippines, Bataan presents a unique context for examining the impact of psychoeducation on mental health attitudes. The cultural and societal makeup of Bataan, with its diverse communities and government support, offers an insightful backdrop for this study (Provincial Government of Bataan, 2023; DILG, 2021). The selected barangays for this study reflect a microcosm of Filipino societal and cultural norms towards mental health that may potentially fill the gap in the research base (Sawyer et al., 2023; Higgins et al., 2020).

The significance of this study extends beyond its immediate findings. By elucidating the effectiveness of psychoeducation in a local Filipino context, this research contributes to the broader efforts to destigmatize mental illness in the Philippines. Moreso, the outcomes may guide policy development, community health strategies, and future research directions, offering a foundation for more inclusive and effective mental health support systems. Therefore, this study explored how psychoeducational interventions can influence the perceptions and attitudes of residents in two barangays in Bataan, Philippines, towards mental illness.

2.0 Methodology

2.1 Research Design

The study employed a quasi-experimental design, specifically chosen due to practical constraints and the nature of the intervention. Unlike randomized controlled trials from true experiments, this design allows for examining the effect of psychoeducation on community attitudes towards mental health in a more naturalistic setting, using predefined criteria for participant group assignment (Gopalan et al., 2020). Furthermore, in assessing the intervention's impact, the study combined independent and repeated measures designs. The independent measures design facilitated a direct comparison between the control and experimental groups, crucial for evaluating the psychoeducation program's effectiveness (Azen & Walker, 2021). Concurrently, the repeated measures design within the two groups provided insight into the differences of attitude changes pre- and post-intervention (Mohajan, 2020).

2.2 Research Participants

This research targeted thirty (30) residents, with fifteen (15) from Barangay Gugo, Abucay, and another (15) fifteen from Barangay Balon Anito, Mariveles, in Bataan, Philippines. Participants, aged 18 to 70, were selected through purposive sampling. This strategy is advantageous for focusing on particular segments within populations to deeply explore the effects of specific interventions—like psychoeducation—on mental health awareness (Campbell et al., 2020).

Eligibility and demographic data were collected through a detailed two-phase screening. The first phase collected basic personal data – age, gender, marital status, socioeconomic and educational backgrounds, and employment status. The subsequent phase confirmed adherence to the study's inclusion and exclusion criteria: no prior engagement in mental health education programs, absence of personal or immediate family mental health diagnoses, lack of participation in related research, access to mental health resources, specific cultural beliefs towards mental health, and availability for the program's duration.

2.3 Breaking the PSYCHcle

The intervention, based on the six modules created by the Mental Health Literacy Organization (2021), was structured into four sessions, conducted in a one-month span. These sessions tackled mental illness stigma, basic mental health knowledge, specific mental illnesses, the importance of family communication and support seeking, and strategies for positive mental health and resilience. Delivered through PowerPoint presentations, discussions,

exercises, and practical applications, each hour-long session aimed at comprehensive education and practical skill development, led directly by the researchers for consistency.

1. The first session covers the first module, "Stigma: Myths and Realities of Mental Illness." Through the discussion, participants gained a better understanding of the stigma surrounding mental illness and its impact on how people seek treatment, as well as the myths and realities surrounding mental illness.
2. The second session goes over the second and third modules. The second module titled, "Understanding Mental Health and Mental Illness", introduces the basics of brain function and how it affects our behavior. While the third module, "Information on Specific Mental Illnesses", focused on the causes, treatments, and other options available for some common mental illnesses.
3. The fourth and fifth modules, "Experiences of Mental Illness and the Importance of Family Communication" and "Seeking Help and Finding Support" were covered in the third session. The initial segment of the session explores the essence of fostering effective family communication, and imparting education on prevalent mental illnesses to others; while the subsequent segment emphasized the significance of having access to appropriate medical care and treatment for mental health conditions.
4. The sixth module, "The Importance of Positive Mental Health", delved into the subject of stress reactions and how to cultivate resilience through it. Participants were expected to gain knowledge on identifying optimal stress-reduction methods and when to apply them, emphasizing mental positivity amidst challenges.

2.4 Research Instrument

To evaluate the impact of psychoeducation, the study employed the Community Attitudes towards the Mentally Ill (CAMI) scale, a self-report questionnaire devised by Taylor and Dear in 1981. This scale includes four dimensions – "Authoritarianism", "Benevolence", "Social Restrictiveness", and "Community Mental Health Ideology". Moreover, the CAMI features twenty-seven (27) statements assessed on a 4-point Likert scale, from 1 ("Strongly Disagree") to 4 ("Strongly Agree"), deliberately omitting a neutral option to prompt definitive responses (Lange et al., 2020). Additionally, higher scores correspond to more positive attitudes.

In reviewing the psychometric properties of the CAMI, it has shown strong internal consistency (Cronbach's $\alpha \geq 0.80$) and good construct validity across its intended dimensions. Although some subscales show variability in consistency, overall test-retest reliability indicates satisfactory stability ($r \geq 0.39$). The scale's content validity is also confirmed, with most items deemed relevant and clear, though adaptations may be necessary for non-English contexts (Sanabria et al., 2023; Kafami et al., 2022).

2.5 Data Gathering Procedure

The study initiated with careful selection of individuals from Barangay Gugo and Barangay Balon Anito in Bataan, Philippines, adhering strictly to established inclusion and exclusion criteria. Following the approval of necessary documents and materials, including the psychoeducation modules from the Mental Health Literacy Organization, the research commenced.

Prior to implementing the program, the researchers provided informed consent forms to the participants. The experimental group in Barangay Gugo underwent a series of four psychoeducation sessions spanning for a month. These sessions started with an orientation and a pre-test, followed by the six modules tailored to the study's needs, and concluded with a post-test. In contrast, participants in the control group from Barangay Balon Anito participated in a single session mirroring the first session of the experimental group, with both pre- and post-tests conducted on the same day.

Upon completing the sessions, data from pre-tests and post-tests were collected and analyzed to assess the impact of psychoeducation on participants' attitudes towards mental illness. The analysis proceeded with fifteen (15) participants in both the experimental and control groups, resulting in a total of thirty (30) participants after considering attrition and exclusions based on the screening criteria.

2.6 Ethical Considerations

This research strictly followed ethical guidelines, adhering to the Data Privacy Act of 2012 (Philippine Republic Act 10173) and the 2022 Code of Ethics of Philippine Psychologists and Psychometricians developed by the

Psychological Association of the Philippines. Before joining the study, participants were fully informed about its aims, possible risks, and benefits. They gave informed consent and were told they could exit the study at any time without repercussions. To protect privacy, participant data, including personal details, was handled with strict confidentiality. Assurances were given that participant anonymity would be contained in any related reports or publications only. Participants received snacks and grocery packs as a gesture of thanks for their participation, explicitly stating that these gifts were not meant to sway their decision to participate or continue in the study. Special attention was given to reducing any potential harm or discomfort, especially since the study involved early to late adults potentially less familiar with psychology and mental health, who might be susceptible to physical or emotional distress.

2.7 Data Analysis

The data collected from the study was analyzed using the Statistical Package for Social Science (SPSS) version 25.0, a commonly used program in various disciplines such as sociology and psychology because of its reliability for data management and documentation (Rahman & Muktadir, 2021). Additionally, the level of significance for all statistical analyses was set at 0.05. Descriptive statistics, such as mean and standard deviation, were computed to describe the average levels and dispersion of their demographics, as well as their attitudes toward mental illness.

To evaluate the psychoeducation program's effect on the community, the researchers applied both parametric and non-parametric methods. Wilcoxon Signed Rank Test was used to analyze changes in participant scores before and after the psychoeducation within groups. This approach, supported by (Liljeholm et al., 2020), helps identify significant shifts in paired data with symmetry, such as in mental health interventions. Additionally, the researchers conducted a Mann-Whitney U Test to compare scores between the experimental and control groups, determining if there were significant differences between these independent samples; following guidance from IBM (2021) and Laerd Statistics (2024) for both tests.

3.0 Results and Discussion

3.1 Experimental Group

Table 1. Mean scores before and after psychoeducation in experimental group

CAMI	Before	After	Difference		Interpretation
	Psychoeducation	Psychoeducation	Mean	p-value	
Authoritarianism	18.27	18.73	0.47	0.046	Significant
Benevolence	15.27	22.87	7.60	0.001	Significant
Social Restrictiveness	16.47	16.47	0.00	0.878	Not Significant
Community Mental Health Ideology	14.33	17.00	2.67	0.002	Significant
Overall Score	64.33	75.07	10.73	0.001	Significant

Table 1 presents the mean scores for the CAMI scale, both before and after a psychoeducation intervention in the experimental group. The mean scores for "Authoritarianism" showed a slight increase from 18.27 before the intervention to 18.73 afterwards, with a mean difference of 0.47 and a p-value of 0.046. For "Benevolence," the mean score before the intervention was 15.27, which rose significantly to 22.87 after the intervention, with a mean difference of 7.60 and a highly significant p-value of 0.001. The "Social Restrictiveness" dimension showed no change, with mean scores remaining constant at 16.47 both before and after the intervention, resulting in a mean difference of 0.00 and a p-value of 0.878, indicating no significant change. "Community Mental Health Ideology" experienced an increase from 14.33 to 17.00, with a mean difference of 2.67 and a p-value of 0.002. The overall CAMI score increased from 64.33 before the intervention to 75.07 after, with a total mean difference of 10.73, and a p-value of 0.001, marking it as significant.

The substantial increase in benevolent attitudes in the experimental group is particularly noteworthy and aligns with previous research indicating that psychoeducation interventions can foster empathy and understanding towards individuals with mental illness (Sampogna et al., 2023). This shift towards more compassionate attitudes is crucial in combating stigma and promoting social inclusion for individuals living with mental health conditions (Waqas et al., 2020).

3.2 Control Group

Table 2. Mean scores before and after psychoeducation in control group

CAMI	Before	After	Difference		Interpretation
	Psychoeducation	Psychoeducation	Mean	p-value	
Authoritarianism	Mean	Mean	Mean	p-value	
Authoritarianism	17.33	19.67	2.33	0.001	Significant
Benevolence	15.71	15.80	0.13	0.001	Significant
Social Restrictiveness	15.20	18.33	3.13	0.722	Not Significant
Community Mental Health Ideology	12.93	14.20	1.27	0.001	Significant
Overall Score	61.27	67.87	6.60	0.024	Significant

Table 2 illustrates the mean scores for the CAMI scale before and after a single module of psychoeducation intervention in the control group. In the "Authoritarianism" dimension, there was an increase from an initial mean score of 17.33 to 19.67 after the intervention, resulting in a mean difference of 2.33, which is statistically significant with a p-value of 0.001. The "Benevolence" scores were stable, with a slight increase from 15.71 to 15.80, yielding a mean difference of 0.13; despite the minimal change, this result was statistically significant with a p-value of 0.001. For "Social Restrictiveness," the scores increased from 15.20 to 18.33, presenting a mean difference of 3.13, but this did not reach statistical significance as indicated by a p-value of 0.722. The "Community Mental Health Ideology" scores saw a moderate rise from 12.93 before the intervention to 14.20 after, with a mean difference of 1.27 and a p-value of 0.001, marking this change as significant. Overall, the total CAMI score increased from 61.27 to 67.87, a mean difference of 6.60, and the change was statistically significant with a p-value of 0.024.

The significant increase in overall CAMI scores in both the experimental and control groups underscores the potential of psychoeducation to positively influence public perceptions of mental illness. This aligns with previous research by (Fung et al., 2021; Goh et al., 2021), who found that psychoeducation programs led to increased mental health literacy and reduced stigma in community samples. Our study extends these findings by demonstrating that even a single module of psychoeducation can yield measurable improvements in attitudes, albeit to a lesser extent compared to more comprehensive interventions (Hobs et al., 2024; Reis et al., 2021).

Interestingly, while the experimental group showed significant improvements across multiple CAMI sub-scales, the control group exhibited a particularly pronounced increase in authoritarian attitudes. This finding is somewhat unexpected and contrasts the study of (Furr et al., 2010, as cited in Schomerus & Angermeyer, 2021). It is possible that the brief psychoeducation session in the control group inadvertently reinforced authoritarian beliefs or triggered defensive reactions among participants. This underscores the importance of carefully designing and delivering psychoeducation interventions to avoid unintended consequences.

Adding to that, the lack of significant change in social restrictiveness attitudes in both groups is consistent with previous research highlighting the stubborn nature of these beliefs. Social restrictiveness attitudes are deeply ingrained and often resistant to change, requiring sustained efforts to challenge societal norms and promote social inclusion for individuals with mental illness (Monnapula-Mazabane et al., 2021; and Vila-Badía et al., 2016, as cited in Vielma-Aguilera et al., 2021).

3.3 Difference between Experimental and Control Group

Table 3. Mean scores before and after psychoeducation in both groups

Groups	Before Psychoeducation				After Psychoeducation				Effect Size
	Mean	SD	t-value	p-value	Mean	SD	t-value	p-value	
Experimental	64.33	6.35	71.0	0.044	75.07	6.54	38.5	0.001	0.369
Control	61.27	7.96			67.87	6.06			0.658

Table 3 displays the mean scores before and after psychoeducation in both the experimental and control groups, along with effect sizes and the results of statistical tests. In the experimental group, the mean score increased from 64.33 (SD = 6.35) before psychoeducation to 75.07 (SD = 6.54) after. The effect size for this group, measured by

Cohen's d , was 0.369, indicating a moderate effect of the intervention. Conversely, the control group showed an increase in mean score from 61.27 ($SD = 7.96$) to 67.87 ($SD = 6.06$). Furthering this analysis, significant differences has been shown between the scores of two groups before and after an intervention with high t -values (71.0 and 38.5) and low p -values (0.004 and 0.001), respectively, suggesting a strong impact of the intervention. Lastly, the effect size for the control group was larger at 0.658, suggesting a more substantial effect of the intervention despite the fewer modules received.

The differential effect sizes observed between the experimental and control groups offer valuable insights into the dose-response relationship of psychoeducation interventions. While the experimental group experienced a moderate effect size, indicating a meaningful but moderate impact of the intervention, the control group exhibited a larger effect size despite receiving fewer modules. This suggests that one-time exposure to psychoeducation may have a disproportionately high impact on attitudes, a phenomenon that is inline with the findings of several studies (Kim & Park, 2023; Alasmee & Hasan, 2020; and Mascayano et al., 2020).

However, this study is limited by its selection of a relatively small and gender-imbalanced sample, reducing the generalizability of the findings and potentially biasing results toward the perspectives of female participants. Also, it does not account for the varied educational backgrounds of participants, which could influence the effectiveness of the psychoeducational intervention. Plus, the quasi-experimental design, without random assignment, may allow for selection bias. Furthermore, the study's focus on specific cultural settings in the Philippines might not capture the diversity of mental health attitudes in different regions or cultures. Moreover, the assessment of the intervention's impact is constrained to a short timeframe, not providing insight into the long-term effect of attitude changes toward mental health. Lastly, the reliance solely on self-report measures for evaluating attitudes towards mental illness could introduce response bias, as participants may respond in a socially desirable manner rather than reflecting their true feelings. Future research could address these limitations by employing a more diverse and larger sample, a randomized controlled trial design, longitudinal follow-up, and a mixed-methods approach to data collection to enhance the robustness and applicability of the findings.

4.0 Conclusion

The data supports the effectiveness of psychoeducation in improving community attitudes towards mental illness, although the extent of change varies across different attitude dimensions and the depth of the intervention. This finding underscores the need for both broad and intensive psychoeducational programs to comprehensively address various stigmatic attitudes towards mental illness. Furthermore, the study aligns with Sustainable Development Goals such as Good Health and Well-being (SDG 3), Quality Education (SDG 4), Reduced Inequalities (SDG 10), and Peace, Justice, and Strong Institutions (SDG 16). These connections highlight the broader social, educational, and institutional impacts of addressing mental health stigma and promote an integrated approach. Future research should explore the longitudinal effects of these interventions and consider integrating them with other community-based strategies to enhance public understanding and acceptance of mental health challenges. In a context where mental health stigma often silences those in need, this study serves as a beacon of hope, demonstrating that targeted education can illuminate the path to empathy, understanding, and societal change.

5.0 Contributions of Authors

In this research, VHJIT spearheaded the entire project, overseeing everything from conceptualization to manuscript preparation, review of literature, finding scales and modules, data analysis, data encoding and interpretation. VHJIT also played a role in introducing the concept of psychoeducation, designing the psychoeducation materials, formatting the questionnaire, and managing the data collection process. Additionally, VHJIT contributed to ethical considerations, created identification cards and food stubs for participants, designed posters for recruitment, and handled data encoding. Furthermore, AJPF contributed by suggesting the stigma questionnaire, managing tests during psychoeducation sessions, and aiding in data encoding and analysis. PGGM facilitated finding suitable scales and modules, led psychoeducation activities, and contributed to data encoding, analysis, and writing results and discussions within the control group. MRMB provided module suggestions, managed participant logistics, encoded data, and contributed to data analysis and writing results and discussions within the experimental group. AIFC coordinated with organizations, managed attendance, crafted certificates, and contributed to data encoding, analysis, and writing results and discussions within the experimental group, including effect size discussions. KLAS organized participant tokens, facilitated sessions, proposed psychosocial education for communities, managed technical aspects, and contributed to various sections, including the introduction, informed consent, and recommendations. JV provided essential coaching and mentoring, encouraged publication, improved the paper with insightful feedback, and gave valuable recommendations that significantly enhanced the study.

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7.0 Conflict of Interests

The authors declare no conflicts of interest about the publication of this paper.

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Lifeworld of Healthcare Professionals During the COVID-19 Pandemic in Northern Mindanao, Philippines

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Abstract. Healthcare professionals are pivotal in maintaining human health and providing empathetic care based on scientific evidence. While extensive research has focused on the quantitative effects of COVID-19 on their well-being, there remains much to explore from a sociological perspective. This study posed an overarching question: How did the healthcare professionals in Mindanao navigate their lifeworld during the pandemic? Grounding on Habermas' colonization of the lifeworld, this study specifically aims to contribute to the discourse on the construction of self-care, family relationships, friendship relationships, and the perceived influences of the pandemic on these relationships. Using purposive and snowball sampling, this phenomenological study collected extensive data from August 2023 to April 2024 through in-depth interviews with nine healthcare professionals, comprising physicians (3), nurses (3), and medical technologists (3), all affiliated with three government-run hospitals in Northern Mindanao and had extensive experience managing COVID-19 patients. Based on the thematic analysis, interlocutors' self-care construction is associated with obtaining enough sleep and rest, relaxing, and taking breaks to unwind. COVID-19 also had significant implications for family dynamics, as it became a family affair. While the pandemic has negatively impacted family relationships, it has brought family members closer through constant yet indirect communication. In contrast, the pandemic strained the bonds between the interlocutors and their closest friends. The study concludes that a health disaster, COVID-19, has been found to restrict the interlocutors' lifeworld by limiting self-care practices and threatening social integration, making it difficult for them to return to their everyday routines.

Keywords: Healthcare professionals; Colonization; Lifeworld; Phenomenology; COVID-19.

1.0 Introduction

In March 2020, the world was confronted with a new and unprecedented global crisis – the COVID-19 pandemic, which has caused widespread panic, illness, and death and impacted the whole world (WHO, 2020). According to Shereen et al. (2020), the COVID-19 virus, which caused the pandemic, is a highly contagious and pathogenic viral infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Throughout the COVID-19 pandemic, healthcare professionals have worked tirelessly as the first line of defense to uphold critical services. These professionals are indispensable to the healthcare system and are essential in safeguarding public health and safety. Despite their invaluable contributions, they contended with various challenges in the healthcare system exacerbated by the pandemic. It is crucial to acknowledge that the healthcare professionals' physical, emotional, and psychological well-being was severely impacted (Giannis et al., 2021). Additionally, they were challenged with heavy workloads, shortages of drugs and equipment, low personal protective gear during the early periods of the pandemic, fear of infection, feeling powerless to treat patients, and

difficulty managing relationships in stressful situations (Vindrola-Padros et al., 2020; Lui et al., 2020; Razu et al., 2021). The vulnerabilities in health systems exposed during the pandemic have had far-reaching effects on health, economic progress, trust in governments, and social cohesion, underscoring the severity and urgency of the situation (OECD, 2020).

The COVID-19 pandemic has presented unprecedented obstacles for healthcare professionals worldwide, as reported in various job satisfaction research employing quantitative methods (Afulani et al., 2021; Abel et al., 2021; Diakos et al., 2022). This study, a constructivist research, goes beyond these reports to highlight the extensive lived experiences of healthcare professionals' lifeworld during a health crisis. It contributes to the scarce literature by delving into and focusing on the pandemic's consequences in the everyday lives of healthcare professionals, particularly in the global south. The study aimed to describe how healthcare professionals in Northern Mindanao, Philippines, navigated their lifeworld, particularly their social relationships, during the COVID-19 pandemic. Its findings provide crucial, informative, and urgent insights, informing policies and interventions to support these professionals.

The study is tailored to the theory of the colonization of the lifeworld by the renowned sociologist Jurgen Habermas. This concept underscores the importance of implicit knowledge as the foundation of social interaction and meaningful participation in the social world (Johnson, 2008). Habermas's work highlights the lifeworld's crucial role in understanding the internal perspective of social interactions. While the system and the lifeworld are different perspectives, they complement each other in communicative action. Habermas was concerned about the exploitation and colonization of the lifeworld and demonstrated how the system of power and money attacks and takes control of the lifeworld (Ritzer & Stepnisky, 2018). This study, however, argues that a health crisis—a pandemic—is an additional factor that may attack and take control of the system and eventually influence a lifeworld by disestablishing the mutual and shared meaning (anomie) of healthcare work and trying to break the lifeworld's social cohesion with the society. This potential threat to the lifeworld of healthcare professionals is a matter of grave concern and warrants immediate attention.

2.0 Methodology

2.1 Research Design

A phenomenological qualitative approach was utilized. Phenomenology involves interpreting phenomena in their natural context to understand individuals' significance in these settings (Denzin & Lincoln, 2011). Examining how healthcare professionals navigate and ascribe meaning to their daily lives during the pandemic sheds light on their personal and professional outlooks.

2.2 Research Participants

To gain insights into the lives of healthcare professionals, the researchers collaborated with nine (9) healthcare professionals, consisting of three (3) physicians, three (3) nurses, and three (3) medical technologists, who all have experience working at various government hospitals located in Northern Mindanao. The research participants were chosen through purposive and snowball sampling techniques. Table 1 illustrates an overview of the research interlocutors and the research setting wherein the study was conducted.

Table 1. Matrix on the healthcare professionals involved in the study and their respective hospitals in Region X.			
Hospitals in Region X			
	A	B	C
Healthcare Professionals	Physician	Physician	Physician
	Nurse	Nurse	Nurse
	Medical Technologist	Medical Technologist	Medical Technologist

2.3 Research Instrument

The researchers employed a comprehensive interview guide that included open-ended questions concerning the participants' personal lives and work experiences during the pandemic. The interview was thorough and lasted more than an hour. The interview guide underwent reliability testing before being used for in-depth interviews. The data gathered from the in-depth interviews (both written and audio) were organized, transcribed, translated, and coded manually. A thematic analysis was followed. The researchers read and re-read the interview

transcriptions to identify significant responses for coding. The raw data was linked with summary markers for analysis, and the themes were labeled and clustered. Themes and subthemes were identified and categorized to obtain a general theme from the results.

2.4 Data Gathering Procedure

Extensive data collection was conducted from June 2023 to April 2024, using in-depth interviews to understand the participants' lived experiences during the pandemic fully (Wright, 2015; Boyce & Neale, 2006). This approach allowed for a more nuanced understanding of the individual's subjective experiences and meaning-making processes (Berg, 1995). Overall, the interviews proved invaluable in gaining insight into the participants' experiences and perspectives during this unprecedented time.

The researchers faced some challenges during data collection but managed them successfully. To ensure the study's success, some changes were made to the original timeline to accommodate stakeholders' schedules and ensure research participants' availability. In the final stages of data collection, obtaining approval from research participants and ensuring their availability was another obstacle. Obtaining research ethics clearance posed a challenge. A hospital research ethics committee screens research submitted before data gathering can commence. Obtaining the necessary documentation was time-consuming, as the university ethics committee and other authorities required approval for some modifications to comply. Despite these challenges, the researchers effectively managed and overcame them, ultimately ensuring the successful completion of the study.

2.5 Ethical Considerations

The researchers adhered to ethical standards throughout the data collection by obtaining clearance from our University Research Ethics Committee and the Healthcare Institutional Research Ethics. The researchers complied with entry protocols for the respective local government units (LGUs), formally requesting authorization to conduct research in their hospitals and to proceed in their respective medical facilities. Further, all study participants were given an informed consent form that indicated the objectives and purpose of the research as well as their rights as study participants.

3.0 Results and Discussion

3.1. Healthcare Professionals' Construction of Self-Care During the COVID-19 Pandemic

This paper utilizes Habermas' idea of the lifeworld, which pertains to the everyday world that individuals share. It encompasses the informal and non-commercial areas of social life such as family and household, culture, politics outside of organized parties, mass media, voluntary organizations, and other similar domains (Finlayson, 2005). It delves into the interlocutors' construction of self-care practices, their relationships with family members and friends, and the perceived influences of the pandemic on these relationships.

In the study, sleep-deprived healthcare professionals posed a concern during the pandemic. The demanding and complex workload and the pandemic's disruptive schedule often force our interlocutors to work long hours, disrupting their sleep patterns and leading to chronic sleep deprivation. This finding is reflected in Ozelik et al.'s (2022) study, which revealed that healthcare workers' sleep quality was affected during the pandemic – a term they referred to as 'COVID-somnia.' Consequently, the lack of recuperative activity to address the sleep deprivation necessary for health maintenance can result in adverse physical and mental health outcomes, significantly impacting their well-being (Song & Lee, 2020).

Furthermore, the pandemic placed an unprecedented burden on the study participants, with the workload described as heavy and complex due to the shortage of healthcare professionals who voluntarily worked on the frontline. This finding, echoed in the report by Research Brief No. 8 of the UPPI in 2020, as well as the studies conducted by Barelo et al. (2020), Duarte et al. (2020), Conti et al. (2021), Galanis et al. (2021), Antao et al. (2022), underscores the dire situation our healthcare professionals are grappling with, demanding immediate attention and action.

Coupled with sleep deprivation is burnout experienced by the healthcare professional interlocutors. In the study, burnout is closely associated with the rapid increase of COVID-19 patients with moderate and severe cases. The rising number of colleagues getting infected with the virus, long periods of isolation due to quarantine procedures,

lack of face-to-face interaction with family and friends, shifting healthcare system protocols, and the system's lack of support all contribute to the interlocutors' burnout. The severity of this issue cannot be overstated. Exacerbating these complications was the healthcare professional participants' discomfort of wearing personal protective equipment for extended periods (Zhang et al., 2020; Nguyen et al., 2020).

Given the unique nature of the participants' work, the research collaborators were acutely aware of the potential for contracting the COVID-19 virus. The myriad health-related risks these healthcare professionals face during the pandemic brings to light this study's argument that the pandemic, a health disaster, subjugated and disrupted the lifeworld of the study participants since their physical well-being was significantly compromised.

Despite the overwhelming challenges caused by the pandemic, the lifeworld of the study participants demonstrated remarkable resilience, adapting to the sudden and drastic changes. As the pandemic unfolded, the interlocutors grappled with managing their well-being amidst stringent health and quarantine protocols. While experiencing the consequences of colonization due to the COVID-19 pandemic, healthcare professionals in the study strove to attain adequate sleep as part of their self-care practices, showcasing their resilience in the face of adversity.

Self-care is the process by which individuals take responsibility for their health by utilizing available knowledge and resources (World Health Organization, 2024). Self-care through adequate sleep during the pandemic was crucial to counteracting the effects on the well-being of healthcare professionals in the study. The participants tried to achieve adequate sleep whenever their shift ended and had to undergo quarantine. The quarantine period for healthcare professionals exposed to COVID-19 patients is critical in preventing the spread of the virus. The duration of this quarantine period depends on the result of the RT-PCR test. If the result is negative, healthcare professionals must undergo a week of quarantine. However, if the result is positive, a two-week quarantine is necessary to prevent the virus from spreading if they are infected. This measure is needed to ensure the safety and health of healthcare professionals and their patients and to minimize the risk of further virus transmission. In addition to ensuring adequate sleep, the study participants also underscored the significance of maintaining a robust immune system to combat the COVID-19 virus. They stressed that a balanced diet and vitamin supplementation are crucial in reducing vulnerability to the virus. These emerged as the study participants' counteraction to the colonization of their lifeworld.

3.2 The COVID-19 Pandemic has Profoundly Influenced the Family Dynamics of the Healthcare Professionals

The findings of this study not only highlight the challenges healthcare professionals have faced during the pandemic but also shed light on the significant impact on their families and friends. This underscores how the COVID-19 pandemic has permeated their lifeworld. As Finlayson (2005) observed, the family is integral to an individual's lifeworld. Medina's definition of the family as a fundamental social institution deeply ingrained in the community and its culture (2023: pp. 89-90) further emphasizes its societal importance. The family is intricately linked with other societal institutions, including politics, economics, religion, education, and healthcare. Any changes in these spheres can profoundly affect the family and, consequently, the individual, as the family is the primary core group to which the individual belongs. The pandemic has brought various challenges to the family institution, and these consequences have been evident.

In response to the pandemic, the Philippine government, in close collaboration with the national healthcare system, implemented a comprehensive community quarantine strategy to curb the spread of COVID-19. This strategy, as described by Amit et al. (2021), included stringent stay-at-home orders for all households, physical distancing measures, suspension of classes and introduction of work-from-home policies, closure of public transportation and non-essential business establishments, prohibition of mass gatherings and non-essential public gatherings, regulation of the provision of food and essential healthcare services, curfews, and bans on the sale of liquor. The strategy also involved a heightened presence of uniformed personnel to enforce the quarantine procedures. The quarantine measures necessitated families to stay indoors, with only one member allowed to leave home to purchase necessities. As a result, people's daily routines, including social interactions and various social relationships, were severely disrupted and faced the threat of disintegration.

The COVID-19 pandemic affected the institution of family. This was demonstrated in a shared fear of contracting the virus, resulting in distrust of each family member who is a probable carrier of the virus. The fear caused by the pandemic influenced and threatened social cohesion among family members, leading to the colonization of the lifeworld. An interlocutor shared that "the COVID-19 pandemic has brought to light the true nature of familial relationships, particularly when a loved one is hospitalized without a designated caretaker. At such times, feelings of loneliness and depression can loom large as one cope with the virus alone, without the comfort of other family members by their side. In such situations, feelings of isolation can be overwhelming, exacerbating the lack of social interaction and leading to depression." This result highlights how the family institution was challenged when faced with a health crisis. There were family members who were willing to risk exposure to the virus to attend to their infected loved one at the hospital. Still, others were unwilling to sacrifice for their families when their well-being was at risk. This paper argues that the pandemic has led to anomie or the loss of the shared understanding and meaning that binds families together.

The narrative presented here echoes the research findings of Bahadur et al. (2021) on how the fear of contracting COVID-19, its severity, and the possibility of death among COVID patients have contributed to anxiety and depression among people in quarantine centers during the pandemic. However, in the context of the study, it is asserted that not only individuals who were in quarantine experienced psychological disorders, but also those family members who cared for their loved ones infected with the virus in the hospitals. This finding is reflected in the personal experiences shared by the study participants. It is important to note that healthcare professionals under study who have been dealing with COVID-19 patients for a long time have also experienced anomie, which was exacerbated by the complications of their healthcare work during the pandemic. These findings were similar to Chen et al.'s (2022) and Shamsan et al.'s (2022) studies, which reported that healthcare workers experienced various psychosocial distresses during their work in their respective healthcare systems.

Furthermore, the COVID-19 pandemic has also brought to light some significant family problems that exist within Filipino households, such as extramarital affairs. A participant in the research observed some issues in marriage relationships and how the pandemic has aggravated them. According to one of the interlocutors, "There was a patient who was in an extramarital relationship, and his mistress was the one attending to him. The mistress could not decide for the patient because she was not a legally recognized wife." This result sheds light on the subtle intricacies of Filipino family dynamics that were already prevalent even before the pandemic. However, the issue of extramarital affairs has been highlighted due to the unprecedented challenges posed by the pandemic. These findings underscored the claim that the health disaster influenced the family institution, disrupting the delicate balance of familial relationships and encroaching on the individual's lifeworld.

Also, the COVID-19 pandemic created a gap between healthcare professionals and their families. The nature of healthcare work during the pandemic led to feelings of alienation among the healthcare professional participants. The study participants, who hold their families in high regard, have opted to keep a safe distance from them to mitigate the risk of contracting the virus, especially given their increased exposure in the workplace. This choice, while necessary, has resulted in a feeling of alienation due to the prolonged physical separation from their loved ones. The feeling of alienation was notably observed among interlocutors who have children. As stated by the interlocutors who were parents, "I was particularly concerned about my kids during the pandemic. So, I took them to another city because no one could care for them here." "I was also worried about them getting infected because I was sure I had been exposed to positive cases. So, it was a challenging situation for all of us." "My relationship with my family is affected by fear. My spouse is afraid that I might transmit something to our children because I am always on the frontline."

The lifeworld of the interlocutor parents faced a dual burden of distancing themselves from their children while performing their parental responsibilities during the COVID-19 pandemic. This result implied a symbolic mechanism of the strategies that their lifeworld has adapted to safeguard their families from the COVID-19 virus. Nonetheless, the study also stresses that this lifeworld's agentic behavior of taking precautionary measures to protect their families was still limited. The pandemic impinged the lifeworld's parental responsibilities. Despite the alienation of the participants' lifeworld, they found alternative ways to reconnect with their families by leveraging the digital space. This indirect communication enabled the participants' lifeworld to perform their

familial responsibilities despite the pandemic. This patterned behavior among the interlocutors reflects their agency despite the limitations imposed by the pandemic.

On a lighter note, this study also reveals a positive impact of the pandemic on the lifeworld of the healthcare professional participants. While the pandemic created distance among families, it strengthened familial bonds among its members through shared efforts to counter the challenges faced and to reconnect using the digital space. The digital space consisted of various social media platforms that enabled indirect communication. This finding underscored the function of the pandemic as a catalyst for reinforcing familial bonds. This has been facilitated by communicative action, which has played a crucial role in repairing the fraying fabric of the family, a vital institution of the healthcare professionals' lifeworld. The study underscores the critical role of communication in maintaining the integrity of the lifeworld.

3.3 COVID-19 is a Test of Friendship Relationship

Like the family, their friendship relationship is essential to the lifeworld of the healthcare professional participants. In the context of this study, the researchers adopted Fischer and Policarpo's conceptualization of "close friends." Fischer (1981) found that people often use the word "friend" to describe anyone they spend time with without a more specific label. Typically, this term is reserved for people of similar age and is associated with social activities such as meeting up, going out, discussing shared interests, or being part of the same organization. In addition, Policarpo (2015) distinguished between friends and close relationships by identifying factors that characterize the latter. Specifically, close relationships involve discussing personal matters, seeking advice, and exchanging material goods and are more closely linked to intimacy.

The interlocutors of the study described their 'close friends' as people they have known for a significant period, such as small groups from high school or college, a few sports teammates, former colleagues turned friends, and colleagues at their present work. These individuals form an essential part of the study participant's social circle, and they often rely on them for emotional support, advice, and companionship.

Based on the study's findings, the pandemic presented various challenges for participants, ultimately influencing their social relationships outside the family sphere. The study found that the pandemic strained the bonds between healthcare professionals and their closest friends. Due to social restrictions, the demanding and complicated workload, the fear of infecting their friends, and the stigma associated with working in the healthcare sector, the study participants felt alienated from their closest friends. This feeling of alienation manifests how the pandemic colonized the healthcare professionals' lifeworld. According to the participants, "... It is funny, but it is stupid," you will be asked, "Did you take a shower?" "Do you have a cough or a fever?" I feel offended sometimes, but I try to ignore it..." and "Some of my friends tend to judge you because of the COVID issue...". The participants expressed feeling offended and judged by their friends due to COVID-related concerns, further exacerbating their feelings of isolation.

The study participants' narratives indicated the significant impact of the pandemic on the deterioration of friendship relationships among healthcare professionals. The spread of unfounded rumors alleging healthcare professionals' manipulation of COVID-19 results for personal gain through PhilHealth Insurance had a sensationalized presence in digital media. Consequently, the COVID-19 pandemic contributed to the stigmatization of healthcare professionals working diligently on the front lines of the health crisis. This negative perception resulted in a breakdown of trust in their relationships, leading to feelings of anomie and alienation among the participants, influencing their ability to deliver high-quality patient care.

Corroborating these findings, a report from the World Health Organization (2020) highlighted similar instances where healthcare workers faced mistrust to the point of being targeted as "risks" in their communities. Moreover, Moro et al. (2022) emphasized that experiencing stigma and discrimination due to their profession was strongly associated with clinically significant depressive symptoms and psychological distress among healthcare workers. De Guzman et al. (2022) found that discriminatory incidents often included derogatory gestures, social ostracism, social media attacks, and offensive humor.

Conversely, some of the study participants' friends did not exhibit such stigma and instead provided support and empathy during their time of need. This led the participants to express profound gratitude and, in turn, actively keep their friends informed about the latest developments regarding the pandemic while encouraging adherence to health guidelines.

Furthermore, due to their physical distancing from their established social circles, healthcare professional participants formed new connections, particularly with colleagues with whom they spent more time at work and during quarantine. One participant articulated, "Those I consider friends are my team during the COVID-19 isolation... our bond grew stronger because we worked closely together as healthcare professionals attending to COVID-19 patients."

Amid the pandemic, these new connections significantly created a more favorable environment for the research participants. The deepened social bond with colleagues turned close friends represented a new addition to the research participants' lifeworld, providing a heightened sense of comfort and support. This new form of relationship facilitated better coping mechanisms for the healthcare professional participants in addressing the challenges posed by the pandemic, as they could share their thoughts and feelings with understanding and empathetic colleagues, feeling more integrated and less isolated.

4.0 Conclusion

The recurring theme in the study relating to the colonization of the lifeworld, a concept that refers to the domination and control of an individual's life by external factors of healthcare professionals in Northern Mindanao, Philippines, includes the challenges associated with the COVID-19 pandemic. These challenges were manifested in the limitation of how they practice self-care. The healthcare professionals in the study were sleep-deprived due to the complications in their workload caused by the pandemic. Sleep deprivation led to various psychosocial issues. Nevertheless, the study participants tried to cope by attaining adequate sleep during isolation periods in their quarantine facility.

Furthermore, the pandemic highlights the intricacies of Filipino familial relationships and threatens their susceptibility. It has brought to light some significant family problems, like extramarital problems, that exist within Filipino households. Additionally, the shared fear of contracting the virus resulted in distrust among family members who are probable carriers. The nature of healthcare work during the pandemic led to feelings of alienation. This study highlights the lifeworld of healthcare professionals who are also parents and faced a dual burden of distancing themselves from their children while performing their parental responsibilities during the COVID-19 pandemic. The pandemic also influenced the participants' social relationships outside the family sphere. The study found that the pandemic strained the bonds between healthcare professionals and their closest friends, causing the interlocutor's lifeworld to experience anomie and alienation.

The study underscores the critical role of communication in maintaining the integrity of the lifeworld during a health crisis. The advent of the digital space, a term that refers to online platforms and technologies, has made the lifeworld more reflexive to changes, as people recognize that they can reconnect with their social relationships anytime, anywhere. Initially, having an internet connection was considered a luxury. However, communication and entertainment in the digital space have become necessary during the pandemic. This research emphasizes digital communication platforms' importance in negotiating social relationships during the pandemic. This allows the study participants to enhance their ties to the world around them.

The COVID-19 pandemic, a health crisis, is a transformative event. It has disrupted and threatened the interlocutors' lifeworld. It has subjugated the healthcare professionals' lifeworld, including their self-care practices and family and friendship relationships. The interlocutors' self-care practices were disrupted by urgency, forgoing their physical well-being while prioritizing care to others and productivity in the healthcare system. Moreover, during the pandemic, the healthcare system's demand for long and nonstandard work schedules and the complications of working in the healthcare system have disrupted the participant's family and friendship relationships, crucial parts of their lifeworld. Meanwhile, the research participants consciously strived to build positive relationships with their colleagues, recognizing the importance of social connections at work. This

underscores that the study participants negotiate with their colleagues turned close friends to maintain positive relationships, empowering themselves in their work environment.

This study strongly advocates for immediate policy action based on the research findings. The study reveals that healthcare professionals who participated in the research have significantly experienced anomie and alienation due to the pandemic's impact on their lifeworld. The breakdown of trust, heightened fear, and emotional strain within their support networks have further underscored the profound effect on their personal experiences. To address the long-term implications of this impact, it is crucial to implement a localized program designed to address the specific needs of the healthcare professionals in the local healthcare system that supports their psychosocial well-being. In collaboration with policymakers and healthcare professionals, the academic community can play a pivotal role in creating a tailored policy framework that supports the healthcare community. Prioritizing local healthcare initiatives and programs is paramount for providing stability and support to the healthcare workforce and fostering a sense of stability within the healthcare industry.

5.0 Contributions of Authors

Author 1 was assigned to write, edit, and revise the article.

Author 2 was tasked to supervise the study and critique the manuscript.

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7.0 Conflict of Interests

The authors declare that they have no conflict of interest.

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Academic Career Development among State Universities and Colleges (SUCs) in Samar

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Abstract. The study sought to answer the extent of implementation of the career development program and the significant relationship between the faculty profiles and the career development programs and processes. The study also wanted to know the challenges and strategies of career development by using a mixed-method research design and randomly picking 125 faculty respondents from different State Universities and Colleges on Samar Island. It was revealed that the lowest career development program extent of implementation was career development counseling and career development coaching and mentoring which both indicated “Moderately Implemented”. It was also shown in the study that there is a significant correlation between career advancement educational background, academic rank, and the number of published research of the faculty. There is also a significant relationship between career development training to international, national, and local training provided and attended. The career development support process has also a significant relationship with the training of faculty internationally and lastly, career development counseling is significantly related to the number of published research. Thematic analysis was also used for providing career development challenges and strategies and it was discovered that the faculty were challenged with three reasons as follows: (1) there are many tasks in Publishing Research; (2) Financial struggle in finishing a Doctorate Degree; and (3) Time constraints because of designation. Subsequently, the career development strategies also revealed the following: (1) Faculty must finish a doctorate to meet the educational requirement; (2) Conduct and publish research to maximize higher possible points; and (3) Study the guidelines of NBC 461 to achieve higher academic rank. Faculty facing challenges in career development makes them initiate self-development in keeping up points in consonance with the NBC provisions and policies, some are still in adjustment to have a culture of research, challenged by finances both education and personal, a problem of which balancing is tough. Encouraging SUC to help faculty career growth and develop a model that effectively does both individual and institutional support. With the results from the research conducted, quantitative and qualitative approaches, and recommendations the researcher generated a model of academic career development which is called “Refuncion’s Academic Career Development Model.”

Keywords: Career development; Career development coaching and mentoring; Career development counseling; Career development trainings; Career advancement; Academic rank; Strategies; Challenges.

1.0 Introduction

Challenges in the academic profession globally are deemed critical to provide strategic ways to improve academic careers as acknowledged by the universities. A deterrent factor is that employees are not eager to plan themselves for they still believe that the management must handle their career development (Quast, 2014). Even some managers, according to Jackson (2014) do not know how to help their employees under them and do not have time to guide them in their growth and even organizations may be reluctant investing career development. SUCs are also challenged when it comes to academic performance due to a lack of training and lack of support from the seniors (Aslam et al., 2010). Esponilla et.al (2020) also identified concerns and challenges that

incline faculty promotion, the following is the dissemination of information, engagement of faculty, document appreciation, implementation schedule, and NBC 461 focal person responsiveness concerning the promotion of faculty, stakeholder's engagement to promotion, and faculty engagement to promotion.

In response to SUCs in Samar Island data was provided in different universities. Available data have shown in CHED Statistics that in the year 2018, there were 19 percent Ph.D. holders in SUC Samar Island, 2019 garnered Ph.D. holders at 19 percent, and in 2020 a percentage of 23 percent (CHED, n.d.). SUCs in Samar Island must be aware of the target and KRAs to achieve a productive outcome in faculty career development contributing to institutional SUC performance.

This study aimed to provide and develop an academic career development model for State Universities and Colleges (SUCs) in Samar Island. In this context, the researcher conducted this study to develop a career development model for SUCs with the hope that this will serve as a guide for human resources development. Thus, the researcher wanted to determine the universities' career development programs and support among SUCs in which the result would aid the SUC administrators to manage faculty development and strategize some interventions for the improvement of human resources within the university. The improved academic career development program will help the SUCs to achieve and accomplish faculty advancement by nurturing themselves through building expertise in their fields of specialization.

2.0 Methodology

2.1 Research Design

The study used a mixed-method research design that addressed research queries in an applicable manner which comprises collecting, analyzing, interpreting, and reporting both qualitative and quantitative data. The quantitative data described and correlated were taken from the respondent's profile and the extent of implementation of the academic career development program. The qualitative data described were taken from the results of the in-depth interview that will focus more on the challenges and strategies for academic career development. According to Braun and Clarke (2006) when data saturation is used, it must be accompanied by thematic analysis. The interviews conducted relied upon the procedures of career development of academic employees in which the researcher conducts several interviews, and attains saturation until no new facts and evidence are revealed. Data voluntarily given by the respondents through the process of data saturation will form part of a thematic analysis probing homogenous views on the career development of faculty or groups and mobilize accumulated knowledge leading to a Career Development Model.

2.2 Research Participants

The researcher used random sampling among faculty in SUCs of Samar Island. The researcher randomly selected a subset of participants from a population (Thomas, 2020) and decided to pick 125 samples among the faculty respondents from a sampling frame and used a random number generation explained by Zikmund (2002). The sampling was randomly selected faculty-respondents taken from SUC with the inclusion of assistant professors to professorial ranks and responded to all the parts of the questionnaire using the Google form link given by the researcher.

In the qualitative method, the researcher used purposive sampling that enabled a model that identifies participants as selective among participants in a form of nonprobability sampling as they come along the way. The researcher filtered respondents in the conduct of interviews that qualify the following criteria: respondents who have answered 2.70 to 5.00 level of implementation rating and respondents who have a low result bracket from 0 to 2 computed by the years in service divided by the number of academic ranks. Chosen participants based on whether or not join voluntarily in the study.

2.3 Research Instrument

In data gathering, a survey questionnaire was used and accomplished by the academic employees of HEIs in Samar Island, Part I of the questionnaire entails respondents' demographics or profiles. Part II was the extent of implementation in Academic Career Development support and programs if there was a presence of a program or is it practiced in the University as part of fostering the progress of every academic workforce taken from Alice

Waithiegeni Kibui's (2015) role of talent management study as to career development process and effect of career development programs by Mark and Nzulwa (2018) with minor modifications and the instrument is reliably proven, therefore valid to conduct further data gathering procedure and result is acceptable when Cronbach's Alpha results 0.7 and above according (Cooper & Schindler, 2003).

2.4 Data Gathering Procedure

A formal letter was sent to the faculty respondents together with the Survey Questionnaire. Distribution and retrieval were facilitated by the researcher through Google form with the approval of the University Presidents, with the aid of the different deans and directors from the University after which gathered data were summarized, analyzed, and interpreted with the use of appropriate statistical tools.

2.5 Data Analysis

Collected data results from the questionnaire given were cleaned checking the precision and accomplishment of answers. The processes were carefully checked for errors. The research samples must answer all the questions legibly and honestly. A few problems from the questionnaire were aligned and reviewed, making sure that it was useful to the study. Data were analyzed quantitatively (frequencies, standard deviation, averages, and percentages) and arranged in tabular form to achieve easy analysis and interpretation conforming to the definition of Kothari (2008) that data must be concise and arranged in logical order. Statistical tools used specifically in the study were Descriptive statistics, in correlation was the Chi-square formula. For statistical calculations, SPSS was used to get the results.

For career development implementation, the extent of implementation was used to determine if the institution was practicing Academic Career Development as to process. Extent of implementation is also used in Academic Career Development as to program, which includes employee training, career counseling, career coaching and mentoring, and career advancement, to enable to evaluation of the career development program used in career systems about human resource development among SUCs. The following criteria were based on the Likert scale came from Eustaquio (2015).

In-depth interview was used in the qualitative approach by interviewing individual faculty in different SUCs using cellular phones automatically recorded confidentially, logs, and notes that are secured and with consent from the interviewee. According to Goulding (1999) data saturation, a theory/model is only considered valid if the researcher has reached the point of saturation. The interviews to be conducted will rely upon the procedures of career development of faculty in SUCs, Samar Island, conducting several interviews, and attaining saturation until no new facts and evidence are revealed. The study utilizes Glaserian theory by generating through an inductive method also called a bottom-up process for model generation.

The researcher coded interviews through the process of open coding, axial coding, and selective coding to formulate themes (Corbin & Straus, 2008) and which "data are fractured, conceptualized, and integrated to form theory" (Strauss & Corbin, 1998) and constant comparisons will determine emergent theory or the assumptions leading to knowledge in Career Development Model.

2.6 Ethical Considerations

Conduct of the study will emphasize the confidentiality of information and details, especially the critical ones, the language used must be clearly instructed to the respondents. They are also informed about the survey purpose and confidentiality clause and it is integrated into the research instrument.

In the qualitative methods of gathering data, in-depth interviews with the respondents by sending a text message as a form of invitation and including a clear description if they like to be interviewed as consent, stating also the rights and expected time finished, the current study, and the purpose. The participants are fully informed that they may have an option to voluntarily participate or withdraw their participation once the data on the analyses phase, but when analyses are done and they are included as the respondents, they are not allowed to withdraw anymore, since it would be hard for the researcher to repeat the analyses. Utmost privacy to protect their rights during in-depth interviews and surveys.

Consent from the participating SUCs is approved by the University Presidents of each HEI and respondents' consents are established before the start of the data-gathering procedure considering the respondents are coded and for compliance with the Data Privacy Act. The data results will be deleted after utilization, analysis, and implementation and solely used for the study.

3.0 Results and Discussion

3.1 Level of Implementation on Career Development Process and Programs of HEIs

The Level of Implementation of Career Development as to Support Process and as to Program in SUCs resulted and presented the data on the level of implementation of Career Development Program. The overall implementation of the Career Development Program in the HEIs garnered (3.36) and it is described as Moderately Implemented. This is an indicator that SUCs have not provided full implementation of the career development program and its processes. Jehanzeb and Bashir (2013) recommended that the organization must promptly evaluate the success of the employee development program for it is very important and beneficial.

It was revealed in the Table 1 that the lowest career development program extent of implementation was career development counseling and career development coaching and mentoring which both indicated “Moderately Implemented” with a general weighted mean of 2.63 and 2.53, respectively.

Table 1. Overall level of implementation on career development process and programs of HEIs

Parameters	Mean	Description
Career Development Support Process	4.16	Significantly Implemented
Career Development Training Program	3.61	Significantly Implemented
Career Development Counseling Program	2.63	Moderately Implemented
Career Development Coaching & Mentoring Program	2.53	Moderately Implemented
Career Advancement Program	3.86	Significantly Implemented
Overall Weighted Mean	3.36	Moderately Implemented

3.2 Relationship between Faculty Profiles and Career Development Variables

It was also shown (Table 2) in the study that there is a significant correlation between career advancement educational background, academic rank, and the number of published research of the faculty. The study of Nezhad et al. (2020) a faculty must have a superior level of education to be promoted to a higher level position and career advancement comprises development, upgrading, growth, and exposure to a new working environment (Noori et al.,2015) and in terms research, many universities placed a great priority on research performance of the academe (Bai, 2011).

Table 2. Correlation between faculty profiles and career development variables

Variable 1	Variables 2	χ^2 value	p-value	df	Decision	Interpretation
Educational Background	Career Advancement	38.51	0.001	16	Reject H	Significant
Academic Rank	Career Advancement	71.26	0.006	44	Reject H	Significant
No. of International Trainings (Relevant)	Career Development Support Process	19.22	0.014	16	Reject H	Significant
	Career Development Training	32.83	0.008	16	Reject H	Significant
No. National Trainings (Relevant)	Career Development Training	39.58	0.001	16	Reject H	Significant
No. of Local Trainings (Relevant)	Career Development Training	35.36	0.004	16	Reject H	Significant
No. of Published Research	Career Development Counseling	22.94	0.028	16	Reject H	Significant
	Career Advancement	29.52	0.003	16	Reject H	Significant

There is also a significant relationship between career development training to international, national, and local training provided and attended Kiima (2015) confirms that employee training develops career projections as it heightens the opportunities for careers. The career development support process has also a significant relationship with the training of faculty internationally and lastly, career development counseling is significantly related to the number of published research.



Figure 1. Thematic analysis on challenges and strategies of academic career development

3.3 Career Development Challenges

Thematic analysis was also used for providing career development challenges and strategies and it was discovered that the faculty were challenged with three reasons as follows: (1) there are many tasks in Publishing Research; (2) Financial struggle in finishing a Doctorate Degree; and (3) Time constraints because of designation.

Theme 1: There are many tasks in Publishing Research

Studies have shown that faculty have more workload and that could impede challenges in publishing journals by themselves. Faculty are also highly involved in teaching and work or course load (Oermann & Hays, 2011). To further study this challenge the university must provide career development interventions on how to boost research publication track publication processes and balance out priorities according to the faculty performance and priorities.

Theme 2: Financial Struggle in Finishing a Doctorate Degree

It has been proven that lack of financial support was the major trial of the faculty in completing their doctoral degrees (Nerad & Miller, 1996). It is necessary to enhance and revisit the faculty's financial support system to enhance motivation among faculty.

Theme 3: Time Constraints because of the Designation

Respondents' another challenge that they have encountered in career development is the time constraints because of designation as compared to the study by Melnick and Meister (2008) with the bulk load in designation resulting in scarce time. To overcome this challenge, the university must limit assignment and designation, and the weight of the work of the faculty and assign them to a place where the major functions of academe are instruction, research, extension, and production.

3.4 Career Development Strategies

Subsequently, the career development strategies also revealed the following: (1) Faculty must finish a doctorate to meet the educational requirement; (2) Conduct and publish research to maximize higher possible points; and (3) Study the guidelines of NBC 461 to achieve higher academic rank.

Theme 1: Faculty must Finish a Doctorate to Meet the Educational Requirement

In NBC 461, a faculty must finish his/her doctorate to enable him to get large points in the Promotional Scheme (NBC 461, Manual on Position Classification and Compensation, 2012). A study revealed that doctoral degree completion is a very challenging trip yet a fulfilling accomplishment. The Scholarship and Support Faculty Development Plan needs to be revisited for possible revisions and harmonization for performance for future changes in the promotional scheme.

Theme 2: Conduct and Publish Research to Maximize Higher Possible Points

SUCs must take a closer look at faculty that serves well, especially those who are indulging in research (Gentry & Stokes, 2015). Motivation and encouragement to faculty in conducting and publishing research are essential for

research productivity to be high, by all means, help faculty engage in research and help publish their research outputs to be counted in their career development and progress.

Theme 3: Study the Guidelines of NBC 461 to Achieve a Higher Academic Rank

Careful review of institutional policies is essential related to the promotion guidelines of the committee for the practices consistent with the implementation leading to individual development and organizational goals (Freeman et al., 2020). A careful study and review of national and institutional guidelines for career promotion in synchronization with faculty performance and orient them thoroughly.

3.5 Proposed Model

The researcher generated a model of academic career development resulting from the quantitative and qualitative approaches and recommendations which is called “Refuncion’s Academic Career Development Model.”

Objectives

To invest in career development among SUC faculty and to provide support and guidance through career paths by analyzing the career needs and measuring and evaluating career progress.

Specific Objectives

1. To enhance participation of SUC faculty needs assessment and construct real and measurable career development level of progress.
2. To educate SUC faculty on the career strategies for them to work on performance and productivity fitting the criteria set in promotion guidelines.
3. To provide international training and strong collaboration among other Universities from around the world - their teaching, curriculum, and University practices as a benchmark and exposure to actual real and field experience.
4. To establish the culture of research and publication among SUC faculty as a normal habit that provides knowledge and facts providing a series of research-enhancing training and workshops and providing more methodology that fits the study.
5. To encourage educational progress as it’s a way to career development and must be prioritized.

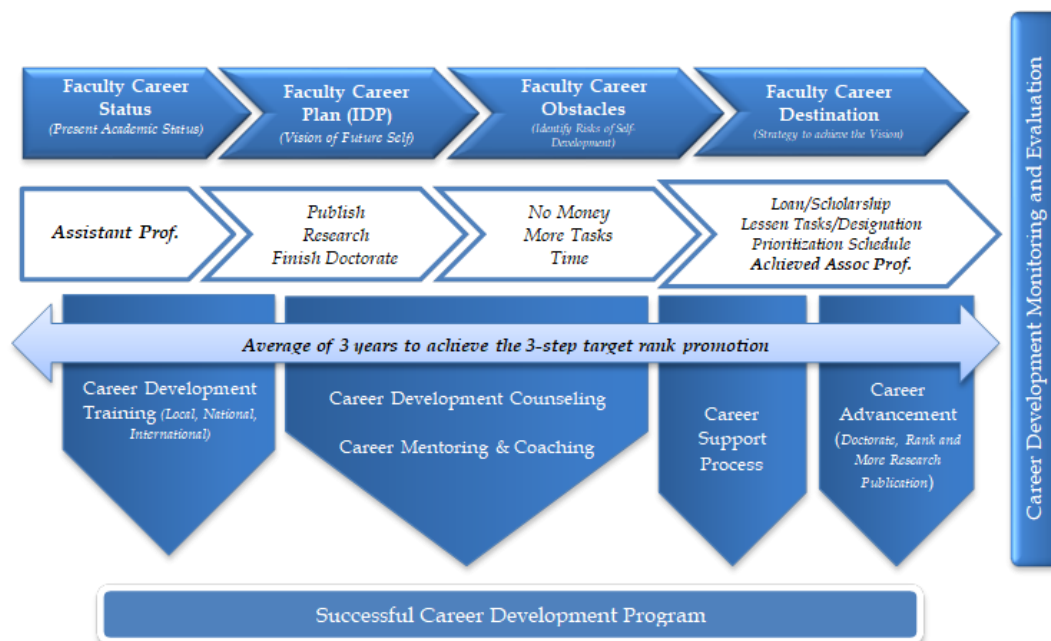


Figure 2. Refuncion’s academic career development model

The generated Model was made because of the propositions formed and will be called "Refuncion's Academic Career Development Model" and it exemplifies both strategies of faculty and management support to achieve a successful Academic Career Development Program among SUCs in Samar Island as shown in Figure 2. The figure has 4 phases: Phase 1 describes the faculty career status which states the present rank of the faculty; Phase 2 indicates the vision of what would be the vision or preferable rank as individually planned; Phase 3 requires the faculty to identify career development obstacles or risks that can occur to hamper advancement or development of one's career; and lastly, Phase 4 in which career destination can be achieved by strategizing by addressing gaps, problems. The second level of the figure provides specific plans, obstacles, and strategies that are practically provided from the results of the qualitative approach using thematic analysis. The Arrow timeline provides the ideal rank step for a faculty for 3 years if problems have been identified and strategies have been practiced. Quantitatively provided by the study career development training of faculty must be continuously programmed by the SUCs mostly from the international arena. Career Individual Plans and Career Obstacles are mainly accommodated by Career development mentoring and coaching and career development counseling so that plans must be aligned properly and awareness of strategies. Career obstacles might be a problem for the mental health of the faculty as it negatively affects the minds and might cause failure in continuing career development plans. With these obstacles and problems, career development support by the SUCs is essential to educators as they are the primary front liners for higher education and universities must invest in them. Attaining doctorate education, more research publication relates to career advancement as it boosts academic rank and is closely significantly related to the variables provided by the study.

For future studies and research, these findings can produce more research and create academic developmental solutions. Future researchers can also validate the results as to new study that addresses faculty career development and progress.

4.0 Conclusion

Level of Implementation of Career Development as to Support Process and as to Program in SUCs resulted and presented the data on the level of implementation of Career Development Program. The overall implementation of the Career Development Program in the HEIs garnered (3.36) and it is described as Moderately Implemented. It was also revealed that the lowest career development program extent of implementation was career development counseling and career development coaching and mentoring which both indicated "Moderately Implemented" with a general weighted mean of 2.63 and 2.53, respectively. The study also shows that there is a significant correlation between career advancement to educational background, academic rank, and the number of published research of the faculty. Another is that there is also a significant relationship between career development training to international, national, and local training provided and attended. The career development support process has also a significant relationship with the training of faculty internationally and lastly, career development counseling is significantly related to the number of published research.

5.0 Contributions of Authors

The author is the sole contributor to the research.

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7.0 Conflict of Interests

The authors declare no conflicts of interest about the publication of this paper.

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Mathematics Teachers' Strategies for Improving Students' Critical Thinking Skills

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Abstract. This study aimed to determine mathematics teachers' extent of utilization of strategies in terms of asking questions, analyzing situations, interpretation of data, and panel discussions in improving students' critical thinking skills. It also examined the level of critical thinking skills of students as well as its relationship to the enumerated strategies. The researchers utilized the descriptive-correlation design and employed the systematic sampling technique in identifying the 320 junior high school respondents from grade 7 to grade 10 of the school year 2023 to 2024 of the four secondary schools of Lazi District in the Division of Siquijor. The researchers used adapted and validated questionnaires and employed mean and Spearman Rank Order Correlation for the data treatment. The findings revealed that the teachers' extent of utilization in terms of the following strategies is "high": (a) asking questions, (b) analyzing situations, (c) interpreting data, and (d) panel discussion. It was also found that the level of students' critical thinking skills is "high". The data further indicated that the mentioned strategies are significantly related to students' level of critical thinking skills. These findings implicate that teachers are able to employ teaching strategies that are beneficial for improving the critical thinking skills of the students in the field of Mathematics. By incorporating these strategies, the teachers are creating an engaging and intellectually stimulating learning environment.

Keywords: Mathematics teaching; Teaching strategies; Critical thinking.

1.0 Introduction

Developing critical thinking skills is crucial for educators as they strive to equip 21st-century students with the necessary abilities to succeed in a highly competitive and technologically advanced professional landscape (Almasco, 2023). It is one of the skills along with collaboration, creativity, communication, citizenship, and character, which are skills referred to as the 6Cs of 21st-century skills (Anggraeni et al., 2022). However, there are problems in education concerning students' level of critical thinking, as indicated by numerous studies. To name a few, a study in Indonesia revealed that grade 5 pupils (Sarwanto, Fajari, & Chumdari, 2021) and grade 8 students (Basri & As' ari, 2019) have low critical thinking skills. A study in Malaysia found that students' proficiency in selecting and utilizing appropriate problem-solving strategies still needs to improve (Abdullah et al., 2019). Students, critical thinking being low is one of the common problems being faced in the world of education at various levels of schools (Haniko et al., 2023). Students who have low levels of critical thinking skills need help to solve problems effectively. This can impede their capacity to excel academically and hinder their prospects in future professional endeavors.

The issues mentioned earlier are not just a concern in foreign countries, but they are also problems in the Philippines. The latest findings from the Programme for International Student Assessment (PISA) in 2022 revealed that students in the Philippines continue to be among the least proficient in the world when it comes to mathematics. The country's performance in the 2018 PISA assessment did not show any significant improvement, and this trend has persisted in the most recent PISA 2022 results (Acido & Caballes, 2024). One of the factors

behind the Philippines' poor performance in mathematics is the low critical thinking abilities of its students. Lack of critical thinking skills among students may be a result of teachers' low expertise and knowledge (Benedicto & Andrade, 2022).

Considering these issues in the world and the Philippines, teachers must go out of their way to seek out other strategies that could help improve critical thinking skills among their learners. Among several research published, only Guevarra, Marquez, and Pecson (2017) made use in their study of the following strategies utilized by teachers in improving the critical thinking skills of students: (1) asking questions, (2) analyzing situations, (3) interpretation of data, and (4) panel discussions. Data interpretation and panel discussion as strategies for improving critical thinking skills are less explored topics in research.

The researchers are motivated to explore this study to determine teachers' extent of utilization of strategies of asking questions, analyzing situations, interpreting data, and panel discussion and believes that the use of these strategies is a contributing factor in the improvement of students' level of critical thinking skills. The result of this study would assist educators in enhancing their instructional delivery by employing effective and relevant teaching strategies.

The study determined the mathematics teachers' utilization of strategies to improve students' critical thinking skills as perceived by the students. Specifically, it (a) determined the extent of teachers' utilization of the following strategies to improve students' critical thinking skills as perceived by the students: asking questions, analyzing situations, interpretation of data, and panel discussion; (b) examined the level of critical thinking skills of students; and (c) explored the relationship between the teachers' utilization of the enumerated strategies and the students' level of critical thinking skills. The findings of this study would provide valuable insights for teachers to understand how well they are teaching critical thinking skills. Furthermore, this information can be used to improve teaching methods and enhance the learning experience for students.

2.0 Methodology

2.1 Research Design

The study utilized a descriptive-correlational survey approach. It is descriptive as it aimed to (a) describe the strategies employed by teachers to improve students' critical thinking skills through asking questions, analyzing situations, interpretation of data, and panel discussion; and (b) identify the level of students' critical thinking skills. On the other hand, it was also correlational, as it examined the relationships between the variables.

2.2 Research Participants

The respondents of the study were the junior high school students from Grade 7 to Grade 10 of the school year 2023-2024 in the Lazi District in the Division of Siquijor. A systematic random sampling technique was applied. There was a total of 320 respondents. The number of students who served as respondents differed depending on the school's grade level population.

2.3 Research Instrument

The researchers utilized two adapted questionnaires in this study. One questionnaire was formulated by Sarigoz (2012) in the study "Assessment of the High School Students' Critical Thinking Skills" which comprised fifteen (15) items measuring their level of critical thinking skills. On the other hand, the other questionnaire which encompassed the strategies in asking questions, analyzing situations, interpretation of data, and panel discussion with ten (10) items each were taken from the study of Guevarra, Marquez and Pecson (2017) entitled "Development of Students' Critical Thinking Skills At Public Secondary Schools, Dinalupihan District: An Assessment." Approval of the authors were sought prior to the use of these questionnaires. Since adapted, the questionnaires underwent validation by three (3) master teachers for content validity. The conduct of dry run with thirty (30) selected students of Campalanas National High School (CNHS) as participants and the use of Cronbach's Alpha Test were done to ensure the survey instrument's reliability.

2.4 Data Gathering Procedure

The researchers forwarded a written request to the Schools Division Superintendent of Siquijor division upon the endoresement of the graduate school dean of Foundation University. The signed and approved letter was

presented to the school heads of the four (4) secondary schools of Lazi District. After having the consent and a schedule to conduct the study, the researchers distributed the survey questionnaires to the respondents. Prior to that, explanation to the purpose and intent of the study were explained comprehensively. The researchers collected the completed questionnaires from the students immediately after they had finished answering the questions. The students' responses were recorded in a spreadsheet, and the researchers employed the mean and Spearman's Rank-Order Correlation for the data analysis.

2.5 Ethical Considerations

This research study followed ethical guidelines throughout the study. The researchers kept respondents' details private to protect their dignity and privacy. The respondents' readiness to provide the necessary data for the study was a sufficient proof of their informed consent. Moreover, the safety of the respondents was given utmost importance. Furthermore, The study followed the ethical guidelines set by the Ethics Committee of Foundation University. Before starting, the researchers got approval from the relevant authorities.

3.0 Results and Discussion

3.1 Teachers' Strategies to Improve Students' Critical Thinking Skills

Asking Questions

Table 1 reveals the perception of students towards their teachers' extent of utilization of strategies in terms of asking questions to improve students' critical thinking skills. Collectively, the teachers have a "high" extent of utilization, as reflected in the composite mean of 3.92.

Table 1. Descriptive statistics of teachers' extent of utilization of strategies of asking (n=320)

Indicators	Mean	Interpretation	Extent
1. rephrases questions to make them clear to us.	4.09	Often	High
2. encourages us to elaborate our ideas.	4.00	Often	High
3. asks us to justify our answers.	3.99	Often	High
4. asks open-ended questions.	3.97	Often	High
5. uses elevating questions to develop higher order thinking skills.	3.97	Often	High
6. asks questions that will prompt us to investigate a thought or process.	3.93	Often	High
7. stimulates discussion with probing questions.	3.84	Often	High
8. challenges us with funneling questions.	3.82	Often	High
9. encourages us to formulate questions of our own.	3.79	Often	High
10. asks questions in different domains of learning like cognitive, affective, and psychomotor.	3.78	Often	High
Composite	3.92	Often	High

To point out, the teachers have "high" usage of rephrasing questions to make them clear to the students ($\bar{x} = 4.09$), which ranks first among all other indicators. Rephrasing questions promotes better understanding and develops student engagement and critical thinking. It also fosters deeper comprehension and retention of the concepts of the lesson. This aligns with the results of Milawati and Suryati (2019), wherein they unveiled that rephrasing questions is one of the questioning strategies that encourage students to respond more and allows the teacher to better understand the depth of the student's knowledge. Additionally, rephrasing questions is one of the modification strategies used to enhance the clarity of teachers' questions, thereby providing students with more opportunities to reconsider and formulate their responses (Jusoh, Rahman, & Salim, 2020).

Meanwhile, asking students to elaborate on their ideas ($\bar{x} = 4.00$) encourages them to articulate their thoughts and enhance their communication skills. This affirms the statement of Gillies (2019) that discourse-intensive instructional approaches that allow students to elaborate their ideas can facilitate their ability to build upon the perspectives of their peers, seek clarification, and draw reasonable conclusions. Wilen and Clegg (as cited in Brualdi Timmins, 2019) suggested probing students' responses to have them clarify ideas, support a point of view, or extend their thinking to foster higher student achievement.

It is likewise evident in the table that teachers have "high" usage of different ways of asking questions, as indicated in the mean values ranging from 3.78 to 3.97. The questions asked focus on the different domains of learning: cognitive, affective, and psychomotor. Targeting different domains of learning with questions provides a well-rounded educational experience. Cognitive questions stimulate thinking and understanding, fostering intellectual growth. Affective questions address emotions and values, promoting empathy, self-awareness, and social skills.

Psychomotor questions involve physical actions, enhancing coordination, dexterity, and practical skills. By addressing all three domains, educators cater to diverse learning styles and abilities, promoting holistic development in students.

The above results only prove that using questioning methods is a powerful strategy that educators can apply to guide and support learning (Hmelo-Silver, Bridges & McKeown, 2019). Questioning techniques can significantly impact the flow and direction of discussions, helping either expand or limit the scope of discourse. Additionally, questioning serves to concentrate students' attention on specific content, recall existing knowledge, and support the setting of learning objectives and goals.

Analyzing Situations

Table 2 shows students' views on their teachers' extent of utilization of strategies in terms of analyzing situations to improve students' critical thinking skills. Entirely, the data reveal that there is a "high" extent of utilization as depicted in the composite mean of 4.01.

Table 2. Descriptive statistics of teachers' extent of utilization of analyzing situations (n=320)

Indicators	Mean	Interpretation	Extent
1. asks us to analyze problems that are needed to be solved.	4.37	Often	High
2. helps us analyze clues and hints in treating various situations.	4.14	Often	High
3. uses inferential questions as guide for us in analyzing situations	4.09	Often	High
4. provides us opportunities to correct each other's analysis.	4.08	Often	High
5. encourages us to collaborate our ideas during brainstorming.	3.98	Often	High
6. provides us opportunities to put ourselves in a given situation.	3.93	Often	High
7. asks our reactions on a given situation	3.92	Often	High
8. cites logical situations that arouse our curiosity and interest.	3.88	Often	High
9. guides us to break down concepts that we are learning.	3.84	Often	High
10. exposes us to situations that require us to think critically.	3.82	Often	High
Composite	4.01	Often	High

It is also exposed in the table that teachers have "high" usage of asking students to analyze problems that need to be solved ($\bar{x} = 4.37$), and helping students analyze clues and hints in treating various situations ($\bar{x} = 4.14$). These are the two indicators in the top-ranks. The act of analyzing problems encourages students to engage in mathematical reasoning, such as making connections from previous knowledge, recognizing patterns, and drawing logical conclusions. Meanwhile, analyzing clues and hints requires students to think critically, make connections, and draw inferences to uncover the relevant information needed to solve the problem. According to Brookhart (as cited in Anggraini & Pratiwi, 2021), effective learning should go beyond simply having students retrieve or comprehend information from their past learning experiences. It should also challenge students to engage in more complex cognitive processes. This includes thoroughly analyzing the content they are studying, reflecting deeply on what they have been taught, and then applying that knowledge in creative ways to address real-world issues and problems. This statement is in affirmation of the statement of Erdogan (2019) that critical thinking is the act of utilizing reflective, rational, and reasonable thought processes to gather, interpret, and evaluate information, ultimately leading to a well-informed judgment.

Interpretation of Data

Table 3 shows the students' view toward their teachers' extent of utilization of strategies in terms of interpreting data to improve their critical thinking skills. Explicitly, the data reveal that there is a "high" extent of utilization, as shown in the composite mean of 3.83. This indicates that teachers are actively engaged in designing lessons and activities that require students to understand data and how to find accurate data, how to consider the source of data and its purpose, how to determine if data is appropriate, and how to use data successfully.

Additionally, the data manifests that the teachers have "high" usage of making students analyze, evaluate and synthesize data integral to learning ($\bar{x} = 4.11$). A data-literate student should possess the necessary quantitative and analytical skills to address a problem, as well as the ability to apply these tools in context to analyze, interpret, and effectively communicate their findings from data (Kjelvik & Schultheis, 2019). When teachers encourage students to analyze, evaluate, and synthesize data, they are fostering higher order thinking skills (HOTS). Hence, high usage of these skills indicates that teachers are effectively engaging students in HOTS, which is a positive sign for educational development.

Table 3. Descriptive statistics of teachers' extent of utilization of interpretation of data (n=320)

Indicators	Mean	Interpretation	Extent
1. makes us analyze, evaluate, and synthesize data integral in learning.	4.11	Often	High
2. makes us collaborate with one another.	3.95	Often	High
3. presents data either in tables, graphs, & other illustrations for analysis.	3.92	Often	High
4. uses data in teaching and learning instruction.	3.84	Often	High
5. uses questions to prompt our assertions and interpretations.	3.84	Often	High
6. helps us implicate the data interpreted with other data.	3.82	Often	High
7. facilitates small group discussion in interpreting data.	3.79	Often	High
8. makes us see concepts from various perspectives during the interpretation of data.	3.78	Often	High
9. makes us discriminate the content of data we are interpreting.	3.66	Often	High
10. makes on-going use of data as part of our habits.	3.60	Often	High
Composite	3.83	Often	High

The table also reflects students' perception of teachers' "high" usage of making them collaborate ($\bar{x} = 3.95$). This indicates that teachers are incorporating collaborative learning strategies into their teaching methods. Collaborative data interpretation requires students to engage in critical thinking, analyze the data from multiple angles, and work together to arrive at meaningful conclusions. This is aligning to the study of Warsah et al. (2021), that collaboration entails interactions. In collaborative learning, students actively participate in the processes of thinking, reasoning, analyzing, and elaborating with one another about the learned material while also understanding each other, completing their competencies, being emphatic, and feeling the essence of their collaborations.

A crucial aspect of the teacher's role as a facilitator is to aid in fostering productive group dynamics among students, particularly in the interpretation of data. This entails observing the group, ensuring that all members are engaged and that key ideas are not overlooked (Hmelo-Silver, Bridges & McKeown, 2019). This finding is also evident in the study of Johnson and Johnson (as cited in Gillies, 2019) that when learners collaborate, they develop the ability to listen attentively to others, clarify any misunderstandings, assist one another, and partake in practices that enhance learning. Through participating in such events, students cultivate the capacity to effectively communicate and engage in debates with one another, fostering bonds that enhance group unity, self-assurance, and trust; these are crucial elements for students to thrive in a collaborative environment.

Panel Discussion

Table 4 presents the students' perception of the teachers' extent of utilization of strategies in terms of panel discussion to improve their critical thinking skills. Cumulatively, the data reveal that there is a "very high" extent of utilization, as depicted in the composite mean of 4.01.

Table 4. Descriptive statistics of teachers' extent of utilization of Interpretation of Data (n=320)

Indicators	Mean	Interpretation	Extent
1. presents an issue or topic involving an important conflict in values and/or interest.	4.21	Always	Very High
2. makes us express our ideas freely.	4.14	Often	High
3. asks us to provide mathematical definitions, postulates, and theories about the topic on the panel discussion.	4.13	Often	High
4. helps us understand the need for fair procedures in discussing an issue or topic.	4.10	Often	High
5. gives us opportunity to take part on the roles to panel discussion.	4.05	Often	High
6. assists us in preparation for the discussion by directing us to various source materials, authorities in fields, etc.	3.99	Often	High
7. encourages us to perform collaborative work.	3.98	Often	High
8. indicates objectives before starting the panel discussion.	3.98	Often	High
9. makes us criticize important points to ponder.	3.89	Often	High
10. makes us research certain topics before the discussion.	3.67	Often	High
Composite	4.01	Often	High

The result shown in the table is similar to the finding of Safarnejad and Montashery (2020) that panel discussion aids learners to have skills in critical thinking. Panel discussion encourages active participation from students. As stressed by Acharya et al. (2019), panel discussion communicatively stimulates the mental faculties. Students can ask questions, offer their insights, and engage in discussions with the panelists. Active participation facilitates the cultivation of critical thinking and communication abilities in students.

The data, likewise, suggests that the teachers have "very high" usage of presenting an issue or topic involving an important conflict in values and interest ($\bar{x}= 4.21$). This suggests that teachers are frequently using this teaching strategy. By presenting issues or topics that involve conflicts in values and interests, teachers are encouraging students to think critically and solve problems, which are important skills in mathematics. Additionally, by making the learning of mathematics relevant to real-world issues, they are helping students understand the practical applications of mathematics.

Moreover, it is exhibited in the table that teachers display "high" usage of making students express their ideas freely ($\bar{x}=4.14$). This indicates that the teachers are encouraging and facilitating an environment where students feel comfortable sharing their thoughts and ideas. Fostering a secure and encouraging atmosphere in which students are able to articulate their thoughts openly enhances their self-assurance in their mathematical aptitude. This result is evident in the study of Sobhy Abo El-yazid, Elsayed, and Ebrahim (2024). They stressed that panel discussion allows students to interact with each other in a democratic, conversational manner, taking turns to speak.

3.2 Critical Thinking Skills of Students

Table 5 reveals the students' level of critical thinking skills. As indicated in the overall result, the data show that there is a "high" level of critical thinking skills, as depicted in the composite mean of 3.55.

Table 5. Descriptive statistics of critical thinking skills of students (n=320)

Indicators	Mean	Interpretation	Level
1. I make or do things with great care or with much detail with my thoughts.	3.84	Often	High
2. I carefully study it by thinking the data in relation to that problem/situation.	3.78	Often	High
3. I understand the level of its seriousness and importance and notice unknown things from the explanations related to it.	3.73	Often	High
4. I understand the main idea and plan/purpose of the writer after carefully reading that problem/situation.	3.70	Often	High
5. I concentrate on it together with my thoughts while it is explained.	3.69	Often	High
6. I express my thoughts regarding it and I can defend my opinion.	3.68	Often	High
7. I understand whether the information is original or reinterpreted.	3.64	Often	High
8. I make inferences based on widely accepted facts, and I can evaluate the reasons for these actions.	3.61	Often	High
9. I detect what this is all about and eventually explain and define them.	3.60	Often	High
10. I think critically, sensibly, logically, and analytically.	3.59	Often	High
11. I visualize it and can feel as the main character of that problem/situation.	3.58	Often	High
12. I find the contradiction between reason and result after considering the explanations from it.	3.57	Often	High
13. I improve its essence intelligently considering my initial thoughts with it.	3.49	Often	High
14. I explain my thoughts regarding it convincingly and logically.	3.46	Often	High
15. I pass an accurate judgement on it, and I can come to a conclusion with my thoughts.	3.44	Often	High
16. I establish striking connections by means of explanations regarding it.	3.44	Often	High
17. I predict the ideas explained by means of explanations regarding it.	3.43	Often	High
18. I am sure that my thoughts do not misguide me.	3.42	Often	High
19. I make comments and judgments based on my thoughts.	3.40	Sometimes	Moderate
20. I solve it easily and make intelligent views or inferences.	3.38	Sometimes	Moderate
21. I deal it with fair and unbiased opinions.	3.03	Sometimes	Moderate
Composite	3.55	Often	High

The above results corroborate with the results of Farillon (2022). The result of the study of Farillon on the level of critical thinking skills of Grade 12 students has a composite mean of 3.68 as compared to the composite mean of 3.54 of the result of this study falls within the same range of 3.41-4.20, which has a descriptive rating of "developed" in that of Farillon's (2022). The difference lies only in the grade level since Farillon (2022) tested Grade 12 students while this study tested junior high school students from Grade 7 to Grade 10. Likewise, the result of the study of Demir (2022) revealed that high school students demonstrated strong analytical abilities and exhibited a high degree of critical thinking dispositions.

Moreover, this finding also corroborated with that of Putra, Riastini and Paramita (2022). Accordingly, the level of the critical thinking skills of the fifth graders at the Elementary School in Sukawati District is in the high category during the face-to-face post-pandemic period. This contradicts with the findings of Basri and As' ari (2019). They

found that junior high school students' critical thinking skills were in the "low" category. However, data in their study were obtained using math tests and interviews.

3.3 Relationship Between Teachers' Strategies and Students' Critical Thinking Skills

Table 6 indicates the data in identifying the relationship between the teachers' extent of utilization of the strategies in acquiring critical thinking and students' level of critical thinking skills. Using Spearman Rank Order Correlation, it is shown that all p-values are less than the level of significance (0.05). This means that there is sufficient evidence to reject the null hypothesis. This signifies that there is a significant relationship between the teachers' extent of utilization of the enumerated strategies and students' level of critical thinking skills.

Table 6. Correlation analysis for the relationship between the teachers' strategies and students' critical thinking skills (n=320)

Variables Correlated to Critical Thinking Skills	r_s	p	Decision	Remark
Asking Questions	0.469	<.001	Reject H_{01}	Significant
Analyzing Situations	0.491	<.001	Reject H_{01}	Significant
Interpretation of Data	0.459	<.001	Reject H_{01}	Significant
Panel Discussion	0.440	<.001	Reject H_{01}	Significant

Note: Level of significance = 0.05

Specifically, the table reveals that there is a significant relationship between the teachers' extent of utilization of strategy in terms of asking questions and the students' level of critical thinking skills ($p < .001$). It was found by Clase and Bonk (as cited in Bezanilla et al., 2019) that despite the numerous techniques to foster critical thinking, the most effective method is when teachers question the students, and the level of student thinking should match the complexity of the questions asked. When educators prepare their lessons, they should think about the goal, the complexity of the questions, and the type of questions that will best reach the set goal. Furthermore, every student requires exposure to challenging questions. Research by Collins (as cited in O'Reilly, Devitt, and Hayes, 2022) indicates that demanding tasks stimulate children to think, analyze, summarize, and explain what they have read. This enhanced mental involvement is due to the teacher's guiding questions. Moreover, Säre, Tulviste, and Luik (2019) argued that questioning techniques can be a great way to encourage verbal reasoning and learning, but it is important to choose the right types of questions.

Moreover, the table unveils that there is a significant relationship between the teachers' extent of utilization of strategy in terms of analyzing situations and the students' level of critical thinking skills. Pithers and Soden (as cited in Alsaleh, 2020) backed the use of questioning as a way to improve critical thinking abilities and pointed out other methods that, based on their literature review, altered students' thought processes. The most important of these involves students deliberately reflecting on their main ideas and being motivated to analyze these ideas. Teachers, for example, can help students evaluate their thoughts by inquiring about similarities, assumptions, and alternatives, challenging preconceived notions, categorizing, and determining which data or information validates the idea.

Additionally, the table suggests that there is a significant relationship between the teachers' extent of utilization of strategy in terms of interpretation of data and the students' level of critical thinking skills ($p < .001$). This result is similar to the findings of Mourad et al. and Langen et al. (as cited in Kjellvik and Schultheis, 2019) that having experiences in collecting, analyzing, and interpreting data, students can have the skills to become critical thinkers and the ability to understand the value of data in comprehending the natural world. Similarly, Cook et al. (as cited in Gibson and Mourad, 2018) argue that having the ability to create and use different forms of data is a key component of critical thinking.

It is further stipulated in the table that there is a significant relationship between the teachers' extent of utilization of strategy in terms of a panel discussion and the students' level of critical thinking skills ($p < .001$). This result is similar to the finding of Safarnejad and Montashery (2020) that panel discussion aids learners to have skills in critical thinking. Panel discussion encourages active participation from students. As stressed by Acharya et al. (2019), panel discussion communicatively stimulates the mental faculties. Students can ask questions, offer their insights, and engage in discussions with the panelists. This active engagement helps students develop critical thinking and communication skills.

4.0 Conclusion

The teachers are able to employ teaching strategies that are beneficial for improving the critical thinking skills of the students in the field of Mathematics. By incorporating these strategies, the teachers are creating an engaging and intellectually stimulating learning environment. The emphasis on the use of questioning, situation analysis, data interpretation, and panel discussion strategies are on developing students to think critically, evaluate information from diverse perspectives, and develop problem-solving skills. These skills are very important for success in the 21st century, as they enable students to navigate complex challenges, make informed decisions, and communicate their mathematical ideas effectively. Overall, the utilization of these teaching strategies in mathematics is a clear indication that teachers are committed to preparing their students for the demands of the modern world, equipping them with the necessary mathematical skills and competencies to thrive in their future endeavors. Hence, it is suggested that school administrators create a mentorship program where experienced teachers, skilled in teaching critical thinking, mentor and support new teachers. Teachers should also focus on developing students' abilities to critically analyze information, engage them in problem-solving activities that require deep thinking, and create an environment that promotes the exchange of ideas and the exploration of various perspectives. Furthermore, teachers are encouraged to utilize technology-enhanced assessment methods to offer a more genuine and thorough evaluation of students' critical thinking skills in mathematics.

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The authors of this research contributed equally to the final version of the document.

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7.0 Conflict of Interests

The authors asserted that they have no conflicts of interest related to this study.

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Navigating English Learning Challenges During the Pandemic: Insights from the National Learning Camp and Subsequent Performance Trends

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Abstract. The study aimed to investigate the correlation between students' performance in English 8, the challenges they faced in learning English during the pandemic, and their performance after the National Learning Camp. The researcher utilized descriptive-correlational and comparative designs and employed the systematic sampling technique in identifying the 240 respondents from the Grades 9 learners of Dumaguete City National High School. The researcher used validated questionnaires and employed percentage, weighted mean, and multiple regression analysis in treating the data. The study revealed that the National Learning Camp (NLC) has shown a positive impact on the students' performance in English 8. The students' performance improved after the NLC, with a statistically significant difference. Additionally, the data revealed that the challenges faced by students in terms of access, equity, quality, resiliency, and well-being are moderate. There is a significant relationship between the extent of students' challenges in learning English during the pandemic in terms of access, suggesting that these issues may have influenced their performance.

Keywords: English language learning; Learning camp; Pandemic.

1.0 Introduction

A well-educated populace is more able to achieve its full potential and contribute to society. Educational competency is one key factor that drives a country's social and economic development (Mulenga and Kabombwe, 2019). Therefore, countries need to implement rigorous learning assessments for monitoring and supporting universal learning (Gafforov and Abdulkhay, 2022). This is because assessment results are used to form educational policies and practices (Raudonyte, 2019). Notably, academic performance is a vital criterion for determining educational quality. For that reason, academic performance is a major issue not only for those involved in the education sector but also for the general population and the students themselves (Affuso et al., 2022). In addition, student assessment involves systematically gathering and analyzing information to enhance student learning. Its purposes include providing feedback to both instructors and students about the achievement of learning objectives, validating meaningful learning, and informing instructional decisions to contribute to student success. (Fisher and Bandy, 2019)

Meanwhile, learning assessments in the Philippines show worrying academic performance results. Bernardo et al. (2021) said that the percentage of learners who are not proficient in reading is increasing. In addition, the 2019 Southeast Asia Primary Learning Metrics (SEA- PLM) revealed that 27% of Grade 5 Filipino students could only recognize single words, with only 10 % possessing sufficient reading skills for a successful transition to high school (Haw and Trinidad. 2021). This had a direct effect on the Philippines' ranking on the English Proficiency Index

(EPI) in 2020. According to Education First (EF), the Philippines dropped to 27th place this year (Baclig, 2020). Addressing poor reading proficiency requires a holistic approach that considers individual well-being, educational policies, and teacher development. By prioritizing literacy, the Philippines can empower its learners and improve overall educational outcomes (Albert, et al., 2023).

For twenty years, national learning assessments have gained significance in measuring educational achievement and tracking advancements toward Sustainable Development Goal (SDG) 4 (Kioupi and Voulvoulis, 2019). This is one of the main reasons why most national learning assessments target students transitioning from elementary school to junior high school and from junior high school to senior high school, respectively, since both are critical periods in the student's educational journey. National learning assessments during critical transitions have implications for educational quality, student well-being, and policy decisions. By addressing these implications, the education system can better support learners' growth and success (Minkos and Gilbar, 2021).

Although numerous studies proved the importance of these assessments, only a handful of these studies delved deeper into the roots of the underachievement and hindrances in academic progress (Özer, 2020). Hence, this study is a novelty since it deals with the student's performance in English 8 and the results of their performance particularly after the National Learning Camp (NLC). This learning gap recovery program was created to address learning losses caused by the COVID-19 pandemic (DepEd Order No. 014, s. 2023). Also, this initiative is a response to the country's underperformance in international assessments of students' reading, science, and mathematical skills. The opportunities to learn from this study are numerous, especially in understanding the students' performance in their English 8 subject. Also, if the performance of the students is seen to have improved after the said learning camp, this can be used for the development of other interventions to enhance the delivery of instruction and to make informed decisions for curriculum implementation. This study has implications for policy, instruction, equity, and curriculum development. By analyzing NLC outcomes, educators and policymakers can make informed decisions to enhance student learning and bridge educational gaps. Therefore, this study aims to explore the relationship between student's English learning challenges during the pandemic and their subsequent academic performance after participating in the National Learning Camp (NLC).

2.0 Methodology

2.1 Research Design

The study utilized the descriptive-correlational research design. The descriptive nature was used to gain information on the student's performance in English 8 before and after the pandemic. Also, the descriptive process would go beyond gathering and tabulating data but also the elements of interpretation of the meaning and significance of what was to be described. On the other hand, it is also correlational because it examines the relationship between the variables identified in the study.

2.2 Research Participants

The respondents of the study are the Grade 9 students of Dumaguete City National High School for School Year 2023-2024. The grade level is composed of ten (10) sections with forty-seven (47). The respondents of the study came from the 10 sections and were randomly selected using the systematic sampling technique wherein every 2nd student in the list was chosen to be the respondent.

2.3 Research Instrument

The study used a validated questionnaire with reliable items to examine every construct of the challenges met by students in learning English during the pandemic. The Cronbach's Alpha coefficients are the following: access was 0.701, equity was 0.712, quality was 0.703, and resiliency and well-being were 0.723.

2.4 Data Gathering Procedure

After the design hearing, the researcher integrated all the corrections and suggestions of the panel members. The researcher wrote a letter asking permission to conduct the study to the Schools Division Superintendent of the Division of Dumaguete City upon the endorsement of the Dean of the Graduate School of Foundation University. After the permission was granted, the researcher gave a copy of the letter to the school principal, the provincial head of Grade 9, and the respective advisers of the students. During the distribution of the survey questionnaires and the test questionnaires, the researcher explained to the students the purpose and importance of the research.

The retrieval of the survey questionnaires and test questionnaires was done right after the students had answered them. Furthermore, the results were tallied using MS Excel and the free statistical software after which they were analyzed and interpreted.

2.5 Ethical Considerations

All necessary ethical considerations and protocols for the entire duration of the study were stringently followed. The researcher also maintained the confidentiality of all data obtained, including the student's identity as well as their answers and raw scores. Moreover, the researcher secured ethical approval from the Ethical Committee of the University Research Office.

3.0 Results and Discussion

3.1 Students' Performance in English before the NLC

Table 1 presents the data showing the students' performance in English before the NLC. The said performance includes their raw scores in their fourth grading examination in English 8. Generally, the results show that the student's performance falls in the "very satisfactory" classification as evident in the weighted mean value of 87.33%. This result implies that the students have developed the fundamental knowledge and skills in English, have attained a core understanding of the subject's concepts, and can self-sufficiently apply this knowledge and skills through authentic performance tasks (DO 73. S. 2012).

Table 1. Descriptive statistics of students' performance in English before the NLC (n = 277)

Rating	Verbal Description	Frequency	Percentage
90% - 100%	Outstanding	101	42.08
85% - 89%	Very Satisfactory	52	21.67
80% - 84%	Satisfactory	48	20.00
75% - 79%	Fairly Satisfactory	39	16.25
Mean = 87.33%			
SD = 6.74			

Meanwhile, the table also displays that a minority of the students' performance in English falls in the "fairly satisfactory" category as evident in the percentage of 16.35. This implies that there may be room for improvement in the overall English proficiency of the student population. This may also indicate the need for targeted interventions to address any gaps in learning and ensure that all students can succeed in their English language studies. A study by Eden, et al. 2024 stated that addressing language proficiency gaps requires a holistic approach involving educators, students, parents, and the community. Also, a study by Ramzan, et al., 2023 mentioned that by implementing targeted strategies, schools can create an environment where all students can succeed in their English language studies.

3.2 Students' Performance in English after the NLC

Table 2 reflects the level of performance of the students in English after the NLC. Generally, the results show that the students' performance falls in the "very satisfactory" classification as evident in the mean value of 88.10%.

Table 2. Descriptive statistics of students' performance in English after the NLC (n = 277)

Rating	Verbal Description	Frequency	Percentage
90% - 100%	Outstanding	116	48.33
85% - 89%	Very Satisfactory	46	19.17
80% - 84%	Satisfactory	45	18.75
75% - 79%	Fairly Satisfactory	33	13.75
Mean = 88.10%			
SD = 6.70			

This result is supported by the study of Rachmawati et al. (2020). They reviewed twenty-five scientific publications related to Fun English Camp as an English learning approach for beginner students. Through this review, they found scientific evidence supporting the idea that introducing a learning method like Fun English Camp can have a positive impact on promoting language learning among elementary school children in Indonesia. This suggests that the Fun English Camp method could be an effective and engaging approach to incorporate into the curriculum design for elementary schools in Indonesia. Participants demonstrated improved vocabulary, pronunciation, fluency, grammar, comprehension, and self-confidence. Another study by Frimaulia and Azmi

(2023) revealed that English Fun Camp had a positive impact on public speaking skills. Participants demonstrated improved vocabulary, pronunciation, fluency, grammar, comprehension, and self-confidence by leveraging this method, educators may enhance language learning outcomes and create a more engaging and effective learning environment for students.

The data also reflects the standard deviation of the academic performance of the students. This standard deviation is used to measure how dispersed the data is with the mean. With a result of 6.70, this indicates that the data are far from the mean, or the data are scattered.

3.3 Difference in the Performance of the Students Before and After the NLC

Table 3 indicates a significant difference existing in the learners' academic performance before and after the NLC ($p = 0.000 < \alpha = 0.05$). This result affirms the finding of Tamba and Panggabean (2020) that the learners use their prior knowledge to establish new knowledge or respond to new information. Being unable to have the necessary knowledge leads to difficulties since there is a conflict between prior knowledge and new knowledge. In other words, prior knowledge and current knowledge are related. Meanwhile, another study by Firmansyah et. al (2023) asserts that the *learners' internal and external factors of motivation are the pulling forces of learning English*.

Table 3. Analysis for the difference in the performance of the students before and after the NLC (n = 240)

Test	Mean	SD	t	p	Decision	Remark
Before	87.33	6.74	4.341	0.000	Reject H_{01}	Significant
After	88.10	6.70				

Level of significance = 0.05

These findings imply that the NLC greatly helped the students in learning the subject. The properly laid out concepts and well-crafted activities like interactive workshops, hands-on projects, team-building exercises, group discussions, educational games, outdoor activities, cultural exchanges, and presentations. of the said camp enabled them to comprehend the lessons and even to work independently. These have also been agreed by Irwansyah et al. (2021) who said that learning materials including learning exercises and evaluations, must use a language that is easy to understand and can be used independently. It was further observed that the wider range of skills can be applied to practical activities, and sharing and discussing ideas can play a key role in deepening one's understanding of a particular subject area.

Indeed, according to Kiyasova, et al. (2022), interactive learning is extremely effective not only in terms of gaining knowledge but also in terms of the formation of personal skills and the development of the character of students. This is supported by the study of Xalilova, et al, (2021). They stated that Interactive English teaching methods are more effective than traditional classical lessons. Interactive approaches empower learners to express their opinions.

3.4 Students' Challenges in Learning English during the Pandemic In Terms of Access

Table 4. Descriptive statistics of students' challenges in learning English during the pandemic in terms of access (n = 240)

Indicators	Mean	Interpretation	Extent
1. I had no one to ask when I encountered problems related to the lessons in English.	3.10	Moderately Agree	Moderate
2. I lacked access to online platforms due to internet -related problems.	2.85	Moderately Agree	Moderate
3. I had difficulty dropping and picking my modules on time due to financial constraints.	3.14	Moderately Agree	Moderate
4. I experienced a lack of access to academic sources from home.	3.17	Moderately Agree	Moderate
Composite	3.06	Moderately Agree	Moderate

Table 4 shows the data in identifying the level of challenges in learning English during the pandemic in terms of access. It is reflected in the composite mean of 3.06. Generally, it shows that students classify the challenges met as "moderate". This means that access is in the adequate range. Specifically, it shows that students consider having no one to ask when they encountered problems related to the lesson in English as "moderate" with a composite mean of 3.10, lacking access to online platforms due to internet- related problems as "moderate" with a composite mean of 2.85, having difficulty dropping and picking modules on time due to financial constraints as "moderate"

with a composite mean of 3.14 and lacking access to academic sources from home as “moderate” with a composite mean of 3.17.

These findings are in line with the results of the study of Maphosa (2021) wherein he revealed that there is a significant loss of learning due to the unavailability of technology and the cost of data. Nevertheless, students agreed that online learning represents the future of teaching and learning. The findings also show that subsidized access to resources and materials is critical for the effective adoption of e-learning. This is also supported by the study of Jaca (2020) which revealed that one of the challenges encountered by participants in online learning was a poor and unstable internet connection. Another study by Ferri and Guzzo (2020) revealed that the technological difficulties primarily stem from unreliable internet connections and the insufficient availability of electronic devices among students.

In Terms of Equity

Table 5 exposes the data in identifying the level of students’ challenges in learning English during the pandemic in terms of equity. It is reflected in the composite mean of 3.15. Generally, it shows that the students classify the challenges met as “moderate”. Specifically, the table shows that students classify not given immediate feedback on the given activities as “moderate” with a composite of 3.06, had difficulty clarifying with their teachers on issues regarding assignments as “moderate” with a composite mean of 3.12, lacking some learning resources for any project or performance task as “moderate” with a composite mean of 3.25, overloading with a lot of remote learning tasks as “moderate” with a composite mean of 3.40, and having no adequate learning space at home as “moderate” with a composite mean of 2.94.

Table 5. Descriptive statistics of students’ challenges in learning English during the pandemic in terms of equity (n = 240)

Indicators	Mean	Interpretation	Extent
1. I was not given immediate feedback on the given activities.	3.06	Moderately Agree	Moderate
2. I had difficulty clarifying with my teachers on issues regarding assignments.	3.12	Moderately Agree	Moderate
3. I lacked some learning resources for my projects or performance tasks.	3.25	Moderately Agree	Moderate
4. I was overloaded with a lot of remote learning tasks.	3.40	Moderately Agree	Moderate
5. I don’t have an adequate learning space at home.	2.94	Moderately Agree	Moderate
Composite	3.15	Moderately Agree	Moderate

According to Esteron (2021), equity in online learning refers to the principle of ensuring that all individuals have equal access to and opportunities for quality education in an online setting. It aims to eliminate barriers and promote inclusivity, ensuring that everyone, regardless of their background or circumstances, can benefit from online learning. Al-Jarf (2021) added that the initiatives and actions to overcome the lack of devices and internet access in online learning are like governorates donating tablets to disadvantaged students, charity organizations and affluent individuals providing tablets, laptops, and financial aid, teachers collecting money to purchase tablets for needy students.

In addition, Rotas and Cahapay’s (2020) study revealed that being overloaded with lesson activities is one of the difficulties faced by students in remote learning. However, a study conducted by Trotter and Czerniewicz (2022) contradicted this result. They found in their study that several contradictions and tensions emerged during this period concerning exacerbated inequities, pedagogical compromises, cultural anxieties, and psychological pressures that could not be fully resolved but only managed. Also, according to the study of Easterbrook et al. (2023) that amid the pandemic, students eligible for free school meals and from financially disadvantaged families faced difficulties with home learning due to noise, limited space, lack of technology, and inadequate internet access.

In Terms of Quality

Table 6 shows the data in identifying the level of challenges in learning English during the pandemic in terms of quality. This is reflected in the composite mean of 3.40. Generally, this figure shows that students classified those challenges as “moderate”. Specifically, the table shows that students classify confusion due to some errors in the modules as “high” with a composite mean of 3.53, unable to locate high-quality online sources as “moderate” with a composite mean of 3.13, difficulty understanding some of the contents due to lack of examples, illustrations, and sidenotes on presented lessons as “high” with a composite mean of 3.66, difficulty on some of

the assessments instructions as “high” with a composite mean of 3.59, and seldom receiving constructive feedback from their teachers as “moderate” with a composite mean of 3.10.

Table 6. Descriptive statistics of students’ challenges in learning English during the pandemic in terms of quality (n = 240)

Indicators	Mean	Interpretation	Extent
1. I was confused due to some errors in the modules.	3.53	Agree	High
2. I was unable to locate high-quality online sources.	3.13	Moderately Agree	Moderate
3. I had difficulty understanding some of the contents due to the lack of examples, illustrations, and sidenotes in the presented lessons.	3.66	Agree	High
4. I found some of the assessment instructions difficult to understand.	3.59	Agree	High
5. I seldom received constructive feedback from my teachers.	3.10	Moderately Agree	Moderate
Composite	3.40	Moderately Agree	Moderate

According to Nugroho et al. (2021), analysis of the quality of learning is crucial in the teaching and learning process to ensure that the quality of learning is well maintained. Learning quality assurance instruments are some of the tools to improve quality in education through evaluations produced by studies of students. Overall, the analysis of learning quality through evaluations and studies of students serves as valuable tools for educational institutions to maintain and improve the quality of education they provide. Moreover, the results obtained regarding the quality of learning with internet-based distance learning during the COVID-19 pandemic indicate that it is perceived as good from a student's point of view.

However, the study conducted by Wahidiyati and Purwokerto (2022) contradicts the result since the feedback provided by most participants highlights their dissatisfaction with the effectiveness and efficiency of online learning, specifically in the context of English teaching and learning. One of the reasons cited is the challenge posed by slow-speed internet, which hampers the smooth operation of online applications. As a result, participants feel that they are unable to fully benefit from their lecturers' knowledge and information during online teaching and learning activities. Also, the study of Pedriña et al. (2024) revealed that the poor quality of printed learning modules was one of the academic challenges that affected the learner’s ability to comprehend and finish the module effectively. This result is also support by the study of Meniano and Tan (2022). The findings revealed several challenges faced during the pandemic, including difficulty comprehending English instructions and subpar quality of educational modules.

In Terms of Resiliency and Well-Being

Table 7 shows the data in identifying the level of challenges in learning English during the pandemic in terms of resiliency and well-being. This is reflected in the composite mean of 3.41. Generally, this figure shows that the students classified struggled with school work which made them feel frustrated as “high” with a composite mean of 3.53, performing poorly in some of the activities which resulted in their poor self-esteem as “moderate” with a composite mean of 3.39, lacking motivation due to the absence of social interaction between and among students and teachers as “moderate” with a composite mean of 3.28, having no more time for themselves due to the demands of either the online or the modular classes as “moderate” with a composite mean of 3.17, and emotionally bothered because they relied on themselves in their learning and they were not sure if they did it right as “high” with a composite mean of 3.66.

Table 7. Descriptive statistics of students’ challenges in learning English during the pandemic in terms of resiliency and well-being (n = 240)

Indicators	Mean	Interpretation	Extent
1. I struggled with schoolwork which made me feel frustrated.	3.53	Agree	High
2. I performed poorly in some of the activities which resulted in my poor self-esteem.	3.39	Moderately Agree	Moderate
3. I lacked motivation due to the absence of social interaction between and among students and teachers.	3.28	Moderately Agree	Moderate
4. I had no more time for myself due to the demands of either the online or the modular classes.	3.17	Moderately Agree	Moderate
5. I was emotionally bothered because I relied on myself in my learning, and I was not sure if I did it right.	3.66	Agree	High
Composite	3.41	Agree	High

The research done by Valladolid (2021) indicates a significant relationship between resilience and well-being, suggesting that individuals with higher levels of resilience tend to experience better overall well-being.

Sood and Sharma (2021) investigated the factors influencing the psychological well-being (PWB) of students in higher education during the peri-traumatic phase of COVID-19. The results revealed that direct resilience is positively associated with PWB, meaning that individuals with higher levels of resilience tend to experience higher levels of psychological well-being. Indirectly, resilience can also influence PWB through various pathways. In addition, a study by Galvez (2022) found that students' resilience amidst the pandemic had significant effects on academic performance.

Also, the study conducted by Eva et al. (2022) contradicted this result. They found that resilience is crucial in online learning to maintain and improve the students' subjective well-being. Students with a high level of resilience tend to have a high level of subjective well-being as well, meaning that they can regulate their emotions better in addition to controlling internal pressures caused by online learning. This is also supported by the study of Rasheed et al. (2022) conducted with university students during the COVID-19 pandemic, participants reported normal to satisfactory levels of overall mental well-being. Notably, resilience played a mediating role, influencing the relationship between meaning in life (both the presence and search for meaning) and mental well-being¹. These findings underscore the importance of fostering resilience and promoting meaningful experiences to support students' mental health during challenging times. The study's results indicate that meaning in life and resilience play crucial roles in supporting mental well-being among university students during the COVID-19 pandemic. Consequently, it is essential to implement effective measures to enhance students' lives by fostering both meaning and resilience.

3.5 Difference in Students' Challenges in Learning English during the Pandemic and their Performance after the National Learning Camp

The data in Table 8 reveal the relationship between the students' challenges in learning English during the pandemic and their performance after the National Learning Camp. Using Multiple Linear Regression Analysis, the overall F-test significance or p-value (0.049) revealed to be less than the level of significance (0.05). This means that the sample data provide enough evidence to reject the null hypothesis for the entire population. This signifies that some of the explanatory or independent variables are significant predictors of students' performance after the NLC. The regression output indicates that the students' challenges in terms of access ($p = 0.049 < \alpha = 0.05$) are a significant predictor of students' performance. The negative sign of its coefficient signifies that there is an inverse or negative relationship between these variables. This further implies that students who experienced greater challenges in terms of access tend to obtain lower performance after the NLC.

Table 8. Multiple linear regression analysis between the extent of students' challenges in learning English during the pandemic and their performance after the national learning camp (n = 240)

Variables	Coefficients	SE	t Stat	P-value
Intercept	89.101	2.640	33.750	0.000
Access	-1.488	0.747	-1.993	0.049
Equity	-1.250	0.882	-1.416	0.158
Quality	1.354	0.901	1.504	0.134
Resiliency	0.849	0.728	1.166	0.245
R = 0.1992				
R ² = 0.0397				
adjusted R ² = 0.0233				
F-ratio = 2.428				
p-value = 0.049 (significant)				
Level of significance = 0.05				

Students who face greater challenges in terms of access during the pandemic may experience lower performance due to several reasons. Limited access to devices and reliable internet connection can hinder their ability to fully engage in online learning activities, resulting in reduced participation and interaction with educational materials (Nassr et al. 2020). This lack of access may also lead to difficulties in submitting assignments, accessing online resources, and communicating with teachers and peers. Additionally, students who do not have consistent access to technology and the internet may face challenges in keeping up with the pace of online instruction. They may struggle to access and understand the content, leading to gaps in their learning (Shikulo and Leketho, 2020). Limited access to support systems, such as teachers or tutors, can further exacerbate these challenges.

Moreover, the home environment plays a crucial role in a student's academic performance. Students facing access challenges may also have limited resources, quiet study spaces, or parental support, which can impact their ability to focus and concentrate on their studies (Barrot and del Rosario, 2021). It is important to recognize these disparities and work towards providing equitable access to resources and support for all students, especially those who faced greater challenges during the pandemic. By addressing these access barriers, providing additional support, and implementing inclusive educational strategies, the impact of limited access on student performance can be mitigated (Liu, 2021).

4.0 Conclusion

The National Learning Camp has a positive impact on the student's performance in English 8 based on the increase in their performance. This suggests that the camp is effective in enhancing students' English skills and can address some learning gaps faced by the students in their English 8. However, based on the findings, some other factors or interventions played a more influential role in determining the students' performance. The impact of the National Learning Camp (NLC) on student performance is a crucial area of study, and understanding its effectiveness and limitations can guide future research and improvements. Here are some recommendations for future research and the limitations of the present work:

Recommendations for Future Research:

1. Investigate the long-term effects of NLC participation. Does the positive impact persist beyond the immediate post-test scores? Longitudinal studies could provide valuable insights.
2. Explore the NLC's impact across different school contexts (urban, rural, socio-economic backgrounds). Understanding variations in effectiveness can inform targeted interventions.
3. Delve deeper into specific learning domains (e.g., reading comprehension, writing skills) to identify which areas benefit most from NLC participation.
4. Assess the effectiveness of teacher training programs related to NLC implementation.
5. Investigate the role of parental involvement during and after the NLC.

Limitations of the Present Work:

1. While the NLC positively impacted student performance, other external factors (e.g., home environment, socio-economic status) may have influenced outcomes. Future studies should control for these variables.
2. The study focused on a specific school (Dumaguete City National High School). Expanding the sample size and including diverse schools would enhance generalizability.
3. Although the NLC was associated with improved performance, establishing causality is challenging. Randomized controlled trials or quasi-experimental designs could address this limitation.
4. The proposed plan of action aims for sustainability, but assessing the NLC's long-term viability and scalability is essential.

5.0 Contributions of Authors

This study has a single author. The author herself contributed to the study conception and design, material preparation and data collection. The first draft of the manuscript was written by her. Her adviser, Eugenia N. Sedillo, read and approved her final manuscript.

6.0 Funding

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7.0 Conflict of Interests

The author declared that she has no conflicts of interest as far as this study is concerned.

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Republic Act 11032 Policy Implementation and Customer Satisfaction in Calamba Water District: Basis for Action Plan

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Abstract. This research investigated the relationship between the implementation of Republic Act 11032 and customer satisfaction within the Calamba Water District (CWD) in Laguna province. The study aimed to identify the factors influencing CWD's ability to achieve optimal customer satisfaction by the Act's regulations by examining challenges, concerns, and potential obstacles. Employing a descriptive-correlational quantitative research design, the study surveyed 428 respondents, including 61 Commercial Department personnel and 367 concessionaires, who were randomly sampled. Data collection was conducted using an adapted research instrument. The findings indicate a significant relationship between the level of Republic Act 11032 policy implementation and customer satisfaction in CWD. The probability values of .000, .012, .000, .001, .000, .000, .000, .000, .000, .000, .000, and .000 were less than the level of significance at .05, thus the null hypothesis was rejected. However, this relationship was not significant in areas such as Citizen's Charter Provisions and Basic Facilities, Government Access through Frontline Services and Basic Facilities, and Zero Contact Policy and Basic Facilities. The probability values of .449, .849, and .855 were greater than the level of significance at .05, this accepting the null hypothesis. Based on these findings, the study proposes an action plan aimed at enhancing current implementation strategies and introducing innovative approaches. This plan focuses on improving communication between the District and its stakeholders, investing in better facilities, and enhancing the skills of frontline employees to boost productivity and customer confidence. Consequently, the research contributes to the development of effective strategies for policy implementation in public service organizations, promoting a culture of transparency and accountability.

Keywords: Calamba Water District; Customer satisfaction; Policy implementation; Public service accountability; Republic Act 11032.

1.0 Introduction

The endeavor to combat red tape and inefficiency within the bureaucracy is a formidable challenge that warrants serious consideration. Recent years have witnessed a global surge in the demand for efficient public service delivery, prompting governments worldwide to recognize the critical importance of meeting citizens' needs effectively. This recognition has led to the development and implementation of various policies and initiatives aimed at enhancing service delivery. These progressive efforts target persistent issues such as burdensome bureaucratic procedures, processing delays, lack of transparency, and insufficient accountability in the public sector (Bjerde & Kunt, 2021).

Public service providers globally are striving to develop processes and tactics to remain competitive. While customers expect high-quality, reliable, and efficient services from corporations, public entities often face challenges due to their monopolistic nature, resulting in declining customer service. Unlike the private sector, where competition drives service improvements, public institutions tend to receive more complaints, which

underscores the necessity for government agencies to enhance their services to boost public satisfaction (Development Academy of the Philippines, 2022).

In the Philippines, despite attracting foreign investors due to its welcoming nature, liberalized economy, and strategic location, the public service sector faces significant challenges. Issues such as poor leadership, inadequate communication, lack of accountability and transparency, and underperformance have contributed to a culture of corruption, perpetuating red tape and hindering efficient business processing. This has led to mishandled complaints, delayed responses, and insufficient client feedback, thereby hampering public service management and undermining political neutrality (Monsod, 2017 as cited in Go, 2021).

The Philippine National Statistics Office's 2020 Annual Poverty Indicators Survey revealed that seventy-five percent of households engaged in supply-driven conduct, offering presents, money, or favors for transactional convenience, while twenty-five percent exhibited demand-driven behavior (Philippine Statistics Authority, 2021). The World Bank's Doing Business Report ranked the Philippines 95th out of 190 countries in 2020, indicating poor performance relative to its East Asia Pacific neighbors (Philippine News Agency, 2021). Furthermore, an article by Business World (2021) highlighted the efforts of the Philippine Government's Task Force Against Corruption in addressing corruption within local government units (LGUs) involved in public works projects. The task force tackled numerous complaints regarding irregularities, favoritism, and questionable practices, emphasizing the need for stricter monitoring and regulation to prevent corruption in the LGU sector.

The Anti-Red Tape Act (Republic Act 9485) of 2007 was strengthened by the signing of Republic Act 11032, known as the Ease of Doing Business and Efficient Government Service Delivery Act, on May 28, 2018, under the Duterte Administration. This legislation specifically addresses the pervasive red tape issue within the Philippine bureaucracy by streamlining processes, reducing requirements, and accelerating processing times (Congress of the Philippines, n.d.).

The Calamba Water District (CWD), a government-owned and controlled corporation responsible for potable water distribution and services in Calamba City, Laguna, is subject to Republic Act 11032. CWD plays a vital role in ensuring clean water access to the community and disseminates information about this law through various Memorandum Circulars. These circulars, including MC Nos. 2008-019, 2020-039, 2020-114, and 2023-009, emphasize the establishment of a convenient Public Assistance Complaints Desk (PACD). Compliance reports are also required to demonstrate adherence to the Citizen's Charter. Other memos related to the implementation of the Anti-Red Tape Act involve measures such as revising procedures for new connection applications, implementing a no-noon break policy, conducting anti-fixing campaigns, and utilizing the Contact Center ng Bayan.

This study aimed to assess the level of policy implementation and the effectiveness of CWD in adhering to Republic Act 11032. By evaluating customer satisfaction and gathering feedback from stakeholders, this research seeks to identify inconsistencies in policy implementation and areas for improvement in CWD's adherence to the Act. The findings are expected to provide valuable insights to enhance service delivery, improve transparency, accountability, and responsiveness in public service. Meaningful improvements in government service delivery can only be achieved by simultaneously addressing the attitudes, mindsets, and behaviors of public officials.

2.0 Methodology

2.1 Research Design

The study employed a quantitative research design, specifically utilizing a descriptive-correlational approach. This methodological choice was guided by the research questions and was well-suited to the nature and scope of the inquiries (Quinlan et al., 2019). To elucidate policy implementation and evaluate customer satisfaction, the study utilized descriptive analysis techniques. These techniques included comprehensive measures of central tendency and measures of variability. To further examine the relationship between the variables, correlational analysis methods, such as Pearson's *r* and Independent *t*-Test, were employed. These methods gauged both the strength and extent of the correlation between variables, serving to validate the measurements and test the hypotheses. This analytical framework provided a robust basis for interpreting the results derived from the data collected from respondents.

2.2 Research Participants

The respondents for assessing the policy implementation level of Republic Act 11032 were personnel belonging to the Commercial Department of Calamba Water District (CWD) and selected concessionaires, while the level of assessment for customer satisfaction was obtained from CWD concessionaires only. Participants were 61 CWD Commercial office personnel and 367 concessionaires. The respondent selection process for the study utilized stratified random sampling, a method specifically chosen for its efficacy in offering a more representative and unbiased view of the population. Using stratified random sampling, the study aimed to divide the prospective participants into subgroups that provided an unbiased representation of the larger population. Every eligible member of the sample had an equitable likelihood of being selected for inclusion, ensuring fairness and minimizing the potential to capture valuable insights from a sample that mirrored the diverse perspectives of the respondents in the specified context (Makwana et al., 2023).

2.3 Research Instrument

The study utilized an adopted questionnaire from two distinct studies (Romero et al., 2019; Perez et al., 2019). This instrument comprised two parts. The first part assessed the level of policy implementation of Republic Act 11032 among Calamba Water District Commercial Department employees and concessionaires, covering four core components: Citizen's Charter, Government Access through Frontline Services (each with 14 indicators), Report Card Survey (12 indicators), and Zero Contact Policy (5 indicators). The second part examined key areas of the Report Card Survey to determine customer satisfaction levels among Calamba Water District's concessionaires, focusing on Frontline Service Providers, Service Quality, Physical Setup, and Basic Facilities (each with 10 indicators).

To ensure the validity of their surveys, the researchers subjected their instruments to content validation by experts in management, language, questionnaire preparation, and data analysis. Recommendations and suggestions from these experts were incorporated into the final versions, which were then pre-tested. A pilot test of the adopted questionnaires was conducted, and the survey items underwent an evaluation of internal consistency using Cronbach's Alpha Reliability Test. The results yielded excellent reliability coefficients of 0.931 and 0.956, respectively, leading to the inclusion of all indicators in the final versions, as noted in their published articles.

2.4 Data Gathering Procedure

The researcher conducted the survey onsite or online through Google Forms. Upon retrieving the completed questionnaires and meeting the required sample size, a meticulous process of tallying, tabulating, and organizing the acquired data was carried out.

2.5 Ethical Considerations

Throughout the study, the researcher diligently adhered to ethical guidelines and considerations. Before their participation, every respondent received a thorough explanation and description of the study, including its goals and purposes, as well as their consent for partaking. By doing so, the researcher adhered to Republic Act 10173, commonly referred to as "Data Privacy Act of 2012" prioritizing principles of anonymity, data privacy regulations, and the security of personal information. This assurance provided respondents with confidence that their provided information was handled with the utmost confidentiality. The study also ensured the meticulous practice of proper recognition and citation of research literature throughout the writing process of the study. This commitment to academic integrity was upheld to acknowledge and respect the contributions of existing research in the field.

2.6 Data Analysis

The data gathered were cleansed, tabulated, and analyzed descriptively and inferentially.

3.0 Results and Discussion

3.1 Policy Implementation Level of Republic Act 11032 As Assessed by Respondents

In terms of Citizen's Charter Provisions

Table 1. Descriptive statistics of Policy Implementation Level of RA 11032 in terms of Citizen's Charter Provisions

INDICATORS The Citizen's Charter...	Personnel		Concessionaires		Composite	
	Mean	Interp.	Mean	Interp.	Mean	Interp.
1. Is posted at the office's main entrance or at the most conspicuous place.	3.79	FI	3.41	FI	3.60	FI
2. Is posted in the form of published materials written either in English or Filipino.	3.85	FI	3.36	FI	3.61	FI
3. Contains the Vision of the institution.	3.87	FI	3.58	FI	3.72	FI
4. Contains the Mission of the institution.	3.82	FI	3.62	FI	3.72	FI
5. Contains the objectives of the institution.	3.85	FI	3.58	FI	3.72	FI
6. Contains the core values of the institution.	3.84	FI	3.61	FI	3.72	FI
7. Enumerates the comprehensive checklist of requirements needed for each type of request.	3.79	FI	3.55	FI	3.67	FI
8. Enumerates the uniform checklist of requirements needed for each type of request.	3.79	FI	3.56	FI	3.67	FI
9. Enumerates the step-by-step procedure to obtain a particular service.	3.87	FI	3.55	FI	3.71	FI
10. Determines the person responsible at each step.	3.87	FI	3.54	FI	3.71	FI
11. Determines the maximum time to conclude the process.	3.82	FI	3.54	FI	3.68	FI
12. Enumerates the documents to be present by the requesting party if necessary.	3.80	FI	3.51	FI	3.66	FI
13. Determines the amount of fees needed if necessary.	3.87	FI	3.52	FI	3.69	FI
14. Determines the procedure for filing a complaint.	3.84	FI	3.52	FI	3.68	FI
General Assessment	3.83	FI	3.53	FI	3.68	FI

Legend: 3.25 – 4.00 Strongly Agree – Fully Implemented (FI) 2.50 – 3.24 Agree – Implemented (I) 1.75 – 2.49 Disagree – Partially Implemented (PI) 1.00-1.74 Strongly Disagree – Not Implemented (NI)

As shown in Table 1, the Citizen's Charter Provisions under the Policy Implementation level of Republic Act 11032 were Fully Implemented (General Assessment = 3.68; Personnel, $\sigma = 0.28$; Concessionaire, $\sigma = 0.45$). The indicators "Contains the Vision of the institution", "Contains the Mission of the institution", "Contains the objectives of the institution", and "Contains the core values of the institution" garnered the highest composite mean of 3.72, verbally interpreted as Fully Implemented, while the indicator "CC is posted at the main entrance of the office or the most conspicuous place" had the lowest mean of 3.60, verbally interpreted as Fully Implemented as well.

The results imply a strong affirmative view and agreement among respondents of Calamba Water District regarding its commendable adherence to regulatory standards. These findings propose that Calamba Water District is generally achieving proficiency in implementation in terms of communication effectiveness, with positive feedback on the content, language, and clarity of its Citizen's Charter. The variations in opinions are generally moderate, suggesting that while there is consensus on positive aspects, however, there may be some room for improvement in certain areas. Given the organization's extensive range of services, it becomes necessary for clients to step back to locate the specific service they wish to avail.

This was in line with the directive, "Public Office is Public Trust" outlined in the Good Governance Act (Republic Act 6713) Rule III, Section 4, which emphasized that every department, office, or agency needed to create a service guide or an equivalent functional document as mentioned in the study of Ndukwe and Patricia (2021). This guide was expected to undergo regular updates and be made accessible to the public engaging in transactions with the respective entity. Additionally, the legislation emphasized the importance of transparency by requiring the display of workflow charts delineating procedures or document flow in prominent locations within the department, office, or agency. This provision served to inform and guide all stakeholders involved in the processes, aligning with the overarching goal of promoting accountability and clarity in public service operations.

Moreover, the studies of Rajakuruna et al. (2022), Sikwese et al. (2021), and Choradia (2021) gave support to this notion. The common theme across these three studies underscored the success of adopting a CC along with additional interventions in enhancing service provision and customer satisfaction. Rajakuruna et al. (2022) found improvements in file compliance, reduced average visits, and increased satisfaction in each office. Furthermore, Choradia (2021) emphasized the crucial role of customer service policies, outlining steps for creating effective

guidelines that contribute to overall customer satisfaction and business success. Similarly, Sikwese et al. (2021) highlighted the significance of the Citizen's Charter in fostering transparency and accountability, leading to streamlined processes, faster service delivery, and increased satisfaction among service users. Overall, these studies emphasized the positive impact of structured policies and charters in improving service quality and customer experiences.

In terms of Government Access through Frontline Services

As depicted in Table 2, Government Access through Frontline Services under the Policy Implementation level of Republic Act 11032 was Fully Implemented (General Assessment = 3.51; Personnel σ = 0.38; Concessionaire σ = 0.58) in Calamba Water District. "There is an alternate signatory if the authorized signatory is on official business" indicator obtained the highest mean of 3.62, verbally interpreted as Fully Implemented. Conversely, "The processing time prescribed by the CC is not longer than three working days for simple transactions" indicator held the lowest mean of 3.36, still interpreted as Fully Implemented.

Table 2. Descriptive statistics of Policy Implementation Level of RA 11032 in terms of Government Access Through Frontline Services

Indicators	Personnel		Concessionaires		Composite	
	Mean	Interp.	Mean	Interp.	Mean	Interp
The Citizen's Charter...						
1. The employees accept the written request of the requesting party.	3.74	FI	3.36	FI	3.55	FI
2. The receiving officer performs a preliminary assessment of the request to ensure more expeditious action.	3.75	FI	3.37	FI	3.56	FI
3. The receiving officer assigns a unique identification number to each request.	3.70	FI	3.30	FI	3.50	FI
4. The receiving officer issues an acknowledgment receipt of the request.	3.72	FI	3.29	FI	3.51	FI
5. All requests submitted are acted upon by the assigned officer within the prescribed processing time in the CC.	3.61	FI	3.32	FI	3.47	FI
6. The processing time prescribed by the CC is not longer than 3 working days for simple transactions.	3.59	FI	3.13	I	3.36	FI
7. The processing time prescribed by the CC is not longer than 7 working days for complex transactions.	3.62	FI	3.24	I	3.43	FI
8. The processing time prescribed for highly technical transactions is not longer than 20 working days.	3.62	FI	3.35	FI	3.49	FI
9. The maximum time prescribed is extended only once for the same number of days prescribed in CC.	3.70	FI	3.35	FI	3.53	FI
10. The notification bears the signature of the requesting party that serves as proof of notice.	3.69	FI	3.30	FI	3.50	FI
11. No request is being returned to the requesting party without appropriate action.	3.75	FI	3.27	FI	3.51	FI
12. Signatories in any documents are limited on three (3) signatures.	3.70	FI	3.38	FI	3.54	FI
13. There is an alternate signatory if the authorized signatory is on official business.	3.80	FI	3.43	FI	3.62	FI
14. The offices are attended at all times even during lunch break.	3.72	FI	3.24	FI	3.48	FI
General Assessment	3.70	FI	3.31	FI	3.51	FI

Legend: 3.25 – 4.00 Strongly Agree – Fully Implemented (FI) 2.50 – 3.24 Agree – Implemented (I) 1.75 – 2.49 Disagree – Partially Implemented (PI) 1.00–1.74 Strongly Disagree – Not Implemented (NI)

The results imply the successful implementation of Republic Act policies governing access through frontline services, showcasing the efficient adherence to standards within the frontline service system of Calamba Water District. Commercial Department Personnel consistently offer efficient processes, where the public easily accesses information, submits documents, and receives timely responses, while external stakeholders benefit from clear guidelines and processing times. The Servicing Section of the Customer Care Division ensures the smooth handling of client requests for systematic interactions. While generally streamlined, variability in responses suggests potential inconsistencies in implementation across concessionaire perceptions. Their assessments highlight processing time discrepancies, likely due to operational and procedural challenges, making operational analysis and continuous monitoring crucial for maintaining high service delivery standards at Calamba Water District.

Affirming this statement, the study of Medina-Guce et al. (2019) underscored the importance of the Anti-Red Tape Act in promoting integrity, accountability, and efficient administration, emphasizing the need for transparency in public service interactions. They advocated for streamlined programs to eliminate bureaucracy and enhance government-citizen interactions, particularly focusing on the efficiency of frontline service delivery. This also

aligned with Petridou and Mintrom's (2020) concept of street-level bureaucrats as policy entrepreneurs who interpreted and adapted policies to address ambiguities, playing a critical role in successful implementation. Intermediaries, bridging policy, managerial, and frontline actors, were highlighted as essential for effective governance and service delivery, emphasizing the interconnectedness of policy design and diverse actors in achieving these goals.

Considering this, however, frontline personnel noted confrontational behavior of certain customers, particularly expressing dissatisfaction with slow processing times or outcomes, often exhibiting rudeness and demanding priority. Educated customers and seniors were identified as more assertive, impacting their approach to service delivery. It becomes apparent that Frontline employees are primarily concerned about the continuous effort required to meet Republic Act 11032 standards, lacking corresponding support and welfare systems despite client complaint avenues. Suggestions from front liners include considering employee motivation and satisfaction in Act provisions or monitoring mechanisms, as proposed by Agbanero (2023) in their research.

In terms of the Report Card Survey

Table 3. Descriptive statistics of Policy Implementation Level of RA 11032 in terms of the Report Card Survey

Indicators The Citizen's Charter...	Personnel		Concessionaires		Composite	
	Mean	Interp.	Mean	Interp.	Mean	Interp.
1. The Citizen's Charter (CC) contains service commitments on transaction steps.	3.75	FI	3.55	FI	3.65	FI
2. The CC contains the cost that can be incurred at each service in the institution.	3.75	FI	3.57	FI	3.66	FI
3. The CC contains the time to be concluded in each step of the institution's services.	3.80	FI	3.57	FI	3.69	FI
4. There is no hidden cost that is charged to the requesting party.	3.17	I	3.04	I	3.11	I
5. There is an anti-fixing campaign located in the vicinity.	3.75	FI	3.50	FI	3.63	FI
6. There is an anti-red tape campaign poster.	3.75	FI	3.69	FI	3.72	FI
7. There is no fixer in the institution.	3.36	FI	3.35	FI	3.36	FI
8. There is no individual offering to facilitate transactions in exchange of money.	3.12	I	2.95	I	3.04	I
9. No Noon Break Policy is observed.	3.80	FI	3.47	FI	3.64	FI
10. There is a Public Assistance and Complaint Desk.	3.85	FI	3.66	FI	3.76	FI
11. The employees wear their identification cards.	3.74	FI	3.27	FI	3.51	FI
12. The requesting party is satisfied on the services that the institution provides.	3.70	FI	3.40	FI	3.55	FI
General Assessment	3.63	FI	3.43	FI	3.53	FI

Legend: 3.25 – 4.00 Strongly Agree – Fully Implemented (FI) 2.50 – 3.24 Agree – Implemented (I) 1.75 – 2.49 Disagree – Partially Implemented (PI) 1.00-1.74 Strongly Disagree – Not Implemented (NI)

As shown in Table 3, the Report Card Survey under Policy Implementation of Republic Act 11032 was Fully Implemented (General Assessment = 3.53; Personnel σ = 0.31; Concessionaire σ = 0.36) in Calamba Water District. Delving deeper, the specific indicator "There is a Public Assistance Complaint Desk" achieved the highest composite mean score of 3.76, denoting an interpretation of Fully Implemented. In contrast, the indicator "There is no individual offering to facilitate transaction in exchange of money" received the lowest composite mean rating of 3.04, signaling an Implemented interpretation.

The results imply that proficient performance measurement practices demonstrated by Calamba Water District are apparent, indicating that the institution is effectively advancing in its execution of the Report Card Survey. Both personnel and concessionaires acknowledge strong communication practices evident in the integration of service commitments, costs, and timeframes in the Citizen's Charter. Anti-fixing and anti-red tape campaigns, alongside initiatives like the No Noon Break Policy and Public Assistance and Complaint Desk, underscore a commitment to fair and efficient services. This suggests a beneficial impact on public perception and trust in the institution. However, challenges persist, particularly in acknowledging hidden costs and navigating diverse perceptions of both groups of respondents surrounding the existence of solicitations within transactions. Enhancing transparency through measures such as updating costs in the Citizen's Charter, conducting regular audits, establishing feedback mechanisms, and staff training can bridge communication gaps.

This further emphasized what Kramer (2022) highlighted in his research, indicating that the Report Card Survey (RCS) was a valuable instrument for government officials in gauging public service feedback, allowing them to identify gaps and shortcomings in service delivery and make necessary corrections. Moreover, the results coincided with the findings and recommendations made by Brillantes and Lorenzo (2023) where they mentioned how the CC which was one of the components evaluated in the RCS proved instrumental in simplifying business transactions, earning high marks from customers. It not only facilitated citizen participation in decision-making through feedback channels but also helped in combating issues like bureaucracy, inefficiency, and corruption. However, it should be highlighted that challenges in monitoring and implementing the law highlight the need for capacity-building, skills, and knowledge based on public ethics among those responsible for bringing about changes in processes and procedures, emphasizing that compliance alone did not ensure effective implementation.

This was incited by Del Mundo (2022), as certain frontline staff have conveyed that despite being aware of undergoing RCS reviews, they often lacked pertinent information regarding the results of these reviews. This absence of information, which was valuable for enhancing efficiency, was noted. In addressing this concern, the Civil Service Commission (CSC) had stated that RCS review results were dispatched to the respective subject agencies, alongside other means of public dissemination. However, it was observed that this information from the CSC was primarily reaching the top management of agencies and is rarely cascaded down to the frontline offices. This scenario underscored the necessity to reassess how information regarding RCS results and CSC recommendations was communicated throughout the bureaucracy. Based on their findings, occurrences of individuals facilitating transactions for money could prompt the institution to strengthen its monitoring mechanisms and educate personnel further.

In terms of the Zero Contact Policy

Table 4. Descriptive statistics of Policy Implementation Level of RA 11032 in terms of the Zero Contact Policy

Indicators	Personnel		Concessionaires		Composite	
	Mean	Interp.	Mean	Interp.	Mean	Interp.
The Citizen's Charter...						
1. Zero Contact Policy is implemented in the institution.	3.48	FI	3.39	FI	3.44	FI
2. A Zero Contact Policy is observed in the institution.	3.34	FI	3.39	FI	3.37	FI
3. The processor has no direct contact with the requesting party.	3.44	FI	3.42	FI	3.43	FI
4. Preliminary assessment of the request and evaluation of the sufficiency is the only time when direct contact can be observed.	3.52	FI	3.45	FI	3.49	FI
5. The institution is presently using a system to ease its transactions.	3.56	FI	3.35	FI	3.46	FI
General Assessment	3.47	FI	3.40	FI	3.44	FI

Legend: 3.25 – 4.00 Strongly Agree – Fully Implemented (FI) 2.50 – 3.24 Agree – Implemented (I) 1.75 – 2.49 Disagree – Partially Implemented (PI) 1.00-1.74 Strongly Disagree – Not Implemented (NI)

As shown in Table 4, the Zero Contact Policy under the Policy Implementation level of Republic Act 11032 was Fully Implemented (General Assessment = 3.44; Personnel σ = 0.69; Concessionaire σ = 0.54) in Calamba Water District. The indicator “Preliminary assessment of the request and evaluation of the sufficiency is the only time when direct contact can be observed” had the highest mean of 3.49 interpreted as Fully Implemented, whereas the indicator “Zero Contact Policy is observed in the institution” had the lowest mean of 3.37 but also interpreted as Fully Implemented.

The findings demonstrate a widespread agreement among both personnel and concessionaires at Calamba Water District regarding the effective implementation of the Zero Contact Policy of Republic Act 11032. This reflects a commitment to reducing direct contact and aligning with policy principles. The data scores signify the successful execution of the Zero Contact Policy in Calamba Water District by its frontline staff. While subtle variations in perceptions hint at areas for potential improvement, they do not diminish the overall positive evaluation of CWD's dedication towards minimal-to-contactless practices when transacting with the public.

Building upon this perspective, an article by Miranda (2021) delved into the practical implementation of a zero-contact policy by the local government in Cagayan De Oro City. Amid the COVID-19 pandemic, the municipality has addressed certain challenges brought about through the issuance and implementation of ordinances advocating electronic submissions for applications, requests, and payments to reduce physical interactions. This aligned seamlessly with national amendments focused on improving the business environment, prioritizing efficiency and transparency. Noteworthy was the discerning protocol that selectively exempted certain

transactions requiring in-person interactions, striking a nuanced balance. This local ordinance, in harmony with a joint memorandum circular in the city, actively contributed to the overarching goals of Republic Act 11032 by bringing efficiency to government service delivery.

Calamba Water District is reinforcing its adherence to the Zero Contact Policy by developing comprehensive rules for online acceptance and processing of new water service applications. This initiative, alongside adopting an Information System Strategic Plan (ISSP) for its Management Information System (MIS), reflects CWD's commitment to aligning information systems with broader computerization goals. The ISSP enhances data management and decision-making, crucial for implementing the Zero Contact Policy efficiently. Clear guidelines aim to ensure a smooth transition to electronic submissions, promoting efficiency and transparency in line with national reforms. Implementing secure digital channels for communication, applications, and payments will not only adhere to the zero-contact paradigm but also enhance customer experience.

3.2 Difference Between the Assessments of the CWD Commercial Department Personnel and Concessionaires as to the Policy Implementation of RA 11032

Table 5. Test of Difference between the assessments of the Commercial Department Personnel and Concessionaires

Variables	t-test	p-value	Remarks	Decision
Citizen's Charter Provisions	6.945	.000	Significant	Reject H_{01}
Government Access through Frontline Services	6.729	.000	Significant	Reject H_{01}
Report Card Survey	5.834	.000	Significant	Reject H_{01}
Zero Contact Policy	.879	.380	Not Significant	Accept H_{01}

There was a significant difference between the assessments of the CWD Commercial Department personnel and concessionaires as to the policy implementation level of Republic Act 11032 in terms of the three key areas of Citizen's Charter Provisions, Government Access through Frontline Services, and Report Card Survey (see Table 5). The probability values of .000, .000, and .000 were less than the level of significance at .05, thus rejecting the null hypothesis. This suggests that there is a notable variance in perceptions between these two groups. To address this, CWD may enhance communication channels and training for Commercial Department personnel and concessionaires through regular workshops and feedback sessions, ensuring clarity on Citizen's Charter provisions for better alignment of expectations.

The inference of reinforcing communication and training programs aligned with established principles in public service delivery and policy implementation, as highlighted in research synthesized by Barwick et al. (2023). In their study, key themes for successful intervention implementation included process evaluation, securing support from the community and stakeholders, and efficient pre-innovation staff training. These findings underscored the pivotal role of effective communication and training programs as integral components in facilitating successful policy implementation.

Furthermore, Malonosan (2021) highlighted the widespread leadership failure in the Philippine system for implementing policies. Effective leadership was identified as essential for restructuring political mandates, resources, structures, and programs. Constant leadership was advised to ensure implementation success, emphasizing fixed-term posts for senior government department personnel to encourage stability and develop solid connections. The inclusion of communication in policy formulation and execution was stressed, emphasizing its role in facilitating effective implementation by addressing the lack of feedback systems involving legislators and frontliners.

As emphasized by Selepe (2023), policy implementation and hindrances often occurred at the frontlines of service delivery and community participation, away from the policy-making center. Effective implementation requires appropriate evaluation, commitment, collaboration (both horizontal and vertical), and leadership. Full comprehension of the policy by all parties involved was also crucial. This literature supported the need for enhanced communication and training programs, emphasizing the role of leadership and community participation in successful policy implementation within public service delivery systems.

Moreover, considering that Government Access through Frontline Services exhibited a significant difference, Calamba Water District should prioritize enhancing and streamlining these services. As a proactive step in this direction, the adoption of the ISSP was previously mentioned (as explained in Table 1.4 on page 86). In a similar context, this resonated with the findings of Biglete (2023) on San Pablo City LGU. Her research underscored the city's need for expertise in computerization and technological advancement, revealing a gap in transitioning to Ease of Doing Business practices. In response, an Action Plan was proposed for San Pablo City, encompassing enhancements to the Business One Stop Shop, the implementation of an Electronic Database, improvements to the Citizen's Charter, alternative payment methods, and benchmarking with other LGUs within Laguna. These actions aimed to address deficiencies and align the city's practices with the core principles of RA 11032.

On the other hand, there was no significant difference between the assessments of CWD Commercial Department personnel and concessionaires regarding the policy implementation level of Republic Act 11032 concerning the Zero Contact Policy, as indicated by a probability value of .380, exceeding the significance level of .05 and accepting the null hypothesis. It can be concluded that there was no significant difference between the assessments of the respondents as to the policy implementation level of Republic Act 11032 in terms of the Zero Contact Policy. This implied that both groups perceived this aspect similarly, indicating that the Zero Contact Policy was generally well-received and understood. Calamba Water District may thus focus on reinforcing efforts related to this policy without major adjustments, leveraging its success to promote seamless and efficient interactions while minimizing contact between personnel and concessionaires.

3.3 Customer Satisfaction on Core Components on the Report Card Survey of ARTA *In terms of Frontline Service Providers*

Table 6. Descriptive statistics of the Level of Customer Satisfaction in terms of Frontline Service Providers

Indicators	Mean	Interp.
1. The frontline service providers show adherence to processing time.	3.38	VS
2. The frontline service providers respond quickly to clients' needs and queries.	3.35	VS
3. The frontline service providers are knowledgeable to the services that the institution offers.	3.37	VS
4. The frontline service providers show other solutions to help solve clients' concerns.	3.34	VS
5. The frontline service providers are proficient in handling clients' needs and queries.	3.35	VS
6. The frontline service providers show a willingness to help clients with their needs.	3.28	VS
7. The frontline service providers deal with clients gently even under pressure.	3.33	VS
8. The frontline service providers portray decency at all times.	3.33	VS
9. The frontline service providers practice impartiality in all dealings with clients.	3.31	VS
10. The frontline service providers convey a professional image.	3.37	VS
General Assessment	3.34	VS

Legend: 3.25 – 4.00 Strongly Agree – Very Satisfied (VS) 2.50 – 3.24 Agree – Satisfied (S) 1.75 – 2.49 Disagree – Dissatisfied (D) 1.00-1.74 Strongly Disagree – Very Dissatisfied (VD)

The customers of Calamba Water District were Very Satisfied ($\bar{X} = 3.34$; $\sigma = 0.59$) with Frontline Service Providers (see Table 6). Notably, the indicator "The frontline service providers show adherence to processing time" achieved the highest mean score of 3.38, interpreted as a Very Satisfied rating. On the other hand, the indicator "The frontline service providers show willingness to help clients with their needs" received the lowest mean score of 3.28 but was also interpreted as Very Satisfied.

The findings indicate that Calamba Water District customers consistently express strong agreement with the competence of its frontline staff and reliably convey satisfaction with their pivotal role in service provision. It further implies that concessionaires are notably more satisfied when employees are knowledgeable, dependable, and easy to work with, underscoring the importance of these qualities. Commendable satisfaction ratings of staff reflect their efficient processing times and proactive responses to customer needs. Their adept knowledge, flexibility in offering solutions, proficiency in handling needs, willingness to help, and maintaining composure under pressure embody a customer-friendly and professional approach, contributing to overall satisfaction. Maintaining consistent portrayal of decency and professionalism by CWD front liners bolsters positive perceptions to delivering positive experiences despite some variability, which becomes crucial at this juncture.

The findings mentioned align with the views presented by Raman (2022) that consumer satisfaction hinged on the perceived quality of service. The consistent satisfaction expressed by Calamba Water District customers with its frontline service employees correlated with the concept that satisfaction arose when consumers believed they were receiving good service. Notably, the importance attributed to frontline service employees' qualities mentioned above highlighted in the findings, resonated with the understanding that meeting these expectations was crucial for consumer satisfaction. Conversely, Raman underscored the risk of dissatisfaction and potential customer migration to competitors when service expectations were not met.

Furthermore, the substantiating evidence from Gurlek and Uygur (2020) reinforced the pivotal role of frontline workers in service organizations and their profound impact on customer satisfaction. The authors emphasized that these employees prioritized client needs, leading to enhanced service delivery, a sentiment echoed in the commendable satisfaction ratings for Calamba Water District's frontline service. The concept of customer orientation, as described by Gurlek and Uygur, was reflected in the findings, emphasizing the dedication of frontline workers to delivering excellent customer service. This dedication, when coupled with employees' knowledge, dependability, and customer-friendly behaviors, as highlighted in the initial paragraph, contributed significantly to overall customer satisfaction. Additionally, the study by Rane et al. (2023) underscored the substantial impact of the attitude and behavior of service providers on customers' perceptions of a business, emphasizing the frontline workers' role as effective representatives of the company. In essence, these studies aligned with the emphasis on the importance of frontline service providers and the need for consistent and high-quality service delivery to ensure positive customer perceptions and satisfaction.

In light of the challenges faced by the Commercial Department personnel, the observations made by Artusi and Bellini (2021) underscored the pivotal role of frontline employees in shaping customer satisfaction. The faces of service organizations, these employees wielded substantial influence over service quality, particularly when they exhibited a customer-oriented approach. Customer orientation, defined as an individual's dedication to delivering excellent customer service, became a crucial factor in this context. The research suggested that frontline employees who possessed confidence in their abilities tended to showcase higher levels of satisfaction.

Further insights from Jumah and Nthiga (2022) enriched the understanding of the dynamics at play. Their investigation delved into the factors influencing the customer-oriented behavior of front-line employees across diverse service settings. Their study underscored the significance of both willingness (engagement and a positive attitude) and ability (confidence in skills) in delivering high-quality customer service. Notably, outstanding customer service required employees who were not only willing to engage positively but also possessed the necessary capabilities and confidence. The interplay between these two factors was highlighted.

In terms of Service Quality

Table 7. Descriptive statistics of the Level of Customer Satisfaction in terms of Service Quality

Indicators	Mean	Interp.
1. Service is delivered with efficiency.	3.78	VS
2. Service is convenient to everyone when needed.	3.82	VS
3. Processing of requests is done manually.	2.52	S
4. Clients' requests/services were done accurately.	3.26	VS
5. Service was assured to be fast and reliable.	3.72	VS
6. Service output was hurriedly completed.	3.12	S
7. Total service experience was said to be warm.	3.80	VS
8. Service output was well executed.	3.21	S
9. Service output was different from what I expected.	3.49	VS
10. Service is exact and free from error.	3.79	VS
General Assessment	3.45	VS

Legend: 3.25 - 4.00 Strongly Agree - Very Satisfied (VS) 2.50 - 3.24 Agree - Satisfied (S) 1.75 - 2.49 Disagree - Dissatisfied (D) 1.00-1.74 Strongly Disagree - Very Dissatisfied (VD)

As shown in Table 7, the customers of Calamba Water District were Very Satisfied ($\bar{X} = 3.45$; $\sigma = 0.24$) with Service Quality. The indicator "Service is convenient to everyone when needed" had the highest mean of 3.82, verbally interpreted as Very Satisfied, while the indicator "Processing of requests is done manually" had the lowest mean of 2.52 and verbally interpreted as Satisfied.

The data gathered reflect a strong agreement and overall satisfaction among respondents regarding the service quality offered by Calamba Water District. This implies confidence in meeting customer needs as they perceive service provided as efficient, convenient, accurate, fast, reliable, and well-executed, contributing to a warm and positive overall service experience. Despite this, there are areas identified for potential improvement. Manual processing, such as recording payments and customer requests, poses a risk of errors, leading to occasional discrepancies in system records. Moreover, challenges arise from adapting and familiarizing with new online payment methods like GCash and the Landbank LinkBiz portal, further complicating the service landscape. Addressing these issues is crucial for enhancing service performance quality and maintaining a positive customer experience.

In light of this, the identified challenges mentioned aligned with the insight from Acharya (2021) which underscored the critical role of institutional trust in municipal services, emphasizing that responsiveness and friendliness of officials significantly impact service quality. Addressing the manual processing issues enhanced these qualities and contributed to building trust with the public. Similarly, Biswas and Roy (2020) stressed the intrinsic link between service quality and government performance. Quality service provision held great significance for democratic states and nations with decentralized systems. By improving service efficiency and accuracy, the organization gleaned valuable insights into management, priorities, and resource allocation, ultimately boosting confidence in public institutions.

Moreover, Kobero and Swallehe (2022) highlighted the responsibility of public sector firms to deliver excellence in services. Poor service quality could result in customer dissatisfaction and potential loss of trust. The identified manual processing challenges, if left unaddressed, could contribute to a negative customer experience, and hinder the organization's long-term reputation. Lastly, Mosimanegape et al. (2020) emphasized the importance of service quality dimensions in influencing customer satisfaction. Waiting time, a crucial component, could be improved through streamlined processes. Addressing the manual processing inefficiencies aligned with offering top-notch services and positively impacted customer satisfaction, as reiterated by Beyene (2019). Therefore, implementing changes to enhance service quality aligned with the broader literature on customer satisfaction and public service excellence.

In terms of Physical Set Up

Table 8. Descriptive statistics of the Level of Customer Satisfaction in terms of Physical Setup

Indicators	Mean	Interp.
1. The office is clean.	3.48	VS
2. The place is safe for transacting clients.	2.57	S
3. Signages are commonly seen.	2.59	S
4. The institution has proper air circulation and ventilation in its premises.	3.50	VS
5. Office space is very much limited.	2.73	S
6. The institution has an accessible service place.	3.45	VS
7. The institution has visible emergency and exit plans for the transacting public.	3.45	VS
8. The office appeared neat and tidy.	3.13	S
9. The total institution setup is said to be appealing.	3.43	VS
10. Service flowcharts are noticeable to the public.	3.43	VS
General Assessment	3.18	S

Legend: 3.25 – 4.00 Strongly Agree – Very Satisfied (VS) 2.50 – 3.24 Agree – Satisfied (S) 1.75 – 2.49 Disagree – Dissatisfied (D) 1.00-1.74 Strongly Disagree – Very Dissatisfied (VD)

The customers of Calamba Water District were Satisfied ($\bar{X} = 3.18$; $\sigma = 0.32$) with Physical Set Up. Notably, the indicator "The office is clean" attained the highest mean of 3.48, indicating an interpretation of Very Satisfied. In contrast, the indicator "The place is safe for transacting clients" recorded the lowest mean of 2.57, warranting an interpretation of Satisfied. The organization's commitment and effort in maintaining a visually appealing and hygienic environment are commended, enhancing overall customer impressions. However, concerns arise regarding security measures and signage clarity. Customers encounter difficulty navigating the premises due to insufficient signage and express unease over inadequate security measures and poorly lit areas, highlighting the need for enhanced safety features to alleviate discomfort and enhance transactional security. Additionally, challenges in navigation due to insufficient signage are apparent, prompting suggestions for clearer and more

visible signage to facilitate smoother transactions and minimize confusion. In summary, these results imply a need for Calamba Water District to prioritize measures to address safety concerns, optimize space utilization, and enhance the visual appeal and functionality of its physical setup to better meet the needs and expectations of its concessionaires.

This closely corresponded with Cetinsoz's (2019) findings, where the physical environment of the restaurant industry emerged as a pivotal factor influencing not only financial performance but also customers' inclination for repeat purchases and overall satisfaction. In the competitive service industry landscape, delivering high-quality service was paramount. Consumers relied on the tangible aspects of the restaurant's physical setup as a reliable indicator for evaluating both concrete and abstract facets of service delivery. Given its significance in the restaurant business, effective management dictated constant planning and the creation of a distinctive image to set the business apart from competitors. The ongoing evolution of the restaurant's ambiance, through various styles of signages, decoration, or music, was essential for maintaining a fresh and appealing atmosphere. The study underscored the profound impact of the physical environment on customer satisfaction and loyalty as customers were drawn to restaurants not only for food and drink but also for the unique and comfortable physical environment. This ambiance influenced customers' emotions, impacting their satisfaction and fostering behavioral loyalty.

In the realm of the retail industry, this also resonated with the insights of Rathnasiri and De Silva (2023) which delved into the connection between a store's physical environment and customer behavioral inclinations, specifically focusing on satisfaction. The findings underscored a significant correlation, emphasizing the pivotal role of the store's ambiance in shaping customer behaviors. The study suggested practical strategies for optimizing the store environment, such as facilitating visibility and access to goods, strategically placing seasonal items, and employing attractive colors and packaging. Emphasizing cleanliness, brightness, and vertical display efficiency, the study highlighted the importance of aligning supply and decoration with customer tastes. Furthermore, the use of standard quality products not only signaled a commitment to quality but also encouraged additional purchases. These findings resonated with the broader understanding that a well-managed physical environment was pivotal in influencing customer satisfaction and subsequent behavioral patterns.

In terms of Basic Facilities

Table 9. Descriptive statistics of the Level of Customer Satisfaction in terms of Basic Facilities

Indicators	Mean	Interp.
1. The institution is equipped with facilities right for the job.	3.78	VS
2. Office equipment is functional.	2.78	S
3. Outdated equipment like typewriters is no longer utilized.	3.34	VS
4. Reading materials are available for waiting clients.	3.47	VS
5. There are seats provided for waiting clients.	2.73	S
6. Ramps are provided for differently-abled persons.	3.80	VS
7. There are express/special lanes for the elderly, persons with disability (PWD), and pregnant women.	2.73	S
8. Queuing machines are seen and functional.	3.56	VS
9. Comfort rooms are clean and available for public use.	3.77	VS
1. The institution is equipped with facilities right for the job.	3.78	VS
General Assessment	3.22	S

Legend: 3.25 – 4.00 Strongly Agree – Very Satisfied (VS) 2.50 – 3.24 Agree – Satisfied (S) 1.75 – 2.49 Disagree – Dissatisfied (D) 1.00-1.74 Strongly Disagree – Very Dissatisfied (VD)

As shown in Table 9, the customers of Calamba Water District were Satisfied ($\bar{X} = 3.22$; $\sigma = 0.23$) with Basic Facilities. The indicator "Ramps are provided for differently abled persons" achieved the highest mean of 3.80, signifying Very Satisfied, while the indicator "Communication lines like telephones are functional" received the lowest mean of 2.23, interpreted as Dissatisfied.

Overall, the findings imply that the concessionaires of Calamba Water District express satisfaction with available basic facilities, reflecting commendable efforts to cater to diverse client needs and enhance the overall customer experience through inclusive infrastructure. However, a significant concern arises regarding the front office layout, particularly the positioning of the ramp behind the parking area, which poses accessibility challenges for

disabled clients when parking spaces are occupied. Additionally, reliability issues with communication channels, such as malfunctioning or unattended telephones, have the potential to hinder customer reach and affect service perception. Addressing these concerns, such as enhancing communication lines and ensuring equipment functionality, is crucial to improving overall satisfaction. Moreover, fostering inclusivity through dedicated and visible express lanes shows promise in enhancing customer experience at Calamba Water District.

The findings of Maharani et al. (2020) supported the implications of this particular subvariable. They mentioned that the emphasis on the completeness of facilities as a crucial factor influencing customer satisfaction resonates with the commendable efforts of the organization to cater to diverse clients. Their study reinforced the notion that the physical evidence of a facility played a pivotal role in achieving customer satisfaction. The greater completeness of facilities offered by an institution leads to increased feelings of happiness and comfort among customers, consequently fostering satisfaction through enhanced convenience and comfort.

Moreover, they highlighted the correlation between facilities and customer satisfaction, as deduced from the results of their hypothesis test, underscored a direct and significant relationship between the facility and overall customer satisfaction. Facilities encompass everything that facilitates consumer satisfaction. Given that the nature of service was intangible, lacking visibility, smell, or touch, the physical appearance of facilities assumed paramount importance as a gauge of service quality. Customers relied on their sense of sight to evaluate the facilities provided by a particular company, and the perception formed through the interaction between customers and facilities significantly shaped the overall quality of service.

This inference found support in the findings of Sinaga et al. (2022) wherein facilities played a crucial role in consumer activities, encompassing conditions, completeness, interior and exterior design, and cleanliness. These aspects, particularly those directly experienced by consumers, profoundly impacted their perception of a service. The atmosphere created by relevant facilities influences customer perception. Physical resources, such as seating, air conditioning, and restroom facilities, must be in place before offering a service. Their research setting at Hotel Platinum Rantauprapat confirmed the substantial influence of facilities on customer satisfaction, indicating that poor facilities lead to lower satisfaction, while improved facilities elevate satisfaction levels.

3.4 Relationship Between Implementation Level of RA 11032 and Customer Satisfaction Level

Table 10. Correlation analysis between the Policy Implementation Level of RA 11032 and the Customer Satisfaction Level

Core Components	Customer Satisfaction	r value	p-value	Remarks	Decision
Citizen's Charter Provisions	Frontline Service Providers	.363**	.000	Significant	Reject H ₀₂
	Service Quality	.130*	.012	Significant	Reject H ₀₂
	Physical Set Up	.304**	.000	Significant	Reject H ₀₂
	Basic Facilities	.084	.449	Not Significant	Accept H ₀₂
Government Access through Frontline Services	Frontline Service Providers	.180**	.001	Significant	Reject H ₀₂
	Service Quality	.196**	.000	Significant	Reject H ₀₂
	Physical Set Up	.199**	.000	Significant	Reject H ₀₂
	Basic Facilities	.043	.894	Not Significant	Accept H ₀₂
Report Card Survey	Frontline Service Providers	.410**	.000	Significant	Reject H ₀₂
	Service Quality	.276**	.000	Significant	Reject H ₀₂
	Physical Set Up	.394**	.000	Significant	Reject H ₀₂
	Basic Facilities	.193**	.000	Significant	Reject H ₀₂
Zero Contact Policy	Frontline Service Providers	.440**	.000	Significant	Reject H ₀₂
	Service Quality	.241**	.000	Significant	Reject H ₀₂
	Physical Set Up	.420**	.000	Significant	Reject H ₀₂
	Basic Facilities	.020	.855	Not Significant	Accept H ₀₂

Table 10 shows that there was a significant relationship between the implementation level of Republic Act 11032 and customer satisfaction level among Calamba Water District concessionaires except Citizen's Charter Provisions and Basic Facilities, Government Access through Frontline Services and Basic Facilities, and Zero Contact Policy and Basic Facilities. The probability values of .000, .012, .000, .001, .000, .000, .000, .000, .000, .000, .000, and .000 were less than the level of significance at .05, thus the null hypothesis was rejected. The computed r-values of .363, .130, .304, .180, .196, .199, .410, .276, .394, .193, .440, .241, and .420 ranged between .130 to .490. This indicated a low positive to moderately positive correlation. On the other hand, there was no significant relationship between Citizen's Charter Provisions and Basic Facilities, Government Access through Frontline services and Basic

Facilities, and Zero Contact Policy and Basic Facilities. The probability values of .449, .849, and .855 were greater than the level of significance at .05, thus accepting the null hypothesis.

The aforementioned findings indicate that an increase in the implementation of Republic Act 11032 by Calamba Water District leads to a corresponding increase in the satisfaction of its concessionaires, except specific areas, as reiterated above. This information is crucial for policymakers and CWD management to understand which aspects of the implementation are directly influencing customer satisfaction and which areas may need further attention. It implies that there is a need for a policy focus as the results highlight the significance of the specific policy components of the Act such as Citizen's Charter Provisions, Government Access through Frontline Services, Report Card Survey, and Zero Contact Policy in influencing customer satisfaction. Policymakers should focus on strengthening these aspects to enhance overall customer experience and satisfaction.

Moreover, the results highlighted instances where no significant relationship exists, such as the lack of correlation between Basic Facilities and Citizen's Charter Provisions, Government Access through Frontline Services, as well as Zero Contact Policy. This could be due to customers prioritizing other aspects of service delivery outlined in the Act over Basic Facilities. Importantly, this suggested that while these elements may not directly influence customer satisfaction, they should not be dismissed or overlooked. Conducting additional qualitative research became imperative to comprehend customer expectations regarding basic facilities and uncover any underlying issues that might not have surfaced in the quantitative analysis of this research. Moreover, engaging with customers through surveys or focus group discussions was strongly recommended to gather qualitative insights into their expectations. These results underscored the need for a nuanced approach to policy implementation, considering the distinctive aspects of each construct.

In concordance with these findings, parallels could be drawn to the insights offered by Talavera (2022) in their quantitative analysis. As they expounded, not all facets of the Integrated ARTA Program exert an equal influence on customer satisfaction. Those components that bore greater significance were those with a more instant effect on the provision of frontline services. Concerning program outcomes, the implementation of Republic Act 11032 through the Integrated ARTA program demonstrated effectiveness in augmenting the efficiency of government services, thereby contributing to heightened client satisfaction with their frontline service experience. Their findings underscored the necessity for a discerning approach to policy implementation, prioritizing components that directly shape client satisfaction and service efficiency.

Further reinforcing these observations, an analysis by NEDA (2019) aligned with the findings by emphasizing key factors that contributed to the efficiency goals of programs such as ARTA and the Ease of Doing Business Act. The consistent factors identified included initiatives at the agency level and prioritization of leadership in management. The mutual relationship between these facilitating factors was apparent; when compliance with ARTA became a priority for management and leadership, it aligned the goals and actions of all units and staff within an office. Resource allocation in terms of manpower, infrastructure, personnel training, and other innovations were all impacted by leadership and management prioritization. However, a cautionary note was raised regarding the potential risk of overemphasizing leadership and management efforts, as observed in various national and local policies in the Philippines. This emphasized the importance of necessary commitment-building efforts from top to bottom to sustain and institutionalize the positive impacts of policy initiatives over time.

In light of these findings, the application of the theory of New Public Management (NPM) which was one of the guiding frameworks in the study, was recommended to enhance the efficiency and effectiveness of public service delivery. As discussed by Saldaen et al. (2021), NPM principles, which emphasized performance measurement, results-oriented approaches, and a customer-focused perspective, aligned with the identified factors influencing client satisfaction and program outcomes. The theory outlined principles such as decentralization, customer focus, and performance measurement, all of which were relevant to the goal of strengthening frontline services. By adopting NPM, government agencies could strategically prioritize components that directly shape client satisfaction and service efficiency, as highlighted by the literature cited above. This theory provided a framework for fostering leadership and management prioritization, encouraging innovation, and ensuring sustained commitment and institutionalization of positive policy impacts. Integrating NPM principles into the

implementation of Republic Act 11032 through the Integrated ARTA program could contribute to achieving the efficiency goals and long-term success of the initiative in Calamba Water District.

3.5 Proposed Action Plan

An action plan (Table 11) was devised to boost customer satisfaction at Calamba Water District, focusing on enhanced communication, transparency, and regular monitoring to align with customer expectations and ensure continuous improvement.

Table 11. Proposed Action Plan to enhance Customer Satisfaction on the Policy Implementation of Republic Act 11032

Key Areas	Objectives	Strategies	Frequency	Persons Involved	Fund	Success Indicators
Physical Set-Up	To improve safety and signage visibility for transacting clients	Conduct a comprehensive safety audit and implement protocols or guidelines based on audit findings Invest in clear, well-lit signage throughout the premises, and update based on feedback and changes in layout	Semi-annually	CWD Management, Commercial Department Personnel	Corporate Operating Budget	85% improved safety and signage
Basic Facilities	To upgrade office equipment and communication lines	Assess the current infrastructure and develop a procurement plan to acquire new equipment, prioritizing those with outdated technology or performance issues Implement a queuing strategy to efficiently manage client seating	Annually	Admin and Commercial Department	Corporate Operating Budget	75-80% office equipment upgrade and functional facilities
Citizen's Charter Provisions	To enhance communication and visibility of the CC at various service points	Posting of CC at every service window, provision of printed and shortened versions of CC in those areas Provide a digitized format of the Citizen's Charter near waiting areas and other social platforms	Quarterly	Commercial Department	Department Fund	80% increased visibility and accessibility of the Citizen's Charter
	To sustain awareness and keep customers engaged	Citizen's Charter briefing, seminar on amendments, and orientation	Semi-annually	Public Information Committee, Customer Care Division Staff	Corporate Operating Budget	85% increased customer feedback acknowledging improved awareness
Govt Access through Frontline Services	To streamline service processes and efficient service delivery	Conduct operational analysis, resource allocation, and process monitoring	Quarterly	CWD Management	Corporate Operating Budget	80% reduction in service response time
Report Card Survey	To augment transparency and communication of costs	Conduct regular audits while recurrently updating the Citizen's Charter with cost information and echoing RCS results throughout the organization	Semi-annually	Commercial Department, Admin Department (Procurement)	Corporate Operating Budget	85% reduction in customer complaints related to unclear or unexpected charges

4.0 Conclusion

Based on the presentation of the findings, the subsequent conclusions were drawn:

a) The positive impact of Republic Act 11032 was evident in the perceived advancements in service delivery, information dissemination, and content, as well as the reduction of bureaucratic hurdles, indicating a high level of adherence to the prescribed standards. The existing structured policies and standard practices yielded favorable outcomes, reflecting compliance with transparency requirements. However, subtle variations suggest areas for improvement, such as addressing hidden costs and ensuring consistent processing times. Ongoing initiatives for continual improvement and innovation align seamlessly with state reforms, fostering increased operational efficiency. Overall, the findings underscore the positive impact of structured policies in enhancing service quality and customer satisfaction, aligning with national regulations aimed at efficiency, transparency, and accountability in public service operations.

b) The significant differences observed among the assessments of Citizen's Charter Provisions, Government Access through Frontline Services, and Report Card Survey indicate the need for targeted improvements in communication and service delivery strategies between Commercial Department personnel and concessionaires. This would further align their understanding and expectations, echoing established principles in public service delivery and implementation. Conversely, the absence of significant differences in the Zero Contact Policy assessment indicates a shared understanding and general approval of its current implementation in CWD. This provides an opportunity for Calamba Water District to focus on sustaining and optimizing this policy without major adjustments.

c) Customer satisfaction is more likely when frontline personnel are consistent, empathetic, and willing to resolve and address concerns. While service quality is generally positive, identified issues such as manual processing inefficiencies and occasional inaccuracies present clear improvement opportunities crucial for enhancing efficiency and building institutional trust. Areas receiving lower ratings highlight the importance of addressing specific challenges within each service dimension to enhance overall customer experience. Additionally, the physical setup's cleanliness, signage clarity, and appeal significantly impact customer satisfaction. Insights from the basic facilities assessment underscored the importance of inclusivity and effective communication channels in shaping overall customer satisfaction.

d) There is a substantial association between the implementation level of Republic Act 11032 in Calamba Water District and the satisfaction levels of its concessionaires, highlighting diverse effects within specific policy components. An overall increase in the implementation of Republic Act 11032 corresponds to increased satisfaction among concessionaires, with exceptions observed in specific areas. Non-significant correlations, particularly in Citizen's Charter Provisions and Basic Facilities, Government Access through Frontline Services and Basic Facilities, and Zero Contact Policy and Basic Facilities, underscore the need for a targeted and refined approach to policy implementation. The intricate nature of customer priorities suggests that while individual policy components hold value, their connection with Basic Facilities may not be the primary determinant of overall satisfaction. Nonetheless, it is crucial to recognize the continued importance of this specific construct and not to overlook it.

e) The findings of the study have led to a proposed plan of action involving the implementation of comprehensive strategies aimed at elevating the current service provision standards and policy compliance of Calamba Water District. This plan also focuses on increasing the productivity of frontline employees and nurturing greater confidence among concessionaires.

5.0 Contributions of Authors

The sole author conceptualized and implemented the study.

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7.0 Conflict of Interests

The author declares no conflicts of interest about the publication of this paper.

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Knowledge, Attitude, and Practices of Students Toward Global Warming

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Abstract. The study aimed to determine the students' knowledge, attitudes, and practices towards global warming and their relationships. The researcher utilized a descriptive-correlational design and the systematic sampling technique. The respondents of the study were 340 students from grades 7 to 12 at Sibulan National High School. The researcher used validated questionnaires and employed weighted mean, Spearman's Rank Correlation Coefficient, mean, and percentage in treating the data. The study revealed that students' knowledge about global warming is "very satisfactory." Students' attitude towards global warming is also "very positive" and their extent of practices to minimize global warming is "high." Moreover, the study found that there is a significant and positive relationship between the students' knowledge about global warming and their attitude towards global warming. The student's attitude towards global warming is also significantly and positively related to their practices to minimize global warming. However, no significant relationship is found between students' knowledge about global warming and their practices to minimize it.

Keywords: Global warming; Attitude; Knowledge; Practices.

1.0 Introduction

Global temperatures continue to rise due to human activities that pump greenhouse gases into the atmosphere. The National Aeronautics and Space Administration (NASA) has recorded that the global average temperature is 2.1°F higher than it was in 1880. This record explains the global issues of melting ice, rising sea levels, drought, floods, increased natural disasters, and wildfires, and is the cause of the possible extinction of some thriving animals and plants (Marder, 2023). The temperature anomaly causes the worst drought in some countries, leading to a decline in crop production and an increase in the price of market products (Kogan, 2023). In addition, this problem of crop production is leading to malnutrition in some countries where populations are growing rapidly (Kogan, 2023). Global warming also threatens public health and causes disease in living organisms on Earth. In an article published in the journal *Wetenskap Health*, climate change is also affecting water, air, and soil composition, which has a major impact on human health. The decrease in heart rate is also associated with the increase in air temperature and therefore the risk of suffering a heart attack increases every day (Hodambia & Dandala, 2020).

The Philippines is located on the equator and, like other tropical countries, is vulnerable to severe effects of global warming. The country is highly vulnerable to various impacts of global warming, such as rising sea levels, droughts, public health threats, altered tropical cyclones, food security issues, and threatened biodiversity. To prevent future generations from bearing the impact of the past, the government and other authorities are working together to combat these global events. The Department of Education (DepEd) is one of the government agencies committed to helping in the fight against global warming. Activities such as DepEd Memorandum (DM) No. 069, S. 2023 establish the rules for the implementation of the "DepEd's 236,000 Trees - A Christmas Gift for the Children" project, an effort to promote environmental protection and instill environmental responsibility among

Filipino children. Another example is the Climate Change Act (Republic Act No. 9729), which promotes the inclusion of global warming and climate change in the teaching of various academic subjects (Federigan, 2022).

Several studies (IPCC, 2021; Ripple et al., 2019; Diaz et al., 2019) have warned about the escalating impacts of human activities on the environment. Despite this, it remains a mystery why the effects of global warming continue to become more severe over time. Several research studies on student awareness (Cavdar, 2023; Kumar et al. as cited in Salman, 2023; Olarewaju et al., 2023), its relationship with attitude (Abdu-Raheem & Adeosun, 2022; Deshiana et al., 2022), and the relationship between attitude and behaviors (Ballew et al., 2024) were conducted. However, these studies failed to examine the significant relationship of the three components essential in addressing the challenges of global warming. To the researcher's knowledge, this quantitative research is less explored.

Therefore, as a public school science teacher, the researcher wants to investigate how aware secondary students at Sibulan National High School are about climate change. The researcher's aim is to survey secondary school students at Sibulan National High School to determine their level of knowledge, attitude, and practices towards mitigating global warming and how these correlate with each other.

2.0 Methodology

2.1 Research Design

The researcher used the descriptive-correlational survey. It was descriptive because it (a) identified students' level of knowledge, (b) examined students' attitudes and perceptions, and (c) determined students' practices or behaviors. On the other hand, it is correlational because it examines the relationship between (a) knowledge and attitudes, (b) knowledge and practices, and (c) attitudes and practices.

2.2 Research Participants

The respondents of this study were high school students enrolled from grades 7 to 12 at Sibulan National High School for the school year 2023–2024 school. The researcher used systematic sampling techniques in which every fourth student on the list was the respondent. The respondents were selected randomly. The researcher used a 5% margin of error and a 95% confidence level to determine the sample size.

2.3 Research Instrument

The researcher used a self-made questionnaire to collect relevant data. The questionnaire consisted of four parts. Part I contains the disclosure statement indicating that the respondents allowed the researcher to collect information provided that all information was treated with the utmost confidentiality. Part II consists of 20-item test questions on the student's level of knowledge about global warming. Part III includes a 5-point scale assessing students' attitudes toward global warming. Finally, Part IV displays the 5-point assessment of students' practices or activities to mitigate global warming. The questionnaires were validated by three science teachers who hold Master's degrees. To ensure the reliability of the item, a dry run was carried out. There were 30 selected students who were not among the respondents from Sibulan National High School who acted as respondents to the said dry run. Test-retests were used for students' knowledge and Cronbach's alpha test was used for students' attitudes and practices. The results were 0.701 for knowledge, 0.760 for attitude, and 0.854 for practice. All values are above 0.70, meaning the items are reliable.

2.4 Data Gathering Procedure

The researcher asked for the approval of the Dean of the Foundation University Graduate School, and a letter of request to conduct a study was sent to the Schools Division Office of Negros Oriental. The signed and approved letter was presented to the principal and students' advisers/subject teachers. During the distribution, the researcher explained the purpose and significance of the study to the students. The researcher emphasized that all information given would be treated confidentially and that they had the right to withdraw at any time. Once the students finished answering the questionnaires, the questionnaires were retrieved immediately. The findings were tallied using MS Excel and analyzed using JAMOWI software.

2.5 Ethical Considerations

The researcher obtained ethical approval from the DepEd's Schools Divisions Office of Negros Oriental and the Ethics Committee of the Foundation University. The ethical considerations are also derived from RM No. 228, s. 2020 on the *Policy Guidelines on the Adherence to Ethical Research Principles and Responsibilities in Studies Involving Teaching, Teaching-related, Non-Teaching Personnel, and Learners*, which follow strict confidentiality and therefore ensure the confidentiality of the information shared. In order to comply with the ethical protocols established by the Foundation University Ethics Committee, the researcher carefully followed the required procedures. Consultations were undertaken to ensure that the research topic is sound, meaningful, and ethically appropriate. Throughout the process, the researcher maintained an unbiased attitude and aimed to avoid any form of censure. In addition, before conducting the study, respondents were fully informed about the purpose of the study and their informed consent through the disclosure statement included in the questionnaire. It was emphasized that respondents could answer, not answer, or withdraw from the questionnaires at any time without intimidation.

3.0 Results and Discussion

3.1 Knowledge of Students about Global Warming

Table 1 illustrates the knowledge of students about global warming based on a sample size of 340 students.

Table 1. Descriptive statistics of students' knowledge of global warming (n = 340)

Rating	Verbal Description	Frequency	Percentage
90 – 100	Outstanding (O)	107	31.47
85 – 89	Very Satisfactory (VS)	60	17.65
80 – 84	Satisfactory (S)	103	30.29
75 – 79	Fairly Satisfactory (FS)	42	12.35
≤ 74	Did Not Meet Expectations	28	8.24
Mean = 85.26% (Very Satisfactory)			
SD = 7.22			

As shown in the table, the average percentage of students' knowledge of global warming is 85.26 percent, indicating a "very satisfactory" performance. The standard deviation is 7.22, indicating that students' ratings are far from the mean. Most students (31.47%) fall into the "outstanding" category and a significant proportion of them (30.29%) have a "satisfactory" level of knowledge. A smaller proportion of students (17.65%) are rated as "very satisfactory," and a smaller number of them fall into the "fairly satisfactory" (12.35%) and "did not meet expectations" (8.24%) categories.

Based on the indicators for identifying students' knowledge, simple questions such as "What is global warming?" and "Which of the following is a greenhouse gas?" have the most correct answers. On the other hand, broad questions such as "Which human activity is primarily responsible for the increase in methane emissions (CH₄)?" and "Without the natural greenhouse effect, the Earth would be like this on average?" are usually overlooked. This means that educators should not only focus on deepening basic knowledge, but also on exploring more nuanced topics. This is supported by Olarewaju et al. (2023) who assume that students' basic understanding of global warming is good, but their comprehensive knowledge is below average. Furthermore, Cavdar (2023) revealed that although students' awareness of global warming is strong, they know less about the underlying causes.

3.2 Attitude of Students Towards Global Warming

Table 2 presents data on student attitudes toward global warming based on the sample size of 340 students. The table indicates that majority of the students' responses fall into the "strongly agree" category, indicating a generally "very positive" attitude towards global warming, as shown by the composite mean of 4.34. The data indicate that students are "very positive" in expressing strong concern about the consequences of global warming for future generations ($w\bar{x} = 4.61$), taking action to combat global warming by using renewable energy ($w\bar{x} = 4.55$), recognizing that global warming is a serious global issue that requires attention from government and other agencies ($w\bar{x} = 4.24$), and asking questions willingly to fully comprehend global warming ($w\bar{x} = 4.24$). Similar to the study by Mazo and San Juan (2019), students who have information about the causes and consequences of global warming tend to participate in activities aimed at reducing or mitigating its impacts. These student behaviors reflect their proactive stance toward understanding and addressing this critical global issue and indicate promising potential for informed advocacy and decision-making in the future.

Table 2. Descriptive statistics of students' attitude towards global warming (n = 340)

Indicators	$w\bar{x}$	VD	AI
1. I feel like our generation should be concerned about global warming because of the continuous habits that destroy our mother Earth.	4.61	SA	VP
2. I think it is important for every community to start using renewable energy to lessen the effects of global warming. This will give us a sense of a safer and brighter future.	4.55	SA	VP
3. I am concerned about the consequences of global warming especially for the next generations to come.	4.53	SA	VP
4. I feel that the issues of Global warming are very alarming.	4.46	SA	VP
5. I feel it is important to take action to reduce greenhouse emissions which is essential to lessen the impacts of global warming.	4.33	SA	VP
6. I feel like Global Warming is a global issue that the government and other agencies should focus on.	4.24	SA	VP
7. I feel worried and afraid of the future consequences that I have watched and read in the media.	4.24	SA	VP
8. I have to ask questions about global warming for me to fully understand this global issue.	4.24	SA	VP
9. I think that it would be worth the cost to take significant actions to combat global warming.	4.17	A	P
10. I have a feeling that human activities are amplifying or increasing the Earth's natural gases.	4.07	A	P
Composite	4.34	SA	VP
Legend:	Scale	Verbal Description (VD)	Attitude Interpretation (AI)
	4.21 – 5.00	Strongly Agree (SA)	Very Positive (VP)
	3.41 – 4.20	Agree (A)	Positive (P)
	2.61 – 3.40	Moderately Agree (MA)	Moderate (M)
	1.81 – 2.60	Disagree (D)	Negative (N)
	1.00 – 2.60	Strongly Disagree (SD)	Very Negative (VN)

The table further shows that students “agree” that it would be worthwhile to take significant action to combat global warming ($w\bar{x} = 4.24$) and they feel that human activities are increasing the Earth's natural gases ($w\bar{x} = 4.07$). These two indicators got the lowest weighted mean and there is a need for educators to sway students to be more vigilant in this crucial issue. This result is supported by the studies of Khozin et al. (quoted by Hillary et al., 2023), Istoqomah et al. (2020), and Calculli (2021), which hold that students' attitudes regarding global warming improve with increasing knowledge. This is in line with what Yacek (2022) emphasized, to continually persuade learners to take action against detrimental habits that lead to global warming.

3.3 Practices of the Students to Minimize Global Warming

Table 3 provides data on the extent of students' practices to minimize global warming.

Table 3. Descriptive statistics of students' extent of practices to minimize global warming (n = 340)

Indicators	$w\bar{x}$	VD	EoP
1. I turn off lights and other electronic devices when not in use.	4.41	SA	VH
2. I turn off the taps while washing my hands with soap or when I brush my teeth.	4.28	SA	VH
3. I help segregate waste materials and recycle plastics	4.15	A	H
4. I am a fan of using second-hand clothes or “ukay-ukay” to lessen the textile waste that may drastically contribute to global warming.	4.04	A	H
5. I choose products with minimal packaging to reduce waste.	3.82	A	H
6. I participate in activities that will help the environment (e.g., tree planting, clean up drive, earth hour, or reducing electrical consumption).	3.80	A	H
7. I prefer to use a bicycle when going to school to reduce the burning of fossil fuels.	3.77	A	H
8. I plant trees at home and in school to help absorb carbon dioxide then reduce the CO ₂ level in the atmosphere.	3.68	A	H
9. I minimize my screen time to help save energy and help lessen heat and carbon emissions.	3.66	A	H
10. I share information about global warming and its impact with my classmates.	3.63	A	H
Composite	3.92	A	H
Legend:	Scale	Verbal Description (VD)	Extent of Practices (EoP)
	4.21 – 5.00	Strongly Agree (SA)	Very High (VH)
	3.41 – 4.20	Agree (A)	High (H)
	2.61 – 3.40	Moderately Agree (MA)	Moderate (M)
	1.81 – 2.60	Disagree (D)	Low (L)
	1.00 – 2.60	Strongly Disagree (SD)	Very Low (VL)

The table shows the overall student responses, as indicated by the composite mean of 3.92, fall into the “agree” category, indicating that students are highly engaged in the various practices to minimize global warming. The students expressly demonstrate “very high” proactive behavior, such as turning off lights and electronic devices when not in use ($w\bar{x} = 4.41$) and conserving water ($w\bar{x} = 4.28$). They also “highly” practice segregation of waste materials ($w\bar{x} = 4.15$) and participation in any environmental activities.

The table also reveals that these student actions indicate a strong commitment to personal responsibility and taking action to mitigate the effects of global warming. This finding is also similar to that of Genezira et al. (2020) and Nath et al. (2020), who found that students expressed their willingness to participate in the fight against global warming. It is important to continue to raise awareness and give students the opportunity to get involved in environmental initiatives to empower them to make a positive impact on the planet.

3.4 Relationship Between Variables

Table 4 shows the data on the relationship between the correlated variables such as (a) students’ knowledge and attitude towards global warming, (b) students’ knowledge and practices to lessen the problem of global warming, and (c) the students’ attitude and practices to mitigate global warming.

Table 4. Correlation analysis for the relationship between variables

	r_s	p	Decision	Remark
Knowledge vs. Attitude	0.375	<.001	Reject H_{01}	Significant
Knowledge vs. Practices	-0.043	0.430	Fail to reject H_{02}	Not significant
Attitude vs. Practices	0.361	<.001	Reject H_{03}	Significant

Spearman Rank Order Correlation at 0.05 Level of Significance

Using Spearman Rank Order Correlation, the data reveal that there is a significant relationship between the students’ knowledge about global warming and their attitude towards global warming ($p < .001$). This finding implies that enhancing students' understanding of global warming through education can lead to more positive attitudes and potentially drive proactive actions to address climate change.

The result confirmed that of Calculli et al. (2021) who revealed that there is a positive relationship between respondents' awareness of global warming and concern about global warming. They also stated that as people became more knowledgeable about global warming, they would become more concerned about its negative impact on the environment. They also added that the higher the students' knowledge, the better their attitude towards global warming. Filho (2022) also emphasized that students' awareness of climate change increases as their concern increases.

The table also indicates that a significant relationship exists between students’ attitudes toward global warming and their practices to minimize global warming ($p < .001$). This signifies that student who display better attitude towards global warming tend to have higher practices to mitigate global warming. This suggests that a favorable mindset can lead to concrete steps in safeguarding the environment. This is supported by the study by Kurup et al. (2021) who stated that as people become more knowledgeable about global warming in the future, they will become more motivated to adopt positive behaviors that enable them to make informed decisions and take responsible actions to raise awareness of the negative impacts of global warming. The results are also consistent with research by Malay (2019), which indicates that students' strong positive attitudes toward climate change issues are a strong predictor of their propensity to actively participate in addressing this global challenge.

Furthermore, the table reveals that there is no significant relationship between the students’ knowledge about global warming and their practices to minimize global warming ($p = 0.430$). This suggests that being aware of global warming does not always equate to actively reducing its consequences. This implies that people's actions to mitigate global warming may be influenced by causes other than awareness. The findings are in opposition to the study of Shikangalah (2019) as she revealed that students' level of knowledge will influence the way they feel about global warming, and this motivates them to act against global warming.

4.0 Conclusion

There is a promising trend in environmental education and awareness among students. The connection between students' knowledge of global warming and their attitudes toward it highlights the importance of education in shaping individuals' perceptions and concerns about climate change. Furthermore, the observed relationship between students' positive attitudes toward global warming and their practices to minimize it underscores the need to foster a sense of responsibility and proactive engagement among individuals.

While knowledge serves as the foundation, it is the attitude that ultimately drives action. Therefore, it is important to talk to the younger generation about topics that first raise awareness about the global warming crisis. Their belief in the origins and consequences of global warming will leave an emotional impact on them. Students are therefore expected to work responsibly to protect the environment.

However, the lack of a significant relationship between students' knowledge about global warming and their actual practices to minimize it reveals a critical gap between intention and action. Although students have a high level of knowledge about global warming, they may face barriers to translating this acquired knowledge into tangible behaviors.

5.0 Contributions of Authors

This study has a single author and his adviser reviewed and approved the final version of this paper.

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7.0 Conflict of Interests

The author declared that he has no conflicts of interest as far as this study is concerned.

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Exploring Staff Nurses' Lived Experiences of Resilience in Relation to Spirituality during the COVID-19 Pandemic

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Abstract. Spirituality was reported to act as a source of resilience, particularly in stressful circumstances. As COVID-19 caused uncertainties that tested resilience, especially for those in the medical field, this study aims to explore the role of spirituality in the experience of resilience among staff nurses. Participants for this study were staff nurses in Northern Mindanao who have been working directly with COVID-19 patients and are all working in private hospitals in Cagayan de Oro City. Interviews were conducted online to gather data. For this study, interpretative phenomenological analysis was used to explore how participants make sense of their experiences of resilience. The main currency for an Interpretative Phenomenological Analysis study is the meanings particular experiences, events, and states hold for participants. The data resulted in four core themes: (1) resilience through faith in the face of adversity, (2) spiritual relief in solitude, (3) finding peace through acceptance, and (4) compassionate service rooted in faith. The dedication of the medical front liners reflects the transformative power of faith in fostering resilience and solidarity within their spiritual communities. Their experiences emphasized the impact of spirituality in navigating challenges, cultivating resilience, and fostering solidarity amidst adversity.

Keywords: Resilience; Spirituality; COVID-19.

1.0 Introduction

Medical front liners of diagnosis, treatment, and care of patients with confirmed and suspected COVID-19 are at significant risk of both infection and development of mental health problems (Bfefferbaum & North, 2020). Its effects have had a significant impact on medical front liners' mental health and well-being. At the same time, they risk their lives, saving people who have been suspected and confirmed to have COVID-19 and causing many uncertainties that have tested their resilience. Resilience adaptively responds to a potentially highly disruptive event to preserve psychological and physical functioning and personal growth (Bonanno, 2004). It has also been defined as the capacity and dynamic process of adaptively overcoming stress and adversity while maintaining normal psychological and physical functioning (Russo et al., 2012; Rutter, 2012b). Research has highlighted the pivotal roles of religiosity and resilience in fostering wellness during pandemics (Jackson, 2021). For example, De Pinho et al. (2021) found in Portugal that healthcare and frontline workers emphasized the significant influence of religiosity on resilience, defined by Luthar and Cicchetti (2001) as the capacity to withstand adversity, adapt positively, and rebound from setbacks.

However, while previous studies have shown that religiosity can promote well-being through social support and existential certainty (Galen, 2011), spirituality offers a more intimate dimension (Cavanna et al., 2015). Defined by Puchalski et al. (2014) as a multifaceted concept encompassing philosophical, cultural, and religious beliefs and practices, spirituality fosters a sense of belongingness and existential interconnectedness that supports mental

health. Even in the study of Jones et al. (2016), spirituality was reported to positively influence one's quality of life, life satisfaction, and adjustment.

Moreover, scholars like Gray (2017) and Levin (2020) argue that spirituality acts as a source of resilience, bolstering physical, psychological, and mental well-being, particularly in stressful and traumatic circumstances (Koenig, 2020; You, 2019). Studies by Chua et al. (2019), Wild et al. (2020), and Raghavan & Sandanapitchai (2020) have also reported positive correlations between spirituality and resilience for those who suffer from physical illness, death of a loved one, artificial and natural disasters in addition to other disease outbreaks. In addition, Ahmed et al. (2021) suggested that spirituality plays an essential role in affecting the resilience of healthcare workers. Resilience acts protectively against psychological distress during unprecedented times such as the COVID-19 pandemic (Pink, 2021). Resilience enables healthcare workers to ameliorate stress, reduce their risk of burnout, and maintain well-being during challenging times (Holmes et al., 2020; West et al., 2020).

Despite this richness of evidence, few studies have investigated the roles of spirituality in the experience of resilience during pandemics, particularly within contexts where social connections are constrained, as experienced by frontline workers. Therefore, this study addresses these gaps by examining the relationship between spirituality and resilience among frontline healthcare workers in Northern Mindanao, as the Department of Health revealed concerning trends in the region, with rising COVID-19 cases stretching healthcare systems to their limits. Understanding the interplay between spirituality and resilience among frontline healthcare workers is imperative.

2.0 Methodology

2.1 Research Design

The study utilized a qualitative research design, using Interpretative Phenomenological Analysis (IPA) to establish themes from the data. The main currency for an IPA study is the meanings particular experiences, events, and states hold for participants. This phenomenological approach involves a detailed examination of the participant's life world. The value of qualitative research using IPA on faith, spirituality, and resilience gave the researchers a chance to glimpse into the reality of people's lives with a faith-based or spiritual practice, their difficulties, hopes, and strengths.

2.2 Research Participants

This study made use of purposive sampling to recruit the participants. The following criteria were included in selecting participants: (1) staff nurses, (2) those working in a private hospital in Northern Mindanao, and (3) those who have been working directly with COVID-19 patients. There are three participants, two of whom are COVID-19 survivors. The main concern in IPA is to appreciate each participant's account fully. For this reason, samples in IPA studies are usually small, which enables a detailed and very time-consuming case-by-case analysis (Pietkiewicz & Smith, 2014).

2.3 Research Instrument

This study used a semi-structured questionnaire to explore the participants' thoughts, feelings, and experiences, allowing them to share their inputs freely. The researcher gathered relevant information to find meaningful results in the study, focusing on resilience among the medical frontliners during the COVID-19 pandemic. The researcher crafted the interview guide questions and reviewed and validated them with an external validator.

2.4 Data Gathering Procedure

Volunteer participants in this study were sent a formal invitation letter. Medical front-liners interested in the study completed a demographic questionnaire to ensure they met the inclusion criteria. They were also asked to sign an informed consent form. Upon completion, a one-on-one interview was scheduled. Interview durations varied, lasting from 30 to 45 minutes.

2.5 Ethical Considerations

This research study followed ethical guidelines. The medical front liners' participation was voluntary, and they signed the informed consent form. The data collected in this study was maintained with the highest level of confidentiality. The study did not disclose participant names or personally identifying information. Additionally, the researcher was considerate of participants' time, refraining from sending emails before 8 a.m. and after 6 p.m.

to respect their schedules. After each interview, a debriefing session was conducted to address any concerns. When the study was completed and the data had been analyzed, the list linking participants' names was destroyed. The result remained utterly anonymous.

3.0 Results and Discussion

Interpretative Phenomenological Analysis (IPA) of the three semi-structured interviews resulted in the emergence of four core themes. These were as follows: (1) resilience through faith in the face of adversity, (2) spiritual relief in solitude, (3) finding peace through acceptance, and (4) compassionate service rooted in faith. These themes are one possible account of the experience of resilience among medical health front liners. They do not cover all aspects of the participants' faith and spirituality but were selected due to their relevance in the experience of the staff nurses. It is acknowledged that these are subjective interpretations and that other researchers might have focused on different aspects of the accounts (Nunn, 2010).

Resilience Through Spirituality in the Face of Adversity

This theme emphasizes the central role of spirituality in fostering resilience amidst adversity. It highlights how frontline workers draw upon their spiritual convictions to navigate challenges within the hospital environment and society, ultimately strengthening their resilience and fortitude in the face of the COVID-19 pandemic. Despite their disappointments in hospital provisions and societal attitudes, prayer and spiritual practices became sources of comfort and strength, enabling the medical front liners to navigate challenging circumstances with hope and purpose. As N03 shared, *"This pandemic served as a wake-up call for me as a Christian, to be closer to Him and confide in Him with what I have been going through. For guidance to be able to move forward"*.

Moments of questioning God have caused more profound reflections on the nature of faith and adversity. N01 shared, *"I questioned God why it turned out like this, maybe because of too much stress. However, later, I asked for forgiveness, asking God to give me strength. He is the only one I can turn to during those times."* The pandemic deepened their relationship with God as they sought refuge and strength. They experienced spiritual intimacy with God through prayer, meditation, and scripture reading, providing comfort and guidance in turbulent times. A similar study by Edara et al. (2021) among Taiwanese university students suggested that an individual's resiliency can be attributed to their belief in the existence of God or the Divine. Hardships served as catalysts for spiritual growth and transformation, prompting the medical front liners to reevaluate their priorities and deepen their commitment to their belief in God. Drawing strength from their spiritual practices, participants emerged from adversity with greater resilience and a renewed sense of purpose.

Spiritual Relief in Solitude

This theme emphasizes how individuals turn to their faith communities for comfort, connection, and spiritual nourishment during loneliness and uncertainty. While social isolation exacerbated feelings of loneliness and helplessness, medical front liners leaned on their faith communities for support and connection. Virtual gatherings, online prayer sessions, and spiritual discussions provided avenues for maintaining fellowship and solidarity amidst physical distancing. N03 shared, *"In our faith, we have what we call bible studies. Although it is different now that it is done online, it is important to have fellowship despite our situation still"*.

This supports the findings of the study of Roberto et al. (2020), which indicated that even in the absence of physical gatherings, fostering ongoing practices that support comfort received from faith and spirituality can be helpful. Realizing the disadvantage of social isolation underscored the importance of spiritual fellowship and communal worship in sustaining one's faith during challenging times. They found creative ways to nurture their spiritual well-being and maintain belonging within their faith communities.

Finding Peace Through Acceptance

This theme highlights how medical front liners draw strength from their faith to surrender to divine providence, cultivating resilience and peace amidst the challenges of the pandemic. Acceptance of the current situation was through faith, as they recognized the sovereignty of God amidst the pandemic. N02 shared, *"But then, there is a realization in the pandemic. You are reminded of what God has done for you and that you should be thankful. During this pandemic, you were not left by God and have been provided the necessary things to survive. Some people do not realize that."*

Trusting in divine providence and acknowledging a higher purpose in their experiences enabled them to find peace and resilience amidst uncertainty. N01 shared, *"The pandemic made me closer to God. I started reading the Bible and turned back to my faith in Him. It seems like there is an advantage in the pandemic because you become closer to your family. It made me appreciate God even more"*. Understanding the positive side of the pandemic reflected their gratitude and faith in God's provision. Also, recognizing blessings amidst hardships fostered a sense of spiritual resilience and optimism, empowering medical front liners to face challenges with renewed faith and courage.

Compassionate Service Rooted in Faith

This theme underscores how frontline workers' commitment to prioritizing the health of others is grounded in their faith values of compassion and service, fostering resilience and solidarity within their spiritual communities. Their commitment to prioritizing the health of patients and the safety of loved ones was rooted in their faith values of compassion and service. N02 shared, *"Spirituality will always play an important role because, in everything we do, we always associate it with God."*

N03 shared, *"We always care and help our patients no matter what happens. This is our calling, and this is our job. We help the sick. We care for the sick."* Guided by their spiritual beliefs, they embraced their frontline roles with dedication and selflessness, embodying the principles of love and care in their caregiving. Spiritual communities also provided support and encouragement, fostering a sense of solidarity and shared purpose in serving others. They found strength and resilience in their journey through prayer and mutual support.

The study reveals that spirituality is critical in fostering resilience among medical front liners during the COVID-19 pandemic. Similar to findings by Bfefferbaum & North (2020) and Jackson (2021), the participants drew on their spiritual beliefs to navigate the challenges posed by the pandemic. This spiritual engagement provided comfort, direction, and a sense of purpose, echoing Koenig's (2020) assertion that spirituality enhances psychological well-being in stressful circumstances. The deepened faith observed among participants aligns with Edara et al. (2021), highlighting that resilience is strengthened through spiritual practices.

Medical frontliners found comfort and connection within their faith communities. Virtual gatherings and online prayer sessions became crucial for maintaining fellowship and solidarity, supporting Roberto et al. (2020) findings on the importance of ongoing spiritual practices. This adaptive behavior demonstrates the capacity of spirituality to foster resilience by providing a sense of community and support during challenging times, aligning with Luthar and Cicchetti (2001).

Also, medical front liners drew strength from their faith to accept the pandemic's challenges, finding peace and resilience through trust in divine providence. This finding reflects Galen's (2011) and Puchalski et al. (2014) findings on spirituality's role in providing existential certainty and a sense of belonging. Recognizing blessings amidst hardships fostered optimism and resilience, echoing You (2019) and Holmes et al. (2020). Healthcare workers' commitment to compassionate service was deeply rooted in their spiritual values, aligning with Chua et al. (2019) and Wild et al. (2020). Support from spiritual communities reinforced their resilience and dedication, illustrating the protective role of spirituality in facing adversity, as Ahmed et al. (2021) noted.

In the Filipino context, spirituality and religious practices are integral to daily life and well-being. The predominantly Catholic faith emphasizes community, compassion, and resilience, evident in the participants' experiences. The concept of "Bayanihan" (community spirit) and the strong family ties prevalent in Filipino culture further support the resilience observed among healthcare workers. This cultural inclination towards communal support and spiritual reliance aligns with the study's findings, demonstrating how deeply embedded spiritual and cultural values bolster resilience and well-being. In any collectivistic culture, the person is interdependent with others (Shiraev & Levy, 2001). In the case of Filipinos, they see themselves as being connected with other people and social institutions. This is evident in the participants helping and caring for others amidst hardships.

For many Filipinos, a relationship with God is of primary value (Yalung, 2010). It guides their evaluations of their behavior and search for meaning in life. Learning from the Filipino context, where many hold religion as necessary, we are not surprised to see that spirituality is a relationship with God built upon one's understanding of God as a powerful source of resilience.

4.0 Conclusion

In conclusion, the core themes highlight the role of faith and spirituality in the experience of resilience among medical front liners in the face of adversity during the COVID-19 pandemic. Despite encountering disappointments in hospital provisions and societal attitudes, these individuals turned to their faith as a source of strength and fortitude. Through prayer, spiritual practices, and introspection, they found relief and guidance in their relationship with God, deepening their spiritual intimacy and resilience amidst turbulent times.

Moreover, spiritual relief in solitude highlights the importance of faith communities in providing comfort and connection during periods of social isolation. Virtual gatherings and online platforms became crucial avenues for maintaining fellowship and sustaining spiritual well-being, demonstrating the resilience of faith communities in fostering solidarity amidst physical distancing. Furthermore, finding peace through acceptance illustrates how frontline workers draw strength from their faith to surrender to divine providence, cultivating resilience and peace amidst uncertainty. By trusting in God's sovereignty and recognizing blessings amidst hardships, they embraced acceptance as a pathway to spiritual resilience and optimism.

Lastly, compassionate service rooted in faith emphasizes the integral role of faith values in guiding medical front liners' commitment to prioritizing the health and well-being of others. Grounded in principles of compassion and service, their dedication to caregiving reflects the transformative power of faith in fostering resilience and solidarity within their spiritual communities. In essence, the experiences of medical front liners emphasized the impact of faith and spirituality in navigating challenges, cultivating resilience, and fostering solidarity amidst adversity. Through their unwavering faith and commitment to compassionate service, they embody the resilience of the human spirit in times of crisis.

5.0 Contributions of Authors

The authors confirm their contributions to the paper: Mahinay, CD – study conception, data collection, analysis and interpretation of the result, and draft manuscript preparation. Manaois, J – editing, writing, and supervising. Wapano, MR – initial conceptualization, research direction, and editing.

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7.0 Conflict of Interests

The authors declare no conflict of interest with the publication of this paper.

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Administrative Disposition and Managerial Competency in Dumaguete City's Lending Institutions

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Abstract. This study examines the administrative disposition and competency levels of lending institution managers in Dumaguete City, employing a descriptive-correlational research design. A sample of 36 managers was selected as respondents, with data analysis conducted using percentage and weighted mean statistical tools. Findings indicated that the respondents demonstrated very high overall work performance, critical thinking, and professional ethics. Additionally, their appreciation of diversity was rated very high in professionalism and high in administrative disposition. Collaborative competence was also very high in both administrative and professional domains. Lifelong learning was rated high for both administrative disposition and professionalism. Overall, the managers were deemed competent. In terms of job performance, the managers scored high in service provision, very high in work processes, and very high in work relations. A significant relationship was identified between administrative disposition and competence level, particularly concerning collaboration. However, the correlation between competence level and job performance was found to be non-significant for service to others, but significant for both work processes and work relations. The study recommends that managers participate in additional seminars and training to further improve their administrative disposition and competency.

Keywords: Lending institution; Organizational management; Managerial competency.

1.0 Introduction

In the contemporary business landscape, adept managerial capabilities are indispensable due to the perpetual evolution and increasing complexity of organizational environments. Managerial proficiency involves a blend of motivational impetus, individual attributes, competencies, knowledge, and values, all of which facilitate effective leadership and decision-making. Administrative dispositions encompass human characteristics such as interests, values, beliefs, attitudes, and adaptability. These characteristics are crucial for navigating the dynamic nature of modern organizations.

The efficacy of organizational management and the strategic direction set by top-tier executives are pivotal determinants of operational success. Building upon this premise, Borko, Liston, and Whitcomb (2007) underscore the influence of personal traits on behavioral patterns, which serve as conduits for the manifestation of beliefs and values. Similarly, Villegas, A. M., & Davis, D. E. (2007), posit that individual behavioral tendencies are shaped by underlying belief systems. Therefore, in this study, disposition is construed as the behavioral manifestation of individuals' core convictions, highlighting the importance of aligning personal values with organizational goals. Competencies are categorized into general and specific domains. General competencies, such as problem-solving and interpersonal skills, are universally applicable across diverse occupational roles and are essential for effective collaboration and communication. In contrast, specific competencies pertain to job-specific knowledge and skills essential for particular roles, ensuring that employees can meet the specialized demands of their positions.

The strategic deployment of competency frameworks extends beyond recruitment and workforce planning; it catalyzes talent development and organizational growth. By fostering a culture centered on competencies, organizations can nurture collaborative teamwork and cultivate robust interpersonal relationships among staff members. This research endeavors to explore the behavioral dispositions and competency profiles of managerial personnel within lending institutions in Dumaguete City. Recognizing the significance of teamwork, companies that embrace competency-based methodologies empower managers and employees to harness the diversity of talents effectively, thereby optimizing organizational performance and fostering sustained growth.

2.0 Methodology

2.1 Research Design

This is a descriptive-correlational study. The highest need was for a correlational research design in response to the research questions. The relationships of administrative disposition and level of competency are being explored. The approach also tries to capture the prevailing conditions during the study period using the available resources to give an accurate picture of the situation under investigation.

2.2 Research Participants

The respondents of the study consist of 36 managers of different lending institutions in Dumaguete City. Among 36 managers, four had earned master's degree units, thirty-one had graduated from college and one held a full-pledge master's degree.

2.3 Research Instrument

Analysis was made using the self-made questionnaire for data gathering primarily although a personal interview was also made with the respondents using the data gathered to verify the truth of the answers in the survey. The questionnaire comprises three parts. Part I pertains to the demographic profile of the respondents. Part II of the questionnaire is about the level of administrative dispositions, the level of competence, and the job performance of the manager. Part III is the validation interview. The structured part has unstructured questions. Structured surveys include those questions that have a list of responses from which the respondent is required to pick one while unstructured questions include an open-ended question where the respondent is expected to comment in his own words. Respondents thus form responses to the questions posed in the questionnaire.

2.4 Data Gathering Procedure

The researcher composed a letter addressed to the dean of the graduate school within the institution, seeking authorization to administer the survey questionnaire to the respondents. After receiving approval, the researcher sought permission to distribute the questionnaires to the respondents at their convenience. Subsequently, the data collected from the completed questionnaires were organized, calculated, and examined to address the particular research problem. The questionnaire's content is based on the specific questions enumerated in the statement of the problem. The questionnaires were administered to selected respondents.

2.5 Data Analysis Procedure

The study applied various statistical tools for data treatment, including frequency, percentage, weighted mean, and composite mean. Additionally, multiple regression analysis was employed to analyze the data. Frequency was used to determine the distribution of the respondents' responses in each category, providing a clear picture of how responses were spread across different options. Percentage calculations were employed to determine the proportion of responses relative to the total, offering insights into the relative frequency of each response category. The study also utilized multiple regression analysis, a statistical method that examines the correlation between a single dependent variable and multiple independent variables. This approach allowed the researchers to identify the relationships and potential predictive power of various independent variables on the dependent variable, providing a comprehensive understanding of the data and its underlying patterns.

2.6 Ethical Considerations

The willingness of managers from lending institutions in Dumaguete City to participate voluntarily is paramount. Additionally, participants retain the option to withdraw from the study at any stage, regardless of their age. Participation hinges on informed consent, a principle that necessitates researchers providing comprehensive

information and assurances regarding involvement, allowing individuals to fully grasp the implications and make an informed decision freely, devoid of any coercion.

3.0 Results and Discussion

3.1 Administrative Disposition and Professionalism

In terms of Work Performance

Table 1. Descriptive statistics of the level of administrative disposition and professionalism in terms of work performance

Indicators	Administrative Disposition			Level of Professionalism		
	w $\bar{x}$	VD	LoAD	w $\bar{x}$	VD	LoP
1. Accepts and incorporates suggestions in subsequent practice.	4.33	A	VH	4.36	A	VH
2. Applies, evaluates, reflects on, and adjusts instructional strategies to enhance learning.	4.25	A	VH	4.28	A	VH
3. Ability to recognize and assess one's contribution to workplace challenges and implement necessary changes.	4.25	A	VH	4.33	A	VH
4. Demonstrates the ability to self-analyze and identify one's strengths and weaknesses	4.00	F	H	4.11	F	H
Composite	4.21	A	VH	4.27	A	VH

As shown in Table 1, the overall composite mean scores of administrative disposition and professionalism among the respondents were 4.21 and 4.27, respectively. This means it is on an extremely high level in both domains. The first three indicators unveil that the respondents performed at a high level of proficiency in their administrative disposition and professionalism. However, it should be considered that the fourth, the last indicator, indicates performance at a high level and presents a naturalistic view concerning the dimensions of his performance.

Job satisfaction is an important constituent that plays a critical role in ensuring that employees display effective, optimal job performance, which is marked by a high level of satisfaction and a sense of achievement in their activities. Job satisfaction is a pillar of productivity and individual health in the workplace, marked by a high level of satisfaction and fulfillment in whatever one is doing. Job satisfaction involves a complex concept, which is associated with an employee's interest and passion for the job, ability to perform work well, and recognition for providing such services (Aziri, 2011). Secondly, individuals' attitudes towards various issues touching on their work, such as the kind of people differing in various categories that they work with, which may include colleagues, superiors, or subordinates; the nature of the job designated to them; and the level of remuneration, affect the level of satisfaction (George & Jones, 2008).

Recognizing the diverse motivational and leadership styles that individuals possess, organizations must tailor their approaches to accommodate these differences, ultimately fostering enhanced job performance and satisfaction among employees. By nurturing a workplace environment conducive to job satisfaction, organizations can effectively motivate their workforce, thereby stimulating increased engagement and improved outcomes (Raziq & Maulabakhsh, 2015).

In terms of Critical Thinking

Table 2. Descriptive statistics of the level of administrative disposition and professionalism in terms of critical thinking

Indicators	Administrative Disposition			Level of Professionalism		
	w $\bar{x}$	VD	LoAD	w $\bar{x}$	VD	LoP
1. Indicates the ability to identify problems and propose solutions.	4.33	A	VH	4.33	A	VH
2. Utilizes assessment data for improvements	4.25	A	VH	4.31	A	VH
3. Solicits and thoughtfully considers alternative and contradictory opinions, demonstrates inquiry and creativity, and seeks solutions.	4.25	A	VH	4.19	F	H
4. Intentionally applies and encourages problem recognition and problem-solving with employees	4.14	F	H	4.19	F	H
Composite	4.24	A	VH	4.26	A	VH

As shown in Table 2, the overall results reveal a consistently high level of administrative disposition with a correspondence of 4.24 and professionalism with a correspondence of 4.26. The composite mean scores reflect a high influence of the respondent in both areas. The respondent shows a consistently high level of administrative disposition, with regards to having the ability to identify the problems and find solutions, as this is indicated by a mean of 4.24; which is "Very High." It is also shown that the respondent can use assessment data for making improvements, with a mean of 4.25; also "Very High."

In the same vein, the respondent maintains a commendable level of professionalism with a composite mean score of 4.26. Again, this is a high level of proficiency in both areas soliciting and thoughtfully considering alternative and contradictory opinions, demonstrating inquiry and creativity in seeking solutions, evidenced by the score of 4.25, which falls under "Very High," and intentionally using and encouraging employees to recognize problems and solving them, which got a score of 4.19, "High."

Overall, the respondent shows strong critical thinking skills in problem identification, generating solutions, and utilizing assessment data for improvement. The attitude toward eliciting diverse opinions and encouraging employees to solve problems is a further indication of professionalism and leadership. Notably, while the respondent performs very well in all dimensions, there is a slight disparity in the level of professionalism, generating diverse opinions and encouraging problem-solving. The score is only within the lower end of the "Very High" category, hinting at a possible area of development or focus on how to become more inclusive in decision-making.

In that regard, the development of good critical thinking can be a tool in guiding one toward making good decisions in the workplace. In this regard, Gambrill and Gibbs (2017) agree that critical thinking indeed supports informed judgment and decision-making, and hence, a lot of good gains. It also helps postpone decisions where necessary, which helps improve management effectiveness. Tripathy (2020) also argued that lubricant, possibly being the most sought-after soft skill for the best organizational positions, is relevant for every leader and worker alike. Recent studies highlight its critical importance to almost all aspects of the workplace, such as communication, team building, leadership, creativity, decision-making, concluding, judgment, problem-solving, and amongst others. In summation, critical thinking will act as a backbone for dealing very comprehensively with the demands made in the workplace.

In terms of Professional Ethics

Table 3. Descriptive statistics of the level of administrative disposition and professionalism in terms of professional ethics

Indicators	Administrative Disposition			Level of Professionalism		
	w $\bar{x}$	VD	LoAD	w $\bar{x}$	VD	LoP
1. Utilizes positive behavioral aids when managing employee behavior.	4.44	A	VH	4.50	A	VH
2. Shows commitment to ethical conduct: turns in assignments on time, is punctual and reliable in attendance, maintains professional appearance	4.36	A	VH	4.36	A	VH
3. Actively advocates for employees and encourages employee self-advocacy. Utilizes non-biased assessments.	4.33	A	VH	4.47	A	VH
4. Recognizes the importance of consulting research to inform employees	4.22	A	VH	4.28	A	VH
Composite	4.34	A	VH	4.40	A	VH

As shown in Table 3, the respondents' self-evaluations in professional ethics were remarkably positive in every way. The mean scores collectively demonstrate the respondents' solid commitment to ethical norms in their professional conduct, as evidenced by the overall composite mean scores of 4.34 for administrative disposition and 4.40 for professionalism, both classified as "very high." The findings point to the respondents' admirable commitment to ethical principles, supporting the idea that they regard their adherence to professional ethics as high and high. These self-evaluations are a sign of strength, highlighting the significance of ethical issues in the workplace.

In a study by Hutterski (2020) on professional ethics in accounting, most respondents in 2015 and 2017 said their organizations followed ethical codes for decisions, but some were unsure. In 2017, a few respondents mentioned their organizations didn't follow these codes. Overall, respondents believed that these standards ensured

accounting tasks were done professionally and honestly. However, in 2017, fewer respondents were confident in the effectiveness of these standards compared to 2015.

Business ethics also includes the field of professional ethics and moral ethics, whereby a professional ethics mindset emerges as the foundation for determining whether someone is professional. The ability to distinguish a human being from another is based on their professional ethics. According to Bavec (2012), the moral aspect of economic activity is addressed by business ethics, a body of guidelines outlining what is ethically right and wrong in a professional setting. It resulted in the creation and using ethical codes, which contain the guidelines that managers and staff members of corporate entities ought to abide by.

In terms of Valuing Diversity

Table 4. Descriptive statistics of the level of administrative disposition and professionalism in terms of valuing diversity

Indicators	Administrative Disposition			Level of Professionalism		
	w $\bar{x}$	VD	LoAD	w $\bar{x}$	VD	LoP
1. Develop a plan of action that is interesting and engaging utilizing a variety of backgrounds, experiences, and cultures	4.19	F	H	4.28	A	VH
2. Identify employee's needs by interpreting data from diverse sources (e.g., formal/informal assessments,	4.06	F	H	4.22	A	VH
3. Differentiates instructions to allow employees who differ widely in terms of their background diversity ledge, styles/preferences, to reach common standards.	4.06	F	H	4.14	F	H
4. Facilitates the organization and social inclusion of employees and environments.	4.03	F	H	4.22	A	VH
Composite	4.08	F	H	4.22	A	VH

Table 4 demonstrates a difference in the respondents' professionalism and administrative disposition regarding valuing diversity. The findings show the respondents show high manifestations for the four administrative disposition indicators. Conversely, the respondents exhibit the signs at a very high level within the professionalism area, except for the third indicator, which only manifests at a "high" level. In summary, the respondents evaluated diversity overall as high (composite mean = 4.22) in the professionalism domain and high (composite mean = 4.08) in the administrative disposition domain.

These findings' implications highlight an elaborate picture of the respondents' perceptions and behaviors related to diversity. The observed difference in manifestation levels indicates that, although diversity is generally valued admirably, the nature and quantity of this commitment vary among the aspects examined. These observations may inform targeted measures and training courses that support a more unified and consistently elevated approach to valuing diversity in administrative disposition and professionalism. To promote organizational diversity, managers should act as role models. Ng and Sears (2020) found that positive CEO beliefs about diversity lead to better adoption of diversity practices through enhanced CEO behavior, resulting in more positive HR evaluations of the CEO's commitment to diversity.

In terms of Collaboration

Table 5. Descriptive statistics of the level of administrative disposition and professionalism in terms of collaboration

Indicators	Administrative Disposition			Level of Professionalism		
	w $\bar{x}$	VD	LoAD	w $\bar{x}$	VD	LoP
1. Values families as full partners in the work process	4.47	A	VH	4.50	A	VH
2. Demonstrates the ability to work creatively and collaboratively with colleagues, clients, and the community.	4.31	A	VH	4.47	A	VH
3. Communicate regularly the progress of employees with special needs	4.17	F	H	4.36	A	VH
4. Collaborates with others with special needs.	4.11	F	H	4.25	A	VH
Composite	4.26	A	VH	4.40	A	VH

Table 5 data reveals a substantial proficiency among respondents in administrative disposition and professionalism concerning collaboration, as evidenced by the comprehensive composite scores of 4.26 (administrative disposition) and 4.40 (professionalism). Notably, respondents self-asserted a very high level of

manifestation across all four collaborative indicators within the professionalism domain. However, in the administrative disposition domain, respondents evaluated themselves as "very high" in the first two indicators and "high" in the last two. These naturalistic distinctions highlight the multifaceted nature of collaborative skills within distinct professional contexts.

These results highlight the remarkable collaborative competence of the respondents, especially in the professionalism category. The uniformly high ratings for professionalism in all areas indicate a shared commitment to teamwork, which may signify a harmonious and productive workplace. The disparities in administrative disposition scores indicate differing viewpoints on collaboration among various organizational components. This realization highlights the significance of adapting strategies to the unique characteristics of administrative and professional contexts and offers helpful suggestions for targeted actions to improve collaborative efficacy.

Teamwork, according to Remington-Doucette and Musgrove (2015), involves key skills for addressing sustainable development challenges, such as planning, communication, conflict resolution, leadership, delegation, organization, embracing diversity, empathy, negotiation, and tolerance. Various studies, including those by Dzhengiz and Niesten (2019), have examined the link between teamwork competence and the success of sustainable development projects. Team members should support each other and evaluate their professional growth (Dudin et al., 2017), while also being open to new approaches and taking responsibility for social, economic, and environmental issues.

In terms of Life-long Learning

Table 6. Descriptive statistics of the level of administrative disposition and professionalism in terms of life-long learning

Indicators	Administrative Disposition			Level of Professionalism		
	w $\bar{x}$	VD	LoAD	w $\bar{x}$	VD	LoP
1. Demonstrates a positive attitude toward others	4.50	A	VH	4.50	A	VH
2. Look for opportunities for professional development (e.g., attendance at workshops, in-service training, conferences, membership in professional organizations) using the information learned	4.14	F	H	4.25	A	VH
3. Find opportunities to serve the employees and clients and community	4.00	F	H	4.06	F	H
4. Presents on an area of expertise or interest to employees and/or clients at local, state, national, or international conferences or training	3.94	F	H	3.94	F	H
Composite	4.15	F	H	4.19	F	H

Table 6 provides information on the respondents' professionalism and administrative competence about lifelong learning. The data suggest a significantly high degree of professionalism and administrative disposition, especially regarding their positive attitude toward others, as indicated by the weighted mean values of 4.50 in both categories. Remarkably, only the first indicator in the administrative disposition category was rated as "very high," with the other indicators receiving "high" marks. In the professionalism category, the first and second indicators, which emphasize having a positive attitude towards people and seeking professional growth opportunities, received "very high." In contrast, "high" ratings were given to the remaining indicators. The respondents' administrative disposition (composite score of 4.15) and professionalism (composite score of 4.19) concerning lifelong learning received an overall "high" rating from the entire evaluation.

From these findings, it may be presumed that the respondents have been committed wonderfully to lifelong learning, particularly in so far as inculcating positive attitudes towards them and looking for opportunities for professional growth have been concerned. In general, there is still the need to further improve the respondents' commitment to lifelong learning in administrative and professional contexts. Eager managers believe in providing a high level of education to the project team members and accomplishing goals, enriching job satisfaction among the employees, and discovering effective talents of the business properly (Dudin et al., 2017). Based on these views, many believe that active managers motivate project team members to develop sustainable innovations, and also meaningful engage in training programs, conserve resources, and practice eco-friendly practices. They are responsible for social and environmental issues, stimulating eco-friendly achievements, implementing favorable environmental practices, and effectively coping with the difficulties of tasks in the real-world work environment.

3.2 Level of Competence

Table 7. Descriptive statistics of the level of competence (n=36)

Indicators	w $\bar{x}$	Verbal Description
1. Management and Leadership Skills	4.25	Very Competent
2. Communication skills	4.17	Competent
3. Collaboration	4.19	Competent
4. Critical Thinking Skills	4.11	Competent
5. Financial skills	4.17	Competent
6. Project Management skills	4.14	Competent
Composite	4.17	Competent

The interesting part is that the self-assessment exercise was presented in Table 7, where respondents elaborated on the feelings they have regarding their competence in different skills. Most importantly, the respondents have credited themselves with a weighted average of 4.25 to indicate their ability in leading and managing, which corresponds with the rating of "very competent." The other important skills that the respondents see as being those within which they are competent rest on the critical areas of communication, collaboration, critical thinking, financial acumen, and project management. This judgment is further supported by the general composite score of 4.17, which places the perceived competence of the respondents within the general category of competent. Another interesting observation that can be made from this study is the involved self-view that the respondents have, who appear to be very confident in management and leadership skills. On the other hand, the label of "competent" in the remaining skills gives the other side of the story, which gives a very objective and rational evaluation of their skills. Such variation in the self-assessment of the respondents at a higher and then a lower level might be regarded as the cue to reinstate a more reinforcing environment in those areas where the respondents perceive themselves as less accomplished, which may suffice to provide a more rounded and self-effective approach regarding professional enhancement.

According to Dzhengiz and Niesten (2019), managerial competencies facilitate critical elements for sustainable development goals. This means that the need for managerial competencies that would support such managers in sustainable development projects is of great importance. As expressly noted in the results, the importance of those competencies is in the potential capacity, which is of support to managers with powerful perceptions of the complex and dynamic systems, in terms of driving opportunities, coming up with desirable visions that are sustainable, and supporting them in the proposal of feasible strategies.

Further, managerial competencies for sustainable projects facilitate the ability to synchronize both company objectives and value knowledge among managers, as described by Bruwer et al. (2018). Dzhengiz and Niesten (2019) also argued that these competencies also encourage managers to pursue socioeconomic growth and employee development. This, in effect, commits managers to enhancing the level of social, economic, and environmental outcomes with the potential of learning from past and previous projects. They also arm the managers to conduct frameworks for sustainable development, inspire creativity, and address current concerns, as described by Chung et al. (2016).

3.3 Level of Job Performance

In terms of Service to Others

Table 8. Descriptive statistics of the level of job performance of the respondents in terms of service to others (n=36)

Indicators	w $\bar{x}$	VD	LoJP
1. I have the chance to complete the work that will be most successful.	4.31	A	VH
2. I can complete the task without feeling bad.	4.08	F	H
3. I have the chance to work for others.	4.08	F	H
4. The chance to have others look to me for direction.	3.97	F	H
5. I have the chance to test out a few other concepts.	3.69	F	H
Composite	4.03	F	H

Table 8 reflects the respondents' work performance in serving others, indicating varying degrees of competence. Notably, the respondents identify their successful completion of assigned tasks with a "very high" level of job performance (weighted mean = 4.31), suggesting solid or pervasive adherence to this indicator in the workplace.

However, the respondents believe that their performance only reaches a "high" level when it comes to things like finishing assignments without feeling bad, getting the chance to work for others, being sought for guidance, and experimenting with novel ideas. The overall evaluation of their job performance in providing service to others is deemed "high," as indicated by the composite mean score of 4.03.

Based on the data, the respondents have strongly emphasized task completion as a critical indicator of job performance, denoted by the consistently high rating. The subtle differences in performance levels between other variables point to differing levels of perceived competence in various aspects of providing services to others. Organizational leadership and HR managers can use these results to devise new ways to highlight strengths and target areas where job performance may be improved.

The essence of servant leadership is that it serves others. Saleem, Zhang, Gopinath, and Adeel (2020) supported the argument that affective trust, organizational citizenship behaviors (OCBs), and task performance are positively related to the subordinates' servant leadership. Further, the results imply an entire mediation of the relationship between servant leadership and task performance by affective trust and a partial mediation between the citizens' subordinates and the subordinates' organizational citizenship behaviors.

Additionally, Maulabakhsh (2015) highlights the important factors in supervision as the support of the employees in critical moments, creation of team connections, encouragement of creativity, inculcation of organizational values, creation of the climate for transparency, and provision of open lines of communication. According to many kinds of research, effective supervision leads to the employees' satisfaction, while the lack of communication skills that a supervisor possesses usually leads to a high probability of dissatisfaction among staff.

In terms of Work Process

Table 9. Descriptive statistics of the level of job performance of the respondents in terms of work process (n=36)

Indicators	w $\bar{x}$	VD	LoJP
1. I'm performing my duties to the best of my ability.	4.56	A	VH
2. I'm carefully doing my job.	4.53	A	VH
3. I'm paying close attention as I work.	4.50	A	VH
4. I do my job and complete it on schedule.	4.39	A	VH
5. I perform better than most of the other employees in my position.	3.64	A	H
Composite	4.32	A	VH

Regarding work processes, Table 9 delineates an obvious "very high" performance level among respondents, evident across all five performance indicators. This collective proficiency results in an overall performance rating of "very high," as indicated by a composite score of 4.42. These outcomes signify a dedicated commitment from respondents, showcasing optimal utilization of their abilities and meticulous observance of deadlines in task execution.

It is noteworthy that the indicator assessing performance compared to peers within the same role yielded the lowest weighted mean value of 3.64, albeit still within the "high" range. Analyzing these results, the respondents have an excellent overall work process competency, focusing on timely task completion and individual excellence. The comparatively lower rating for comparative performance alludes to a more natural aspect in which the respondents recognize a less noticeable difference from their colleagues, even while they believe they are performing very well individually. Nonetheless, direct strategic efforts are still necessary to promote collaborative standards and handle possible discrepancies between internal and external performance evaluation.

Raziq and Maulabakhsh (2015) emphasize the pivotal role of employees in bringing to fruition the mission and vision of an enterprise, particularly within its production sphere. They stress the importance of employees hitting the organization's set performance benchmarks to uphold both their work outputs' quality and quantity. To achieve these organizational standards, workers or personnel necessitate a conducive work environment that fosters their ability to operate without restrictions, devoid of any impediments that might hinder their full potential.

Moreover, the productivity of employees in executing their tasks is intricately intertwined with their level of job satisfaction. Abuhashesh et al. (2019) found that job satisfaction has a profound impact on workers' performance, motivation, productivity, and life satisfaction in general, extending its influence beyond their professional realm and into their personal lives. It is imperative to acknowledge that job satisfaction significantly contributes to employees' sense of security within the organization.

In terms of Work Relations

Table 10. Descriptive statistics of the level of job performance of the respondents in terms of work relations (n=36)

Indicators	wx	VD	LoJP
1. I appreciate seeing my employees helping each other with their jobs.	4.64	A	VH
2. I act cordially with my employees.	4.39	A	VH
3. I delegate work based on the employee's job description.	4.36	A	VH
4. I always abide by the company's rules and policies instead of my preferences.	4.33	A	VH
5. I take into account my employees' opinion	4.28	A	VH
Composite	4.40	A	VH

Table 10 Summary of data indicating that the respondents sustain a level of performance rated as "very high" in the work relations domain, with weighted mean values ranging from 4.28 to 4.64 across various performance indicators. The results shed light on the respondents' outstanding performance in the areas of rapport building, respect for the opinions of employees, maintenance of pleasant work relations, and conformity to the organization's culture. The findings underscore the remarkable competence displayed by the respondents in promoting effective work relations. The expertness in dealing with interpersonal dynamics in the workplace emerges across these indicators, suggesting that the respondents have worked to develop an affirmative organizational culture. Efforts must continue to develop work relations that sustain a harmonious and productive work climate.

In summary, Sanyal and Hisam (2018), reported results from their study as follows – Conclusion Superior management and a culture of trust in the team appear to be the most vital factors in supporting raising the bar for worker performance. A positive correlation with the dependent variable, they found favor among their respondents concerning employee performance, teamwork, leadership, structure, trust, appraisal, and rewards. Ozyilmaz (2018) supports and takes this statement to further argue that in organizations in whom trust in the organization is high, the perceived self-efficacy of employees to enhance job satisfaction, task performance, and organizational citizenship behaviors are correspondingly heightened.

3.4 Relationship Between Administrative Disposition and Respondents' Competence

Table 11. F-test for the relationship between administrative disposition and level of competence

Variables	Coefficients	SE	t Stat	p-value
Competence in Terms of Collaboration				
Intercept	0.601	0.756	0.796	0.433
Work Performance	0.479	0.250	1.919	0.065
Critical Thinking	-0.473	0.316	-1.499	0.145
Professional Ethics	0.232	0.336	0.691	0.495
Valuing Diversity	-0.023	0.301	-0.078	0.939
Collaboration	0.530	0.230	2.303	0.029
Life-Long Learning	0.099	0.218	0.454	0.653
r = 0.705				
r ² = 0.497				
adjusted r ² = 393				
F-ratio = 4.774				
p-value = 0.002 (significant)				
Other Variables of Competence				
Management and Leadership Skills: F-ratio = 1.136; p = 0.367 (not significant)				
Communication Skills: F-ratio = 1.392; p = 0.251 (not significant)				
Critical Thinking Skills: F-ratio = 1.136; p = 0.367 (not significant)				
Finance Skills: F-ratio = 1.135; p = 0.367 (not significant)				
Project Management Skills: F-ratio = 0.628; p = 0.706 (not significant)				

Table 11 result indicates the overall F-test which has a significant relationship between administrative disposition and respondents' competence, specifically regarding collaboration ($F = 4.774$; $p = 0.002 < \alpha = 0.05$). These results imply that certain classifications of administrative disposition serve as significant predictors of the respondents' competence in collaboration. Further scrutiny of the independent variables' p-values, presented in the table, reveals that administrative disposition related to collaboration ($p = 0.029 < \alpha = 0.05$) emerges as the sole significant predictor of respondents' competence in collaboration. Since the coefficient of collaboration (0.530) is positive, this means that the higher the administrative disposition of the respondents in the area of collaboration, the higher their level of competence in the same area. In other words, administrative disposition, particularly in collaboration, is a significant factor influencing competence levels; hence, it should be further promoted and enhanced.

Scholars have offered diverse categorizations for managerial competencies, encompassing areas such as achievement orientation, motivation, communication, teamwork, development orientation, influence, planning, leadership, innovation, flexibility, decision-making skills, quality focus, and customer focus (Arditi et al., 2013). These competencies serve not only as benchmarks for evaluating performance but also as subjects for study and analysis, significantly enhancing project outcomes (Bucur, 2013).

Bucur (2013) corroborated that managerial competencies include abilities such as learning, influence, collaboration, results orientation, strategic thinking, team leadership, and transformational leadership. Furthermore, Raišienė (2014) delineated managerial competencies as encompassing skills such as effective communication, collaborative decision-making, facilitation of team efforts, assistance in achieving goals, and resolution of conflicts.

3.5 Relationship Between Competence and Job Performance *In terms of Service to Others*

Table 12. F-test for the relationship between competence and the job performance in terms of service to others

Variables	Coefficients	SE	t Stat	p-value
Intercept	2.159	0.747	2.892	0.007
Management/Leadership Skills	-0.295	0.292	-1.008	0.322
Communication skills	-0.002	0.215	-0.010	0.992
Collaboration	0.069	0.238	0.291	0.773
Critical Thinking Skills	0.062	0.212	0.292	0.773
Financial skills	0.196	0.216	0.905	0.373
Project Management skills	0.428	0.227	1.883	0.070
$r = 0.566$				
$r^2 = 0.320$				
adjusted $r^2 = 0.179$				
F-ratio = 2.276				
p-value = 0.064 (not significant)				

Table 12 provides an insightful examination of the relationship between respondents' competency levels and job performance within service-oriented roles. Despite initial expectations, the overall F-test results in a non-significant outcome ($p = 0.064 > \alpha = 0.05$). This finding challenges the assumption that the six competency areas assessed serve as significant predictors of job performance in service-oriented tasks. Put simply, fluctuations in competency levels do not appear to align with corresponding shifts in job performance. Consequently, these results cast doubt on the notion that these variables exert a substantial influence on job performance at a broader population level.

The non-significant relationship observed in the analysis implies a notable discrepancy between assessed competencies and actual job performance, particularly in the context of service-oriented roles. This underscores the complexity inherent in understanding the drivers of job performance within this domain. It suggests that traditional competency frameworks may not fully capture the nuanced factors influencing performance in service-oriented tasks. Consequently, there is a pressing need for a more holistic and context-specific approach to understanding and enhancing job performance within service-oriented contexts. Such an approach should account for the multifaceted nature of service-oriented work and recognize that identified competencies may not directly translate into improved performance outcomes.

In Terms of Work Process

Table 13. F-test for the relationship between competence and the job performance in terms of work process

Variables	Coefficients	SE	t Stat	p-value
Intercept	2.385	0.549	4.345	0.000
Management/Leadership Skills	-0.558	0.215	-2.597	0.015
Communication skills	0.125	0.158	0.792	0.435
Collaboration	0.357	0.175	2.038	0.051
Critical Thinking Skills	0.023	0.156	0.149	0.883
Financial skills	0.019	0.159	0.120	0.905
Project Management skills	0.511	0.167	3.058	0.005
r = 0.759				
r ² = 0.576				
adjusted r ² = 0.488				
F-ratio = 6.556				
p-value = 0.000 (significant)				

Table 13 demonstrates a statistically significant overall F-test ($p = 0.001 < \alpha = 0.05$), indicating that some of the explanatory or independent variables (the six competency constructs) are influential determinants of the respondents' job performance in work processes. The regression output highlights that management and leadership skills ($p = 0.015$) and project management skills ($p = 0.005$) are significantly related to job performance in work processes. Intriguingly, the negative coefficient of management and leadership skills (-0.558) suggests that respondents with lower management and leadership skills tend to exhibit better job performance in work processes. Conversely, the positive relationship indicates that as respondents' project management skills increase, so does their performance in work processes.

The surprising negative coefficient for management and leadership skills suggests a different relationship – wherein too much emphasis on these skills may be counter-productive in work performance. Management and leadership skills would divert the hands-on work performance of the work when there is a moderate focus on the said skills. On the other hand, the positive correlation of project management skills is in line with the intuitive expectation that enhanced project management skills should improve work process performance. The conclusion, therefore, is that skill demands should be balanced with appropriate configurations of emphasized skill sets to allow optimal job performance, contingent on specific work contexts. Lai et al. (2020) researched work engagement as a probable core mechanism to mediate the impact of transformational leadership on task performance and citizen behavior of workers. In this context, it is envisaged that transformational leaders engage in a series of behaviors to support and enhance the psychological states of their employees which are effective in promoting work engagement. Certainly, the outcome of the study established the fact that those who physically and psychologically engaged themselves fully in the accomplishment of tasks have better chances of getting performer ratings and are more prone to help others attain their goals. As such, transformational leaders can enhance the performance of subordinates, also motivate them to help, since they stimulate them to work more and behave beyond expectations.

In terms of Work Relations

Table 14. F-test for the relationship between competence and the job performance in terms of work relations

Variables	Coefficients	SE	t Stat	p-value
Intercept	3.043	0.562	5.417	0.000
Management/Leadership Skills	-0.310	0.220	-1.410	0.169
Communication skills	-0.101	0.162	-0.624	0.537
Collaboration	0.201	0.179	1.121	0.272
Critical Thinking Skills	0.172	0.159	1.078	0.290
Financial skills	-0.251	0.162	-1.546	0.133
Project Management skills	0.627	0.171	3.665	0.001
r = 0.731				
r ² = 0.534				
adjusted r ² = 0.437				
F-ratio = 5.531				
p-value = 0.001 (significant)				

Table 14 reveals that the overall F-test is significant ($p = 0.001 < \alpha = 0.05$). Among the six competency constructs, the regression results reveal that only project management skills ($p = 0.005$) are significantly related to job performance in work relations. Since the coefficient of project management skills is positive (0.627), this signifies that the higher the project management skills of the respondent, the higher the job performance in work relations. Thus, one can surmise from this that project performance can be good if the technical competence of the project manager is sound but better if the project manager has good human relations and administrative skills.

Daft (215) contends that teams today perform more work than individuals; so, the quality of cooperative work relations is more important than the quality of competitive work relations. What is more, the changing nature of work requires that organizations be restructured into a more organic form of organization where more importance is given to working relationships, collaboration, decentralized decision-making, communication, and lower levels of hierarchy. In work organizations, the relationship between people and the organization means more than just talking to one another. These relationships facilitate networking, provide support, help new employees get accustomed to the workplace, and yield important information that must be known to do well and feel good about the job. Setting up a good work environment is essential, but employees must also cope with the unstable and unpredictable nature of work in today's workplaces. A key notion in researching these work relationships is the Social Exchange Theory (SET). It suggests that people decide how to interact based on weighing the benefits and drawbacks, and they're more likely to keep doing things that have been rewarding in the past.

4.0 Conclusions

Based on the findings of the study, the respondents generally excel in administrative disposition, professionalism, and job performance. This high level of performance suggests that they are effectively managing their tasks and responsibilities. A contributing factor to this commendable performance is the smaller number of employees under their supervision, making it easier for them to manage and lead their workforce. However, certain areas of their managerial performance, such as lifelong learning and service to others, received only "high" ratings compared to other indicators that were rated "very high." The overall competence level of the respondents is rated as merely "competent," indicating a need for further enhancement through seminars, workshops, and training. Although many of these managers have significant experience in the field, their knowledge and leadership capacities still require further enrichment.

Performance evaluations should be periodically conducted to identify the strengths and weaknesses of each manager and employee, enabling the development of strategies to highlight and celebrate their accomplishments. Additionally, lending institutions should implement policies and guidelines that promote work-life balance to attract and retain young talent. Offering career advancement opportunities for older employees through leadership development programs is also crucial. Regular training programs, coaching sessions, and mentorship initiatives should be established to support employees in pursuing further education and professional development opportunities.

Moreover, resources should be available to facilitate the education of employees and enhance their competencies. This comprehensive approach will ensure that all employees, regardless of their experience level, continue to grow and contribute effectively to the organization. By fostering a culture of continuous learning and professional development, institutions can maintain a highly skilled and motivated workforce, capable of meeting the challenges of an ever-evolving work environment.

5.0 Contributions of Authors

The study was authored by Jomar G. Benedico and co-authored by Dr. Romario P. Ybanez, who contributed from the conceptualization to the final version of the paper.

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Students' Language Learning Preferences in Taking In and Presenting Information to Others

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Abstract. This study aimed to ascertain the extent to which students prefer to take in and present information to others using the four perceptual learning modalities: visual, auditory, reading and writing, and kinesthetic in learning the English language. The researcher applied the descriptive-correlational design and considered 250 Grade 12 randomly selected respondents. The researcher utilized a validated questionnaire and conducted a dry run with thirty respondents. The Cronbach's Alpha Test revealed that all items were reliable with coefficients greater than 0.70 in all areas. The results of this study revealed that the students generally have a high preference for auditory, reading and writing, and kinesthetic learning styles, while their preference for visual learning is moderate. In terms of presenting information, students prefer auditory and kinesthetic methods more than visual and reading and writing. Despite these preferences, students' academic performance in English was very satisfactory. Importantly, there was a positive correlation between academic performance and the extent to which students engaged in reading and writing. Conversely, heavy reliance on visual presentations was associated with lower English academic performance. Additionally, students who preferred reading and writing and kinesthetic methods for presenting information tended to perform better academically. These findings highlight the significance of considering diverse learning preferences and presentation methods to enhance students' academic achievements in English.

Keywords: Learning preferences; Learning modalities; Visual; Auditory; Reading and writing; Kinesthetic, Academic performance.

1.0 Introduction

There was a prevalent yet critical debate about developing effective pedagogical practices to reduce student attrition and considerably enhance throughput rates. Newton and Salvi (2020) affirmed that 89% of teachers felt that instruction should be matched with the students' preferred learning style. This was believed to foster greater student engagement, motivation, and retention of knowledge, leading to improved academic performance (Magulod, 2019; Chetty et al., 2019; Akhlaghi, 2018). Research results conducted by Triandanda (2022) also showed that teachers needed to put serious consideration into identifying the students' learning styles to facilitate appropriate teaching methods and materials to meet the learning goals during the teaching-learning process. To implement various teaching methods in the classroom that could support the needs of the students, Rachman et al. (2019) advised language teachers to take into account the learning styles of their students. Students' competency in the English language was significantly influenced by language learning methods and teaching strategies.

In the Philippines, the research conducted by Natividad and Batang (2018) affirmed that teachers helped students broaden their abilities by accommodating another learning style. Tizon and Lopina (2022), on the other hand, recommended that teachers identify students' preferred learning modality before the start of classes so that they could carry out activities appropriate for the students. This was supported by another study conducted by Cabual

(2019) that emphasized the importance of matching the students’ learning modalities to the teachers’ methods and techniques.

Although many studies examined how learners preferred to learn the English language, there was currently a need for literature focusing on how students preferred to take in and present information in learning English. Past research predominantly focused on identifying individuals’ learning style preferences and patterns (Cuizon et al., 2022; Ally et al., 2022; Tizon & Lopina, 2022; Cabual, 2019). This study, however, aimed to ascertain the extent to which students preferred to take in and present information to others using the four perceptual learning modalities: visual, auditory, reading and writing, and kinesthetic in learning the English language. Determining the degree to which learners preferred to take in and present information would make this research different from the others.

It was interesting to note that language learning preferences in taking in and presenting information to others were crucial in teaching and learning for two major reasons. First, students learned more about the affective, social, cognitive, and metacognitive processes involved in language acquisition. Second, the conduct of this study would be of great help to educators in facilitating learning. The researcher was an English teacher herself at Dumaguete City National High School (DCNHS) who taught Practical Research II (Quantitative Research), among other subjects, to Grade 12 students. Therefore, she was interested in addressing learning preferences to create a more inclusive and effective learning environment. She believed that understanding and accommodating these preferences could help bridge the gap between diverse learning styles, ensuring that all students had the opportunity to thrive academically.

2.0 Methodology

2.1 Research Design

The research utilized a descriptive-correlational survey design. This approach aimed to identify the extent to which students preferred to take in and present information using the four perceptual learning modalities: visual, auditory, reading and writing, and kinesthetic. Additionally, it sought to correlate these preferences with students' academic performance.

2.2 Research Respondents

The participants in this study comprised Grade 12 students from Dumaguete City National High School enrolled in the academic year 2023-2024. From a total population of 666 Grade 12 students, a sample of 250 individuals was selected. The selection process employed a systematic sampling approach, wherein every third student from the lists was chosen as a respondent.

2.3 Research instruments

The study used a self-crafted questionnaire and the students' ratings in English during the school year 2022-2023. The researcher adapted the VARK learning strategies (Fleming, 2006) into inquiries pertaining to both receiving and conveying information. This questionnaire underwent validation by three experts holding master's and doctorate degrees, actively engaged in educational research. To ensure the items’ reliability, a dry run was conducted. 30 selected students served as the respondents. Results were calculated to verify the internal consistency and reliability of the items using Cronbach’s Alpha Test. The theoretical value of this variable ranges from 0 to 1, representing the degree to which all the variables in the scale are positively related to one another. Ideally, Alpha values should be higher, and a value of 0.70 is regarded as acceptable.

The following were the coefficients of the Cronbach’s Alpha Test:

Modality	Taking In Information	Presenting Information
Visual:	0.743	0.842
Auditory:	0.701	0.732
Reading and Writing:	0.711	0.726
Kinesthetic:	0.700	0.800

2.4 Data Gathering Procedure

This study used specific steps to ensure proper protocol in gathering data. The researcher wrote a letter of request to the Schools Division Superintendent of the Division of Dumaguete City to ask permission to conduct the study upon the endorsement of the dean of the graduate school of Foundation University. After the approval was granted, the researcher gave a copy of the letter to the school principal, the province head of Grade 12, and the respective advisers of the students. During the distribution, the researcher explained to the students the purpose and importance of the research. The questionnaires were collected immediately after the respondents completed them. Results were tallied using MS Excel and free statistical software. The final steps were the analysis and interpretation of the data.

2.5 Ethical considerations

For the duration of the study, the researcher adhered to all the necessary ethical standards. Information confidentiality was upheld to protect the respondents' privacy and dignity. Additionally, the researcher took it upon herself to reduce any possible risk to the participants by conforming to the moral standards established by the Ethics Committee of Foundation University. A consultation was held to ensure the topic was significant, morally, and objectively sound. The researcher also adopted a nonjudgmental attitude throughout the process to avoid criticism.

3.0 Results and Discussion

3.1 Students' Preference in Taking In Information

Visual Learning

Table 1 presents the data exposing the extent to which students prefer visual learning in taking in information.

Table 1. Descriptive statistics of the extent to which students prefer visual learning in taking in information (n = 250)

Indicators	Mean	Interpretation	Extent
1. I review my notes and look for patterns.	3.73	Frequent	High
2. I find flowcharts to be helpful in understanding things.	3.58	Frequent	High
3. I explain my drawings verbally or through words.	3.43	Frequent	High
4. I draw ideas in my notes based on my memory.	3.17	Sometimes	Moderate
5. I reduce my notes from three pages to one.	3.02	Sometimes	Moderate
6. I replace keywords with symbols and diagrams.	2.82	Sometimes	Moderate
Composite	3.29	Sometimes	Moderate

As reflected in the table, students “moderately” prefer visual learning modality ($w\bar{x} = 3.29$) with the verbal description of “sometimes” ranging from 2.61 – 3.40. Specifically, the results indicate that most of the learners who prefer the mentioned modality “highly” prefer the following indicators: (a) review notes and look for patterns ($w\bar{x} = 3.73$); (b) find flowcharts to clarify things ($w\bar{x} = 3.58$); and (c) explain drawings verbally or through words ($w\bar{x} = 3.43$). These findings indicate that visual learners learn the language by writing it down in notebooks, jotting down key points or important words on small cards and displaying them around the house, taking notes from teachers' explanations, making lists, watching videos, using flashcards, highlighters, underlining, and so on. They also get more information from visual images (pictures, diagrams, graphs, schematics, demonstrations (Fakhirah, 2022). These results reveal visual modality is the least preferred among the other learning modalities in taking in information. The above finding is vital as it will help teachers and other stakeholders in choosing the learners' preferred learning modality, especially when veering away from the visual modality. This does not mean however that the said modality will be totally ignored as there are also others who prefer such.

Auditory Learning

Table 2 reveals how much students prefer auditory learning in taking in information. Based on the weighted mean values ranging from 3.41 to 4.20, the findings collectively indicate that the learners perceived a “high” level of preference for the Auditory. Most auditory learners prefer to discuss topics with others to learn with a 4.36 weighted mean and a verbal description of “Always” with a “Very High” extent of preference. The result is likewise evident in the study of Manel (2023) which emphasized the need for auditory learners to speak to more people to understand concepts better. The results indicate that, of the various learning modalities, the auditory modality is the second most favored. The findings imply that incorporating auditory components into lessons can increase the effectiveness of lessons. A teacher can meet the needs of a large percentage of students by using strategies like group discussions, oral presentations, and verbal explanations.

Table 2. Descriptive statistics of the extent to which students prefer auditory learning in taking in information (n = 250)

Indicators	Mean	Interpretation	Extent
1. I discuss topics with others.	4.36	Always	Very High
2. I explain new ideas to other people.	3.84	Frequent	High
3. I orally read and re-read my notes.	3.48	Frequent	High
4. I listen to people who speak well and those who are experts in their fields.	3.47	Frequent	High
5. I like to attend discussions and tutorials.	3.46	Frequent	High
6. I listen to myself while talking.	3.46	Frequent	High
Composite	3.68	Frequent	High

Reading and Writing Learning

Table 3 exhibits the extent to which students prefer reading and writing in taking in information.

Table 3. Descriptive statistics of the extent to which students prefer reading and writing learning in taking in information (n = 250)

Indicators	Mean	Interpretation	Extent
1. I rewrite the information presented by others.	3.95	Frequent	High
2. I silently read my notes and highlight important concepts.	3.65	Frequent	High
3. I read and extract meanings from headings and titles.	3.54	Frequent	High
4. I go over my notes and categorize them by topics.	3.47	Frequent	High
5. I read and take down notes for review.	3.31	Sometimes	Moderate
6. I read books, essays, manuals, and other reading materials.	3.26	Sometimes	Moderate
Composite	3.53	Frequent	High

It can be observed that students prefer to rewrite the information presented by others ($w\bar{x}=3.95$), silently read notes and highlight important concepts ($w\bar{x}=3.65$), read and extract meanings from headings and titles ($w\bar{x}=3.54$), and go over their notes and categorize them by topics ($w\bar{x}=3.47$). These four indicators' mean values range from 3.41 to 4.20, which indicates that the learners perceived a "high" level of preference for reading and writing in taking in information. The result is similar to the finding of Akhlaghi et al. (2018) where students make notes in classes. One technique that helps students comprehend and remember what they read is to take notes to highlight the main ideas in a text. This is because, rather than copying a lot of the text, they can use it to make notes of the concepts that are most pertinent to them. To take quality notes, students need to read with attention, evaluate the material, and exercise critical thought (The Learning Center, 2021). The results imply that a significant portion of learners inform educators about the need to diversify instructional strategies. It emphasizes the importance of making reading and writing activities more engaging and it encourages the exploration of alternative methods. Educators can incorporate interactive and multimedia elements to make these activities more appealing and relevant to students.

Kinesthetic Learning

Table 4 shows the students' level of preference for kinesthetic modality in taking information.

Table 4. Descriptive statistics of the extent to which students prefer kinesthetic learning in taking in information (n = 250)

Indicators	Mean	Interpretation	Extent
1. I enjoy role-playing.	4.28	Always	Very High
2. I use all my senses - sight, touch, taste, smell, and hearing.	3.86	Frequent	High
3. I like to do things for myself, instead of asking somebody to do it for me.	3.74	Frequent	High
4. I get knowledge by doing.	3.67	Frequent	High
5. I enjoy leaving the room to join practices.	3.44	Frequent	High
6. I learn more when I go on field trips.	3.34	Sometimes	Moderate
Composite	3.72	Frequent	High

The students' level of preference for kinesthetic modality in taking information, with weighted mean values ranging from 3.41 to 4.20 indicating a "high" level of preference for the Kinesthetic modality. Most of the learners enjoy role-playing ($w\bar{x} = 4.28$) with weighted mean values ranging from 4.21-5.00, the findings unveil learners perceived a "very high" level of preference for the said indicator. Results also show that the students "highly" prefer to use senses - sight, touch, taste, smell, and hearing ($w\bar{x} = 3.86$), carry out tasks on their own ($w\bar{x} = 3.74$), learn by doing ($w\bar{x} = 3.67$), and leave classrooms for practices ($w\bar{x} = 3.44$). These results affirmed the statements of Zineb and Anfel (2023) and Akbulut et al. (2023) that kinesthetic learners learn best through hands-on experiences and physical practice. Moreover, they generate or modify things with one's hands and use one's entire

body to communicate and transform ideas and feelings. According to the results, kinesthetic modality is the most favored among the other learning modalities. The results imply that teachers can improve students' engagement by implementing manipulative and movement-based activities. Instructors can include exercises or simulations that allow students to apply concepts in real-world situations, which can help them understand and remember the information better.

3.2 Students' Preference in Presenting Information

Visual Presentation

Table 5 presents how much students prefer visual learning in presenting information

Table 5. Descriptive statistics of the extent to which students prefer visual presentation of information (n = 250)

Indicators	Mean	Interpretation	Extent
1. I use images, lots of colors, and different font sizes and styles in presenting ideas.	3.55	Frequent	High
2. I make a drawing or any type of illustration to express my ideas.	3.26	Sometimes	Moderate
3. I use various layouts in making presentations.	3.16	Sometimes	Moderate
4. I use charts and diagrams to analyze and present data.	3.04	Sometimes	Moderate
5. I prefer to use diagrams in presenting data.	2.90	Sometimes	Moderate
6. I like to present my work using graphs.	2.79	Sometimes	Moderate
Composite	3.12	Sometimes	Moderate

The research findings suggest that students exhibit a preference for visual learning when conveying information to others, as indicated by weighted mean values ranging from 2.61 to 3.40. This suggests a "moderate" level of preference for this mode of learning. Specifically, a majority of students favored using images, various colors, and diverse font sizes and styles when presenting ideas to others, with a weighted mean of 3.55, indicating a "high" level of preference. These findings align with previous studies by González-Beltrán et al. (2023), McKeown (2023), and Payaprom (2020), which also highlight the reliance of visual learners on pictorial and diagrammatic information, suggesting that they learn most effectively through visual means.

The students exhibit a moderate preference for all other indicators, as evidenced by weighted mean values ranging from 2.61 to 3.40. These include making drawings or illustrations to convey ideas ($w\bar{x} = 3.26$), employing various layouts in presentations ($w\bar{x} = 3.16$), utilizing charts and diagrams for data analysis and presentation ($w\bar{x} = 3.04$), incorporating diagrams in data presentation ($w\bar{x} = 2.90$), and presenting work using graphs ($w\bar{x} = 2.79$). Tzenios' study (2020) corroborates these findings, indicating that visual learners favor tools such as diagrams to complement verbal explanations and provide visual context. Notably, the results highlight visual modality as the least preferred method for presenting information to others. The aforementioned finding is important because it offers recommendations to educators and other stakeholders regarding how students prefer to present information, especially when it deviates from the visual modality. However, since some people prefer the visual modality, this does not mean that it will be entirely ignored.

Auditory Presentation

Table 6 demonstrates the presentation of information to others through auditory means.

Table 6. Descriptive statistics of the extent to which students prefer auditory presentation of information (n = 250)

Indicators	Mean	Interpretation	Extent
1. I look for people who like to listen and talk.	4.14	Frequent	High
2. I prefer to join group discussions	3.89	Frequent	High
3. I speak in various ways based on my purpose.	3.49	Frequent	High
4. I like to say something or make a comment on the works of others.	3.48	Frequent	High
5. I participate in online discussions and chats using any of the following platforms: email, blogs, Twitter, Facebook, and Tiktok, among others.	3.36	Sometimes	Moderate
6. I organize groups and discuss with them.	3.28	Sometimes	Moderate
Composite	3.61	Frequent	High

The data indicates that presenting information to others through auditory means ($w\bar{x} = 3.61$) is characterized by a frequent and high preference for verbal description. According to the results, students demonstrate a preference for activities such as listening and talking ($w\bar{x} = 4.14$), participating in group discussions ($w\bar{x} = 3.89$), adapting speech according to the purpose ($w\bar{x} = 3.49$), and providing comments or feedback on others' work ($w\bar{x} = 3.48$).

These findings align with Yotta's assertion (2023) that auditory learners tend to excel in activities involving verbal explanation and group interaction. Notably, the results indicate that among all learning modalities, auditory presentation ranks as the second most preferred method for conveying information to others. The results suggest that incorporating auditory elements into educational materials can improve their effectiveness in conveying information to others. By adopting methods such as oral presentations, group discussions, and verbal explanations, educators can cater to the preferences of a considerable number of students.

Reading and Writing Presentation

Table 7 presents the students' level of preference in Reading and Writing modality.

Table 7. Descriptive statistics of the extent to which students prefer reading and writing presentation of information (n = 250)

Indicators	Mean	Interpretation	Extent
1. I arrange things or ideas based on their importance, priority, category, or schema.	3.56	Frequent	High
2. I re-write ideas, thoughts, and principles in my own words.	3.52	Frequent	High
3. I arrange my list in multiple-choice to distinguish ideas from each other.	3.36	Sometimes	Moderate
4. I organize any diagrams and graphs into statements.	3.02	Sometimes	Moderate
5. I convert reactions, actions, diagrams, and charts into words.	2.91	Sometimes	Moderate
6. I send my own articles and write-ups to various print media.	2.59	Sometimes	Moderate
Composite	3.16	Sometimes	Moderate

Table 7 illustrates the extent of students' preference toward different modes of presenting information, particularly in Reading and Writing. Weighted mean values between 3.41 and 4.20 signify a "high" level of preference. The majority of students show a penchant for arranging items or concepts based on significance, priority, classification, or structure (average = 3.56), and expressing ideas, thoughts, and principles in their own words (average = 3.52), indicating a notable preference for these approaches.

Students exhibit a "moderate" inclination towards other methods, such as distinguishing ideas by arranging lists in multiple-choice format (average = 3.36), transforming diagrams and graphs into statements (average = 3.02), verbalizing reactions, actions, diagrams, and charts (average = 2.91), and submitting personal articles and compositions to print media outlets (average = 2.59). These results imply that learners who favor reading and writing excel in conveying information through written language. Additionally, the data indicates that the reading and writing mode ranks third among students' preferences for presenting information to others.

The research conducted by Konstantinidou et al. (2023) and Leijten et al. (2019) is reinforced by findings indicating that individuals who excel in reading and writing skills transform written data into practical action. Effective comprehension of instructions is crucial for the reader to grasp the required tasks. In pursuit of personal goals, information undergoes conceptualization, restructuring, and linguistic adaptation to generate written content aimed at informing and convincing the reader (functional writing).

Furthermore, empirical research in writing by Michel et al. (2020) suggests that reading-to-write tasks demand a specific set of literacy skills and cognitive processes that extend beyond those typically associated with writing alone. Consequently, students engaged in such tasks must effectively juggle both reading and writing components: they need to strategize, compose, and revise their own texts while also comprehending the content of source materials, selecting relevant information from these sources, and so forth.

These findings underscore the importance of injecting more appeal into reading and writing activities and encouraging exploration of diverse methodologies. To enhance the engagement and relevance of exercises, particularly regarding how students prefer to convey information to others, educators can integrate interactive and multimedia elements.

Kinesthetic Presentation

Table 8 demonstrates the students' strong inclination (weighted mean = 3.80) towards the Kinesthetic mode when conveying information to others, with weighted mean values ranging from 3.41 to 4.20. The majority of kinesthetic learners exhibit a notably high preference for drawing upon personal experiences in decision-making (weighted mean = 4.41), as well as a strong preference for engaging in hands-on activities (weighted mean = 4.17), recounting

events based on actual occurrences (weighted mean = 3.99), and detailing experiences based on specific events (weighted mean = 3.94).

Table 8. Descriptive statistics of the extent to which students prefer kinesthetic presentation of information (n = 250)

Indicators	Mean	Interpretation	Extent
1. I use my own experiences when making decisions.	4.41	Frequent	High
2. I am interested in hands-on activities.	4.17	Frequent	High
3. I relay information based on what exactly happened.	3.99	Frequent	High
4. I focus on real things because reality is important to me.	3.94	Frequent	High
5. I prefer to give plenty of examples in my summary.	3.15	Sometimes	Moderate
6. I give a lot of examples when I talk, write, discuss, and present my ideas.	3.13	Sometimes	Moderate
Composite	3.80	Frequent	High

These results underline that Kinesthetic learners thrive through physical engagement, movement, and tactile experiences, relying on touch and bodily motion to process information. When disseminating information, they often prefer to draw upon personal experiences, consistent with their preferred learning style. This corroborates the assertions of Zineb and Anfel (2023) and Gill et al. (2023) regarding how kinesthetic learners manipulate objects with their hands, communicate, and express ideas through bodily actions. The findings underscore Kinesthetic modality as the preferred mode for presenting information to others among the surveyed students. Given the prevalence of Kinesthetic preference among students, educators can enhance student engagement by incorporating activities that involve movement and manipulation. Providing exercises or simulations that allow students to apply concepts in practical contexts can aid in comprehension and retention of information.

3.3 Academic Performance of the Students in English

Table 9 illustrates the Academic Performance of Students in English.

Table 9. Academic performance of the students in English (n = 250)

Rating	Verbal Description	Frequency	Percentage
90% - 100%	Outstanding	61	24.40
85% - 89%	Very Satisfactory	97	38.80
80% - 84%	Satisfactory	70	28.00
75% - 79%	Fairly Satisfactory	22	8.80
Mean = 85.55	(Very Satisfactory)		
SD = 4.63			

Table 9 illustrates that 24.40% of surveyed students achieved an outstanding rating, 38.80% attained a very satisfactory rating, and 28% performed satisfactorily. Additionally, 8.80% received a rating of "fairly satisfactory." These results highlight the need for remedial activities to address gaps in English language learning among these students. The overall performance score for the students is 85.55, characterized as "very satisfactory." This score slightly exceeds previous research results by Jumento (2023), who reported an 83.30% rate, and Aragote et al. (2019), who found 82.52% of respondents performing satisfactorily in English. This suggests that students at this level have generally mastered essential English concepts and can apply them independently in real-world tasks, as per Deped Order No. 73, s. 2012. These findings indicate that, on average, students performed well in their assessments or exams, reflecting a relatively high overall level of academic achievement within the group.

3.4 Relationship Between Students' Preference for Absorbing Information and their English Academic Performance

Table 10 presents the data that identifies the correlation between students' preferences for acquiring information through the four perceptual learning modalities and their English academic performance. Utilizing Multiple Linear Regression Analysis, it is demonstrated that the overall F-Test holds significance ($p = 0.000 < \alpha = 0.05$). This indicates that the sample data provide substantial evidence for rejecting the null hypothesis, suggesting that certain explanatory variables (the four perceptual learning modalities) significantly predict students' academic performance in English. According to the linear regression findings, only the preference for the reading and writing learning modality emerges as a significant predictor of students' academic performance ($p = 0.000 < \alpha = 0.05$), with a positive coefficient (3.03). This suggests that higher preference for reading and writing among students correlates with greater academic success in English.

Table 10. Correlational analysis for the relationship between students preference and academic performance in English (n = 250)

Variables	Coefficients	SE	t Stat	P-value
Intercept	73.59	2.03	36.34	0.000
Visual	-0.72	0.63	-1.15	0.251
Auditory	1.00	0.66	1.53	0.128
Reading and Writing	3.03	0.64	4.72	0.000
Kinesthetic	-0.01	0.58	-0.02	0.987
r = 0.4405				
r ² = 0.1941				
adjusted r ² = 0.1809				
F-ratio = 14.749				
p-value = 0.000 (significant)				
Level of significance = 0.05				

The results imply that students' proficiency in reading and writing strongly influences their overall academic achievement, highlighting the pivotal role of tasks involving reading comprehension and written expression in assessing and forecasting students' English proficiency. This finding resonates with Akhlaghi et al.'s (2018) study, indicating that individuals favoring a reading/writing learning style tend to achieve higher academically. Those inclined towards reading and writing activities may excel academically as reading serves as a fundamental method of information acquisition. Yotta (2023) underscores that reading and writing learners absorb information primarily through reading materials, note-taking, and list-making. Additionally, being cognizant of learners' diverse learning styles and implementing appropriate strategies can enhance academic performance. Individuals proficient in reading may adeptly comprehend and process written information, which can be advantageous in academic settings where textual information predominates. Moreover, effective reading and writing skills often coincide with strong study habits, such as note-taking, summarization, and creating outlines, enhancing understanding and retention of academic content. These results align with Tus et al.'s (2020) findings, emphasizing the importance of regular study habits, including reading, note-taking, and meeting learning objectives, in fostering academic success.

3.5 Relationship Between Students' Preference in Presenting Information and their English Academic Performance

Table 11 reveals the correlation between students' inclination towards presenting information through the four perceptual learning modalities and their academic performance in English.

Table 11. Correlational analysis for the relationship between students preference and academic performance in English (n = 250)

Variables	Coefficients	SE	t Stat	P-value
Intercept	76.61	1.91	40.09	0.000
Visual	-1.73	0.59	-2.93	0.004
Auditory	0.52	0.61	0.85	0.397
Reading and Writing	1.75	0.71	2.47	0.014
Kinesthetic	1.87	0.60	3.11	0.002
r = 0.3821				
r ² = 0.1460				
adjusted r ² = 0.1321				
F-ratio = 10.474				
p-value = 0.000 (significant)				
Level of significance = 0.05				

Table 11 illustrates the data aimed at discerning the correlation between students' preferences in presenting information through the four perceptual learning modalities and their academic performance in English. It indicates that the overall F-test holds significance ($p = 0.000 < \alpha = 0.05$), leading to the rejection of the null hypothesis. This suggests that certain explanatory variables (the four perceptual learning modalities) significantly influence students' academic performance in English. The linear regression analysis reveals that students' preferences in presenting information through visual ($p = 0.004$), reading and writing ($p = 0.014$), and kinesthetic ($p = 0.002$) modalities are significantly linked to their academic performance in English. Furthermore, the data highlight that the coefficient for the visual modality (-1.73) is negative, indicating that students who rely more on visual presentations tend to have lower academic performance in English. Conversely, those who utilize reading and writing (coefficient = 1.75) and kinesthetic (coefficient = 1.87) modalities in presenting information tend to achieve better academic performance in English.

These findings suggest that while visual presentations hold importance in certain educational contexts, other modalities such as reading and writing, and kinesthetic engagement play a more pivotal role in determining academic success, particularly in English. This underscores the complexity of learning styles and emphasizes the necessity for a diverse skill set to excel academically.

The study also reveals that according to Neupane et al. (2023), visual learners who prefer pictures, drawings, models, and paintings tend to perform less well academically in English. This aligns with Akhlaghi et al.'s (2018) findings, which suggest that students favoring a reading/writing learning style tend to outperform those without such a preference. Additionally, Zineb and Anfel's (2023) study indicates that reading and writing learners excel through written words, emphasizing the significance of note-taking as a strategy to enhance understanding and retention from reading. Moreover, Amuda and Ali's (2018) study confirms the relationship between students' study habits and academic performance, while Chetty's (2019) research emphasizes that learners' habits are pivotal in determining academic success.

4.0 Conclusion

This work significantly advances the field of education by shedding light on the importance of recognizing and accommodating diverse learning preferences among students. By acknowledging that students exhibit varied preferences in learning English, the study underscores the necessity for educators to adopt a more personalized approach to teaching. The research contributes to the present state of knowledge by emphasizing the impact of tailored instruction on student motivation, engagement, comprehension, retention, and overall academic success. By aligning teaching methods with individual learning styles, educators can create a more inclusive and efficient learning environment that caters to the unique needs of each student.

Furthermore, the work suggests several areas for future study. Firstly, researchers could delve deeper into the specific strategies and techniques that are most effective for different learning preferences, providing educators with more practical guidance on how to implement personalized instruction. Additionally, longitudinal studies could explore the long-term effects of personalized learning approaches on students' language proficiency and academic achievement. Moreover, investigations into the intersectionality of learning styles with other factors such as cultural background, socioeconomic status, and cognitive abilities could offer valuable insights into how to further optimize educational practices for diverse student populations. Overall, continued research in this area has the potential to continually refine and enhance teaching methodologies, ultimately leading to more impactful learning experiences for students.

5.0 Contributions of Authors

This study has a single author and his adviser reviewed and approved the final version of this paper.

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7.0 Conflict of Interests

The author declared that he has no conflicts of interest as far as this study is concerned.

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On the Innovative World of Care: Unveiling the Lived Experiences of Nurses in Using an Electronic Health Information System

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Abstract. As healthcare systems worldwide continue to undergo digital transformation, the integration of health informatics has become pivotal in enhancing patient care, communication, and overall healthcare efficiency. The purpose of this descriptive phenomenological study was to explore and understand the experiences of staff nurses using an electronic health information system. A purposive sample of 14 senior nurses were interviewed. Using Colaizzi (1978) phenomenological method, rigor was established through application of verification, validation, and validity. From 205 significant statements, 15 cluster themes emerged. The experiences of staff nurses in employing the electronic information system included struggles during the initial encounter with the new electronic health information system, working with IT support, workflow disruption, issues regarding limited devices and internet connection, need for training, and having staff pay for errors committed. Their means of coping with the challenges of their experiences focused on recognizing workflow efficiency as perceived benefit, changes in the protocol for improvement, support from superiors and hospital management, as well as collaboration and coordination with others. The insights that staff nurses wanted to share with their peers and the nursing practice in general were personal alignment and resilience, upgrading the system, enhancing staff competency, and meeting workforce demands. Nurses adapting to a new electronic health information system echo wider healthcare's digital hurdles. Let's learn from their struggles and resilience to prioritize user-friendly designs, accessible technology, and robust training. This empowers and supports our essential nurses, paving the way for successful health informatics.

Keywords: Nursing; Electronic health information system; Healthcare system; Digitalization.

1.0 Introduction

Like many other countries, the Philippines increasingly adopts electronic health record systems (EHRS) to improve healthcare efficiency and patient care. However, implementing EHRS among staff nurses, the backbone of the healthcare system, presents unique challenges. Entering data into EHRS can be time-consuming and cumbersome, adding to already heavy workloads and potentially compromising patient care time. Nurses struggling with EHRS might spend less time on direct patient care, hindering overall healthcare efficiency. Challenges can lead to nurse frustration and dissatisfaction, potentially contributing to burnout and staff turnover. Salameh (2019) predicted that by 2014, all US hospitals would adopt electronic medical records (EMRs), reflecting the widespread recognition of their benefits in improving healthcare delivery. Given that 2020 has been declared the World Health Organization's (WHO) Year of the Nurse and Midwife worldwide, it is important to consider how nurses now provide care and how that will evolve. Kuek (2019) studied Australian healthcare staff's digital literacy and attitudes towards information systems. While they generally feel confident with ICT and hold positive views on information systems, poor computer skills, and negative attitudes hinder electronic health record adoption. Meanwhile, in Sweden (Persson, 2023), a study showed increased complexity due to

digitalization. Even if some tasks are digitalized, the remaining non-digitalized ones can be cumbersome enough to lower the motivation for use or the feeling of making work more efficient.

Nursing informatics is still a developing field in the Philippines. The impact of incorporating data and communication technology into nursing service delivery systems and nursing informatics on nurse emphasis is still being determined. A deeper comprehension of the historical contributions of nursing informatics to Philippine nursing and the declaration of its implications for Philippine nursing practice, starting from a caring standpoint, must be focused on, and clarified (Faustorilla, 2020). Moreover, specific barriers to adopting electronic medical records in select Philippine hospitals (Ebardo, 2019) have shown that healthcare professionals often experience a learning curve.

In the Municipality of Midsayap, there remains a glaring need for more research on the impact of rolling out electronic health information systems electronic health information system in local hospitals. This study seeks to fill this gap by delving into the lived experiences of staff nurses as they navigate the adoption of electronic health information system software, their development of coping mechanisms, and their implementation of adaptive strategies to ensure continued quality and safety of patient care amidst this digital transformation.

2.0 Methodology

2.1 Research Design

This study utilized the phenomenological type of qualitative research design to obtain a detailed understanding of the experiences of staff nurses who experience using an Electronic Health Information System (EHIS). Specifically, a descriptive-phenomenological study was utilized, which allows the researcher to explore in-depth individual lived experiences of the research and maximize the effectiveness of feedback and workplace learning (Neubauer., 2019). EHIS implementation isn't just about technology; it significantly impacts nurses' work, relationships, and self-perception. Phenomenology seeks to comprehend the meaning and significance these experiences hold for nurses, delving deeper than simply describing behaviors or opinions. The qualitative method provides an in-depth questioning and further probing of the participants based on their responses. The researcher also tries to understand their motivations and feelings (Bhat, 2023).

2.2 Research Participants

The research was conducted in the Municipality of Midsayap, which has a land area of 290.42 square kilometers or 112.13 square miles, which constitutes 3.12% of Cotabato's total area. Its population, as determined by the 2020 Census, was 165,376. Four hospitals in Midsayap are using an EHIS, which are Midsayap Diagnostic Specialist Hospital, Inc., Cohesco Hospital, Fresenius Kidney Care Midsayap, and Anecito T. Pesante Sr. Memorial Hospital. This study employed a purposive sampling strategy to select 14 senior staff nurses with at least two years of experience using an EHIS. Participants' ages ranged from 35 years and above. Although the suggestion of recruiting 10 participants was based on the guidelines from a reference book, the final number of the participants was determined by the point of data saturation. This meant that the researcher continuously recruiting until no new themes or insights were emerging from the data, ensuring that the study captured a comprehensive range of perspectives and information. This criterion ensured we captured the perspectives of nurses who had significant experience leveraging EHIS for patient care, allowing us to delve deeper into its impact on their practice. Data saturation, determined through an iterative process of data collection and analysis in collaboration with my advisor, was reached with 14 participants, indicating that we had gathered sufficient data to explore the research question comprehensively.

2.3 Research Instrument

This study employed a descriptive-phenomenological approach to analyze the lived experiences of 14 senior staff nurses using an EHIS in different hospitals. The researcher used both in-depth, one-on-one interviews with seven participants (1-7) and focus group discussions with the remaining seven (8-14) to gather rich data. Interviews and discussions focused on participants' descriptions, opinions, and reflections on their encounters with the EHIS, allowing us to gain a deeper understanding of its impact on their work and patient care.

In-depth interviews involved one-on-one interactions between the researcher and the participant. The purpose was to gather detailed and comprehensive information about the participant's experiences, opinions, beliefs, or

attitudes on the topic. The focus group discussion on the other hand, allowed exploration of group dynamics and the emergence of shared perspectives. Aside from taking notes of the participant's behavior and emotions, the researcher was recording the discussion as part of data collection needed for the analysis. The participants who participate in the study served as the primary data source, while secondary data was gathered from recent studies, articles, journals, and related literature.

2.4 Data Gathering Procedure

In conducting this study, the researcher followed the procedures for data collection: First, the researcher will secure approval from the Davao Doctors College, Inc. Ethics committee while formulating a research questionnaire. Then after, it will undergo validation with the validators/panelists for reliability testing. The researcher will ask permission from the Program Chair to conduct the study. The researcher will afterward identify target participants. The researcher will formulate and send a letter of authorization to the Medical Director and Chief Nurse of the Hospital of selected health facilities in Midsayap before the interview and then after the scheduling of the interview. The participant's informed consent was given and will be gathered. A brief orientation to the study's preliminary procedures was provided. The researcher will conduct a face-to-face individual interview and focus group discussion that will take 30 to 45 minutes for each participant, depending on the thorough conversation between the participant and the researcher. Participants were informed that the interview was audio-recorded. Following the interview, the audio was transcribed to make sure that the data was reliable. After the interview process, participants received a letter conveying the researcher's heartfelt appreciation for their time, cooperation, and active participation in the data collection process. Respondents were assured that their data and information were kept strictly confidential. The compiled results from all the participant's senior staff nurses for this study were analyzed using Collaizi's method of thematic analysis.

2.5 Ethical Considerations

This research study followed ethical guidelines.

Social Value. In the conduct of the study, the study aims to ascertain staff nurses' lived experiences with adopting an EHIS software and the switch from traditional method to electronic-based software, as well as how dedicated and committed the staff nurses were to the changes in their workflow, reducing work-related stress, along with the struggles of staff nurses which already adapting to it. The results of this study will provide knowledge on people who have the utmost concern when it comes to the experiences of learners in online physical education classes. The result of the research was disseminated to the community, most specifically to those who will benefit the most.

Risks and Benefits. The questionnaire may ask about the personal experiences of the participants, which entail personal reflections. Rest assured that the study was used for research purposes only. The benefits of this study can help the researchers in initiating intervention activities that can address the experiences the researchers have incurred. This research will serve as a foundation for establishing focused, therapeutic actions by understanding the participants' personal experiences. These interventions will address and enhance the specific experiences the researchers will have faced in their duties and responsibilities, ultimately promoting a more positive and productive work environment for everybody concerned.

Voluntary Participation. The respondent's participation in this study is voluntary. The respondents have the right to refuse to participate if they do not feel comfortable in any way. Moreover, even if the respondents initially decided to participate, they have the right to withdraw from the study at any time without penalty. If the respondents choose to withdraw from the study, all information that they have provided will not be included in the data collected.

Privacy and Confidentiality. In the gathering, retention, and processing of personal data, researchers followed the criteria of transparency, legitimate purpose, and proportionality (Data Privacy Act of 2012). In terms of privacy and confidentiality, the respondents were given the freedom to stay anonymous. Even if the respondents indicated their names and other identifying information, it will not be associated with any part of the written report of the research. The data that was gathered in this study was kept with the utmost confidentiality. If in the future, this research study would be published, any information indicated in the material will not reveal the respondent's

identity in any way. Moreover, the researcher declines to anybody who is not connected with the study who will ask for any information about the data gathered. All the data gathered would be kept strictly confidential and would be accessible only to the researchers. After the study, the participants may be provided with a copy of the results if they ask for it. Lastly, all the raw data would be disposed of accordingly after the study. As part of privacy and confidentiality the data of the participants was stored on a USB drive to ensure easy access and secure handling throughout the research process. This data included personal information and responses necessary for the study. The duration of the storage of this data ended one month after the manuscript was officially approved and hardbound, marking the finalization of the research project.

After this period, strict protocols were followed to ensure the secure destruction of the data. The USB drive containing the participants' information was destroyed by burning it in a fire. This method was chosen to guarantee the complete and irreversible elimination of all stored data, thus protecting the confidentiality and privacy of the participants. This destruction process was carried out with meticulous care to ensure compliance with ethical standards and institutional guidelines.

3.0 Results and Discussion

There were three emergent themes and eight cluster themes resulted from the examination of the participants' overall responses to the lived experiences of the staff nurses that answered these questions: What are the experiences of nurses in the use of EHIS? How do participants cope with the challenges of their experiences? What insights can participants share with their peers and to the nursing practice in general?

Theme 1: Learning Curve and Challenges

The first Emergent Theme is the Learning Curve and Challenges. Implementing EHIS presents a learning curve for nurses, the primary users (Ahmadian, 2017). While EHIS promises improved record accuracy, reduced errors, and faster data access, navigating its features, workflows, and menus can be complex. Nurses must adapt to a new interface, requiring them to learn data entry, documentation practices, and potential integrations. The shift from paper to digital necessitates overcoming cognitive hurdles related to layout, information hierarchy, and interaction methods.

Subtheme: Encountering New Things

The initial phase of implementing a new EHIS presents a learning curve for nurses as they encounter new features, workflows, and data entry methods. This shift from familiar paper-based systems to a digital interface necessitates adaptation and overcoming challenges.

The participants expressed this cluster through these statements:

"At first, we experienced struggle using Bizbox before because the software is not that user friendly." (SS 1, Participant N1, Lines 2 to 3)

"First, it was very challenging to us because we used to have this previous system, and then here comes another new system again, so it's very challenging to adjust for our staff." (SS 2, Participant N2, Lines 178 to 181)

"At first, we are having difficulty because we are getting used to the old one." (SS 3, Participant N4, Lines 482 to 483)

"The training proceeded smoothly; however, when we began using the system in practice, we encountered difficulties on multiple occasions." (SS 5, Participant N1, Lines 29 to 30)

Introducing a new EHIS has disrupted nurses' routines, necessitating significant adjustments. They faced unfamiliar interfaces, requiring extra time and effort to navigate effectively, adapting to new procedures, and modifying established practices. Yusif et al. (2019) highlighted the challenges nurses encounter during this process, emphasizing the importance of comprehensive support and training. Recognizing these obstacles is crucial for assisting nurses during EHIS adoption, especially given the potential for increased stress from unfamiliar technology, which could exacerbate workload and staffing shortages (Jedwab, 2022).

Subtheme: Confusing Workflow Protocols

Challenges in supporting clinical workflows have plagued the transition from paper to electronic health processes. This has hampered the ability of health nurses to distribute safe and efficient care to patients.

The participants expressed this cluster through these statements:

"But at first, we encounter time delay, in the sense that we easily get confused with our computer-to-patient transition." (SS 14, Participant N1, Line 11)

"At first it is difficult for us and because we have confusion on what to the priority that's why we have a lot of errors in the requisition under medicine bar option." (SS 27, Participant N2, Lines 193 to 194)

"Challenges may be more on charging patient laboratories and medicine in the system because all charges were entered in the system." (SS 28, Participant N2, Lines 193 to 194)

"There is a little bit of disruption if we experience downtime on our end; it will also affect our work." (SS 31, Participant N4, Lines 497 to 498)

"If incorrect spelling or new medication that was not registered in the system, it won't show in the system, so accurate results depend on the patient's charts." (SS 33, Participant N5, Lines 598 to 599)

Unlike initial expectations, EHR's ability to seamlessly enhance clinical procedures and their anticipated integration and strengthening has proven challenging, as Zheng (2021) noted. Implementing EHIS frequently results in substantial disruptions. Nurses encounter challenges adjusting to the new system requirements, which may divert their attention from other vital patient care duties. This learning process disrupts established workflows, affecting efficiency and potentially causing delays in essential care.

Subtheme: Irritating Internet Interruptions

Despite widespread interest in automating health records globally, EHIS system adoption can be overwhelming and financially prohibitive for many healthcare stakeholders, including medical record/health information managers, administrators, and providers. Limited budgets in developing nations often restrict investment in modern IT infrastructure, hindering EHIS effectiveness due to compatibility issues, security risks, and slow performance.

The participants expressed this cluster through these statements:

"Usually, the challenges that I've encountered using the nephroweb is having loss of internet connection, loading so if that happens there will be a delay in our work." (SS 45, Participant N5, Lines 590 to 591)

"That's the reason why it became a hassle on the part of the staff nurse due to the system is delay/slow." (SS47, Participant N1, Lines 42 to 45)

"It is slightly not good, since delays where inevitable circumstances happen like slow loading process or delay issues." (SS 48, Participant N1, Lines 1222 to 1223)

"The workflow will stop/pause if the system experiences a problem since it is connected all in section in the institution." (SS 49, Participant N1, Lines 78 to 79)

"Our internet is running slow; that's the main problem that we struggled with." (SS 50, Participant N3, Line 429)

Developing nations face a significant challenge in implementing and maintaining EHIS systems due to the "digital divide" and resource limitations (Olayinka, 2021). Reliable and high-speed internet connectivity is crucial for EHIS functionality. However, frequent outages, slow connection speeds, or limited access in rural areas plague many developing nations. This instability disrupts data entry, retrieval, and overall system performance. Healthcare providers experience frustration and workflow disruptions, hindering their ability to deliver patient care efficiently.

Subtheme: Paying for Errors Committed

Healthcare professionals provide care as a part of intricate systems prone to mistakes and unfavorable outcomes. Even after little training, since the new system's launch has a timeline, frontline staff are faced with the dilemma that errors may be committed. With every mistake made, staff are expected to shell out money to pay for the lost revenue.

The participants expressed this cluster through these statements:

"That's the only downside: if you forget to charge them, they will look into it, and the nurses will be obliged to pay, so it's unfair on the nurse's part because if they have an effort on a 12-hour shift and then end, they will pay for it." (SS 60, Participant N2, Lines 252 to 253)

"It was a burden to us because it will automatically fall under salary deduction." (SS 245, Participant N1, Line 132)

"The nurse will be paying for that wrong entry or committed error that did not coincide with the doctor's order." (SS 61, Participant N4, Line 536)

Healthcare professionals explore the relationship between protocol adherence and adaptation to complex realities (Zangaro et al., 2023). High-stakes patient care persists despite incomplete information, limited support, and overwhelming workloads. This pressure and the moral distress of not meeting ideal care standards create a challenging environment. Implementing new systems like EHRs can introduce additional errors. These mistakes rarely stem from individual failures; inadequate training, system glitches, and unclear workflows are often the culprits. A culture of blame and financial penalties in response to errors fosters fear and mistrust. This discourages open communication and reporting of issues, hindering system improvement and potentially jeopardizing patient safety.

Theme 2: Adapting the Strategies

The second Emergent Theme is *Adapting the Strategies*. Adapting to new technologies like EHRs requires overcoming a learning curve through training and support (Zadvinskis, 2018). Individual factors and training quality influence how quickly nurses adapt. Their satisfaction, perceived benefits, and ongoing support further impact their acclimatization to the new system.

Subtheme: Benefitting Efficiency

EHRs boost perceived efficiency by offering real-time access to patient data from anywhere. This streamlines communication and care coordination, while automated tasks like medication orders free up clinician time for direct patient care. Less paperwork and more patient focus are the efficiency advantages of EHIS.

The participants expressed this cluster through these statements:

"It somehow becomes easier when it comes to workload and less paperwork." (SS 62, Participant N3, Line 349)

"Compared to the old ways that we have, this is much easier since before we were doing manual charting, writing, and requesting on a prescription pad." (SS 63, Participant N4, Lines 487 to 488)

"It makes the process fast in terms of bills and payments, and in charging as well, because in the system it processes fast, and they can easily be discharged." (SS 67, Participant N3, Lines 373 to 375)

"We entered it in the system, so it's an easy way to store those patient's information." (SS 70, Participant N7, Line 781)

"It's practical for me because, previously, everything was handwritten. Writing prescriptions and making copies was time-consuming. Now, with the system, you click and type a few letters, and everything appears automatically." (SS 71, Participant N2, Lines 208 to 210)

EHIS are linked to improved patient outcomes, including enhanced diagnosis and treatment coordination (Khalifa, 2017). Authorized providers can access patient records remotely, promoting efficient communication and collaboration. EHIS also streamlines documentation, reducing paperwork and allowing more time for patient care.

Subtheme: Improving the Protocols

Implementing sophisticated computer technologies in health services requires adjustments not only to the organizational structure and job descriptions but also to the individual level, as demonstrated by the requirement that staff members modify daily operations. In the current healthcare system, digital technologies are used as an essential component of nursing.

The participants expressed this cluster through these statements:

"First, if we have new nurses transferred in ER, I make sure that they will receive a proper orientation because not all areas have the same process workflow." (SS 115, Participant N1, Lines 87 to 89)

"We need to make sure that everything is encoded correctly, and there is also a need to double check to avoid such error." (SS 117, Participant N1, Lines 102 to 103)

"That's a reminder I gave to the newcomers: 'Double-check before entering and before saving.'" (SS 118, Participant N1, Lines 112 to 113)

"So, charge nurses' first step is an endorsement, and after the endorsement, they check if there is any IV fluid that is nearly empty, so they request it after so it will not hit on the medication nurse request." (SS 119, Participant N2, Lines 223 to 224)

"When a requisition is made, and doctors have already placed the orders, nurses will proceed with carrying out the order, including laboratory requests. This constitutes the process for assigning tasks to nurses." (SS 120, Participant N2, Lines 224 to 225)

EHRs application provides contrasting views, with some embracing its potential for health promotion, while others fear it diverts nurses from patients (Tsarfati, 2023). However, healthcare professionals can overcome these concerns by focusing on proactive solutions. By adapting protocols to address workflow inefficiencies and pain points during implementation, they can mitigate the negative impacts of EHRs and strategically optimize their use for improved efficiency.

Subtheme: Asking for Help from Management Support

While technology revolutionizes hospital workflows across every department, its true impact empowers nurses, the backbone of patient care. Their satisfaction and efficient adoption hinge on the unwavering support of managers and hospital leadership.

The participants expressed this cluster through these statements:

"Supervisor staff, they usually help check the system every morning, every day and even also in night shift." (SS 128, Participant N1, Line 116)

"And for the supervisors and administrators, every month we are conducting a meeting, and then every month our admin officers are monitoring everything." (SS 130, Participant N2, Lines 269 to 270)

"So, first of all, supervisor and admin, they boost, and they well explained the system to us, and if we encounter errors, they will stay and get some help." (SS 131, Participant N3, Lines 402 to 403)

"Our supervisor checks to see if we experience issues, so they will list all those concerns and raise them with the administration, and the administration will call on the attention of Bizbox personnel through communication to address the issues." (SS 132, Participant N4, Lines 542 to 545)

"Initially, in our administrative roles, our company supports us in adopting the system. We undergo comprehensive training before implementing it, ensuring thorough practice and exploring its functionalities." (SS 135, Participant N8, Lines 791 to 793)

Successful EHR implementation hinges on fostering trust and empowering nurses through comprehensive, tailored training (Cheng, 2021). Open communication and proactive feedback collection are essential for addressing challenges promptly and building a collaborative partnership.

Subtheme: Coordinating with Others

Nurses are inherently team players. Their daily routines are an intricate collaboration dance, with individual work styles influencing the team dynamic. A meticulous nurse might favor highly organized workflows, while another thrives in a fast-paced environment. Recognizing these preferences and fostering an environment that celebrates diverse styles is crucial for a successful and efficient nursing team.

The participants expressed this cluster through these statements:

"Support we received from our colleagues if ever that on our level in station 2 staff if ever they see errors or wrong charging in the system, they call the attention of that staff who committedly wronged so it's easy for them to endorse." (SS 144, Participant N2, Lines 259 to 261)

"Before, they were having conflict, but now they are already open, and they are suggesting which is better in our flow." (SS 145, Participant N2, Lines 267 to 268)

"Every time if there are incidents like that, we used to have a quick huddle to highlight those wrong entries and then what to do to correct it and then to avoid that in the future." (SS 150, Participant N6, Lines 721 to 722)

"We plan ahead of time and then of course with the team, we inform them that this will happen so possible we will experience backlogs so at least we prepare our whole time and staff." (SS 151, Participant N2, Lines 804 to 806)

"Every time we need to admit patients, they update us from time to time so there will also be control, and if the house is full, then we can refer them to other nearby hospitals." (SS 152, Participant N4, Lines 569 to 571)

Coffetti (2023) stresses the importance of teamwork, leadership, and nurse collaboration in effectively embracing EHRs. They note that user resistance frequently contributes to challenges in IT implementation. Moreover, Yuan (2020) highlights the impact of social networks on individual acceptance of new systems, stressing that peer group

views notably affect adoption more than collective beliefs. Thus, fostering collaboration and sustaining transparent communication among nurses is crucial in EHIS implementation to address resistance and achieve successful adoption.

Theme 3: Upholding the Need for Change

The third Emergent Theme is *Upholding the Need for Change*. Nurses embraced the EHIS, anticipating benefits like clearer documentation, improved patient safety, and better care delivery (Alrasheeday et al., 2023). Sharing real-world experiences can expedite learning and system refinement by identifying strengths, weaknesses, and workflow bottlenecks.

Subtheme: Encouraging Willingness to Learn

This highlights a critical factor in successfully deploying EHIS within hospitals. User acceptance, particularly among nurses who constitute the majority of EHIS users, is essential for maximizing the system's benefits. Transitioning from paper-based records to a new digital system involves a significant learning curve. Nurses must acquire new skills and adapt existing workflows to utilize the EHIS effectively. A willingness to learn is essential for overcoming this initial hurdle.

The participants expressed this cluster through these statements:

"Skills and knowledge, maybe first, enhance my critical thinking skills because when we are so emotional in the things we do, we will get confused about what they are supposed to be, so critical thinking skills mean you don't need to panic, so we do troubleshoot skills in terms of systems and computers that we can resolve." (SS 160, Participant N2, Lines 276 to 279)

"First of all, you will become a computer wizard. Like before, you are not very familiar with those shortcuts on the keyboard, computer, how to install, etc., so your skills will develop extra knowledge you can appreciate." (SS 162, Participant N3, Lines 415 to 417)

"You need to be more flexible when it comes to experiencing delay issues." (SS 164, Participant N4, Line 549)

"Another thing is they need to start to show a willingness to learn when someone is teaching them so that they can use it and they can share it with their colleagues." (SS 169, Participant N5, Lines 635 to 637)

Understanding the value of health information systems impacts nurses' fulfillment, as evidenced by the significant link between perceived usefulness, attitude, and satisfaction (Barzekar, 2019). However, transitioning to a new system requires the resilience of the organizations and frontline nurses.

Subtheme: Upgrading the System

Big data requires good internet connectivity and modern equipment. EHIS relies on real-time data access and exchange. A strong internet connection ensures minimal lags, quick data transfer, and uninterrupted workflows for nurses and other healthcare professionals. Modern equipment with intuitive interfaces and minimal lag can significantly improve user experience and encourage nurses' acceptance of the new system.

The participants expressed this cluster through these statements:

"Maybe I can only suggest upgrading and have no logging issues so we can't have system breakdowns, and it also initiates diagnostics, like if a problem occurs, it automatically diagnoses it." (SS 222, Participant N3, Lines 452 to 453)

"If the internet connections work smoothly, maybe we have a large server capacity because the server that we have should be exposed to heat and overheating because it works 24/7." (SS 223, Participant N3, Lines 454 to 457)

"Perhaps if the hospital purchased a system, it should be in the full package even though it is slightly more expensive, but the processes are smoother, unlike a limited package that was purchased, which also has limited access to the system, so the struggle is on the staff, whereas with a full package, you can access everything, and it will be faster." (SS 224, Participant N3, Lines 473 to 476)

"Second, internet connection, it's not necessary to have a very faster connection, but it should not always be slow, even if you are expert, so it needs to give in." (SS 225, Participant N5, Lines 662 to 665)

"I think they need to explore the system and research, not just relying on the training that was given to them but also advising them to research so that it's easier for them to use the system." (SS 226, Participants N13, Lines 1165 to 1167)

In healthcare, big data comes from sources like hospital records, patient files, test results, and IoT devices (Dash, 2019), offering opportunities and challenges for organizations aiming to enhance patient care and efficiency. The steps critical to the implementation's success are understanding the methodology and the company's

requirements. Healthcare workers are happier when the optimal strategy, technique, backup system, and training are used, significantly reducing the likelihood of impaired usability (Aguirre, 2019).

Subtheme: Training Enrichment Program

While technology promises to revolutionize healthcare, its success hinges on the human touch. Training and competency are crucial in how nurses adapt to Health Information Technology (HIT), like EHIS.

The participants expressed this cluster through these statements:

"Training is a big help and everyday continuity of your work for you not to forget what lecture you have in training and of course also seminars for a refresher to refresh you for all those things they taught you so it will maintain and sustain if what are the needed things you will do." (SS 229, Participant N6, Lines 728 to 731)

"As a unit head in our company, if we have newbies, then we have training before they hand on the system if they need a buddy, so we are also doing that to prevent mistakes and future problems." (SS 230, Participant N7, Lines 816 to 817)

"As a staff nurse, the only thing that I can suggest making the job of a staff nurse easier and more bearable if maybe they will have training." (SS 232, Participant N5, Lines 638 to 643)

"In the nursing administration, we should embed technical skills in orientation and training because it will improve everything. Sooner or later, everything will update that technology, and the same will happen with the system, so there is a need for training." (SS 233, Participant N2, Lines 341 to 343)

"More training, seminars, and improvements to the system will also make our daily transactions smoother." (SS 235, Participant N4, Lines 580 to 581)

Nurses advance in proficiency with each EHIS training session, maximizing their capabilities (Zadvinskis, 2018). Investing in their skills is crucial, as EHIS effectiveness relies on user competence. Unlike basic tutorials, effective training bridges the gap between paper and digital, leading to smoother workflows and better patient care.

Subtheme: Increasing a Need for Manpower

Implementing a new EHIS often means additional tasks and workflows for nurses and other staff. Coupled with the need to learn a new system, this can lead to increased workload and stress due to the learning curve, the more reason there is to meet the workforce demands.

The participants expressed this cluster through these statements:

"I think if there is enough workforce, nurses really can do it. But if most facilities now lack nurses, I think it's a struggle for nurses even as we experience it. It is an additional task for nurses, so it is important to have enough workforce." (SS 242, Participant N6, Lines 735 to 737)

"We need to consider that we have staff who file resignations, so maybe we must conduct a meeting session regarding Bizbox usage. An open forum is also possible." (SS 243, Participant N4, Lines 581 to 582)

"If you apply this in your institution, there should be enough nursing staff; otherwise, care plans will not be effective due to minimal manpower support." (SS 244, Participant N6, Lines 758 to 760)

Human resource management techniques secure adequate staffing levels (Kilgore, 2020). This involves strategies to recruit, retain, and deploy personnel effectively, ensuring the right people are in the right roles when needed. Implementing a new EHIS demands technological preparedness and effective personnel management. Ensuring affirmative staffing during this critical phase relies on fostering trust, motivation, and engagement among staff through positive HR practices.

4.0 Conclusion

EHIS in nursing research have opened new doors for data-driven inquiry. Staff nurses contribute to the generation of evidenced-based practices by balancing the complexity of information within electronic health records. This facilitates extensive studies, promoting a more comprehensive understanding of patient outcomes, treatment efficacy, and healthcare trends. Through these electronic systems, nurses are not only enhancing the quality of patient care but also transforming the point of view of nursing education and research. In addition, qualitative research offers guidance for exploring different aspects of staff nurses' experience with the EHIS and allows a better understanding of nursing practice, nursing education, and nursing research in the innovative world of care. The methodologies employed in this study, including survey instruments, qualitative interviews, or observational approaches, can be refined, or adapted to suit the specific contexts of other healthcare settings.

Comparing the findings across different institutions or healthcare systems can lead to a more comprehensive understanding of common challenges and best practices in health information system implementation. Collaborative efforts among researchers, where insights and methodologies are shared, can foster a collective understanding of the complex dynamics surrounding health information systems in healthcare. As a result, the study not only contributes to its specific field but also opens avenues for a broader discourse on optimizing technology in healthcare settings.

5.0 Contributions of Authors

AA - Conception, design of the study, manuscript writing, data collection, data analysis, interpretation of the results, revision of the manuscript.

BA - Data Analysis, literature review, study coordination, interpretation of data and reviewed the manuscript.

CA - Final Approval of the manuscript.

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Moderating Effect of Social Media Exposure and School Type on the Relationship Between Instructional Competence and English Proficiency

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Abstract. Social media have become the main means of communication and maintaining a social life. Students may develop their English proficiency through social media and so with the teacher's instructional competence. This study determined the moderating effect of social media exposure and school type on the relationship between instructional competence and English proficiency. The researchers pilot-tested and validated the instruments to determine the reliability and validity of the instrument. The researchers adapted and modified the instruments of Baria (2012) and Hasegawa (2010). Further, the study employed a descriptive correlational research design. The study focused on the influence of social media exposure and school type on the relationship between students' perception of teachers' instructional competence and the English proficiency level of BECED first-year college students in one of the community colleges in Mindanao, Philippines. The result of the study exposed that first-year college students mostly graduated from public schools. Students claimed that they were exposed to social media for uploading pictures, interaction, and other academic purposes. Additionally, the results of the study showed that first-year BECED college students had an overall mean score that indicated poor English proficiency performance. Furthermore, the results of the study showed that there was no significant difference in the respondents' English proficiency when grouped according to feeder school type. Also, the results showed that there was no significant relationship between English proficiency and social media exposure. Additionally, the results showed that the respondent's English proficiency had no significant relationship with teachers' instructional competence. The study concluded that social media does not moderate the relationship between the perception of a teacher's instructional competence and English proficiency. Thus, students must use social media carefully. Also, teachers have to be competent enough to meet the needs of 21st-century learners.

Keywords: Social media exposure; Instructional competence; English proficiency; School type; Moderating effect.

1.0 Introduction

Instructional competence directly influences the effectiveness of teaching which leads to improved student learning outcomes. Competent teachers engage students, address diverse learning needs, foster critical thinking skills, and create a positive and productive learning environment. Since the teachers' instructional competence is one of the factors that affect students' proficiency, many educators strive hard to look for strategies, methods, and techniques to help the students and aid them in independently interacting with written material in a way that they correctly pronounce the words and understand the message contained in them.

Additionally, teachers' instructional competence is an important component in building and enhancing students' English proficiency. The teachers seek to equip the learners with a lot of strategies, methods, and techniques to

help the students and to aid them in independently interacting with written material in a way that they correctly pronounce the words and understand the message contained in them. Thus, learners' learning depends on their ability and views towards the teachers' competencies.

English proficiency is highly important due to its status as a global lingua franca, enabling effective communication and collaboration across borders and cultures. It opens up numerous educational and professional opportunities, as English is widely used in academics as a medium of instruction, business, and international organizations. Moreover, English proficiency enhances access to information and resources available in the English language, enriching one's personal and professional growth. English proficiency can open up many opportunities for people, both personally and professionally.

Furthermore, using online social networking nowadays is common among every individual; it helps to develop students' communication and knowledge. Shivakumar and Manichander (2013) discuss education within the 21st century and how technology is a powerful tool for students. Additionally, social media platforms often provide exposure to English language content, including posts, videos, and interactions in English. Regular exposure to English on social media can contribute to students' language exposure and potentially enhance their English proficiency. According to Reid Chassiakos (2016), social media provides a lot of advantages to students' development. With the advancement of social media, students can easily communicate with their loved ones which may lead to the increase of their communication skills. On the other hand, if students are primarily exposed to informal or non-standard English on social media, it may affect their language development and proficiency less desirably.

However, many students are now engaged and exposed to social media activities like Facebook, Twitter, and Instagram which helped them build on how they perceive teachers' competency and students' English proficiency. Social media exposure can potentially influence students' perception of their teachers' instructional competence. Students may come across various educational content on social media platforms, including instructional videos, teaching tips, and opinions about teaching practices. This exposure can shape their expectations and standards for effective instruction. If students perceive a mismatch between what they see on social media and their own classroom experiences, it may impact their perception of their teachers' instructional competence.

School types often play a significant role in preparing students academically for higher-level institutions. If students receive a solid foundation in their feeder schools, they may have a positive perception of their teachers' instructional competence. Also, they may have possibly built a strong foundation of English proficiency. This study aimed to determine the moderating effect of social media exposure and school type on the relationship between instructional competence and English proficiency. Further, the researcher conducted the study to the 1st year college students who recently took an English subject and were exposed to social media.

2.0 Methodology

2.1 Research Design

A descriptive correlational research design was employed in this study. It is a study where the primary goal was to describe relationships between variables rather than trying to establish a causal relationship (Nora, 2021). The research design was deemed appropriate since the purpose of this study was to determine the moderating effect of social media exposure and school type on the relationship between students' instructional competence and English proficiency.

2.2 Research Locale

The study took place in a tertiary education in Mindanao, Philippines. This school was built on year 2018 with 3 courses offered namely; Bachelor of Entrepreneurship (BSEntrep), Bachelor of Early Childhood Education (BECed), and the Bachelor of Livelihood Education (BTLEd). According to the 2020 census, it has 29,998 people. The town is known as a child-friendly municipality. The researchers conducted the study on the said locality to know and determine the influence of social media exposure and school type on the relationship between students' perception of teachers' instructional competence and English proficiency level as their future reference for appropriate strategies.

2.3 Research Participants

The participants of this study were 71 first-year college students from the Bachelor of Early Childhood Education (BECED) department in one of the community colleges in Mindanao, Philippines who enrolled in the academic year 2022-2023.

2.4 Research Instrument

An adapted survey questionnaire from Grazioplene (2012) of Capiz State University of Social Media Exposure of Students concerning Academic Performance was used in the 1st part of the questionnaire, particularly on social media exposure. The second part of the questionnaire was also an adapted survey questionnaire of Kenji Hasegawa (2010) from the study about Instructional Competencies of the Teaching Force: their Relationship to the Students' Academic Performance. Cronbach Alpha was utilized to determine the questionnaire's Internal Consistency Reliability; the result was 0.90, which signified the reliability of the instruments used in Students' Perception of Teachers' Instructional Competence. Further, the survey questionnaire on English Proficiency Level underwent item analysis which signified that the items were accepted. The questionnaire was personally administered by the researchers following safety protocols and informed the respondents about the purpose of the study.

2.5 Data Gathering Procedure

This study used specific steps following the standard ethical procedures. The researcher had undergone significant steps in obtaining the information needed. An endorsement letter was secured from the Dean of the Graduate School, asking permission to conduct the study. The researchers wrote a letter of intent and addressed it to the College president asking permission to collect data needed for the study. Correspondingly, another letter of intent was distributed to the respondents to formally do the process of gathering data. Afterward, the data gathered were subjected to thorough investigation and analysis.

2.6 Ethical Considerations

This research study followed ethical guidelines. The data gathered were kept confidential. The respondent's participation was voluntary. They were free to decide whether to take part or not to take part in the survey. The respondents' names were not included in the data gathering to keep their identities unknown. The well-being of the first-year students who responded was always protected.

3.0 Results and Discussion

3.1 School Type

Table 1 shows the frequency and percentage distribution of respondents' school type. The result in Table 1 showed that most of the population (84.50%) went to public schools, while 15.50% had graduated from private schools.

Table 1. Frequency and percentage distribution of respondents' school type

School Type	Frequency	Percentage
Private	11	15.50%
Public	60	84.50%
Total	71	100%

Further, the result showed that most BECED first-year college students graduated from public school. 60 out of 71 respondents graduated from public schools because most live in the same community or area. Students graduate from public schools because they cannot afford to study in private schools since their parents' income is only enough for their daily expenses. Studying in private schools can only add to their expenses. The social standing or class of an individual or group (American Psychological Association, 2018) is the common reason why students enrol in public schools. This means that students who study in public schools are those whose parents cannot afford to send them to private schools, so they choose to study in public schools because it is free.

3.2 Students' Perceptions of Social Media Exposure

Table 2 presents the mean distribution of respondents' perceptions of social media exposure. Table 2 shows the mean scores of the 1st year BECED respondents' perception of social media exposure. Among the 15 statements, the highest mean score was the statement: *I check my social media account daily*, with a mean score of 3.32.

Table 2. Mean Distribution of respondents' perception of social media exposure

Indicators	Mean	Description	Interpretation
1. I use social media to upload pictures and videos.	3.22	Agree	High Exposure
2. I check my social media account every day.	3.32	Strongly Agree	Very High Exposure
3. I use social media to increase my ability to communicate.	3.28	Strongly Agree	Very High Exposure
4. I stay awake late at night updating, watching videos, and responding to the newsfeed account.	2.97	Agree	High Exposure
5. I update my profile once in a while.	2.87	Agree	High Exposure
6. I use social media to research my lessons/assignments.	3.21	Agree	High Exposure
7. I feel delighted spending most of my time using social media apps.	3.11	Agree	High Exposure
8. I feel irritated if I cannot check my social media account.	2.59	Agree	High Exposure
9. I spend more than three hours using/accessing my social media account.	3.14	Agree	High Exposure
10. I use social media because it allows me to reinvent myself.	3.26	Strongly Agree	Very High Exposure
11. I use social media to enrich my vocabulary.	3.29	Strongly Agree	Very High Exposure
12. I see my social media account as a venue for releasing my school pressure and stress.	3.26	Strongly Agree	Very High Exposure
13. I use social media to express myself in any way possible.	3.23	Agree	High Exposure
14. I use social media to develop my communication skills.	3.33	Strongly Agree	Very High Exposure
15. I do not update my social media account/s regularly.	2.98	Agree	High Exposure
Overall Mean	3.13	Agree	High Exposure

The results indicated that respondents were always updating their social media accounts. Moreover, the second highest statement was: I use social media to increase my communication ability. This revealed that the first-year BECED college students used social media to develop their communication skills. This means that students find social media helpful in improving their communication skills where they can increase their ability to communicate, reinvent themselves, and enrich their vocabulary. As Reid Chassiakos (2016) expressed, social media provides many advantages to students' development. With the advancement of social media, students can easily communicate with their loved ones, which may increase their communication skills. Social media sites have replaced other forms of communication and are now needed for maintaining a social life (Li & Croucher, 2020). It is now simpler to communicate and disseminate information because of social media. It makes it easier for students to stay in touch with one another and is a highly useful source of information whenever they are.

3.3 Students' Perceptions of Teachers' Competence

In terms of Mastery of the Subject Matter

The result in Table 3 shows the mean distribution of the students' perceptions of teacher competence regarding mastery of the subject matter.

Table 3. Mean distribution of the student's perception on teacher competence in mastery of the subject matter

Indicators	Mean	Description	Interpretation
1. Manifest confidence and firmness with every piece of information being given in the class.	3.42	Strongly Agree	Very High Competence
2. Relates subject matter to previous topics and areas of interest.	3.25	Agree	High Competence
3. Explain the lesson by citing relevant examples and situations.	3.42	Strongly Agree	Very High Competence
4. Answers questions clearly and with confidence.	3.28	Strongly Agree	Very High Competence
5. Readily define important terms in the lesson.	3.25	Agree	High Competence
Overall Mean	3.32	Strongly Agree	Very High Competence

As perceived by the first-year BECED college students with a total mean score of 3.32, it was revealed that the respondents' perceptions of teacher mastery of the subject matter showed a very high competence. The result exposed that a teacher who showed confidence in giving information in class relates the subject matter to previous

topics, understands the lessons, and readily defines important terms in the lessons helps students to learn more about the lessons. The teacher's mastery of the subject matter can be a great tool in developing students' knowledge because if students see that their teacher has mastery of the subject, they can have confidence in getting knowledge from the teachers. Teachers have to possess a great deal of knowledge and skills concerning both teaching and assessment practices to meet those demands and standards of quality education (Ksenia, 2017).

In terms of Teaching Skills

Table 4, shows the mean distribution of the students' perception of teacher competence in terms of teaching skills. The total mean score of 3.33 revealed that the respondents' perceptions of teacher teaching skills show a very high competence.

Table 4. Mean distribution of the students' perception on teacher teaching skills

Indicators	Mean	Description	Interpretation
1. Presents the lesson systematically and analytically.	3.35	Strongly Agree	Very High Competence
2. Uses language effectively in expressing ideas in class discussions.	3.22	Agree	High Competence
3. Adjusts teaching methods to students' needs, interests, and abilities.	3.39	Strongly Agree	Very High Competence
4. Uses different teaching techniques, approaches, and strategies to make the lesson interesting and meaningful.	3.35	Strongly Agree	Very High Competence
5. Motivates the students by asking questions effectively to develop critical thinking and creativity.	3.35	Strongly Agree	Very High Competence
Overall Mean	3.33	Strongly Agree	Very High Competence

This means that teachers' techniques, strategies, methods, and teaching skills positively impact students. Training teachers to ensure they have the necessary skills, knowledge, and strategies to deliver high-quality education is essential. Teacher training enables educators to stay updated with the latest educational approaches, enhance their instructional techniques, and effectively meet the diverse learning needs of the students. Additionally, identifying teachers' weak points is crucial to help them improve and become more effective. Through teachers' training, they can gain a lot of techniques, methods, and approaches that could help them deliver the lessons properly and develop their professional skills. Research on teaching skills by Didion, Toste, and Filderman (2020) confers the importance of professional skills as "Professional skills are an important factor influencing whether learning activities have a positive impact on outcomes for students is the extent to which those outcomes form the rationale for and on-going focus of teacher engagement." Professional learning of the teacher prospects greatly influences student learning outcomes as it emphasizes precise teaching skills.

In terms of Classroom Management

Table 5, shows the mean distribution of the students' perception of teacher classroom management.

Table 5. Mean distribution of the student's perception of teacher classroom management

Indicators	Mean	Description	Interpretation
1. Establishes authority in the classroom effectively by making students obey rules set to help the class achieve the objectives set for the day.	3.39	Strongly Agree	Very High Competence
2. Commands respect from the students.	3.56	Strongly Agree	Very High Competence
3. Starts learning activities on time.	3.38	Strongly Agree	Very High Competence
4. Shows a great deal of patience towards the students.	3.48	Strongly Agree	Very High Competence
5. Can assist students in doing cooperative group tasks.	3.39	Strongly Agree	Very High Competence
Overall Mean	3.44	Strongly Agree	Very High Competence

The data revealed that the respondents' perceptions of teacher classroom management had the highest mean score of 3.56 and the lowest mean score of 3.38 which showed that the teachers command respect from the students and start learning activities on time. It also exposed that the teacher establishes authority in the classroom effectively by making students obey rules set to help the class achieve the objectives set for the day, shows a great deal of patience towards the students, and can assist students in doing cooperative group tasks. Classroom management is necessary because if the classroom is conducive to learning, students can focus on listening and understanding the lessons without any disruptions. Students' perceptions of teachers who create and maintain safe and supportive learning environments and their classroom experiences have been previously examined (Egeberg &

McConney, 2017). Despite varying school contexts, students identified effective classroom managers as teachers who meet students' needs by developing caring relationships and controlling the classroom environment while fostering student responsibility and engaging students in their learning (Egeberg & McConney, 2017). In connection, teachers who show care and patience toward students give them a positive impact.

In terms of Evaluation Skills

Table 6 discloses the results of students' perception of teachers' competence in evaluation skills.

Table 6. Mean distribution of the students' perception of teacher evaluation skills

Indicators	Mean	Description	Interpretation
1. Evaluate students' performances fairly and use adequate and accurate standard evaluation measures.	3.44	Strongly Agree	Very High Competence
2. Provide evaluative activities appropriate to students' abilities, interests, and needs.	3.49	Strongly Agree	Very High Competence
3. Utilize evaluation results as a basis for improving instruction.	3.46	Strongly Agree	Very High Competence
4. Treat each student fairly in giving grades.	3.52	Strongly Agree	Very High Competence
5. Allows students to rate their performances in some of the activities in the class.	3.42	Strongly Agree	Very High Competence
Overall Mean	3.46	Strongly Agree	Very High Competence

The total mean score of 3.46 revealed that the respondents' perceptions of teacher evaluation skills show a very high competence. Specifically, the highest mean score was 3.52 which claimed that teachers treat each student fairly in giving grades. On the other hand, the lowest mean score was 3.42 which claimed that teachers allow students to rate their performance in some of the activities in the class. Fair treatment in giving students equal opportunities helps them stay focused on their studies. If students see that their teachers give an equal opportunity to all, they will gain confidence and do their best in their studies. Additionally, student perceptions are a better indicator of student learning results than other approaches like outside observations or teachers' subjective assessments of their teaching styles (Maulana, Helms-Lorenz, & Van de Grift, 2015). By giving students fair evaluations in any activities, students will be motivated to do more and give their best.

Summary

Table 7 shows the summary of students' perception of teachers' instructional competence.

Table 7. Summary table of students' perception on teacher instructional competence

Areas	Mean	Description	Interpretation
Mastery of the subject matter	3.32	Strongly agree	Very high competence
Teaching skills	3.33	Strongly agree	Very high competence
Classroom management	3.44	Strongly agree	Very high competence
Evaluation skills	3.46	Strongly agree	Very high competence
Overall Mean	3.38	Strongly agree	Very high competence

The table revealed that the overall summary of the student's perception of the teacher's instructional materials in terms of the mastery of the subject matter, teaching skills, classroom management, and evaluation skills shows a very high competence with a total mean score of 3.38. This result indicated that students observe a good and positive outcome if teachers are well equipped for the subject handled with different learning styles, techniques, classroom styles, and fair student evaluation. Teacher instructional competence, on the other hand, may serve as an important lever that can be used to improve the quality of teaching and student outcomes, for instance, in professional development programs (Kleckmann, Trobs, Jonen, Vehmeyer, & Möler, 2016).

3.3 Students' Perceptions of English Proficiency

In terms of Grammar

Table 8, revealed that the English proficiency of the respondents in terms of grammar was satisfactory with a total mean score of 7.80 which means that students' score needs some improvements. Students' satisfactory scores on grammar tests divulged that they were not good enough at identifying and arranging words correctly. Students need to practice more in writing and reading so that they will know how to arrange the sentence correctly. If students have good grammar skills, they can learn best and can easily improve their English proficiency because they already mastered English grammar. Students' knowledge of grammar is one of the factors in building English

proficiency. According to Mariawoodford (2018), “English grammar is one of the most important elements of your language study”. It means that to have a clue to speak English fluently and confidently, a student should know the correct grammar.

Table 8. Mean distribution on students’ english proficiency in grammar test

Scores	Description	Frequency	Percentage
13	Outstanding	1	1.41%
11.14	Very satisfactory	7	9.86%
7.63	Satisfactory	34	47.89%
5.25	Fairly satisfactory	28	39.43%
2	Did not meet expectations	1	1.41%

In terms of Analogy

Table 9 shows that students’ scores in English proficiency in terms of Analogy were satisfactory based on the total mean score of 7.36 which means that students should continue to read and learn more words.

Table 9. Mean distribution on students’ english proficiency in analogy test

Scores	Description	Frequency	Percentage
13.71	Outstanding	7	9.86%
11	Very satisfactory	5	7.04%
7.46	Satisfactory	43	60.56%
5.37	Fairly satisfactory	16	22.54%
0	Did not meet the expectation	0	0

For the students to get higher scores on their analogy test, they must practice reading because reading can help the students learn more words, and that could strengthen their vocabulary. Analogy speaks of a different matter and two different things which are then compared. Analogy in linguistics is the equation between forms as the basis for the occurrence of other forms. Analogy is one of the morphological processes in which in the analogy, the formation of new words from existing words. If students have gained a high score on the analogy test this means that students are wide readers and have wide vocabulary skills which helps them understand words that are being compared (Septianingsih and Jerusalem 2021).

In terms of Stress

Table 10, presents the English proficiency of the respondents in the word stress test.

Table 10. Mean distribution on students’ english proficiency in stress test

Scores	Description	Frequency	Percentage
9.33	Outstanding	9	12.67
7.56	Very Satisfactory	16	22.53
5.31	Satisfactory	32	45.07
3.54	Fairly Satisfactory	11	15.50
1.66	Did not meet expectations	3	4.23

It is shown that the English proficiency score of students in terms of the word stress test was satisfactory with a total mean of 5.48. Students' scores in the word stress test indicated that students need to practice more on speaking and pronunciation. The more students can understand and pronounce the words phonetically and correctly, the more likely they can pronounce English words similarly to native speakers. As a result, students have confidence in their pronunciation. This makes communication more effective (Kulachit & Nuangchalerm, 2021). Students with good pronunciation and good English proficiency of language can easily alter the words correctly.

Summary

The result in Table 11 indicated that the students need to put more effort into studying English to improve and enhance their proficiency. Van Zyl, Bezuidenhout, & Adefuye (2020) discovered that the difficulty level of the English language in course materials and assessments could have negative effects on students’ academic achievement. Based on the data, students must study and practice more in English Language. English proficiency can be developed through consistent practice and exposure to the language, including activities such as reading,

writing, listening, and speaking. By engaging in active learning, utilizing resources, and seeking opportunities to apply and interact with English in various contexts, individuals can enhance their proficiency over time.

Table 11. Summary of respondents' English Proficiency

English Proficiency	Mean	SD	Description	Interpretation
Grammar	7.80	2.15	Satisfactory	Good
Analogy	7.36	2.45	Satisfactory	Good
Word Stress	5.48	1.99	Satisfactory	Good
Overall Mean	20.64		Satisfactory	Good

3.4 Difference in English Proficiency When Grouped to School Types

Table 12 shows the p-value of 0.43, which revealed that there was no significant difference between the private (N=11, Mean=5.56, and a standard deviation of 1.21) and public (N=60, Mean=5.85, and a standard deviation of 0.13) in terms of their English proficiency level.

Table 12. Test of difference in the respondents' English proficiency level when grouped according to school type

	T	P	Decision	Interpretation
English Proficiency and Feeder School Type	-0.786	0.43	Rejected	Not significant

Therefore, the null hypothesis was rejected. Students' English proficiency does not have a significant difference between students in private and public schools. Regardless of the students' school type, it does not guarantee that they can develop their English proficiency. When it comes to student achievement, the data do not support the assumption that private and public schools will improve their standards (Kuivalainen, 2017). No matter where the students came from any type of school does not have a significant effect on the English proficiency level of the students. Public schools often provide education to a diverse population and may have access to government funding, while private schools often have more flexibility in their curriculum and may offer specialized programs, but may also have higher costs and potential exclusivity. The respondents need to learn, study, and practice more on developing their English proficiency. They must give more time to their studies especially in learning a language because through this they can build a strong foundation in their English language.

3.5 Relationship Between English Proficiency and Social Media Exposure

Table 13. Test of relationship between English proficiency and social media exposure

Variables	Pearson's r	p-value	Decision Ho	Interpretation
English Proficiency and Social Media Exposure	0.021	0.85	Rejected	not significant

Table 13 shows a p-value of 0.85, which means that there was no relationship between English proficiency and social media exposure. Therefore, the null hypothesis was rejected. Based on the results, English proficiency did not have a significant relationship with social media. No matter how exposed are the students to social media, it cannot help them improve their English proficiency. This means that students need to use social media in the right way instead of using it for entertainment they should use it academically. Social media has a lot to offer, so students must be wise enough to use it in the right way that could help them improve their English proficiency. Furthermore, social media exposure has nothing to do with developing students' English proficiency. Students' excessive use of social media can be a contributing factor to poor performance as it can lead to reduced focus and attention on academics. Since students frequently use social media for purposes other than learning, this tends to distract them from the classroom and hinder academic development (Bekalu, McCloud, & Viswanath, 2019). Kulidtud (2017) claimed that students' primary motivation for utilizing the internet differs from what they were doing when they first reached the sites. This means that if students' primary goal is entertainment, then English proficiency cannot be improved.

3.6 Relationship Between English Proficiency and Teachers' Instructional Competence

Table 14 displays the p-value of 0.36, which revealed that there was no relationship between students' perception of teachers' instructional competence and their English proficiency.

Table 14. Test of relationship between the students' perception on teachers' instructional competence and their english proficiency

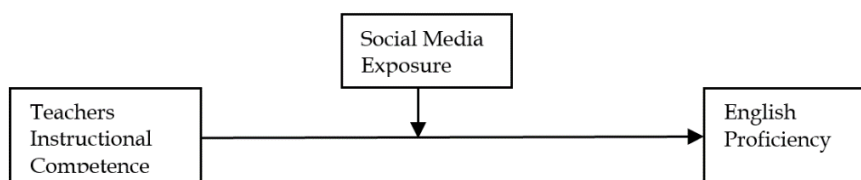
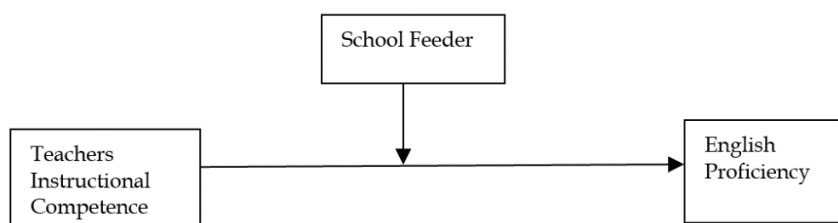
Variables	N	Pearson's r	p-value	Decision Ho	Interpretation
Teacher's Instructional Competence and English Proficiency	71	0.109	0.36	Rejected	Not significant

Students' perception of teacher instructional competence has nothing to do with students' English Proficiency. According to studies, teachers' actions influence students' cognitive, affective, and learning results (Maulana et al., 2015; Van der Lans, Van de Grift, and Van Veen, 2015). However, there is a critical and ongoing need to pinpoint relevant explanatory factors that influence the effectiveness of teaching behavior. Teacher instructional competence can be a great factor in students learning; however, it will depend on how the students perceive and use it to develop their competency.

3.7 Relationship Between Variables

Table 15. Moderation analysis

Model	Coeff.	SE	p	Interpretation
Constant	5.36	.660	.0000	
TIC	.428	.396	.283	
SM	-.685	.3546	.057	Not Significant
Interpretation	-.552	1.209	.649	
School type	.241	.351	.4933	

**Figure 1:** Moderation Analysis Model 1**Figure 2:** Moderation Analysis Model 2

The hypothesized moderated model was tested using multiple regression analysis via PROCESS macro model 1. Based on the results, social media does not moderate the relationship between the Perception of Teacher's Instructional Competence and English Proficiency Level. The decision rejected Ho. Further, the school type was not used because it was nominal data and cannot be factor N. It was not included but used as a control. Social network sites have become the main means of communicating and maintaining a social life (Li and Croucher, 2020). Students use social media to stay in touch with their loved ones who are far from them and use it as a means of developing their communication skills. However, social media has more adverse effects than positive ones (Woods and Scott, 2016). Since students tend to spend more time on social media than on educational purposes, this tends to cause distraction from the learning environment, affecting their academic progress (Bekalu et al., 2019). Students' exposure to social media does not merely influence students' English proficiency. According to some studies, teachers' competence gives a positive learning outcome to the students; however, numerous observations are pointing out teachers' poor competence in terms of aligning classroom activities with the objective of the lesson (Lucero, 2018). This is mainly due to poor lesson planning skills among teachers which need to be addressed in no time.

4.0 Conclusion

The influence of social media exposure on the students did not help them in building their English proficiency. Furthermore, the findings of the study confirmed that students' perceptions of teachers' instructional competence in terms of mastery of the subject, teaching skills, classroom management, and evaluation skills have a very high influence on the students. Students learn best if teachers are competent. Further, the findings of the study confirmed that social media does not moderate the relationship between the perception of teachers' instructional competence and the English proficiency of the students. Students must use social media carefully since many users upload and share information that is not true, which may lead to misinformation. They must use social media to develop their communication skills. Furthermore, college students should not solely rely on social networking to improve and build their communication skills, as physical or face-to-face interaction is also essential. Also, teachers need to be competent enough to meet the needs of 21st-century learners by attending seminars and other workshops related to teaching so that they will be more equipped and able to meet the needs of 21st-century learners.

5.0 Contributions of Authors

The authors indicate equal contribution to each section. The authors reviewed the final work.

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7.0 Conflict of Interests

The authors declare no conflicts of interest about the publication of this paper.

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A Survey of Awareness and Compliance With Occupational Safety and Health Programs Among Contractors and Field Workers in Negros Oriental

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Abstract. The study aimed to determine the contractors' and field workers' awareness of and compliance with Occupational Safety and Health Programs (OSH) in the Department of Public Works and Highways (DPWH). This study employed a descriptive-correlational design. The respondents were eight (8) contractors and fifty-six (56) field workers from randomly selected contractors. The study is descriptive as it aimed to illustrate the level of the respondents' awareness of and compliance with Occupational Safety and Health Programs. It is also correlational as it investigated the relationship between two variables: (a) the extent of the field workers' awareness of and compliance with OSH Programs and (b) OSH compliance and accident rates in the construction site. The researcher used a validated questionnaire and applied statistical tools such as weighted mean, percentage, and Spearman's Rank Order Correlation to treat the data. The findings underscore commendable levels of awareness among the personnel, although challenges leading to non-compliance are identified. Notably, many field workers attribute non-compliance to discomfort with wearing personal protective equipment (PPE). Considering these insights, the study offers recommendations aimed at enhancing safety practices for both the implementing office (DPWH) and contractors.

Keywords: Contractors; Field workers; Awareness; Compliance; Occupational safety; Health program.

1.0 Introduction

The construction sector has historically and presently remained among the most hazardous industries for employment. Contemporary challenges in management and Occupational Safety and Health (OSH) initiatives persist, including hazards such as accidents and physically demanding labor (Grill et al., 2019). Each year, the Comparative Global Estimates on work-related burdens of accidents and diseases record 2.9 million deaths, resulting in an annual global GDP loss of 5.40 percent (Hämäläinen et al., 2022). According to Abaya and Ondieki (2021), workers are susceptible to various workplace hazards, including chemical exposure, injuries from moving machinery or falling objects, exposure to radiation or harmful gases, slips, and other harmful incidents. This necessitates that employers ensure their working environments are free from potential dangers and that employees comply with the legal requirements outlined in OSH regulations.

The purpose of this research is to determine the contractors' and field workers' level awareness and compliance with OSH Programs. To determine the substantial connection between awareness and adherence, the study builds upon Ajzen's Theory of Planned Behavior (Ajzen, 1991). This theory upholds that an individual's inclination to

follow rules and regulations is shaped by three primary factors: their subjective norms, attitudes toward the behavior, and perceived behavioral control.

The study by Toyado (2021) revealed that while workers in the construction sector are aware of OSH measures, their adherence to these measures is inconsistent. The construction sector has long faced significant challenges regarding awareness and compliance with OSH, especially in developing nations where OSH risks are particularly high. Toyado (2021) also noted that OSH in construction is frequently neglected. In response to this concern, the Department of Labor and Employment (DOLE) has initiated efforts to address the issue by establishing and enforcing comprehensive OSH guidelines and facilitating OSH seminars for workers in construction companies.

The topic of awareness and compliance with OSH standards within the construction industry remains relatively underexplored. Recent research has primarily focused on OSH concerns related to public health (Schulte et al., 2022), underground mining operations (Sadeghi et al., 2022), and the manufacturing sectors (Nuruzzakiah et al., 2019). Additionally, the majority of previous studies on this topic have been conducted internationally. Therefore, this study is particularly valuable as it offers a new perspective on OSH standards within the local context.

Moreover, the study specifically aimed to evaluate the level of awareness and compliance with Occupational Safety and Health (OSH) Programs among field workers in the District Engineering Office, in light of the substantial expansion of the construction industry. Despite the government's initiatives to promote and sustain awareness of and adherence to safety standards, especially concerning the costs and budget allocations for OSH requirements in construction projects, there are instances where contractors neglect their responsibility to ensure a safe and healthful working environment for the employees. This observation has raised significant concerns regarding the adherence to OSH standards and the associated risks faced by field workers on Department of Public Works and Highways (DPWH) projects. With extensive firsthand experience as a safety officer and OSH program evaluator, the researcher sought to provide insights into these challenges encountered in the construction field.

2.0 Methodology

2.1 Research Design

This study is a descriptive-correlational type. The descriptive aspect was utilized to characterize and provide an account of the extent of awareness and compliance among field workers regarding Occupational Safety and Health (OSH) Programs. Simultaneously, the correlational component aimed to establish relationships between the following variables: (a) the extent of awareness and compliance of field workers on OSH Programs, and (b) the correlation between OSH compliance and accident rates in the construction site.

2.2 Research Locale

The study was conducted at the DPWH 1st District Engineering Office, situated in a third-class municipality of Negros Oriental, Philippines. This office serves as the government's infrastructure arm, with the primary responsibility of continuously advancing its technology to ensure the safety of all infrastructure facilities and achieving optimal efficiency and construction quality for all public works and highways. DPWH is aligned with governmental development objectives and plays a crucial role in the planning and design, construction, and maintenance of all government national roads, bridges, and building infrastructure projects.

2.3 Research Participants

The researcher employed the one-stage cluster technique to randomly select eight (8) contractors out of 14. In one-stage cluster sampling, a simple random sample of clusters is chosen, and data are then collected from every unit within the sampled clusters (Britannica, 2018). Fifty-six (56) field workers from those contractors holding an active contract with the Negros Oriental 1st District Engineering Office participated in the survey. Due to the manageable number of respondents, the researcher opted for one-stage cluster sampling. In this approach, the total sample is initially divided into a predetermined number of clusters based on the desired cluster size. Subsequently, random selection and sampling are conducted from the clusters, with data collected from each unit within the selected clusters (Simkus, 2023).

2.4 Research Instrument

The research used a researcher-made survey questionnaire with four parts. Part I of the questionnaire includes the disclosure statement, which serves as evidence of the informed consent of the field workers. Part II covers the questionnaire that determines the extent of the respondents' awareness of and compliance with OSH programs.

A rating scheme or table is provided as a reference for answering the questions, with scores ranging from 5 to 1 and varying verbal descriptions from "Very High" to "Very Low," respectively. The research covers areas, such as Construction Safety and Health Program (CSHP), Formal Site Safety and Health Inspection, Factors that Contribute to Health Hazards on Construction Sites, Provision of Personal Protective Equipment (PPE), and Safety Measures in the Workplace.

Part III, on the other hand, identifies the challenges encountered by workers in complying with the OSH program in the workplace and examines accident rates on construction sites. Data for this section were collected using a separate questionnaire, which allowed field workers to honestly report the number of accidents and injuries they experience annually on construction sites, while part IV covers the questionnaires that address the contractors' awareness of and compliance with the OSH Program in the workplace.

The researcher's subject adviser, statistician, thesis adviser, and other domain experts were considered in the validation process, ensuring that the questions are valid and closely aligned with the specific objectives and research issues. Furthermore, the invaluable input provided by these experts was duly taken into account to iteratively refine the questionnaire items, enhancing their precision and relevance.

The validation process involved experts, ensuring precision and relevance. Reliability was assessed using Cronbach Alpha, yielding values > 0.70 in a dry run with thirty respondents, indicating questionnaire reliability. Specific reliability results for areas such as CSHP, Formal Site Inspections, Health Hazards, Provision of PPE, and Safety Measures ranged from 0.815 to 0.922, confirming the consistency of measurements in assessing relevant concepts.

2.5 Data Gathering Procedure

The researcher made sure that all recommendations and corrections from the panel members were incorporated into the study. Following the design hearing, a letter was sent to the District Engineer of the First District Engineering Office. Subsequently, the researcher submitted a formal request letter to various DPWH contractors, seeking permission to conduct the study at the district level and distribute questionnaires to the targeted respondents. After obtaining approval, the researcher distributed the questionnaires to the respondents, providing clear instructions on how to complete them objectively and honestly. Upon completion, the data were collected, compiled, and analyzed. To further corroborate the survey results, the researcher conducted random interviews with the respondents, adding an additional layer of validation to the study's outcomes.

2.6 Data Analysis Procedure

The researcher employed several tools for data analysis, including the use of percentages to illustrate the relationship of a part to a whole. This was particularly utilized in presenting challenges faced by workers due to non-compliance with OSH Programs and in depicting accident rates in construction sites. Additionally, the weighted mean and standard deviation were employed to assess the extent of awareness and compliance among workers regarding OSH Programs. The Spearman rank correlation coefficient was utilized to identify the degree of relationship between workers' awareness and compliance levels with OSH Programs. Throughout the analysis, the researcher applied specific interpretations to describe the workers' awareness and compliance concerning OSH Programs.

2.7 Ethical Considerations

All individuals involved in the study were granted the right to privacy and dignity of treatment. Any information obtained was held in strict confidentiality by the researcher. In addition, the researcher duly acknowledged all assistance, collaborations, and sources from which the information was drawn.

3.0 Results and Discussion

3.1 Awareness of and Compliance on Construction Safety and Health Programs

In terms of Construction Safety and Health Program

Table 1 presents the extent of awareness and compliance among workers regarding OSH Programs, focusing on the Construction Safety and Health Program. The data indicate that workers' awareness in this stage ranges from "high" to "very high," as evidenced by the weighted mean values ranging from 3.82 to 4.41. Moreover, the standard deviations indicate that the workers' ratings do not vary significantly. In contrast, the workers consistently demonstrate a commendable level of compliance during this stage, uniformly rated as "high," as reflected in the weighted mean, values ranging from 3.50 to 4.04. Both the extent of awareness (overall weighted mean, $w\bar{x} = 4.16$) and the extent of compliance (overall weighted mean, $w\bar{x} = 3.76$) in this area attest to a commendable "high" rating.

Table 1. Descriptive statistics of the workers' awareness of and compliance with OSH programs in terms of construction safety and health program (n = 56)

Statements	Awareness			Compliance		
	$w\bar{x}$	VD	SD	$w\bar{x}$	VD	SD
1. Aware that all heavy equipment operators assigned at the project site must be tested and certified by the Technical Education and Skills Development Authority (TESDA).	4.41	VH	0.60	4.04	H	0.69
2. Provided knowledge of the proper waste disposal sys. in the construction site.	4.39	VH	0.59	3.89	H	0.89
3. Recognize that the CSHP outlines the safety and health policies that the management, supervisory levels, and workers must adhere to and uphold at the construction site.	4.30	VH	0.78	3.88	H	0.97
4. Know that all heavy equipment deployed at the site has been checked on a daily routine inspection by duly certified mechanics and operators.	4.30	VH	0.91	3.86	H	0.94
5. Know that the contractor/employer provides welfare facilities to ensure humane working conditions.	4.21	VH	0.89	3.73	H	0.82
6. Am responsible for ensuring that the CSHP provides clear information regarding the frequency and content of orientation, instruction, and training of all workers.	4.11	H	0.82	3.79	H	0.85
7. Know that there is a min. inventory of medicines, medical supplies, & equip.	4.09	H	0.88	3.68	H	0.77
8. Attend training, orientation, and toolbox meetings which are conducted by the General Contractor that provide OSH information to the workers about hazards and control measures.	4.00	H	0.91	3.57	H	0.85
9. Am subject to the penalties and sanctions outlined in the CSHP for any safety and health violations.	3.98	H	0.84	3.63	H	0.91
10. Have undergone the 8-hour mandatory safety and health orientation conducted by the Contractors Safety Officer.	3.82	H	0.97	3.50	H	0.97
Composite	4.16	H	0.82	3.76	H	0.87

Note: 4.21 – 5.00 (Very High, VH), 3.41 – 4.20 (High, H), 2.61 – 3.40 (Moderate, M), 1.81 – 2.60 (Low, L), 1.00 – 1.80 (Very Low, VL)

The findings imply that the field workers are aware of ($w\bar{x} = 4.41$) and compliant with ($w\bar{x} = 4.04$) the requirement that all heavy equipment operators assigned to the project site must undergo testing and certification by TESDA. This practice aligns with the DOLE D.O. no.13 series of 1998 under section 15, which mandates that workers in critical occupations must possess a skill certificate issued by TESDA. This suggests that the regulatory framework is effectively communicated and implemented within the workforce, ensuring that operators are properly trained and certified, thereby enhancing their capability to ensure workplace safety and operational efficiency.

Furthermore, the data reveal that item 10, which pertains to the mandatory 8-hour safety and health orientation program ($w\bar{x} = 3.82$), received the lowest scores for both awareness and compliance. This indicates a potential gap in the workers' engagement with the mandatory training provided by the Contractors Safety Officer or DOLE-accredited institution. According to Friebel, et.al (2024) safety representatives, through education and communication, can enhance workers' awareness and attitudes towards OSH, align safety practices with social norms, and improve workers' confidence in their ability to adhere to safety protocols, thereby increasing overall compliance with safety measures.

With the results, El-Dash, Monem, and Salih (2022) argue that workers should leverage their expertise, seek professional advice, and reference past safety reports to formulate regulations and training strategies customized to address site-specific hazards. Notably, the results further indicate that not all field workers deployed to the project site benefit from the 8-hour safety and health orientation.

In terms of Formal Site Safety and Health Inspection

Table 2 illustrates the level of awareness among workers regarding occupational safety and health within the workplace, specifically concerning formal site safety and health inspections. The data indicate that the extent of awareness is from “high” to “very high” as reflected in the values of the weighted mean ranging from 4.07 to 4.55. Furthermore, the standard deviations signify that the workers' ratings are not widely dispersed. The respondents possess very high awareness of item number one “Ensure that the site premises are free of protrusions such as rebars, nails, etc.,” which has the highest weighted mean ($w\bar{x} = 4.55$), and high compliance ($w\bar{x} = 4.11$). This implies that the construction sites undergo formal safety and health inspections conducted by official inspectors to proactively prevent accidents (Lim, Oh, Won, & Chon, 2018).

Table 2. Descriptive statistics of the workers’ awareness of and compliance with osh programs in terms of formal site safety and health inspection (n = 56)

Statements	Awareness			Compliance		
	$w\bar{x}$	VD	SD	$w\bar{x}$	VD	SD
1. Ensure that the site premises are free of protrusions such as rebars, nails, etc.	4.55	VH	0.60	4.11	H	0.68
2. Ensure Orderliness of Material Storage (e.g., Regular disposal of waste and trash)	4.54	VH	0.54	4.04	H	0.57
3. Ensure that there are no exposed electrical wires, inspect the plug, cord, and receptacles before plugging in the equipment.	4.52	VH	0.63	3.95	H	0.77
4. Ensure that tools materials and products are sorted.	4.41	VH	0.73	4.00	H	0.85
5. Ensure that there is an adequate number and type of fire extinguisher(s) available on the project site.	4.39	VH	0.73	3.95	H	0.64
6. Maintain a high standard of cleanliness and sanitation in the workplace.	4.38	VH	0.70	3.84	H	0.78
7. Ensure that Ladders are inspected & in good condition.	4.23	VH	0.83	3.95	H	0.62
8. Ensure that all scaffolds can support twice the maximum load.	4.23	VH	0.87	3.89	H	0.80
9. Aware that there is an OSH personnel in the establishment to conduct regular appraisals of the sanitation system in the workplace.	4.20	H	0.55	3.95	H	0.82
10. Aware that a scaffold left standing for 4 months shall not be used.	4.07	H	0.83	3.70	H	0.82
Composite	4.35	VH	0.70	3.94	H	0.74

Conversely, item 10 “Am aware that scaffold left standing for 4 months shall not be used” receives the lowest weighted mean rated as “High” on awareness ($w\bar{x} = 4.07$) and on compliance ($w\bar{x} = 3.70$). According to the Canadian Centre for Occupational Health and Safety (2024), a comprehensive evaluation is crucial for effectively addressing issues observed at the construction site.

The overall weighted mean in this area is “very high” for the extent of awareness ($w\bar{x} = 4.35$) and “high” for the extent of compliance ($w\bar{x} = 3.94$). This suggests that the field workers possess a heightened level of awareness within this area, but there is a disparity in their adherence to safety protocols. According to the respondents, they acknowledge the significance of these measures but occasionally overlook their importance, potentially putting themselves at risk of hazards.

In terms of the Factors that Contribute to Health Hazards on Construction

Table 3 illustrates the extent of the workers’ awareness of OSH programs in the workplace in terms of factors that contribute to health hazards on construction sites. The data show that the extent of awareness is “very high” as reflected in the values of the weighted mean ranging from 4.21 to 4.68. In addition, the standard deviations of the workers’ ratings is very close to the composite weighted mean. This finding suggests that the field workers are aware of and compliant with the indicator “Do not drink alcoholic beverages prior to work or avoid working under the influence of alcohol” as signified by the weighted mean of 4.68 and 4.38, respectively. The respondents are cognizant of the consequences of drinking alcoholic beverages.

Furthermore, the data indicate that item 8, “Am provided with adequate training so that I can identify and control the possible hazards in the workplace,” received the lowest mean score for compliance ($w\bar{x} = 3.91$). Indeed, this finding strengthens the importance of conducting meetings that promote the field workers' welfare and minimize potential risks (Maliha et al., 2021). Under section 6 of the IRR-RA11058, it is stressed that workers affected by the presence of an imminent danger situation may be temporarily reassigned to other areas within the workplace, provided there are no imminent safety and health concerns.

Overall, both the extent of awareness (overall weighted mean, $w\bar{x} = 4.44$) and extent of compliance (overall weighted mean, $w\bar{x} = 4.27$), rated as “very high” in this area, suggest that the field workers have commendable

levels of awareness and compliance. According to the majority of the respondents, they value these factors that contribute to health and safety in the workplace and these characteristics are driven by their aspiration to sustain on-site work, ensuring the provision of their families' needs.

Table 3. Descriptive statistics of the workers' awareness of and compliance with osh programs in terms of factors that contribute to health hazards on construction sites (n = 56)

Statements	Awareness			Compliance		
	w $\bar{x}$	VD	SD	w $\bar{x}$	VD	SD
1. Do not drink alcoholic beverages before work or working under the influence of alcohol.	4.68	VH	0.54	4.38	VH	0.62
2. Provided with necessary fall protection system e.g., fall arrester and full body harness for fall prevention.	4.55	VH	0.57	4.23	VH	0.66
3. Am oriented with Chemical hazards in the workplace such as gasoline, paints, and welding fumes.	4.50	VH	0.69	4.20	H	0.94
4. Ensure that the hand and power tools to be used are not defective before usage.	4.48	VH	0.57	4.07	H	0.60
5. Am oriented with Physical hazards in the workplace such as machinery, exposure to heat, power, and hand tools.	4.46	VH	0.63	4.20	H	0.80
6. Thoroughly clean and inspect the area for dropped nails and shards of glass to avoid being pierced.	4.46	VH	0.79	4.02	H	0.70
7. Am oriented with biological hazards in the workplace such as gasoline, paints, and welding fumes.	4.45	VH	0.74	4.21	VH	0.82
8. Am provided with adequate training so that I can identify and control the possible hazards in the workplace.	4.34	VH	0.67	3.91	H	0.77
9. Am oriented with Ergonomics hazards in the workplace such as exertion of force, poor posture, and repetitive motion.	4.21	VH	0.78	3.95	H	0.90
10. Informed by the contractors that I have the right to refuse unsafe work and unsafe working conditions.	4.21	VH	0.97	3.95	H	0.86
Composite	4.44	VH	0.70	4.27	VH	0.77

In terms of the Provision of Personal Protective Equipment

Table 4 shows the extent of the workers' awareness of the OSH programs in the workplace in terms of the provision of personal protective equipment. The data reveal that the level of awareness in all areas is "very high," as indicated by the values of the weighted mean ranging from 4.23 to 4.59. In addition, the standard deviations demonstrate that there is little spread in the ratings given by the workers.

Table 4. Descriptive statistics of the workers' awareness of and compliance with OSH programs in terms of provision of personal protective equipment (n = 56)

Statements	Awareness			Compliance		
	w $\bar{x}$	VD	SD	w $\bar{x}$	VD	SD
1. Use safety belts and full-body harnesses when working at heights.	4.59	VH	0.53	4.25	VH	0.84
2. Know that the provision of the necessary PPE is at the company's or employer's expense.	4.55	VH	0.60	4.30	VH	0.78
3. Wear hard hats to protect my head from falling objects, impacts from falls, and other types of head trauma based on appropriate use.	4.50	VH	0.60	4.20	VH	0.84
4. Wear high-visibility clothing or reflectorized vest to alert or caution drivers and other vehicle operators of a worker's presence.	4.48	VH	0.71	4.18	H	0.86
5. Use appropriate gloves while operating in areas with a high risk of cuts, abrasions, or burns.	4.43	VH	0.68	4.13	H	0.72
6. Do not borrow other PPEs for health and sanitation reasons.	4.34	VH	0.64	4.02	H	0.67
7. Wear safety shoes to prevent the potential for puncture or penetration wounds.	4.32	VH	0.64	3.88	H	0.79
8. Wear full-sleeved shirts when working on the field.	4.25	VH	0.94	3.82	H	0.94
9. Avoid wearing jewels, key chains, or other metallic pieces on your fingers and arms.	4.25	VH	0.61	4.02	H	0.82
10. Do not wear defective personal protective equipment (PPE).	4.23	VH	0.79	4.00	H	0.81
Composite	4.39	VH	0.67	4.08	H	0.81

The findings affirm the assertion of Loibner et al. (2019) that field workers should prioritize safety to the utmost extent through the use of PPE designed to protect them from workplace hazards. Certainly, the respondents of the current study acknowledge that most minor and major accidents in their past experiences occurred due to neglecting the use of PPE.

On the other hand, the extent of the workers' compliance ranges from "high" to "very high." It is likely because the respondents already have PPE on before visiting the site and they know that PPEs, tools, and equipment must

always be prepared before commencing work. PPE significantly reduces the impact of accidents when they occur, as mentioned in the study of Shazwan and Ee (2018).

Correspondingly, the study by Guan et al. (2019) on the effectiveness of PPE for building construction workers underscores the significance of PPE in protecting individuals from exposure to or contact with any harmful materials that may lead to injury, disease, or even death. However, despite PPE's benefits, there is a low level of awareness on PPE among building construction workers.

In general, the extent of awareness, indicated by the overall weighted mean ($w\bar{x} = 4.39$), is considered "very high," while the extent of compliance, with an overall weighted mean of 4.08, is rated as "high." This implies that the workers demonstrate a commendable level of awareness. According to the respondents, the primary reason for occasional lapses in complying with the use of PPE is discomfort. For example, they find the use of safety shoes tiring due to the latter's weight, which is heavier than regular shoes.

In terms of Safety Measures

Table 5 shows the extent of the workers' awareness of OSH programs in the workplace in terms of safety measures in the workplace. The data reveal that the extent of awareness in all areas are "very high", as indicated by the values of the weighted mean, ranging from 4.32 to 4.59, and the overall weighted mean of 4.47. This finding suggests that all field workers are aware of the precautionary measures imposed in the worksite. Furthermore, the standard deviations indicate that the ratings provided by the workers are closely aligned.

Table 5. Descriptive statistics of the workers' awareness of and compliance with OSH programs in terms of safety measures in the workplace (n = 56)

Statements	Awareness			Compliance		
	$w\bar{x}$	VD	SD	$w\bar{x}$	VD	SD
1. Am well informed of the symbols and warning signs used and posted in the workplace.	4.59	VH	0.56	4.27	VH	0.62
2. Provided with proper lighting on streets and buildings especially during nighttime work, to improve visibility and ensure that the work area is well-lit for both workers and visitors.	4.55	VH	0.57	4.20	H	0.64
3. Make sure that the signages are regularly inspected and maintained in good condition.	4.54	VH	0.66	4.14	H	0.75
4. Am trained to use all safeguards and safety devices furnished for workers' protection and that of others.	4.52	VH	0.74	4.13	H	0.72
5. Ensure to place properly the traffic devices in designated areas as per the traffic management plan and that signages are posted/placed in prominent positions or strategic locations.	4.50	VH	0.63	4.00	H	0.74
6. Ensure the roadworks machinery has a clear path, to ensure the safety of the workers, and of the public.	4.43	VH	0.66	4.20	H	0.64
7. Am aware that the project site is provided with different types of signages, devices, warning signs, and other traffic control devices	4.43	VH	0.57	4.05	H	0.70
8. Provided with the provision of special PPES according to assigned tasks in the workplace and as per recommendation by the Safety Officer.	4.43	VH	0.57	3.96	H	0.76
9. Provided with the use of high-visibility clothing during construction.	4.36	VH	0.64	4.07	H	0.74
10. Knowledgeable with signals for Heavy Equipment movements and maneuvers during road construction.	4.32	VH	0.77	3.93	H	0.76
Composite	4.47	VH	0.64	4.09	H	0.71

In an article by the Global Railway Review (2009), it was emphasized that various guidelines on behavior, roadwork site setups, and technical solutions were formulated and put into practice, thereby reducing and eliminating life-threatening hazards in the workplace.

Meanwhile, the extent of the workers' compliance with OSH programs in the workplace in terms of safety measures in the workplace ranges from "high" to "very high" with weighted mean values of 3.93 to 4.27. It has an overall weighted mean of 4.09, described as "high." The data suggest the need to further strengthen regulatory measures.

Given the persistent challenges in road signage practices, addressing the issue seems most practical through the implementation of regulations, as postulated by Hughes (2022). The respondents in the current study also

acknowledged that they lack knowledge about certain tasks assigned to them, but they express a willingness to learn and are actively managing the process of acquiring the necessary skills.

3.2 Relationship Between Workers' Awareness and Compliance

Table 6 presents the data identifying the relationship between the extent of the workers' extent of awareness of and compliance with the OSHP in the workplace. Using Spearman's Rank Order Correlation, the researcher found that all p-values are less than the level of significance (0.05) and all r_s -values are within 0.50 to 1.00. These findings are enough evidence to reject the null hypothesis, which means that a significant and strong relationship exists between the workers' awareness of and compliance with OSHP in terms of the following: (a) construction safety and health programs for employees; (b) formal site health and safety inspections; (c) factors that contribute to health hazards on construction sites; (d) provision of personal protective equipment; and (e) safety measures in the workplace. This further connotes that the higher the awareness of the workers is, the higher also is their compliance.

Table 6. Correlation analysis for the relationship between the extent of workers' awareness of and compliance with OSH programs in the workplace (n = 56)

Areas	r_s	Interpretation	p-value	Decision	Remark
1. Construction safety and health programs for employees	0.881	strong relationship	0.000	Reject H_{01}	Significant
2. Formal site health and safety inspections	0.818	strong relationship	0.000	Reject H_{01}	Significant
3. Factors that contribute to health hazards on construction sites	0.843	strong relationship	0.000	Reject H_{01}	Significant
4. Provision of personal protective equipment	0.797	strong relationship	0.000	Reject H_{01}	Significant
5. Safety Measures in the Workplace	0.747	strong relationship	0.000	Reject H_{01}	Significant

*Level of significance = 0.05

This phenomenon is attributed to the various safety awareness campaigns conducted by safety organizations and providers. To reduce the number of fatalities and losses in the construction industry resulting from accidents, it is crucial to prioritize knowledge sharing and cultivate a culture of heightened awareness of construction safety (Li et al., 2019).

3.3 Relationship Between Compliance of Workers on OSH Program and Accident Rates

Table 7 reveals the data identifying the relationship between the workers' compliance with OSHP and the accident rates on the construction sites. As presented, the p-value is greater than the level of significance (0.05). This finding will not allow the rejection of the null hypothesis, which means the data are not sufficient to conclude that the two variables are significantly related. This may also suggest that the extent of the workers' compliance cannot be considered as a factor in the accident rates on the construction sites.

Table 7. Correlation analysis for the relationship between workers' compliance and accident rates in the construction site (n = 56)

Variables	r_s	p-value	Decision	Remark
Compliance of Workers on Occupational Safety Health Programs and Accident Rates in the Construction Site	-0.102	0.451	Fail to reject H_{02}	Not significant

*Level of significance = 0.05

Moreover, this may imply that there could be other factors contributing to the accident rates. Additional factors might include unsafe acts and unsafe conditions. Unsafe acts undoubtedly play a role, along with other numerous factors that contribute to workplace accidents and injuries, such as insufficient physical fitness, improper techniques for lifting and carrying, excessive force, inadequate awareness of potential hazards, stress, and even the design of the workplace. As supposed by Sun et al. (2018), each of these elements can significantly influence the occurrence of workplace injuries.

Conversely, unsafe conditions pertain to environmental factors within a workplace that present risks, including poorly maintained equipment, insufficient lighting, or cluttered workspaces. These conditions can also arise from the actions of fellow employees, such as leaving spills or obstacles in walkways (HSS Team, 2023). Adebiyi (2020) emphasized the need for comprehensive investigations into the level of construction workers' knowledge of and adherence to OSH in response to the occurrence of accidents on construction sites. This suggests a broader scope of considerations beyond compliance with OSHP when analyzing and addressing accident rates in the construction industry.

3.4 Challenges Encountered by Workers for Non-Compliance with OSH Standards in the Workplace

Table 8 on the next page illustrates the challenges faced by workers regarding non-compliance with OSH standards in the workplace. The data indicate that approximately 68% of the workers expressed discomfort with wearing PPE, citing it as a leading cause of their non-compliance. Additionally, 39.29% cited having a lack of awareness of potential safety and health hazards or inadequate debriefing on standard operating procedures as reasons for their non-compliance. Meanwhile, about 28% considered the absence of toolbox meetings as a factor contributing to their non-compliance.

Table 8. Descriptive statistics for the challenges encountered by workers for non-compliance with OSH standards in the workplace (n = 56)

Challenges	Frequency	Percent
1. Not comfortable wearing PPE	38	67.86
2. Not informed of potential safety and health hazards to which they may be exposed at their workplace/debriefing of the standard operating procedure.	22	39.29
3. Lack of toolbox meeting	16	28.57
4. Lack of proper OSH training	13	23.21
5. Lack of support from the top management	13	23.21
6. Lack of PPEs and other safety devices/equipment	12	21.43
7. Provision of PPEs is not free.	6	10.71
8. Poor enforcement of safety rules by safety officers/inspectors	4	7.14
9. Not seeing the importance of OSH implementation	4	7.14
10. Lack of knowledge of a specific task	3	5.36

Comparing the perspectives of the respondents with the research findings of Williams et al. (2018), it becomes apparent that the field workers' feeling of discomfort when wearing PPE is associated with their attitudes and practices. This coincides with the broader examination conducted by Williams et al., wherein they identified various factors contributing to non-compliance with Health and Safety (H&S) information, such as bribery, legal concerns, profit motives, funding issues, staffing inadequacies, workplace-related worries, managerial commitment gaps, human rights neglect, industry stakeholders' perceptions, misguided beliefs, concerns about company reputation, and the nature of the tendering process employed. Together, these insights emphasize the importance of addressing both individual attitudes and broader systemic issues to enhance safety compliance in the construction industry.

3.5 Contractors' Awareness of and Compliance with OSH Programs in the Workplace

Table 9 reveal that the awareness levels across all areas are exceptionally "very high" with a weighted mean value indicating a maximum score of ($w\bar{x} = 5.00$).

Table 9. Descriptive statistics for the extent of contractors' awareness of and compliance with OSH programs in the workplace (n = 8)

Statements	Awareness		Compliance	
	$w\bar{x}$	VD	$w\bar{x}$	VD
Construction Safety and Health Programs for Employees				
Able to submit CSHP to appropriate government agency/ies and approved before the project implementation.	5.00	VH	5.00	VH
Able to provide for penalties and sanctions for safety and health violations.	5.00	VH	5.00	VH
Formal Site Health and Safety Inspections				
Able to report incidents/accidents immediately to the implementing office	5.00	VH	5.00	VH
Able to provide on-site safety and health promotion and continuing information dissemination	5.00	VH	5.00	VH
Factors that Contribute to Health Hazards on Construction Sites				
Able to provide training for workers who will be assigned on machinery and equipment used in the workplace.	5.00	VH	5.00	VH
Able to provide provision of transportation facilities for workers in case of emergency, provision of water, and other first aid kit and medicines.	5.00	VH	5.00	VH
Provision of Personal Protective Equipment				
Able to furnish the workers with PPE to workers or required of other persons in the construction site adequate and of approved type (with test certificate/result).	5.00	VH	5.00	VH
Able to provide all workers the necessary personal protective equipment (PPE) at the company's expense.	5.00	VH	5.00	VH
Safety Measures in the Workplace				
Able to provide safe and hazard free facilities to the workers during construction activities.	5.00	VH	5.00	VH
Able to provide safety signages and security plan developed by the construction contractor and approved by owner.	5.00	VH	4.60	VH
Composite	5.00	VH	4.96	VH

This observation indicates that all contractors recognize the significance of the surveyed areas, aligning with the idea of prioritizing knowledge sharing and cultivating a heightened culture of construction safety awareness highlighted by Li et al. (2019). Furthermore, the data on the extent of compliance indicate that all of the areas surveyed are “very highly” complied with or adhered to. In the findings of Macayan (2023), it is noteworthy that the effective implementation skills of managers are deemed to play a crucial role. Macayan posited that managers who excel in implementing strategies tend to supervise employees who demonstrate a heightened level of compliance.

Based on the current findings, it may be inferred that the observed high level of compliance across all surveyed areas may be attributed, in part, to the proficiency of managers in implementing and overseeing adherence to safety protocols in the construction industry. In a recent interview with a labor inspector from the DOLE assigned to the DPWH Negros Oriental 1st District Engineering Office, it was stated that all contractors comply with the Construction Safety and Health Program. This proof of compliance is based on the submission and concurrence of CSHP by all contractors before the implementation of projects, as approved by the DOLE head. Consequently, their inspections also aim to verify that the field workers' salaries meet the minimum standards.

4.0 Conclusion

The high level of awareness of OSH programs in the workplace shows that both the field workers and contractors are mindful of the safety protocols and regulations in the vicinity. Such practices can create a safe and healthy work environment for workers. This, in turn, will lead to reduced occurrences of accidents in the field, enabling workers to focus on their designated tasks, thereby increasing productivity. Moreover, continuous improvement in the field of safety and health encourages a safety culture in the workplace and builds a hazard-free environment for contractors and field workers alike. The high level of awareness and compliance manifested by the contractors can significantly boost the confidence of the field workers as well as promote a positive reputation in the industry and among potential clients. Adhering to safety protocols also minimizes the risk of legal battles between employers and employees. Nonetheless, despite the positive findings, the research also recognizes the challenges faced by the field workers that, at times, contribute to their non-compliance. With the significant number of field workers cited the discomfort of wearing personal protective equipment (PPE) as the primary cause. These challenges are risky and must be addressed immediately. Thus, construction companies should explore and adopt innovative PPEs that enhance both convenience and the safety and health of workers to address the issues of discomfort. Meanwhile, the implementing department (DPWH), should ensure that contractors comply with safety protocols through the conduct of surprise or random site inspections to verify consistency in following and implementing the protocols according to safety guidelines and existing laws.

5.0 Contributions of Authors

The authors confirm their equal contribution to every part of this research. All authors reviewed and approved the final version of this paper.

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7.0 Conflict of Interests

This study has no conflict of interest of any sort.

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Language Learning Strategies and Motivation As Determinants of the English Academic Performance of Grade 10 Students

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Abstract. The academic performance in English is essential to students' overall learning outcomes. This study aimed to determine the relationship between language learning strategies, motivation, and English academic performance among Grade 10 students. A descriptive-correlational design was employed, and participants were selected through stratified random sampling from three schools in Tagum City. The mean was used to describe the students' level. The statistical tools used included the mean, standard deviation, and Pearson-r correlation coefficient. The study found that Grade 10 students exhibited a high level of language learning strategies, suggesting that these strategies helped students become more effective learners and fostered more efficient development of their mastery of the target language. Additionally, students demonstrated a high level of motivation, indicating frequent motivation in learning. The study also revealed a satisfactory level of English academic performance, suggesting that there are still areas needing improvement. Furthermore, the two independent variables were significantly correlated with the English academic performance of Grade 10 students.

Keywords: Academic performance; Descriptive-Correlational; Language learning strategies; Motivation.

1.0 Introduction

The student's academic performance in English was crucial to their overall learning performance. The ability to use and comprehend English can contribute to their learning in another learning area, which is why it is considered a key element in their learning process (Gbollie & Keamu, 2016). According to Hilman and Abubakar (2017), academic performance concerns students' educational and extracurricular achievements. However, the recent standing of students in English performance is deteriorating compared to the neighboring ASEAN countries, which made it an issue in English education having Kyrgyzstan and Tajikistan rank 96th and 100th, respectively, among Asian nations (Ang, 2021; Ozowuba, 2018;).

Meanwhile, several issues were also associated with low academic performance in the Philippines (Almerino et al., 2020). One of these is low academic performance in English at the elementary and secondary levels. The low academic performance of the students can be attributed to their proficiency in the English language, which also affects their performance in science and mathematics, which use English as the medium of instruction. The poor performance of the students in Samar in learning the language, as mentioned above. They need help acquiring the English language, which has given them higher chances of failing academically. They have made this a primary concern for teachers and must be addressed (Alaga, 2016).

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In Davao del Norte, a study revealed that high school students in public schools in Panabo City attained low academic performance, especially in English. After the National Achievement Test, Panabo City Division got an overall Mean Percentage Score (MPS) of 64.32, which was less than the division target of MPS of 72.66% in SY 2014-2015 and is relatively less than the 75% national passing rate. It was recommended in the said study that so much has to be done to improve their student's academic performance, especially in English (Decano & Orbeta, 2019).

On the other hand, the possible contribution of language learning strategies to the student's academic performances in English has been given attention. This has been well documented and popular as it was found that a learner's ability to handle language learning situations can contribute to higher academic performance. If one can appropriately strategize language learning, it will lead to higher self-esteem, eventually improving performance. Students believed that, by making better and more effective use of language learning strategies, they could perform better in their academics in English (Ngo et al., 2015; Shyr et al., 2017). Motivation was also found to predict the students' academic performance. The affiliative aspect of one's motivation may affect one's academic performance. This can be manifested as they put effort into pleasing people and obtain commendations from parents and teachers, which will drive them to perform better (Sukor et al., 2017). It can also be noted that motivation plays a vital role in learning because it extensively explains academic performance and gives impact to it (Gasco et al., 2014; Khatib, 2010).

Despite these observations, the researcher identified a noticeable gap in the research concerning the potential link between language learning strategies and student motivation, particularly in terms of their academic performance as junior high school students studying English. More research should be focused on the roles of language learning strategies and motivation in students' performance in grades 7 to 10. Due to that, the researcher believes that it is high time to conduct a study that will determine if there is a relationship between the use of language learning strategies and academic performance as well as motivation for the English performance of the students. This aligns with the recommendation of Al-Haj (2020) that it is essential to investigate learners' academic performance in learning English as it can be affected by their language learning strategies and motivation.

2.0 Methodology

2.1 Research Design

This study utilized the quantitative research method, precisely the descriptive-correlational approach. Quantitative research techniques serve to evaluate objective theories by exploring the interrelations among different variables. These variables are often quantified using specific measuring instruments, allowing the gathered numerical data to be subjected to statistical analysis (Creswell, 2012). The quantitative research involves quantifying and analyzing variables to arrive at results. This includes the analysis of numerical data using specific and appropriate statistical tools. This method is also used in dealing with numbers and other measurable data to investigate phenomena and their possible existing relationships. The quantitative research method is utilized to answer questions about the relationships of variables that are measurable with interpretation (Apuke, 2017). Further, descriptive-correlational design was used to examine the level of language learning strategies, motivation, and academic performance among Grade 10 students. Hence, the survey is considered valuable, as it will prove facts on which scientific judgment will be based. It will give essential knowledge for developing the instruments of the measurements of many things, which are utilized in all types of quantitative research (Berg, 2009).

2.2 Research Locale

This study was conducted in three selected public schools in Tagum City, Philippines. Tagum is a coastal city in the province of Davao del Norte. It served as the provincial capital. The city's land area was 195.80 square kilometers or 75.60 square miles, which constitutes 5.72% of Davao del Norte's total area.

2.3 Research Respondents

The study's respondents were Grade 10 students from Junior High School. The sample size was taken from a population of 1499 Grade 10 students. Using Raosoft Calculator, the sample size was 306 with a 5% margin of error, 95% confidence level, and 50% response distribution. 306, as the sample size for this study, has been accepted

as it conformed to the claim of Wilson et al. (2007) that the rule of thumb for a survey that determines relationships through correlation and regression is to have no less than 50 participants, which may increase as the number of independent variables increases.

Using the concept of proportion, the researcher arrived at the number of student respondents needed per school. The number of respondents per school was based on the school's population. 20.41% of the population in each school were randomly selected as the respondents. The researcher then came up with the sample size per school, which was 65 students in School A, 191 students in School B, and 50 students in School C. The 306 respondents were asked to respond to the survey questionnaires. Male or female students answered the survey questionnaire through Google Forms.

2.4 Research Instrument

The researcher utilized two adapted research questionnaires. The first tool is the Strategy Inventory for Language Learning (SILL) version 7.0, developed by Oxford (1989). This will be adapted to suit the context where the study will be conducted. It is a 50-item survey. Another adapted research tool is the Students' Motivation questionnaire developed by Sari (2019), which was drawn from Gardener's Attitude/Motivation Test Battery (AMTB) and has good validity and reliability. The tool has two parts: instrumental motivation and integrative motivation. Each subscale contains ten statements. In addition, the wording of questions is critical and should be considered, including appropriateness of the content, level of sophistication of language, type, and form. The adapted-modified questionnaire will be subjected to pilot testing. Thirty participants not part of the study will be chosen to participate in the pilot test.

2.5 Data Gathering Procedure

The researcher requested permission from the Division Office of Tagum City to conduct the study. Next, the researcher immediately sought approval from the principals of the selected schools. Upon receiving permission and approval, informed consent and assent forms were sent to the minor respondents during the study. When everything was cleared, the researcher administered the survey and assisted them if needed. In determining the level of academic performance, the researcher sought permission from the advisers to access the students' grades in English. Moreover, checked, scored, and recorded the scores in the master data sheet were utilized for data analysis using descriptive statistic tools.

2.6 Ethical Considerations

This research study followed ethical guidelines. It was done to confirm and verify that the research poses no potential harm, risk, or danger to the participant and to validate and check the contents of the research for erroneous or falsity of any data embedded in the study. In addition, the researcher was held accountable and responsible for securing the confidentiality of any data gathered during the survey. Oliver (2003) and Gregory (2003) noted that confidentiality is often regarded as closely related to the principle of privacy. Furthermore, the ethical behavior of individual researchers was under unprecedented scrutiny (Trimble & Fisher, 2006). The research respondents were informed and explained the nature of their participation in the study and the data confidentiality. This was done to ensure that the respondents' involvement is purely voluntary and that they will be fully informed regarding the study procedure.

3.0 Results and Discussion

3.1 Language Learning Strategies

Table 1 to 6 presents the Grade 10 students' level of language learning strategies from the online survey. The results show that the overall mean rating of 3.64 is described as high, which means that it is often observed. Generally, this result connotes that the use of LLS is evident. The category mean value of all indicators under the language learning strategies ranges from 3.55 to 3.78, suggesting high results. On the other hand, the overall SD is 0.71, which is less than one, indicating a significant dispersion of responses among the respondents. The Grade 10 students made conscious choices and operationalization to aid them in carrying out various activities from the beginning of learning to the most advanced levels of target language performance. This supports the statement of Rose (2015) that the processes and behaviors that language learners portray are intentionally employed to help them learn or utilize a language more successfully.

Table 1. Descriptive statistics for language learning strategies in terms of memory

Indicators	Mean	SD	Description
1. I make connections between my existing knowledge and new concepts that I encounter in English.	3.85	0.99	High
2. I use new English words in a sentence to remember them.	3.73	0.98	High
3. I associate the pronunciation of a new English word with a visual image or picture of the word.	3.69	1.09	High
4. I remember a new English word by mentally picturing a situation in which the word might be used.	3.61	1.17	High
5. I use rhymes to remember new English words.	3.44	1.10	High
6. I use flashcards to remember new English words.	3.22	1.19	Average
7. I physically act out new English words.	3.49	1.11	High
8. I review English lessons often.	3.69	1.07	High
9. I retain new English words or phrases by recalling where they are located on a page, a board, or a street sign.	3.60	1.09	High
Category Mean	3.59	0.77	High

Table 2. Descriptive statistics for language learning strategies in terms of cognitive

Indicators	Mean	SD	Description
1. I say or write new English words several times.	3.72	1.09	High
2. I try to talk like a native English speaker.	3.58	1.11	High
3. I practice the sounds of English.	3.89	1.03	High
4. I use the English words I know in different ways.	3.74	1.14	High
5. I start conversations in English.	3.51	1.11	High
6. I watch English-language TV shows or go to movies that are spoken in English.	3.82	1.13	High
7. I read for pleasure in English.	3.59	1.11	High
8. I compose notes, messages, letters, or reports in English	3.60	1.08	High
9. I first skim an English passage (scanned over the passage), then go back and read carefully.	3.51	1.14	High
10. I look for words in my language that are similar to new words in English.	3.66	1.14	High
11. I try to find patterns in English.	3.47	1.16	High
12. I find the meaning of an English word by dividing it into parts that I understand.	3.48	1.19	High
13. I try not to translate word-for-word.	3.35	1.10	Average
14. I make summaries of information that I hear or read in English.	3.59	1.15	High
Category Mean	3.61	0.78	High

Table 3. Descriptive statistics for language learning strategies in terms of compensation

Indicators	Mean	SD	Description
1. I make guesses to understand unfamiliar English words.	3.82	1.08	High
2. I use gestures when I can't think of a word during a conversation in English.	3.70	1.07	High
3. I make up new words if I need to learn the right ones in English.	3.49	1.06	High
4. I read English without looking up every new word.	3.32	1.11	High
5. I guess what the other person will say next in English.	3.39	1.17	Average
6. If I can't think of an English word, I use a word or phrase that means the same thing.	3.61	1.08	High
Category Mean	3.55	0.82	High

Table 4. Descriptive statistics for language learning strategies in terms of metacognitive

Indicators	Mean	SD	Description
1. I find as many ways as I can to use my English.	3.86	0.98	High
2. I notice my English mistakes and use that information to help me do better.	3.97	1.06	High
3. I pay attention when someone is speaking English.	3.98	1.03	High
4. I will find out how to be a better learner of English.	3.86	1.10	High
5. I plan my schedule to have enough time to study English.	3.55	1.11	High
6. I look for people I can talk to in English.	3.50	1.13	High
7. I look for opportunities to read as much as possible in English.	3.66	1.12	High
8. I maintain specific objectives to enhance my English proficiency.	3.82	1.12	High
9. I think about my progress in learning English.	3.84	1.08	High
Category Mean	3.78	0.78	High

Table 5. Descriptive statistics for language learning strategies in terms of affective

Indicators	Mean	SD	Description
1. I try to relax whenever I feel afraid of using English.	3.83	1.11	High
2. I motivate myself to speak English despite my fear of making mistakes.	3.83	1.11	High
3. I reward myself or treat when I do well in English.	3.48	1.17	High
4. I am aware of feeling tense or nervous while I am studying or using English.	3.65	1.09	High
5. I write down my feelings in a language learning diary.	3.24	1.26	Average
6. I talk to someone else about how I feel when I am learning English.	3.41	1.22	Average
Category Mean	3.57	0.83	High

Table 6. Descriptive statistics for language learning strategies in terms of social

Indicators	Mean	SD	Description
I ask the other person to slow down or repeat it if I need help understanding something in English.	3.93	1.05	High
I request that English speakers correct me when I speak.	3.78	1.09	High
I practice English with other students.	3.72	1.12	High
I ask for help from English speakers.	3.66	1.13	High
I ask questions in English.	3.68	1.17	High
I try to learn about the culture of English speakers.	3.59	1.14	High
Category Mean	3.73	0.71	High

The metacognitive strategy has the highest category mean among the six indicators of language learning strategies. It can be seen in the table that the level of Language Learning Strategies of the Grade 10 students in terms of Metacognitive strategy is high, which means that this strategy is often observed. This result is evident by the general weighted mean of 3.78. This implies that the students are aware of their learning processes, which relate to their skills in organizing and managing their learning processes. It aligns with the claim of Al-Buainain (2010) that students prefer using metacognitive strategies over other language learning strategies. This claim is also in line with the findings of Radwan (2011), which revealed that among the students, the metacognitive strategy was reported to be used significantly more than any other category of language learning strategies. Further, Surat (2014) mentioned that metacognitive strategies are used to manage the entire learning process. A metacognitive strategy is used as an executive function to manage, monitor, and evaluate their learning activities. Metacognitive strategies are often exhibited in their abilities, approaches, ways of thinking, and actions to exert control over their cognition and learning process. Furthermore, Abdalhamid (2012) claimed that learners who use metacognitive strategies learn faster and more effectively, can be constant receivers and deal with all situations, have the self-confidence to seek assistance from partners, teachers, or family, and can observe and evaluate themselves. Using a metacognitive strategy during the listening process increases learners' self-confidence, motivation, and ability to complete the activities. When there is a comprehension failure, skilled listeners use more repair strategies to redirect their attention back to the activity, whereas less-skilled listeners stop listening.

In particular, the statement that obtains the highest mean under metacognitive strategies is in the aspect of paying attention when someone is speaking English. This has a mean of 3.98, which is high and is often observed. This result implies that most of the Grade 10 students were attentive when someone was speaking in English. However, the statement that got the lowest mean is in the aspect where they are looking for people, they can talk to in English which obtains a mean of 3.50 which means high and is oftentimes observed. This implies that the Grade 10 students prioritize looking for someone they can talk to using English. With the above results, it can be concluded that learners seek out or create opportunities to practice the new language in naturalistic situations, like joining a conversation club (Paredes, 2010). Also, the findings of Chen (2009; Magno 2010) provide evidence that learners are willing to listen in order to achieve better learning outcomes.

On the other hand, Compensation Strategy attains the lowest category mean of 3.55 with a descriptive rating of high. This implies that this strategy is still evident among Grade 10 students in compensating for the missing knowledge in the target language due to lack of vocabulary. The findings align with the study of Shakarami (2017), which confirmed that the use of compensation strategies in language learning among students is considered high. In particular, the statement that obtains the highest mean under compensation strategies is making guesses to understand unfamiliar English words, where it obtains a mean of 3.82 with a descriptive equivalent of high. This statement further implies that the students usually guess unfamiliar words and use gestures during conversations when they cannot think of a word in English. Often, they use another word or phrase that means the same thing if they cannot determine the appropriate English word. However, the statement that got the lowest mean, which obtains a mean of 3.32 with a descriptive equivalent of high, is in the aspect where they are reading English without looking up every new word. This result implies that students in Grade 10 practice reading only after looking at the meaning of every new word.

The following results support the study of Shakarami (2017), where guessing was reported as the highly used strategy as study respondents reported a high level of thinking about the meanings of unknown words by dividing them into their components, using their knowledge of the comprising parts, and adding them up again to comprehend the meaning. Oxford (1990) reported that compensation language learning strategies are direct strategies learners use to overcome knowledge limitations in all four skills in learning and producing a new

language. Specifically, compensation strategies enable learners to use the new language for either comprehension or production despite limitations in knowledge.

3.2 Motivation

Table 7 to 8 presents the Grade 10 students' level of motivation from the online survey. The results show that the overall mean rating is 3.73, which is described as high and often observed. The category mean value of all indicators under motivation ranges from 3.66 to 3.81, which suggests high results. On the other hand, the standard deviation (SD) is 0.73, which is less than one, indicating a significant dispersion of responses among the respondents. Motivation consists of two (2) indicators: Instrumental and Integrative.

Table 7. Descriptive statistics for the motivation level of the students in terms of instrumental

Indicators	Mean	SD	Description
1. My primary use of English is for class assignments and exams.	3.78	1.07	High
2. I quote the textbooks and do not communicate myself when speaking or writing in class.	3.53	1.04	High
3. I am interested in reading only English textbooks for my university study, but only in other English texts like newspapers and magazines.	3.43	1.21	High
4. I am more interested in earning a university degree and an excellent job than learning the English language itself.	3.49	1.14	High
5. My interest leans more towards advancing my higher education than mastering the English language itself.	3.51	1.12	High
6. Learning English is essential for traveling abroad.	3.86	1.11	High
7. Learning English is essential for making me a knowledgeable and skillful person.	3.88	1.11	High
8. Learning English is essential for making me an educated person.	3.72	1.14	High
9. I consider being proficient in English can lead to more success and achievements in life.	3.83	1.07	High
10. I consider being proficient in English to make other people respect me.	3.54	1.17	High
Category Mean	3.66	0.75	High

Table 8. Descriptive statistics for the motivation level of the students in terms of integrative

Indicators	Mean	SD	Description
1. Studying English enables me to understand English books, movies, pop music, etc.	4.03	1.02	High
2. Studying English helps me better understand and appreciate the lifestyles of native English speakers.	3.92	1.02	High
3. Studying English enables me to keep in touch with foreign acquaintances.	3.72	1.14	High
4. Studying English enables me to discuss exciting topics in English with people from other national backgrounds.	3.69	1.15	High
5. Knowledge to other people, like giving directions knowledge to other people, like giving directions to tourists.	3.73	1.18	High
6. Studying English enables me to participate freely in academic, social, and professional activities among other cultural groups.	3.72	1.12	High
7. Studying English enables me to behave like native English speakers the accent and using English expressions.	3.68	1.09	High
8. Studying English enables me to appreciate English arts and literature.	3.87	1.07	High
9. Studying English helps me to be an open-minded, and friendly people like English-speaking people.	3.88	1.11	High
10. Studying English enables me to achieve maximum proficiency that is why I am determined to study English as best as I can.	3.85	1.08	High
Category Mean	3.81	0.82	High

Among the two indicators, Integrative motivation got the highest mean value of 3.81, which is described as high. This means that students' motivation is evident, particularly in the aspect that studying English enables them to understand English books, movies, pop music, etc., obtains the highest mean of 4.03, described as high, which means that the Grade 10 students often observed this aspect. The lowest is 3.68, which is defined as high, which is in the element where studying English enables them to behave like native English speakers, having an accent and using English expressions. This further implies that students often study English to understand English books, movies, and pop music, etc., They often study English to better understand and appreciate the ways of life of native English speakers, and they study English to be open-minded and sociable people like English-speaking people.

The abovementioned findings are in consonance with the findings of the study of Bundit (2019) which divulged that students were more integratively motivated to study English. It was further indicated that integrative motivation was a significant factor among the students. Students were highly interested to study English as they thought it was worth for them. Integrative motivation was the factor that contributed to the main reason for students to be successful in studying English. The learners with integrative motivation want to learn the language to understand better and get to know the people who speak that language (Wong, 2011). Further, Wang (2008) mentioned that integratively motivated learners tend to have more persistence in their learning, especially when they encounter challenges or complex tasks. This is because they have internalized their motive of learning into their self-value system, which explains why integratively motivated learners put more effort into their learning and obtain more significant achievements in second language acquisition. Furthermore, Gardner (1985) stated that integrative motivation supersedes instrumental motivation because integrative motivation involves attitudinal factors and goal-orientated behaviors, which are important to the second language learning process.

On the other hand, Instrumental motivation got the lowest mean value of 3.66 with a descriptive equivalent of high, which means that the Grade 10 students often observed instrumental motivation. Specifically, believing that learning English is essential for making themselves knowledgeable and skillful persons obtains the highest mean under the instrumental motivation of 3.88, which is described as high, which means that students' instrumental motivation is evident. However, the lowest mean under this indicator was 3.43, which is defined as a high means that it is oftentimes observed by the Grade 10 students that are in the aspect where they are having an interest in reading only English textbooks for university study but no other English texts like in newspapers and magazines. This further implies that the students often believe that learning English is essential to becoming knowledgeable and skilled. They often consider learning English important for traveling abroad and that being proficient in English can lead to more success and achievements in life.

The results conform to the findings of Zhao (2012), which revealed that students learning English as a second language were more instrumentally motivated than integratively motivated. This was due to the students' limited opportunities to communicate with the target native group or foreigners, which might be why learning English through integrative motivation was difficult. Another finding, revealed by Hong and Ganapathy (2017), indicated that students are more instrumentally motivated than integratively motivated in an English as a Second Language learning. Also, the study of Long et al. (2013) indicated that most of the motivation among the students was instrumental; however, students' learning motivation level towards English was high. In accordance with the study of Rahman (2019), students are typically instrumentally motivated when learning a second language. The instrumentally motivated students devote little time to English language learning. This means that these students understand how important English is to them and how important it is for them to learn it, but they need to devote more time and effort to practicing and mastering it. Also, compared to integratively motivated students, instrumentally motivated students need more time and energy to devote to their learning. The student's motivation for studying English was primarily instrumental.

3.3 Academic Performance in English

Table 9. Descriptive statistics for the academic performance in English

Range	Frequency	Percentage	SD	Mean	Description
75-80	91	29.7%	20.0	83.17%	Satisfactory
81-85	106	34.6%			
86-90	102	33.3%			
91-95	7	2.3%			

Table 9 presents the students' level of English academic performance among students. The overall mean grade is 83.17 with an $SD \pm$ of 20.00, which has a descriptive equivalent of satisfactory. The results show that the students' English academic performance is satisfactory. Specifically, 91 out of the 306 respondents have an average of 75-80 in English, 106 of them have an average of 81-85, and 102 have an average of 86-90. Only 7 out of the 306 respondents have an average of 91-95.

The results on the academic performance of students in English also supported the findings of Racca and Lassaten (2016), who concluded that most of the students in the setting of their study have English language proficiency,

which is only at a satisfactory level. This conforms to the results shown above. Further, the study concludes that the student's academic performance in English is reasonable.

Also, Li (2010) reported that educators agree that proficiency in the English language is the basis for success in academic pursuits. Reading, writing, and working with numbers are tasks based on language learning strategy. This describes the interplay between everyday language learning and more advanced communication learning strategies. Indeed, language proficiency is a key to academic performance. For instance, a person who does not know English may need access to the world's known scientific and technological discoveries that are predominantly written in English. This means that students need to be proficient in English to grasp knowledge in other learning areas better. As claimed, language proficiency in English is significantly related to academic performance. Also, as stated by Fakeye and Ogunsiji (2009), students' success in school mainly depends on their proficiency in the language of instruction. If the students are excellent and well-versed in English, their academic performance increases and is satisfactory.

3.4 Relationship Between Language Learning Strategies, Motivation, and English Academic Performance

Table 10. Correlation analysis for the relationship between language learning strategies, motivation, and English academic performance among grade 10 students

Independent Variable	Dependent Variable	R-value	p-value	Remarks
Memory	Academic Performance	0.157	0.006	Significant
Cognitive		0.186	0.001	Significant
Compensation		0.110	0.053	Not Significant
Metacognitive		0.150	0.008	Significant
Affective		0.101	0.079	Not Significant
Social		0.102	0.075	Not Significant
Instrumental Motivation		0.119	0.038	Significant
Integrative Motivation		0.164	0.004	Significant
Language Learning Strategies		0.151	0.008	Significant
Motivation		0.152	0.008	Significant

The Pearson r correlation was utilized to test whether there is a significant relationship between the variables in this study, namely, language learning strategy, students' motivation, and English academic performance among Grade 10 students. As displayed in Table 10, the test of the relationship between language learning strategies and English academic performance obtains an R-value of .151 and a p-value of .008, which is less than 0.05 level of significance. The aforementioned R-value implies that there is a relationship between language learning strategies and the academic performance of students in English. Thus, there is a significant relationship between students' language learning strategies and their English academic performance. This result is cognizant of the report of Tuckman and Kennedy (2011), which mentions the association of language learning strategies with improving the academic performance of freshmen students in English. Also, the result confirmed the suggestion of Espinosa (2015), which reiterates that English language learning strategies are associated with fostering learners' academic performance.

The findings of Tuckman and Kennedy (2011) on the relationship of Language Learning Strategy and explicit instruction in improving freshmen performance are also confirmed. Their empirical research confirmed the association of Language Learning Strategy in helping learners achieve academic success. Further, as displayed in Table 4, the test of the relationship between motivation and English academic performance obtains an R-value of .152 and a p-value of .008, which is less than the 0.05 level of significance. The aforementioned R-value implies that there is also a relationship between motivation and the academic performance of students in English. Thus, there is a significant relationship between students' motivation and their English academic performance. The results on the relationship between motivation and English academic performance conform to the finding of Adamma et al. (2018), which revealed that motivation correlates to students' English academic performance. Motivation, specifically, improves academic performance. Alongside this, Kariuki & Mbugua (2018) also concluded that motivation has a positive association with students' academic performance in English. Following

the study of Vansteenkiste et al. (2005), motivation has been shown to positively affect students' academic performance in domains of education, especially in English. The abovementioned findings of this study confirmed the anchored proposition by Gbollie and Keamu (2017) that the student's language learning strategies and motivation impact their academic performance in English. Also, it affirms the proposition of Shyr et al. (2017) that the students' use of language learning strategies is related to their academic performance as driven by their goals.

4.0 Conclusion

This study concluded that the Grade 10 students' language learning strategies are high in terms of memory, cognitive, compensation, metacognitive, affective, and social. They often use language learning strategies to learn English. Thus, these strategies help students become more effective learners in their classes and foster more efficient development of their mastery of the target language. The Grade 10 students' motivation is high in terms of instrumental and integrative motivation. They are often motivated to learn, so knowing the student's focus area is very important. The level of English academic performance is satisfactory. The grades of the students in English are on average. However, it indicates that aspects still need to be improved, especially in their academic performance. There is a significant relationship between language learning strategies and English academic performance. Also, there is a significant relationship between motivation and English academic performance. Hence, the abovementioned variables are associated with junior high school students in Tagum City.

Based on the findings and conclusion, it is recommended that students continue to employ the language learning strategies that suit them as they learn English. Constant use of these strategies may help them improve their capacity to learn English. In terms of motivation, teachers may also use appropriate teaching strategies that will increase motivation among students. Since there is a satisfactory level of academic performance in English, the teachers may work on improving it by connecting the students' respective language learning strategies to tasks and activities. Future researchers are encouraged to conduct further research on the other variables that affect the English academic performance of the students, which may be explored. Lastly, since there is a significant relationship between language learning strategies and academic performance motivation and academic performance, the school head may conduct forums, including the discussion during the School Learning Action Cell (SLAC) or the Mid-year Review Program and Evaluation (MPRE), benefitting the teachers, learners and school administrators.

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The author indicates equal contribution to each section. The author reviewed and approved the final work.

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Empowering Students: How Communities Can Help

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Abstract. Low-income families, particularly those with disabled children, frequently face considerable economic challenges. Educational programs that teach participants income-generating skills are critical for these families. Schools can play an important role in empowering vulnerable populations by introducing revenue-generating projects. This qualitative study assessed the influence of a community project, which was executed at a public elementary school in Digos City, Philippines. The project aimed to provide higher-grade Special Education students (deaf and mute) and their parents with the skills and information required to launch their own enterprises. The researcher used focus groups and in-depth interviews to learn about the individuals' real experiences. Thematic analysis was utilized to discover reoccurring themes and acquire a better understanding of how the project cultivated their entrepreneurial spirit and sense of community in the school setting. Results revealed that the initiative affected participants' living standards, sense of independence, and overall well-being. The study emphasizes the need of customizing such programs to individual circumstances. The findings can be used to guide the design and implementation of future programs, ensuring that participants are financially empowered while also creating a more dynamic and self-sustaining learning environment.

Keywords: Income generating project; Community empowerment; Public school; Philippines.

1.0 Introduction

Education serves as a cornerstone for individual empowerment and societal progress. Well-rounded programs emphasizing character development and Social-Emotional Learning (SEL) have demonstrably led to improved academic achievement, stronger social skills, and better mental health for students with disabilities (CASEL, 2023). Unfortunately, ensuring access to effective Special Education (SPED) programs in the Philippines faces a significant financial obstacle.

SPED programs require specialized resources beyond those found in mainstream classrooms. Trained teachers, assistive technologies, and adapted learning materials are crucial for catering to the diverse needs of students with disabilities. Additionally, individualized instruction and smaller class sizes are essential to provide adequate support. These factors inevitably lead to higher operating expenses compared to mainstream education (Peters & Katsiyannis, 2018). Unfortunately, limited government funding in the Philippines often restricts access to these critical services. A 2022 report by the Department of Education (DepEd) revealed a significant shortage of SPED teachers and specialists, highlighting the funding constraints faced by the program. This shortage not only limits the number of students who can benefit from SPED services, but also hinders the quality of education received by those who do. The budgetary limitations of SPED programs disproportionately affect students with disabilities and their families. These limitations can lead to a cycle of poverty and limited opportunities. Low-income families, particularly those with children facing disabilities, often experience significant economic hardship (Racoma K. M. et al., 2023). Without access to quality SPED programs, students with disabilities may struggle to reach their full

potential academically, socially, and professionally. This can further limit their future employment prospects and exacerbate financial difficulties for their families.

This funding gap necessitates exploring alternative mechanisms to bridge the financial divide for SPED programs. Income-generating projects (IGPs) have emerged as a promising strategy. Defined by Hwang et al. (2018) as small-scale initiatives that empower beneficiaries by fostering self-determination and income streams, IGPs encompass a wide range of activities. Microcredit programs, vocational training initiatives, and local economic development projects all fall under this umbrella (Ziv et al., 2018). The potential benefits of IGPs extend beyond simply generating revenue for SPED programs. The global movement for inclusive education emphasizes the significance of allowing all students, including those with disabilities, to learn alongside their peers in mainstream classes (UNESCO, 2020). To achieve full inclusion, SPED programs must address their budgetary constraints. IGPs offer an exciting way for SPED programs to augment government support and expand access to crucial services for students with disabilities. Furthermore, IGPs can contribute to empowering students with disabilities by fostering financial independence, self-sufficiency, and entrepreneurial skills.

This impact assessment study focuses on the "Sampalok: Asim ng Buhay, Tamis ng Tagumpay" (Seedlings: Strength of Life, Sweetness of Success) IGP. This unique initiative, designed specifically for higher-grade Special Education students, particularly those who are Deaf and Mute, and their parents in the Philippines, serves as a case study to explore the potential of IGPs within the context of SPED programs. The study aims to investigate the project's impact on participant empowerment, financial well-being, and overall quality of life. While existing research recognizes the benefits of IGPs for educational institutions (Ahmad, Ng, & Ngeoh, 2015; Miranda, Tenedero, Fiel-Miranda, & Celestino, 2016), there is a limited understanding of how IGPs specifically contribute to empowering students with disabilities within the context of community support programs. This study addresses this gap by examining the IGP as a potential model for enhancing the lives of students with disabilities in the Philippines. By analyzing the project's impact and effectiveness, this research contributes valuable insights into the potential of IGPs as a tool for empowering students with disabilities, fostering financial independence, and ultimately promoting greater inclusion within the educational system.

2.0 Methodology

2.1 Research Design

This study uses a descriptive-correlational research design to evaluate the impact of the "Sampalok: Asim ng Buhay, Tamis ng Tagumpay" (Seedlings: Strength of Life, Sweetness of Success) Income Generating Project (IGP) on the project's teachers, students, and parents (Creswell & Creswell, 2018). This design provides various advantages. First, it enables us to collect detailed information regarding the project's implementation, the problems encountered by participants, and the perceived benefits they received through interviews with key stakeholders. This descriptive section offers a thorough and comprehensive knowledge of the project's real-world implications. Second, the correlational feature allows us to investigate potential correlations between IGP membership and changes in participant outcomes, such as higher income, greater self-sufficiency, or a stronger feeling of community. It's vital to realize that correlations can indicate influence but cannot prove causality. Finally, given the scarcity of research on similar IGPs in Special Education Programs (SPED), this strategy enables us to collect significant data that will influence future studies attempting to demonstrate causal correlations using more rigorous designs.

2.2 Research Locale

The researchers carried out this study among the public elementary schools under Zone 3, Digos City for the School Year 2022-2023. This southernmost province of Digos City Davao del Sur is a second-class component city serves as the provincial capital, known for its tag-line "The Gate City of the South" The City has a land area of 287.10 square kilometers which constitutes 13.27% of Davao del Sur's total Area. Digos has 26 barangays.

2.3 Research Participants

Three (3) teachers are the proponents of this study; ten (10) higher-grade SPED pupils (deaf and mute) and ten (10) parents are the beneficiaries. selected public elementary schools in the aforementioned district participated in the study for the school year 2022-2023. They are the teachers who conducted the income-generating project for the beneficiaries to help them improve their social and economic backgrounds. For the total samples of

respondents in the study, the researchers used a complete enumeration (Efron, 1982) of the 3 Teachers, as proponents, were 10 random higher-grade SPED pupils (deaf and mute) from DepEd Digos City District who served as participants in this study.

2.4 Research Instrument

To get a thorough knowledge of the Income Generating Project (IGP) from the perspective of teacher-proponents, this study prioritizes semi-structured interviews as the primary data gathering approach. Unlike organized formats, these interviews allow for open-ended queries that go beyond the obvious facts. They delve into the teacher-proponents' lived experiences, investigating their motivations for starting the IGP, the challenges they encountered throughout the project's lifecycle (from planning to implementation), and their understanding of the project's purpose - whether it was financial gain, community development, or something else entirely. This flexibility enables deeper examination of intriguing features that arise throughout the conversation, resulting in a more nuanced understanding of the teacher-proponents' experiences with the IGP (Rubin & Rubin, 2012). Furthermore, semi-structured interviews are ideal for eliciting the "why" behind their behaviors. Participants can discuss the personal meaning they gain from their involvement, as well as the IGP's perceived impact on their life and the community. This technique is critical for collecting rich, qualitative data on the experiences and viewpoints of teacher-proponents, which will provide significant insights on the IGP's performance and sustainability.

2.5 Data Gathering Procedure

Interviews are an essential component of data collection in qualitative studies (Taylor, 2005; DiCiccoBloom & Crabtree, 2006). Following the flexibility and adaptation benefits of semi-structured interviews, a thorough thematic analysis method will be used to extract meaning from the obtained material. This in-depth study entails recording interviews verbatim to ensure comprehensive context. Each transcript will then be coded line by line or segment by segment in order to discover important concepts relevant to the research topics. By examining and comparing codes from all interviews, we will identify reoccurring themes that signify significant patterns in the proponents' experiences with the IGP. These initial themes will be modified for clarity and consistency, either by merging similar themes or separating larger ones. Finally, the research team will analyze the final themes in light of the study questions and existing literature on IGPs. This interpretation will entail making links between the themes and investigating their significance for understanding the proponents' opinions on the project. The study's thorough thematic analysis attempts to uncover rich and nuanced insights from the interview data, contributing to a more comprehensive understanding of the proponents' experiences with the IGP and overall impact.

2.6 Ethical Considerations

Every participant will provide informed consent. There will be guarantees of confidentiality and anonymity, and participants will be free to leave the study at any moment. This approach will give a thorough grasp of the project's effects and the reasons behind its termination, offering insightful information for similar projects in the future. Facilitating free and informed consent is an important ethical norm to consider when doing social research. The principle of informed consent was defined to help create research interactions based on 'trust and integrity' (BSA, 2017), and it strives to protect people's right to choose whether or not to engage in research. An key condition for consent validity is that an individual's decision is voluntary and based on clear, unambiguous information about what participation in the research entails. Many governments and institutions have adopted ethical principles and legislation that recognize participants' free will (Beach and Arrazola, 2019). The background for regulating ethical processes includes histories of destructive, clandestine research, which ignored study subjects' integrity and judicial rights, inside both medical and and social research (Wiles, 2013). Additionally, When qualitative researchers address and discuss informed consent, the emphasis is frequently on the recruiting stage, before fieldwork or data collection begins (Gallagher et al., 2010). During this step, researchers get official access by providing information and asking agreement to engage in the study endeavor. Researchers' reflective accounts of practice typically focus on how each individual participant's decision manifested in the shape of a written contract. Such ethical reviews involve conversations about who is capable of consenting, as well as how much and in what form information was provided during the early phase (Alderson and Morrow, 2011).

3.0 Results and Discussion

3.1 Financial Impact

In 2010, around 1.9 million Filipino children attended pre-school in both public and private schools. An additional 21% (or 2.5 million children) is projected for 2011. From 2007 until 2008, the Department of Education says that ninety-seven percent of students with disabilities ages seven to twelve years old are not enrolled. Among those enrolled, the majority (156,270 pupils) are in formal Special education programs. In contrast, just 3,028 students are mainstreamed in primary and high school (16 and 17). In addition, the bulk of these Special Education programs and schools are situated in urban areas. This considerable disparity emphasizes the need for increased access to adequate educational opportunities for all children, particularly throughout critical developmental times.

The discontinuation of the initiative had a substantial financial impact on both parents and SPED students. The project's reliance on selling Sampaloc, a seasonal product, limited its capacity to generate continuous revenue. This budgetary limitation hampered its efforts to provide continuing assistance to pupils with special needs (SPED) (Justus & Bjurström, 2020). This is consistent with the findings of Jansson (2020), who highlights the necessity of diverse revenue streams in social companies for long-term viability. The initiative struggled to get long-term funding since it lacked a consistent revenue stream. Justus and Bjurström's (2020) research on social enterprise finance emphasizes the significance of constant funding sources for social initiatives to succeed. The project's reliance on seasonal sales makes it impossible to plan for the future and provide ongoing support to SPED students. Moreover, the initiative faced challenges in obtaining constant project supporters. This emphasizes how important it is to have capable leadership and effective governance in order to maintain social programs. Heeks's (2019) research on social enterprise governance highlights the significance of establishing unambiguous goals, a dedicated leadership group, and strong accountability frameworks. The project's ultimate cancellation might have been influenced by the lack of these components. The project's budgetary constraints also limited its capacity to meet the long-term needs of SPED kids. Ideally, the project would have sought to establish a trust fund to provide ongoing assistance beyond school supplies. This method is consistent with the findings of Davidson, Avery, and Nunez-Smith's (2022) research on the long-term effects of scholarships for low-income students. A comparable trust fund may have provided continued support to SPED kids, potentially affecting future educational or vocational opportunities. Finally, the project's focus on school supplies emphasizes the importance of early intervention for children with impairments. Providing appropriate school resources can be an indirect way to promote early intervention programs, which are critical for children with disabilities (NICHD, n.d.). Early intervention programs can significantly improve learning outcomes and general development. The project's provision of school materials may have indirectly encouraged this strategy by providing children with the necessary tools to benefit from such programs.

Unfortunately, the cancellation of the project resulted in significant financial consequences for both parents and SPED students. The lack of ongoing income from the project, along with challenges in securing consistent project proponents and the seasonal nature of the product, presented significant hurdles in empowering and supporting this vulnerable population.

Loss of Potential Revenue

The initiative has budgetary constraints because it relied on a seasonal crop, tamarind. This limited its ability to generate continuous revenue, threatening its long-term viability. Tworld Minnesota (2023) research illustrates the issues that organizations face due to seasonality, which causes revenue volatility and jeopardizes financial stability. In the instance of "Sampalok," a lack of year-round funding hindered the project's ability to support the ten (10) SPED kids and their families all year. The project's initial grant of 1,000 pesos for a trust fund was intended to give continued support to SPED students. Clark and Lang (2019) argue that relying on short-term funding can jeopardize the long-term viability of social enterprises. Without a continuous stream of income, the trust fund would have expanded slowly, restricting its ability to give long-term help to pupils beyond the initial distribution of school supplies. These budgetary limits, combined with unforeseen circumstances, resulted in the project's abandonment and prevented it from meeting its long-term objectives. Even looking into other cash streams outside selling tamarind could have helped the enterprise. For example, the project may have held seminars on tamarind-based dishes or collaborated with local businesses to develop value-added goods like tamarind jams or

candies. This is consistent with Jansson's (2020) results on social enterprise business models, which emphasize the need of diversification in mitigating risk and generating revenue throughout the year.

Financial Resources Wasted

The project's reliance on a single seasonal product, tamarind, is a squandered chance for financial growth. Focusing only on "sampaloc" hampered the project's capacity to reach a larger consumer base and earn income throughout the year. During the off-season, resources invested in tamarind production and sales are often underutilized. This can be seen as poor resource allocation, as Bourne and Walker (2023) bring out in their study of project management approaches. They contend that optimal resource allocation is critical to maximizing project impact and financial performance. In the instance of "Sampalok," overreliance on a seasonal product could have resulted in wasted materials, underutilized labor, and, eventually, financial losses for the project. Furthermore, the project's exclusive concentration on "sampaloc" restricted its capacity to meet a larger range of client wants and preferences. Martin and McMullen (2019), in their work on marketing strategies for social enterprises, underline the necessity of identifying the target market and establishing a product mix that meets their different demands. By focusing primarily on "sampaloc," the project may have overlooked potential clients who prefer different products or value-added services. Diversifying the product options beyond tamarind may have reduced the financial risks related with seasonality. For example, the initiative may have looked into manufacturing processed tamarind goods such as jams or sweets, as well as providing workshops on tamarind-based dishes. This is consistent with Jansson's (2020) findings on social enterprise business models, which highlight the importance of product diversification in generating revenue throughout the year and reducing dependency on seasonal products. Similarly, Valdés, Nicholls, and Merino (2020) discovered that social firms offering a broader range of products and services had higher financial stability and resilience.

Opportunity Cost

The project's financial success was most likely impacted by its management's limited availability due to their hectic schedules. This resulted in a considerable opportunity cost, as Morris and Pinto (2020) note in their research on project portfolio management. The term "opportunity cost" refers to the possible benefits that are forfeited by choosing one alternative over another. In the instance of "Sampalok," the project leaders' limited time may have kept them from exploring other potentially profitable projects, such as outreach campaigns to acquire new clients or fundraising events. These foregone activities are a squandered opportunity for the project's financial success. Furthermore, in their study "Exploring the Link Between Project Manager Time Availability and Project Success," Nicholas and Davies (2020) look into how project manager time limitations affect project outcomes. Their research demonstrates how limited time can have a negative impact on project performance, potentially impeding crucial tasks connected to financial success. The project's proponents' busy schedules most likely hampered their ability to form collaborations with firms or organizations that may have provided financial or marketing assistance. Furthermore, with less time available, they may have been unable to put in significant effort in applying for grants or seeking corporate sponsorship. These missed prospects for external finance are likely to result in a major financial loss for the project. These instances show that the project leaders' limited time was more than simply an annoyance; it was a measurable expense that hampered the project's ability to reach its full financial potential.

Impact on Long-Term Sustainability

The closing of the project, as well as the subsequent loss of money, had a substantial influence on its long-term viability. This is consistent with the findings of Hwang, Kim, and Sham (2019) in their study "The Challenges of Achieving Long-Term Sustainability for Social Enterprises." Their research demonstrates how reliance on short-term funding sources, such as the project's seasonal income, can impede social enterprises' long-term goals. Without a consistent source of funding, the initiative struggled to meet operational costs, engage in expansion, and, ultimately, continue providing critical support to parents and SPED kids. This financial hardship severely hindered the project's capacity to carry out its purpose of empowering vulnerable people.

The end of the program resulted in huge financial losses for both the participants and the initiative. Low-income families with SPED pupils would most certainly have a more difficult time obtaining critical school supplies without the project's aid. The trust fund's basic seed money of ₱1,000 is a squandered chance to provide long-term financial support for students. The project's reliance on a single seasonal product, "sampalok," reduced its revenue

potential. This is consistent with Hwang et al. (2019), who underline the difficulties faced by social companies with insufficient product diversification. Exploring alternate revenue streams, such as additional product offers or skill-based services, could have offered a more secure financial foundation, according to Clark and Lang's (2019) research on social enterprise financing. Furthermore, the initiative's reliance on the availability of project proponents underscores the need for a more sustainable methodology. While budget constraints prompted the program's discontinuation, the core purpose of empowering individuals and promoting financial independence remains critical. Future project development should include a cost-benefit analysis that takes into account not only the immediate financial impact but also the possible long-term benefits for participants, as proposed by Berrone, Fosfuri, and Gelabert (2019) in their research on social impact evaluation. This will allow future attempts to be more financially sustainable while still efficiently serving their intended audience.

3.2 Social Impact

The program incorporates social development concepts with the purpose of improving the long-term well-being of SPED students, their families, and the school community. This is consistent with the World Business Council for Sustainable Development's (WBCSD) definition of social impact, which stresses actively addressing social concerns (Breeze and Knipe, 2022). Similar to the program's emphasis on individual empowerment, Mitra and Banerjee (2020) underline the necessity of incorporating social development principles into interventions to attain long-term well-being. By incorporating SPED students and their families in the production process, the program promotes self-reliance and builds the school community network, mirroring Patel's vision for social development programs (2005). Furthermore, emphasizes environmental responsibility by focusing on using widely available Sampaloc fruit. This resourcefulness encourages waste reduction in the school community and instills a feeling of environmental care. This is consistent with the recent emphasis on Education for Sustainable Development in teacher education (Moch and Baie, 2020). Aside from its social and environmental benefits, the program provides valuable learning opportunities for SPED students. Students gain significant skills through hands-on experience in product production, quality control, and, perhaps, design and sales. These exercises can help to improve not just motor skills and confidence, but also communication and interpersonal skills, which are essential for social development (Hodgdon, 2020). In essence, goes beyond financial gain by offering a comprehensive plan for empowering SPED students (Evans & Wamsley, 2021), instilling environmental responsibility, and promoting social development through skill development and community involvement.

While the program attempted to increase social responsibility and skill development, it ran into restrictions that prevented it from reaching its full potential. Hall and Smith's (2019) research investigate the obstacles that social programs have in reaching their full potential, which is pertinent to the constraints encountered by the project. Future versions of the program can benefit from further investigation into these limitations.

Missed possibilities for Empowerment

While the effort sought to empower, it fell short of achieving the revolutionary shift envisioned by empowerment theory (World Bank, 2023). Its reliance on a seasonal commodity most likely limited revenue generation, preventing expenditures in activities that could benefit SPED children and families (Gundersen et al., 2019). This could limit access to critical skill development seminars, entrepreneurship training programs, and income-generating activities that are directly relevant to the community's needs (Narayan, 2020). These transferable talents include a wide range of characteristics that may be applied across multiple employment sectors, including critical thinking, problem-solving, communication, and collaboration (Bélanger et al., 2021). A full needs assessment, as recommended by current best practices (Mitra & Desai, 2023), would have recognized these limitations and ensured that the program provided participants with meaningful and sustainable options. This assessment would ideally include in-depth meetings with community members to better understand their individual needs, goals, and challenges (Alsop et al., 2021). Finally, the program's limited finances likely impacted its ability to give ongoing help, which is widely acknowledged as critical for long-term empowerment (Narayan, 2020). Empowerment is a multifaceted process that involves constant support to assist individuals and communities in overcoming obstacles and building resilience (Alsop et al., 2021). Future programs can take a more comprehensive approach to empowerment by correcting these limitations and incorporating recent research findings.

Reduced Awareness and Advocacy

The abrupt closure of the program severely limited its ability to promote public awareness and advocate for the rights of parents of Deaf and Mute SPED (Special Education) children. According to Boris and Mosher-Williams (1998) and Fagen et al. (2009), advocacy is a complex activity that includes public education, mobilization, and policy development. A persistent program could have been an effective advocate for this underrepresented minority. The program's termination resulted in lost opportunities for public awareness and advocacy for Deaf and Mute SPED children and their families. Reid (2000) underlined the importance of public education in advocacy. The program's discontinuation ceased efforts to educate the public about the issues that this population faces. Increased awareness could have encouraged empathy and addressed traditional stigmas. Unfortunately, without further public education, these negative preconceptions may perpetuate (Baglieri et al., 2021). Glennie et al. (2023) investigate how negative media portrayals can perpetuate these stigmas, emphasizing the significance of initiatives such as in developing positive narratives about Deaf and Mute children. Furthermore, the program's shutdown restricted its ability to advocate for the special needs of these children and their families. Boris and Mosher-Williams (1998) describe effective advocacy as the process of lobbying officials and producing solutions. By learning from these flaws, future programs can ensure that their advocacy efforts have a long-term impact, resulting in a more inclusive and supportive environment for these students and their families (Masterson et al., 2020). Koziol et al. (2022) found that effective advocacy programs for children with disabilities entail engagement with families and policymakers. This coordinated approach could help secure resources and legislative improvements for Deaf and Mute SPED students. To summarize, the program's termination impeded its ability to promote public awareness and advocate for the rights of Deaf and Mute SPED children. Future programs can benefit from these weaknesses by focusing on continuing public education, creating positive narratives about this population, and collaborating with families and lawmakers on lobbying. This will create a more inclusive and supportive atmosphere for these students and their families.

Impact on Stakeholders' Well-Being

The abrupt discontinuation of the program most likely had a substantial impact on the well-being of important stakeholders, particularly parents and children with Special Educational Needs and Disabilities (SPED) who are Deaf and Mute. This is consistent with recent research, which suggests that discontinuing social programs might have a negative impact on participants' mental health and contribute to feelings of loneliness (Dusseault & Germain, 2020). The program's objectives undoubtedly extended beyond economic empowerment and environmental responsibility. It could have intended to increase educational possibilities for special education children by incorporating the school community. Hands-on learning experiences offered by programs such as have been shown in studies to dramatically improve academic performance and engagement among students with impairments. Furthermore, recent study suggests that the program's collaborative nature may have generated a sense of community belonging, which is an important determinant in mental well-being (Wang et al., 2021). The program's demise most certainly negated these prospective benefits. Without ongoing help and resources, parents may have faced extra obstacles in providing educational opportunities for their children. This may have worsened feelings of isolation and exclusion, especially among Deaf and Mute students who rely on the program's software for communication and social contact (Ferguson et al., 2020).

The abrupt closure of the program most likely had a substantial detrimental influence on the well-being of Deaf and Mute SPED students and their families, potentially raising feelings of isolation and loneliness (Ferguson et al., 2020). This is consistent with evidence indicating that program cessation can harm mental health (Dusseault & Germain, 2020). Given the program's potential to improve mental health and create community belonging (Wang et al., 2021), this study emphasizes the vital importance of long-term sustainability in social initiatives. Future projects can learn from by focusing on the development of transferable skills through workshops and extensive needs assessments (Mitra & Desai, 2023). This guarantees that the program provides participants with transferable abilities that will benefit them beyond the program's duration. Building good ties with local groups can help ensure that families continue to have access to resources and assistance after the program has ended (Smith et al., 2019). These collaborations can provide a critical safety net and facilitate a smoother transition for participants. The good aspects of "Sampalok," such as promoting social participation and environmental responsibility, can be enhanced in future versions. Future initiatives that combine non-seasonal skill development with long-term support networks established via community engagement can better equip SPED children and their families for

long-term well-being. Learning from the inadequacies of enables future social entrepreneurs to serve these communities in a more sustainable and impactful way.

3.3 Sustainability

Sustainability in social programs refers to the ability to address the requirements of current beneficiaries without affecting the program's ability to serve future generations (Evans, 2020). This notion is consistent with the broader concept of sustainability within ecological economics (Costanza et al., 2014). Sustainable social initiatives carefully identify and mitigate potential hazards to their long-term existence. These hazards could be financial, environmental, or societal in nature (Mayer, 2019). For example, a vocational training program may consider prospective employment market upheavals or changes in government funding to be sustainability concerns. Long-term results and impact are critical components of program sustainability (Clark et al., 2019). Sustainable programs usually include procedures for continual review and development (Chevalier & Buckles, 2020). This enables the program to change its strategy depending on real-world outcomes, increasing its efficacy in meeting its objectives. Regular monitoring and assessment also help to make better use of financial and human resources (Moser, 2019). Sustainable programs prioritize resource allocation and pursue cost-effective solutions (Hall et al., 2020). This can lead to better financial stability, allowing the show to reach a broader audience.

The program's stated sustainability strategy, which includes gradual implementation with explicit targets and continuing review, demonstrates these characteristics. The program's well-defined sustainability strategy, which is organized into three phases with specified activities and goals, shows a dedication to long-term viability. This stepwise strategy, with a planned rollout and ongoing evaluation, allows for adjustments based on real-world results while also encouraging a culture of continual improvement. The program's set term, January 2023 to December 2023, provides concentrated implementation while leaving room for required changes. This planned approach to sustainability, although the program was not fully completed due to its discontinuation, it remains an important example for future initiatives aimed at long-term effect and social good. This lack of complete sustainability has resulted in the following impacts:

Limited Long-Term Impact

The premature termination of the program likely limited its ability to have a long-term positive impact on the lives of participants. This is especially troubling for a program intended to give continuing assistance to low-income families with SPED children (Alsop et al., 2021). A long-term strategy is essential for such programs because it attempts to promote long-term changes in participants' well-being while also providing them with the tools, they need to face future challenges (Rhodes et al., 2019). Research constantly emphasizes the necessity of ongoing assistance in youth development initiatives. Rhodes et al. (2019) discovered that programs with longer intervention periods had a considerably higher influence on positive youth development outcomes than programs with shorter durations. Similarly, Lerner et al. (2020) underline the importance of long-term, supportive interactions between mentors and youth in promoting favorable development pathways. The program's performance was likely determined by its ability to give ongoing support in a variety of areas (Alsop et al., 2021). For example, supplying school materials on a regular basis is likely to boost student attendance and participation. Without sustained access, these improvements could swiftly fade (Guarino et al., 2020). Similarly, the program's skill-development sessions provided participants with useful skills that they could use throughout their life. The short duration of these workshops reduced the long-term potential for these abilities to be developed and applied (Bielaczyc & Collins, 2019). Furthermore, the program most likely produced a feeling of community, which not only provided emotional support but also encouraged long-term use of the program's resources and services (Wang et al., 2021). The unexpected shutdown most certainly caused the collapse of this group, threatening the continuous support network on which many individuals relied (Dusseault & Germain, 2020). This can be especially problematic for families with SPED children, who may confront unique obstacles and require continuing support networks.

Financial constraints imposed by the program's closure likely created a ripple effect. The ability to secure funding or form partnerships for future initiatives was undeniably hampered. Without continued financial resources, the program's viability in the long term was placed in serious doubt. This highlights a critical lesson for future endeavors. Prioritizing long-term sustainability from the outset is paramount. Building robust support mechanisms that extend beyond the initial program cycle is essential to ensure lasting positive change for the

target population. By incorporating these elements, future programs can emulate the positive aspects of while mitigating the limitations imposed by its abrupt closure.

Reduced Stakeholder Engagement

The project's long-term viability was most likely jeopardized by insufficient stakeholder engagement. The project proponents' hectic schedules limited their capacity to actively connect with parents, students, community leaders, and possible partners. Building good relationships with multiple stakeholders is critical for project success, as Doherty et al. (2020) discovered in their research on stakeholder theory in social businesses. Effective stakeholder involvement promotes trust, collaboration, and, ultimately, project sustainability. Several disadvantages arose as a result of low stakeholder participation. For starters, without consistent communication and collaboration, it can be difficult to establish trust and maintain continued support. This may have resulted in a lack of engagement from stakeholders, both in terms of offering their time and advocating for the effort. In their research on social business governance, Nyström et al. (2021) underline the importance of stakeholder participation in mobilizing resources and instilling a sense of ownership. Without solid stakeholder ties, the initiative may have failed to recruit volunteers and obtain community support, limiting its ability to provide effective services. Second, ineffective participation may have hampered the project's capacity to locate and capitalize on significant resources or relationships. Collaboration with local businesses, for example, could have resulted in sponsorships or reduced costs for goods. In their corporate social responsibility research, Waddock and Smith (2020) examine the potential benefits of stakeholder involvement in terms of identifying new resources and building strategic collaborations. The initiative may have missed out on financial or material support because it did not effectively contact with local businesses. Finally, without actively incorporating stakeholders in the project's creation and implementation, it became more difficult to ensure that the program met their needs and was long-term viable. Moser (2019) emphasizes the relevance of stakeholder participation in identifying community needs and implementing effective solutions. Limited stakeholder involvement in the project may have resulted in a program that did not fully address the demands of the target community, jeopardizing its long-term viability.

Loss of Partnership opportunities

The project's poor ability to develop partnerships probably hampered its ability to collect resources and establish long-term relationships. Several things led to this challenge. To begin, potential partners, such as local businesses or organizations, may have had financial difficulties or even closures as a result of external circumstances. This can make them less likely to develop new partnerships. In their study of stakeholder theory in social enterprises, Doherty et al. (2020) admit that external barriers are a barrier to effective stakeholder participation. When potential partners are struggling, they may be less likely to engage on new initiatives. Second, the program's activities are seasonal, which may limit partnering prospects. The availability of potential partners can vary throughout the year, making it difficult to establish constant collaboration. In his research on social enterprise governance, Nyström (2021) underlines the necessity of partner alignment in ensuring successful collaboration. The seasonal nature of the project's activities may have turned off potential partners who require year-round participation.

Incomplete Resource Utilization

The abrupt discontinuation of the program resulted in a huge loss of resource usage. Financial resources spent, infrastructure created, and specialist equipment purchased are all significant expenditures that are now sitting idle. This emphasizes the significance of long-term sustainability planning, as noted by Wijen and Ansari (2020) in their study on social enterprise resource reliance. They claim that failing to address the long-term use of resources can result in financial waste and a lower overall impact. Unused resources not only result in a financial loss, but also a wasted potential to have a greater positive impact. Consider the additional value the program could have received if the infrastructure and equipment had been employed to serve a larger population or broaden the program's reach. This is consistent with the findings of Moser (2019) in her research on social innovation. She highlights the need of establishing programs that are resource efficient in order to increase their impact and reach. Furthermore, unused resources might create a sense of abandonment or neglect in the community that the program intended to help. This may harm the reputation of future initiatives and impede efforts to attract community support for new projects. In their research on financing social initiatives, Clark and Lang (2019) emphasize the need of creating stakeholder confidence through effective resource allocation. The program's experience demonstrates the critical need to optimize resource use in social enterprises. By planning

for long-term sustainability and allocating resources strategically, future programs can have a greater and more lasting positive impact on the communities they serve.

Scaling and Replication Challenges

The abrupt conclusion of the initiative highlights the challenges that come with attaining long-term societal change through short-term, seasonal interventions. While the effort had a clear sustainability strategy, including a staggered deployment and a one-year timeframe, it eventually fell short of its objectives. Several problems limited the program's capacity to expand and reproduce its effectiveness in other regions. First, relying on seasonal items or services resulted in an inconsistent income source. This is consistent with the findings of Mair and Marti (2019) in their research on social enterprise business models. They underline the significance of creating models that provide predictable money to ensure the long-term viability of social impact programs. Without a consistent source of income, projects like fail to gather the resources needed for expansion and replication in new locations. For example, money may be insufficient to hire more people, create training materials, or adapt the program to new situations.

Second, the restricted availability of project proponents due to their hectic schedules hampered constant assistance and the development of strong ties with participants and stakeholders. As Doherty et al. (2020) note out in their study of stakeholder theory in social enterprises, allocating adequate time and resources to stakeholder engagement is critical for fostering trust and collaboration, which can boost program expansion. The absence of constant involvement in the program most certainly limited efforts to acquire long-term support from a larger network of persons and organizations. This bigger network is critical for growing programs and achieving greater impact. Without solid stakeholder relationships, acquiring the resources and buy-in required for replication in new places becomes more challenging. Third, the program's brief length may have hindered its ability to give ongoing support to participants and create the long-term relationships required for effective replication. Clark and Lang (2019), in their work on financing social ventures, emphasize the necessity of investing in capacity building within the target population to ensure long-term program viability. The short timeline of the initiative may have hindered its potential to provide participants with the skills and knowledge needed to sustain the program's benefits in the long run. This may limit the program's viability when adopted in new communities. These restrictions contributed to the program's inability to give ongoing help to participants, create solid relationships, and form partnerships necessary to gain further resources for replication in other regions. Future projects can have a greater impact by creating programs with long-term sustainability in mind, concentrating on diverse financing sources, and actively engaging stakeholders throughout the program cycle.

Despite a well-defined sustainability strategy and gradual implementation, the "Sampalok: Asim ng Buhay, Tamis ng Tagumpay" project fell short of its long-term objectives. This conclusion provides important learning possibilities for future social activities. The project's experience highlights the vital need to prioritize long-term sustainability from the start. Several factors contributed to "Sampalok's" failure to make a lasting social influence. To begin, the program's abrupt termination hampered its capacity to foster long-term beneficial change for participants, particularly in terms of giving ongoing support to underprivileged populations. This is consistent with the findings of Presley and Davies' (2019) research on social program design. They underline the need of designing programs with a long-term impact in mind, assuring ongoing support after the initial intervention. Without a long-term commitment, programs like risk leaving participants unprepared to maintain the benefits in the long run. Second, the program's cancellation hampered its capacity to acquire money and partnerships for future initiatives. In their study on social enterprise funding, Elias et al. (2019) emphasize the necessity of a successful track record in garnering investment for future ventures. The program's failure to demonstrate long-term viability most likely discouraged potential donors and partners from partnering on future projects. Third, as the project closure demonstrates, poor stakeholder engagement with parents, students, community leaders, and potential partners can impede collaboration and program support. Doherty et al. (2020) suggest in their study of stakeholder theory in social businesses that effective stakeholder engagement is critical for establishing trust, encouraging collaboration, and obtaining continued program funding. The program's minimal involvement with stakeholders may have contributed to a lack of community support, making it difficult to secure the continued funding and collaboration required for long-term success.

The project's experience is a cautionary tale. Future social ventures can improve their chances of bringing about long-lasting beneficial change by incorporating long-term sustainability considerations from the start, such as preparing for continued support, diversifying financing streams, and actively engaging stakeholders.

Table 1. Salient findings and implications

Key Findings	Implications
The project's reliance on a seasonal product resulted in financial constraints and limited its ability to scale and replicate the program's success in other areas.	Future social development initiatives should prioritize long-term sustainability by incorporating strategies for ongoing support and resource allocation.
The importance of long-term sustainability planning is highlighted, including securing consistent funding sources and actively engaging stakeholders.	Active stakeholder engagement is crucial for building trust, fostering collaboration, and maximizing program impact.
Future programs can benefit from by focusing on transferable skills development, building strong community ties, and employing a diversified approach to resource generation.	Diversifying revenue streams beyond seasonal products can ensure financial stability and enable programs to serve a wider population.

4.0 Conclusion

The Income Generating Project (IGP) offers useful lessons for planning future community development efforts that prioritize long-term sustainability. While the project clearly benefited participants' lives throughout its operation, its reliance on a seasonal product (fruit) ultimately hampered its ability to give year-round assistance and effect long-term change. Future programs can use the positive qualities of to ensure long-term success. As Anderson and LeFevre (2019) propose, developing transferable skills in participants enables them to adapt and prosper beyond the program's lifespan. Furthermore, expanding revenue streams beyond seasonal products can help organizations maintain financial stability and serve a larger population. The IGP serves as a foundation for future community development activities that value sustainability. Future projects can expand on the success of by learning from its limits and integrating best practices for long-term effect. Future initiatives can empower communities to accomplish long-term beneficial change by concentrating on transferable skill development, strengthening community bonds, and using diverse resource creation tactics.

5.0 Contributions of Authors

In this joint endeavor, all authors receive equal credit for their efforts throughout the project. Each individual played a significant role in every aspect of the work, ensuring a cohesive and well-rounded final product. Furthermore, all authors actively participated in the review process, meticulously examining the content and providing valuable feedback to help improve and strengthen the manuscript. This combined effort and thorough review procedure resulted in the final version of this work, which was unanimously approved by all contributing writers.

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7.0 Conflict of Interests

In the spirit of transparency and ethical research standards, all authors of this paper declare that they have no conflicts of interest or ties that could sway the objectivity of their findings. This disclaimer guarantees that the study described here is free of any financial, personal, or professional biases that could influence the interpretation of the findings.

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Unveiling Minds: Investigating Critical Thinking Traits of Students in Private Catholic Schools in Siquijor Province

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Abstract. The study aimed to identify the critical thinking traits of students as possible determinants of their critical thinking skills and their relationship to selected variables. The researcher utilized a descriptive-correlational design and employed a systematic sampling technique to identify 130 randomly selected students from private Catholic institutions in the Province of Siquijor. Validated questionnaires were used, and multiple regression analysis, chi-square test, and weighted mean were employed for data analysis. The study found that senior high school students exhibit "high" levels of critical thinking traits in the following areas: truth-seeking, open-mindedness, analyticity, systematicity, critical thinking self-confidence, inquisitiveness, and cognitive maturity. Their critical thinking skills in interpretation, analysis, evaluation, inference, and self-regulation are also "high". Furthermore, students who exhibit higher levels of truth-seeking, open-mindedness, and critical thinking self-confidence tend to have better critical thinking skills. Female students display more positive critical thinking traits compared to their male counterparts. Students in the Science, Technology, Engineering, and Mathematics (STEM) and Technical Vocational Livelihood (TVL) tracks exhibit the most desirable critical thinking traits and skills compared to other groups of students. These findings indicate the need for a concerted effort to maintain and improve critical thinking traits and skills across all student groups, with particular emphasis on gender disparities and stream-specific differences. Educators and policymakers can use these insights to better prepare students for academic success and future challenges.

Keywords: Critical thinking; Private catholic school; Philippines.

1.0 Introduction

Problems with students' lack of problem-solving and critical thinking skills remain pervasive, despite emphasis on these skills as essential in today's workforce (Lestari, Haryani & Sumarti, 2020; Irwanto, Rohaeti, & Prodjosantoso, 2019). Coping with the demands of a constantly evolving world entails going beyond the conventional method of increasing one's knowledge capacity (Holmarsdottir et al., 2023). People must sharpen and refine their higher-order thinking skills, particularly their critical thinking ability (Firdaus et al., 2019; Hart, 2023). The ability to think critically is inextricably linked to a critical disposition or attitude of individuals (Hunter, Brabazon, & Quinton, 2023). According to Sulaiman (2018), a vehicle is incapable of transporting someone to a certain destination if there is inadequate fuel. Indeed, the vehicle is essential; it is unacceptable to be a genuine thinker in the absence of the necessary dispositions. Thus, critical thinking serves as the vehicle, while critical thinking disposition serves as the fuel.

In the Philippines, the Department of Education (DepEd) designed the Basic Education Exit Assessment (BEEA) to identify the Grade 12 students' 21st-century skills. According to Cordon and Polong (2020), the outcomes of the assessments are crucial to raising the standard of education because they reveal how well students are performing

and provide the information needed to develop reforms or policies that will benefit the learners. However, the study of Bulangis (2021) on BEEA revealed that students have low proficiency in problem-solving, information literacy, and critical thinking. Undeniably, problem-solving, information literacy, and critical thinking skills are necessary in all facets of people's lives (Darling-Hammond et al., 2019). However, there is a prominent decline in students' competency in twenty-first-century skills, according to Siregar, Rosli, and Nite (2023). This decline is evident in the TIMMS results of students in the Philippines wherein the country got the lowest rank in Mathematics among the 58 countries involved in the study (CNN Philippines Staff, 2019).

According to Safitri et al. (2023), between 2016 and 2017, researchers focused significantly on the improvement of students' mathematical capabilities, notably mathematical problem-solving and reasoning thinking abilities. In the next year, 2018–2019, research focused on investigating instructional techniques for increasing students' problem-solving ability. In the years 2021–2022, research focused on improving students' cognitive capabilities in science and mathematics, particularly in terms of mathematical reasoning abilities. However, Rauscher and Badenhorst (2021) recommended that more research must be done to determine which dispositions should be emphasized to meet the dispositional requirements in technology education. In the words of Poondej and Lerdpornkulrat (2015), considering the disposition dimensions of that range of critical thinking is more important than examining the cognitive abilities dimension.

With the above premise, the researchers, who are educators who majors in Math, desired to investigate the relationship between students' critical thinking traits and critical thinking skills. They also wanted to explore the connection between the students' profile (i.e. sex and academic strand) and the aforementioned variables. Thus, this study was conducted.

2.0 Methodology

2.1 Research Design

The research utilized the descriptive-correlational survey as a research design. The descriptive nature was used to gain information on the students' critical thinking disposition and describe their critical thinking skills. Also, the descriptive process would go beyond gathering and tabulation of data but also the interpretation of the meaning and significance of the elements to be described. On the other hand, the study was also correlational because it examined the relationship between the variables identified in the study.

2.2 Research Locale

The study focused on Siquijor's Catholic senior high school programs, which included Assisi High School, Inc., Ave Maria Academy, Carmelite College of Siquijor, Inc., Saint Isidore, the Farmer Catholic School, Saint John High School, and Saint Vincent Academy. These private institutions under the Diocese of Dumaguete are well-known for providing high-quality Catholic education. Carmelite College of Siquijor, managed by the Carmelite Sisters of Our Lady, is the island's only Catholic higher education institution, with an average class size of 27. All these schools have the necessary facilities, including computer laboratories and science labs, and adhere to the Department of Education's safety and usability standards.

2.3 Research Participants

The respondents of the study were the Grade 12 students enrolled in the Catholic institutions during academic year 2022-2023. Out of the 188 total students from six schools, 130 were taken as respondents. These students were chosen using the systematic sampling design in which every second student in the list was chosen as part of the study.

2.4 Research Instrument

The study used two sets of standardized survey questionnaires. The first set is for assessing critical thinking traits. This tool was adopted from Boonsathirakul and Kerdsonboon's (2021) study, "The Investigation of Critical Thinking Disposition among Kasetsart University Students." The second set, the Critical Thinking Assessment-Scale Short Form, was adopted from the work of Payan-Carreira et al. (2022) in their study, "Development and Validation of a Critical Thinking Assessment-Scale Short Form." These survey questionnaires have three sections. The first part is the disclosure statement, and the second part contains the students' profiles in terms of sex and academic strand. The third part is intended to assess the learners in the areas of critical thinking traits and skills

such as (Tohir et al., 2021) interpretation, analysis, evaluation, inference, explanation, and self-regulation when presented with mathematical situations.

A dry run was conducted to test the reliability of the instrument with students carefully identified to ensure they were not among the target respondents. The results yielded a reliability coefficient of 0.62 for truth-seeking, open-mindedness (0.57), analyticity (0.80), systematicity (0.77), critical thinking self-confidence (0.83), and 0.65 for inquisitiveness as well as cognitive maturity. Items for truth-seeking, open-mindedness, critical thinking self-confidence, inquisitiveness, and cognitive maturity scored less than 0.7, so these constructs' items were revised. The questionnaire was also presented to experts in mathematics for content validity. These experts are School heads, Mathematics Coordinators, and Master teachers in mathematics with vast experience in the field. Their suggestions were considered in the refinement of the questionnaire with permission from the authors to modify the questionnaire in the Philippine context.

However, the Critical Thinking Assessment-Scale Short Form (Payan-Carreira et al., 2022) was not subjected to a dry run because the study's confirmed factor analysis has established the validity and reliability of the corresponding six-factor empirical framework of the Critical Thinking Assessment-Scale Short Form using Cronbach alphas for the overall instrument and the six scales were both high for the overall scale of 0.969 and 0.750–.965 for the six factors. The following values were obtained: 0.772, for interpretation, 0.888 for analysis, 0.858 for evaluation, 0.905 for inference, 0.853 for explanation, and 0.905 for self-regulation.

The researchers utilized Multiple Linear Regression Analysis to examine the relationship between students' critical thinking traits and their critical thinking skills. They employed a Chi-Square Test to determine the relationship between students' profile, based on sex and academic strand/track, and (a) their level of critical thinking traits and (b) their critical thinking skills. Additionally, the Weighted Mean was used to assess (a) the level of students' critical thinking traits and (b) the level of their critical thinking skills.

2.5 Data Gathering Procedure

After the consolidation, all the corrections and suggestions from panel members and incorporated into all inputs for the improvement of the study. A letter of request to conduct the study was sent to the School President of Carmelite College and the School Superintendent of the Diocesan Schools through the respective school principals of Assisi High School, Ave Maria Academy, Saint Isidore, the Farmer Catholic School, Saint John High School, and Saint Vincent Academy.

The list of identified students was obtained from the registrar's office with the permission of the school principal. The respondents and their parents also received a consent letter. Furthermore, the conduct of orientation was provided to the respondents before the distribution of questionnaires. During distribution, the researcher explained to the students the goal and importance of the study. The questionnaires were retrieved immediately after the students were done answering the questionnaire items. Confidentiality was strictly observed throughout the process.

2.6 Ethical Considerations

Throughout the study, the researchers exercised all necessary ethical considerations. Because humans were chosen as study participants, information was kept confidential. The researchers also made sure to protect the dignity and privacy of the respondents and minimize potential risks. The researchers followed the ethical protocols established by Foundation University's Ethics Committee. Consultation was pursued to ensure that the research topic would be clearly sound, significant, and ethically correct. The researchers asked the participants to sign the disclosure statement after they had fully understood the risks and benefits of the study.

3.0 Results and Discussion

3.1 Students' Critical Thinking Disposition

Table 1 shows the results of the critical thinking traits of the senior high students. The students have a "high" level of critical thinking disposition with 4.84 weighted mean. This result is affirmed by Sellars et al. (2018), who found that critical thinking disposition does indeed develop over time through a combination of experience, education, practice, feedback, exposure to diverse perspectives, open-mindedness, and intellectual curiosity. Rowe (2018)

also asserted that by actively cultivating these factors, individuals can enhance their inclination and ability to think critically in various contexts and domains.

Table 1. Descriptive statistics of students' critical thinking disposition (n = 130)

Areas	Mean	Interpretation	Level
Truth-Seeking	4.79	Agree	High
Open-Mindedness	4.86	Agree	High
Analyticity	4.51	Agree	High
Systematicity	4.94	Agree	High
Critical Thinking Self-Confidence	4.69	Agree	High
Inquisitiveness	5.03	Agree	High
Cognitive Maturity	5.07	Agree	High
Overall	4.84	Agree	High

This result supports Ahmad and Duski's (2020) claim that critical thinking has been established as a primary goal in the academic field and one of the characteristics of a senior high school graduate. As noted by Celik and Ozdemir (2020), academic achievement can influence critical thinking disposition. Cruz, et al. (2020) also stated that academic achievement must be reinforced through experience, lifelong learning, and consistent effort.

Furthermore, systematicity ($w\bar{x}=4.94$) and analyticity ($w\bar{x}=4.51$) are both "highly" achieved by the students with the provision to engage in problem-solving procedures in a systematic manner throughout the process. In the same vein, open-mindedness ($w\bar{x}=4.86$), truth-seeking ($w\bar{x}=4.79$), and critical thinking self-confidence ($w\bar{x}=4.69$) are all "high," indicating that students are naturally inclined to employ critical thinking when making decisions. The findings indicate that students are better prepared to seek new knowledge, engage critically with information, and adapt to new challenges and opportunities throughout their lives. According to Cui et al. (2021), integrating systematicity and analyticity may indicate how students utilize reasoning and evidence to solve issues using a systemic mindset.

3.2 Students' Critical Thinking Skills

Table 2 unveils the student's critical thinking abilities. This result is based on the cognitive abilities that define the ideal thinker. Students' critical thinking skills are seen to be generally "high" with an overall composite weighted mean of 4.45. According to Facione (2015), critical thinking skills are useful in a variety of contexts, including problem-solving, decision-making, and intellectual development.

Table 2. Descriptive statistics of students' critical thinking skills (n = 130)

Areas	Mean	Interpretation	Level
Interpretation	4.53	Usually	High
Analysis	4.42	Usually	High
Evaluation	4.49	Usually	High
Inference	4.44	Usually	High
Explanation	4.21	Frequently	Somewhat High
Self-Regulation	4.59	Usually	High
Overall	4.45	Usually	High

3.3 Relationship between Students' Critical Thinking Disposition and Skills

The data in Table 3 reveal the relationship between the students' critical thinking disposition, which is measured by seven (7) constructs and their overall critical thinking skills. Using Multiple Linear Regression Analysis, it is revealed that the F-test significance or overall p-value (0.000) is less than the level of significance (0.05). This means that the sample data provide enough evidence to reject the null hypothesis for the entire population. This signifies that some of the explanatory or independent variables (7 constructs of critical thinking disposition) are significant predictors of students' overall critical thinking skills. Based on the regression output, it is revealed that students' critical thinking dispositions in the following constructs are significant predictors of their overall critical thinking skills: truth-seeking ($p = 0.007$); open-mindedness ($p = 0.028$); and critical thinking self-confidence ($p = 0.034$).

Table 3. Multiple linear regression analysis for the relationship between the critical thinking disposition and thinking skills (n = 130)

Variables	Coefficients	SE	t Stat	p-value
Intercept	-0.617	0.569	-1.084	0.280
Truth-Seeking	0.320	0.116	2.765	0.007
Open-Mindedness	0.276	0.124	2.225	0.028
Analyticity	-0.101	0.107	-0.945	0.346
Systematicity	0.216	0.118	1.823	0.071
Critical Thinking Self-Confidence	0.256	0.120	2.140	0.034
Inquisitiveness	0.014	0.134	0.103	0.918
Cognitive Maturity	0.061	0.114	0.529	0.598
R = 0.655				
R ² = 0.429				
adjusted R ² = 0.396				
F-ratio = 13.089				
p-value = 0.000 (significant)				
Level of significance = 0.05				

Furthermore, the coefficients of these 3 constructs are all positive, signifying that the students who manifest higher skills in truth-seeking, open-mindedness, and critical thinking self-confidence dispositions tend to attain higher critical thinking skills. In this regard, truth-seeking, open-mindedness, and self-confidence serve as a foundation for other critical thinking behaviors such as inference, interpretation, evaluation, and explanation, as well as transversal competence, which intersects and encompasses all critical thinking skills. Attard (2020) concurs with this conclusion, stating that a person can search for truth in the interconnectedness of events and achieve comprehensive understanding because the present world is an era of information explosion and so people must find a way to screen information.

Similarly, the findings of Gogus, Göüş, and Bahadır (2019) found a positive association between critical thinking skills and four sub-dimensions of critical thinking disposition: analyticity, systematicity, self-confidence, and inquisitiveness. Specifically, evaluation is positively correlated with systematicity. According to Changwong, Sukkamart, and Sisan (2018), critical thinking is a higher level of reflective thinking that involves individuals becoming more aware of their perceptions, feelings, actions, and decisions, and according to Erdoğan (2019), what they do, and focusing on deciding what to do and what to believe.

Meanwhile, other constructs of critical thinking dispositions (analyticity, systematicity, inquisitiveness, and cognitive maturity) do not significantly relate to the overall critical thinking ability of the students (all p-values > $\alpha = 0.05$). The prevailing result suggests that other factors could predict the specified critical thinking disposition constructs. As emphasized by Pu. et al. (2019), the dominant viewpoint in any field, critical thinking skills and dispositions are all positively related to internal motivation to think.

3.4 Relationship between Students' Profile and Their Critical Thinking Disposition

Table 4 indicates the data in identifying the relationship between the profile of the students and their overall critical thinking disposition. Using Chi-Square Test (χ^2), it is identified that there is a significant relationship between the sex and the overall critical thinking disposition of the students ($p = 0.008 < \alpha = 0.05$). The values of the weighted means suggest that female students ($w\bar{x} = 5.00$) display higher overall critical thinking disposition than their male counterparts ($w\bar{x} = 4.72$). One possible explanation for the gender difference in critical thinking disposition is that female students tend to be more critical (Sk & Halder, 2020) and male students are less motivated to learn than female students (Ahmad & Duskri, 2018).

Table 4. Chi-Square test for the relationship between the students' profile and critical thinking disposition (n = 130)

Variables	χ^2	df	p-value	Decision	Remark
Sex and Critical Thinking Disposition	9.73	2	0.008	Reject H_0	Significant
Academic Strand and Critical Thinking Disposition	21.53	4	0.000	Reject H_0	Significant

Level of significance = 0.05

Another possible explanation is that female students outperform male students on average in secondary school, as revealed in the study by Marc Jackman and Morrain-Webb (2019). A similar finding was also manifested in the study of Fitriani et al. (2018), which showed that the critical thinking disposition of female and male students

differs in several components, including inquisitiveness, maturity, self-confidence, and open-mindedness. Female students outperformed males in composite inquisitiveness and maturity, while males outperformed females in self-confidence and open-mindedness. The Analyticity disposition component has a dominant correlation in all components of male and female critical thinking disposition. However, Sk and Halder (2020) have found that gender had no significant moderating effect on emotional intelligence and critical thinking disposition.

The table also reveals that the students' academic strands are being grouped. This is done to satisfy the assumptions of the use of the Chi-Square Test. As shown, the strands are grouped according to their competencies wherein Accounting, Business and Management (ABM) and Electrical Installation and Management (EIM) are grouped with the idea that they are more on the business and entrepreneurship strand. Science, Technology, Engineering and Mathematics (STEM) and Technical Vocational Livelihood (TVL) are also grouped since they are more focused on skill development in terms of communication, critical thinking, body coordination, tool savvy, troubleshooting, and safety, while Humanities and Social Sciences (HUMSS) and General Academic Strand (GAS) strands focus on the study of human behavior and societal changes, and analysis of arts, culture, literature, and politics. With this grouping, the Chi-Square Test yields a significant relationship between the students' strands and their overall critical thinking disposition.

The data further indicate that the STEM and TVL groups have the highest critical thinking dispositions among the other two groups—the ABM and EIM; and the GAS and HUMSS groups. Although the requirements for the humanities and social sciences differ from those for science, technology, engineering, and mathematics, critical thinking is considered essential for both.

The STEM approach to contemporary teaching and learning is critical to effective, relevant learning experiences and profound knowledge that can connect STEM and TVL disciplines. Indeed, both students and teachers share equal responsibility for achieving better quality outcomes, particularly in HOTS. As a result, Baharin, Kamarudin, and Manaf (2018) asserted that, with the support of technology innovation, the STEM instructional method should incorporate problem-solving, creative thinking, disposition, and analytical reasoning that have the potential to enhance HOTS among students.

3.5 Relationship between Students' Profile and Their Critical Thinking Skills

Table 5 reflects that the sex of the students is not significantly related to their critical thinking skills ($p = 0.078 > \alpha = 0.05$). This means that regardless of their sex, the students manifest the same level of critical thinking skills. However, previous research in the field suggested that gender influences critical thinking skills. This is because female students differ from male students in terms of their understanding, fascination, and acquisition of styles. Female students were more engaged in their learning than male students (Bhagat & Chang, 2018; Daher et al., 2021; Yang et al., 2018). Gender disparities in the scientific process, skills, and critical thinking have an impact on students.

Table 5. Chi-Square test for the relationship between the students' profile and critical thinking skills ($n = 130$)

Variables	χ^2	df	p-value	Decision	Remark
Sex and Critical Thinking Skills	6.82	3	0.078	Fail to reject H_0	Not significant
Academic Strand and Critical Thinking Skills	16.57	6	0.011	Reject H_0	Significant

Level of significance = 0.05

The table further shows that the academic strand of the students is significantly related to their critical thinking skills ($p = 0.011 < \alpha = 0.05$) with Science, Technology, Engineering and Mathematics (STEM) and Technical-Vocational Livelihood Track (TVL) groups manifesting the highest weighted mean than the other two groups of students, namely the ABM and EIM group; and the GAS and HUMSS group. STEM and TVL students benefit from the outcome because their content knowledge has a strong real-world application, and the students are well prepared for the modern era. This strand, in contrast to the Humanities and Social Science (HUMSS) and General Academic Strand (GAS) strands, focuses on human behavior and societal changes, as well as arts, culture, literature, and politics. While Accounting, Business and Management (ABM) and Electrical Installation and Management (EIM) add value to client management and the delivery of high-quality services and products. On the contrary, Gepila et al., (2022) claimed that ABM students' thinking skills in terms of remembering and creating

are average. They also asserted that the students have poor thinking skills in terms of comprehension, application, analysis, and evaluation, and that the majority of students have poor critical thinking abilities.

On the other hand, Farillon (2022) found that Science, Technology, Engineering and Mathematics (STEM), General Academic Strand (GAS), and Accounting, Business and Management (ABM) students learned to reason well, developed critical thinking skills, and performed well in Science. This demonstrates that the students have a strong understanding of Science, which will be useful when explaining various phenomena and Science-related problems. These students may excel at scientific argumentation, discourse, and in-class debates. This could imply that whatever they critically considered demonstrates scientific reasoning and critical thinking skills. This finding did not corroborate with Ramos (2018) who posited that students enrolled in both General Academic Strand (GAS) and Technical Vocational (TECHVOC) at the level of senior high schools failed to demonstrate the necessary thinking and reasoning level skills.

Furthermore, Dumitru (2019) believes that studying the arts, humanities, and culture is the best way to develop critical thinking skills. For example, learning philosophy embodies critical thinking; literature teaches us how to interpret, analyze, and evaluate; and history teaches us to be curious and critical. Meanwhile, archaeology sharpened students' truth-seeking and systematic skills, while the arts fostered open-mindedness, self-confidence, and cognitive maturity. Cultural studies provide explanation, self-regulation, and open-mindedness. All of these specific fields foster the growth of thinking skills and attitudes. It follows then that critical thinking is inherent in the social sciences; these domains have substantial contributions to the formation of critical thinkers. Overall, these findings contradict Prinsloo's (2018) claim that comparing critical thinking patterns across music and art students against science and engineering students indicated comparable critical thinking processes.

4.0 Conclusion

The findings show that critical thinking traits and thinking skills are closely related concepts that significantly impact an individual's ability to think critically. Teachers can help students improve their communication skills by employing strategies that promote clarity, coherence, and effectiveness. Teachers can also help students improve their explanatory skills by fostering a supportive learning environment where they can feel confident and empowered to express their ideas. Designing cohesive activities that promote active engagement and integrate content and critical thinking skills into academic studies enables students to learn collaboratively, share different points of view, and participate in meaningful discussions. Furthermore, an interdisciplinary approach is critical for addressing the complex challenges of the twenty-first century and advancing knowledge in different fields. This approach promotes collaboration, innovation, and comprehensive understanding; all of these are critical for future research, education, and problem-solving. Researchers propose replicating the study in public schools to compare thinking skills and traits across various academic disciplines to identify specific strengths, areas for improvement, and disparities among diverse student populations.

5.0 Contributions of Authors

Fritzie F. Pagente was responsible for conceptualizing the topic, gathering data, encoding, and editing, while Dr. Maria Chona Futalan, her supervising adviser, handled data analysis, proofreading, and additional editing.

6.0 Funding

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7.0 Conflict of Interests

The authors declared that there has no conflicts of interest as far as this study is concerned.

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Exploring Literature Teaching Challenges Among Secondary Level School Teachers in a Rural Area of an English as a Second Language (L2) Country

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Abstract. This study aimed to address the need for more research in literature teaching, especially in an English as a Second Language (L2) context, and to consider often overlooked micro-geographical areas to improve education quality. Supporting Sustainable Development Goal (SDG) number four, this qualitative research explored the challenges faced by L2 public secondary school literature teachers (n=30) in Southern Nueva Vizcaya, Philippines. Data were collected through semi-structured interviews and focus group discussions (FGDs). Participation was voluntary, with informed consent obtained, and confidentiality and anonymity ensured. The study found that teachers faced challenges such as low English proficiency among students, negative student attitudes, limited instructional time, and insufficient resources and materials. These findings suggest the need for significant changes in education to enhance language education in L2 countries, provide activities to improve students' attitudes towards literature, allocate adequate time for reading, and supply necessary learning materials and resources. Future research could involve a larger sample of literature teachers and compare the challenges of teaching literature in L1 and L2 contexts, as well as in urban and rural areas.

Keywords: Literature teaching; Secondary level; Rural area; English as a second language.

1.0 Introduction

Teachers are the primary pillars that attract students to the field of literature. They consider themselves responsible for making their students love literary pieces to gain knowledge. Presently, literature serves as a significant grammatical stimulus for learners and a beneficial source of enthusiasm in second language courses (Baca et al., 2010). In numerous ways, literature education aids in developing students' English proficiency. Concentrating on a text's linguistic characteristics and structures may enhance one's language abilities. An enhanced understanding of culture can result from exploring societal issues through the lens of a distinct culture (Yimwailai, 2015).

Under the K-12 curriculum of the Philippines for junior high school, teachers are required to teach Philippine literature, Afro-Asian literature, Anglo-American literature, and World literature to grades 7-10, respectively. While in senior high school, 21st Century Literature from the Philippines and the World is taught to grade 11 students. As mandated by the "Basic Education Program of 2013," Republic Act No. 10533 stipulates that the Department of Education (DepEd) is obligated to adhere to a curriculum that integrates a variety of pedagogical approaches, including constructivist, inquiry-based, reflective, collaborative, differentiated, and integrative methods. Therefore, it is imperative to expose the difficulties that the teachers are encountering to devise more effective strategies to resolve them and achieve the department's objectives regarding the English curriculum.

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As teachers embark on delivering quality literature teaching, they continue facing challenges in teaching. While society as a whole is recovering, the pandemic is still influencing students' schooling. Closing schools due to the pandemic causes learning deficits beyond the crisis period. It resulted in an immeasurable loss of education.

Ugwu (2022) revealed some problems associated with effective literature education. These include an unfavorable learning environment, an alarming textbook shortage, limited language ability, misunderstandings about the importance of reading, a demanding workload, and a lack of parental support. Some schools lack literature instructors.

In the context of L2 countries such as the Philippines, for instance, empirical observations, especially in public schools, show that students and teachers sometimes complain about the lack of classrooms and textbooks. Considering the variety of languages in L2 countries, the use of English may also pose difficulty in learning literature written in English. This is evident from the findings of various studies about the connection of language and literature learning. Students may need help understanding the language used in the materials they were studying (Isa & Mahmud, 2012; Ghazali et al., 2009; Mustakim et al., 2014; Sanub & Yunus, 2017; Vethamani & Nair, 2009). According to two studies by Ghazali et al. (2009) and Vethamani and Nair (2009), students liked reading and studying short tales since they were brief and the author's language was easy to understand. On the other hand, students detested learning poetry since the language is so complex that they find it uninteresting (Isa & Mahmud, 2012; Ghazali et al., 2009).

Additionally, Ling and Eng (2016) contended that teaching low-proficiency learners would be challenging because they needed help understanding the concepts in the literary text. They also observed that students' lack of English proficiency impacted instructors' capacity to engage in more linguistic activities in class. Reading literature for enjoyment was difficult since learners needed help understanding the material. It prevented learners from speaking out and sharing their ideas and opinions. In addition, they claimed that learners would not learn if they showed little enthusiasm for learning. They also discovered that 37.5 percent of teacher respondents considered it challenging to teach literature because they needed to cover all of the literary components within a specific teaching time frame.

Teachers encounter challenges in completing cognitive tasks that require active participation from students when they remain passive recipients of input (Awang et al., 2010). Teachers who are less innovative and engaging may also render students passive and incapable of critical thought (Hwang & Embi, 2007). Furthermore, Adeyemi's (2012) research on the difficulty of teaching and studying English literature in an L2 setting indicated that instructors needed help with their students' writing. The research also claimed that reading is a crucial aspect that improves writing while growing literacy abilities. Students can only produce decent sentences or paragraphs if they read infrequently. According to Muhammad et al. (2016), many students need help to get a sufficient and reliable source of knowledge.

The reviewed literature points to a deeper problem in literature classrooms that requires further investigation, particularly in the L2 context. A little study has yet to be published on the lenses of L2 junior and senior high literature teachers in the Philippines. Likewise, it is also essential to consider micro-geographical areas, limiting generalizability, like in the provinces of the Philippines (Castillo, 2023; Castillo, 2024). Narrowing down the lenses into the challenges in teaching literature, particularly in the schools situated in the provinces, could enhance curriculum and instruction at the national level and, later on, in the context of other L2 countries where literature is also important.

Furthermore, as a support to Sustainable Development Goal (SDG) number 4, this research was aimed to help improve the quality of education by unveiling challenges of L2 teachers in public secondary schools in Southern Nueva Vizcaya. Although the study was conducted in three categorized as large schools in the Philippines, the findings and the implications could be of significance, particularly to other L2 countries teaching literature and English subjects in general.

2.0 Methodology

This study utilized qualitative research (Creswel, 2014). Qualitative research entails gathering and evaluating non-numerical data to comprehend concepts, views, or experiences. It has a variety of methods, but the focus is on keeping rich meaning when interpreting data (Bhandari, 2020). This design was vital in understanding the challenges teachers encountered in teaching literature among L2 learners.

The participants were the thirty (30) L2 public secondary school teachers of Southern Nueva Vizcaya, Philippines. They were purposively taken as participants based on the inclusion criteria set: (1) L2 teacher in a public secondary school; (2) must be a permanent L2 teacher under the Department of Education (DepEd); (3) must be teaching literature during academic year 2021-2022; (4) must be teaching in a large school category under DepEd; and (5) must be willing to participate. The locale was chosen since few studies have been conducted considering rural areas, particularly provinces and towns away from the cities/capital.

A semi-structured interview was conducted with the participants. Three research experts and three English major teachers validated the interview questions. The interview questions in the guide targeted the challenges the teachers encountered in their teaching of literature. In gathering pertinent data, the researcher sought permission to perform the study by filing a formal request letter to the Office of Schools Division Superintendent of Nueva Vizcaya, Philippines. After the University and the SDO office had checked the ethical side of the methods and processes, the ethical clearance and the permit to conduct were released. The researcher personally conducted the semi-structured interview. The research's purpose, aims, and significance were explained to the participants before the interview proper. They were asked to sign the informed consent. Their anonymity and the confidentiality of their responses were guaranteed. They were also encouraged to be truthful in their responses to ensure the study's results and conclusions were reliable and valid.

The data gathered were subjected to thematic data analysis using the framework of Braun and Clarke (2022). The responses about the challenges were initially coded; preliminary themes were made from the codes. After all the codes were themed, the themes were defined and refined to better operationally describe the challenges the participants faced based on the environment or context where the study was conducted. Focus Group Discussions were also conducted to crystallize the data gathered and ensure that the data interpretations were reliable. Peer member checking was done, and clinical investigators were involved in validating the coding and the theming process to establish the trustworthiness of the findings and interpretation.

3.0 Results and Discussion

The data show that the respondents faced numerous challenges in teaching literature. Generally, their responses were themed into low English language proficiency, negative attitude of students, short time frame, and lack of materials and resources.

Theme 1: Low English Language Proficiency

This theme appeared to be most frequent in the participants' answers since some students are believed to be not proficient yet in using and understanding the English language, making it a factor in the success of literature teaching-learning.

Participant 1: *"The level of English ability of the students is not high. Students are hesitant to speak or write in English."*

Participant 4: *"Focusing on the linguistic features of a text for me is challenging since students are not too capable yet in using the English language."*

Participant 16: *"As a Grade 7 teacher, I consider very challenging is to teach the students who lack vocabulary and English usage."*

Participant 26: *"Students with low English proficiency do not have the complex skills needed to read literary texts, and as a teacher, it is very challenging to teach these students."*

Participant 30: *"Some of the students choose not to participate if not given the chance to express themselves in their local dialects, and that's a challenge to me on how I will engage them."*

The participants' remarks suggest that low English language proficiency hinders quality literature teaching and learning. One specific challenge under this theme is the lack of vocabulary or complexity of the linguistic features.

The lack of vocabulary may imply difficulty understanding the words in the literary text. If the words or linguistic features are too complex for the students, teachers may find it difficult to teach the literary text, regardless of the genre. Moreover, because the students have a low proficiency in the English language, they become hesitant in speaking and writing. This may hinder them from participating in class discussions and in activities about the text read.

Another challenge is the production of language during activities or recitations. In literature teaching-learning, it is essential to process the guide questions to enhance the student's understanding of the text read. However, in the context of the participants, since in the earlier years of education (from K-3) in the Philippines, the mother tongue is used as a medium of instruction, the students become more comfortable using their mother tongue or the local dialects. In addition, though English is used as L2, the language at home is Tagalog, and the parents use other dialects.

Language proficiency in L2 is a challenge since literature has one common carrier: language. Students need help understanding the language to ensure comprehension of the text. Hence, there is a need for L2 countries such as the Philippines to consider crafting long-term plans to transform education in terms of language development among students in their earlier stages of schooling. While using the mother tongue or dialect enhances understanding and delivery of lessons, it is essential to note that English is a universal language and must be developed, not just taught through practice and application, especially in formal education. The failure to develop students' ability to use the language may hinder the delivery of quality education (SDG 4), particularly the success of the literature teaching-learning process.

This discovery substantiated the assertions made by Ling and Eng (2016) that instructing students with low proficiency levels could prove challenging due to their inability to comprehend the terminology used in literary works. Students' inadequate English proficiency also impeded instructors' ability to engage in more excellent linguistic activity in the classroom. It was unthinkable for learners to read literary works for amusement due to their inability to comprehend the text. This discouraged learners from expressing their opinions and speaking up. Shoulder-challenged learners found certain textbooks' language challenging to comprehend, according to an additional finding by Mustakim et al. (2014) that corroborates the study's results.

Theme 2: Negative Attitude of Students

This theme refers to the students' perceptions toward a literary text, their interest in literature, and their teaching and learning of literature, which result in great challenges among L2 teachers. The students' behavior is a factor contributing to understanding the literary text taught by the participants.

Participant 2: *"Students are sometimes passive during the discussion. They show a little interest."*

Participant 3: *"Students are afraid to commit mistakes."*

Participant 6: *"What's challenging for me is how to sustain the love of students in reading and learning literature. They are not interested sometimes."*

Participant 8: *"The length is even more what they expected. This leads to loss of interest to continue learning,"*

Participant 10: *"They have low interest towards literature and that a challenge for me as a teacher."*

Participant 16: *"They don't listen sometimes because the literary text is not interesting to them. That makes it a challenge on my part as their literature teacher."*

Participant 19: *"Students also have anxiety in answering question in front of group because they don't want to be embarrassed, and they don't have guts to answer."*

Participant 26: *"They hate listening to literary texts especially those are longer that would really kill the time."*

Another theme uncovered is the students' negative attitude. This hampers interactive teaching and learning of literature, and students' ideas are not expressed. Since students are passive, it is also challenging for the participants to maintain their attention. Another specific challenge the participants faced was the students' low interest in reading and reading material. This was because the material being read to/by the learners was not their area of interest, and the vocabulary was not familiar to them. With the students' less motivation to read and learn literature, the participants faced difficulty in conducting the planned activities for the day, as reflected in their Daily Lesson Log (DDL).

In addition, the participants believed that the students' anxiety also made delivering literature instruction difficult. Effective instruction is achieved when teachers and students participate in the discussion and activities. The higher the students' anxiety in expressing their ideas, the greater the challenge for the participants to involve students in the teaching and learning process. The problem of students' attitudes may create a less welcoming environment for questions and concerns and can make students focus on rote learning and memorization of literature content rather than sense-making and critical thinking. Thus, teachers need to develop students' interest in studying literature and encourage students to participate in the teaching-learning process. This implies the need to provide hands-on and interactive activities, considering the aim of the Philippine K-12 curriculum towards constructive, interactive, student-centered, and Outcomes-Based Education.

According to Ling and Eng (2016), students would only acquire knowledge if they were interested in learning. Teachers encounter challenges in completing cognitive tasks that require active participation from students when they remain passive recipients of input (Awang et al., 2010). Teachers who are less innovative and engaging may also render students passive and incapable of critical thought (Hwang & Embi, 2007). Furthermore, it has been found through numerous studies that students hold an unfavorable view of the texts utilized in literature classes (Isa & Mahmud, 2012; Ghazali et al., 2009; Naser & Aziz, 2017). Students found reading texts to be an unpleasant experience, according to Ghazali et al. (2009), because the subjects and topics were tedious, and the plot needed to be more relatable to them. The students perceived the writings as monotonous, making the narrative and characters excessively intricate to grasp.

Theme 3: Short Time Frame

The participants also disclosed this category as one of the challenges, albeit less frequently. The specific challenges to this included time constraints, the number of competencies to cover, and activities like small group discussions and role-playing.

Participant 10: *"What's challenging in literature teaching is the time."*

Participant 12: *"It takes time to elicit information because they lack vocabulary to express their answers."*

Participant 17: *"Because we have a lot of competencies to cover, teaching literature and activities like small group discussions, role playing, etc. are really posing great difficulty."*

Participant 25: *"In the JHS, the time to finish a lit lesson is also a challenge. We have a lot of competencies to cover targeting the different areas of English."*

Participant 27: *"We have limited time to teach our students the text so the objective must be attained immediately. Asking them to perform tasks like drama and role plays take a lot of time and preparation."*

The participants also found time challenging since they had to complete all of the week's competencies as outlined in the DepEd's Curriculum Guide (CG). Some of the activities, such as writing and role plays, needed much time in terms of preparation and execution. As a result, teachers need to emphasize time management to finish all the activities in the literature lesson and cover all the competencies charted for each week. Henceforth, there is a need to consider studying the arrangement of competencies as plotted in the CG.

According to a study by Ling and Eng (2016), 37.5 percent of teacher-respondents perceived the requirement to cover all literary components within a teaching schedule as a challenging aspect of literature instruction. Teachers may find that employing inquiring and prompting strategies effectively elicits responses from students, particularly those who have difficulty expressing themselves in their second language (L2). Divsar (2014) corroborated this, noting that educators, due to time and effort constraints, were hesitant to implement language-based approaches when instructing literature.

Theme 4: Limited Resources

The students' responses disclosed this category. Based on the participants' responses, the specific challenges are a need for gadgets, slow internet connectivity, and a lack of books and reference materials.

Participant 3: *"Not all can attend lecture sessions because they lack gadgets."*

Participant 5: *"Some students don't have a strong internet access making it difficult for them to reach out their classmates."*

Participant 13: *"Limited access to technologies,"*

Participant 27: *"There is a limited number of books that we can use in class."*

Participant 29: *"Aside from the books given, it is hard to find other reference books available for free."*

While teachers are expected to integrate ICT into the classroom, the reality could be very different. There are students who cannot afford and have no access to the internet and technology, let alone unfinished activities and unattended class discussions. Without addressing this concern, there is a risk of creating a generation ill-prepared for digital use. Hence, there is a call to emphasize the need of students for technology and internet accessibility in order to participate well in the lectures and activities asked in literature class.

It was discovered by Sivapalan and Ahman (2010) and Yunus and Suliman (2014) that integrating technology into literary classes had positive effects. Given that students like using technology for learning, these two studies recommend that professors use it in literary classes. Thus, educators need to remain current on current trends and develop technology-infused instructional practices to engage and cater to the tech-savvy youth (Hussin, 2018).

Participants also needed help due to the absence of books and reference resources. Teachers find it challenging to provide learners with resources, especially when considering the materials' copyright issues when duplicated. Ugwu's (2022) findings about the scarcity of textbooks were consistent. Although DepEd receives the most significant funding from the Philippine government, a strategic plan is still required to develop books with high-quality and relevant information that students may learn.

4.0 Conclusion

This study adds new information to the literature teaching and learning process in the context of rural schools in the Philippines. This study presents the challenges in literature teaching among L2 secondary level teachers, including low language proficiency, negative attitude of students, short time frame, and lack of resources and materials. The findings imply the need to recognize quality education in rural areas and how it must be transformed. As an L2 country, there is still a need to give attention to how language education may be delivered to achieve maximum student potential in terms of language use. Improving students' language proficiency would entail improving reading, understanding, and macro-skills. In addition, the findings also imply the need for innovative, interactive, and engaging activities. This will allow maximum participation, which will result in authentic and meaningful learning.

Further, while there is a shortage of time in the delivery of literature instruction, other studies may be conducted, especially on the plotting and time allocation of competencies stated in the CG. Lastly, in the context of the Philippines, since the highest budgetary allocation is given to DepEd, the department may find solutions to maximize the production of learning resources and books for students to use. They may also propose projects or studies focusing on strategic intervention materials that would help researchers and teachers.

Future research may be able to overcome some of the limitations of this study's methodology. Given that English teachers comprise the largest percentage of literature teachers, the study's emphasis may have justified the decision to examine this group of teachers in large schools. However, it is recommended that future investigations consider integrating a larger stakeholder base to have a deeper understanding of literature teaching-learning in the Philippine setting. Lastly, additional researchers can think about carrying out the same study with an emphasis on contrasting the difficulties associated with teaching and learning literature in L1 and L2 nations and cities and provinces.

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The author conducted the research, analyzed the findings, and finalized the article.

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7.0 Conflict of Interests

No potential conflict of interest

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E-government Implementation in Calamba Water District and Public Trust: Basis for Enhancement Program

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Abstract. The research comprehensively analyzed the relationship between the e-government implementation of Calamba Water District (CWD) and the level of public trust among the concessionaires. It also delved into the challenges faced by concessionaires in utilizing CWD e-government services and the factors influencing their trust in its implementation. The study employed a descriptive-correlational design and surveyed 397 CWD concessionaires in Calamba, Laguna, who had internet access and were actively engaged with CWD e-government services. Data collection was facilitated using a carefully selected research instrument and was analyzed using statistical treatments including simple mean, Four-point Likert Scale, standard deviation, and Pearson r. The research revealed a significant correlation between CWD's e-government implementation and the level of public trust among concessionaires. Specifically, the study revealed a substantial link between the level of e-government implementation in terms of ICT infrastructure, online services communication, human capital, privacy and security risks, ease of use, and usefulness of e-government services and public trust level among the concessionaires in terms of information, service, system quality, technology, and the government institution. It indicated that the higher the level of e-government implementation, the higher the public trust level among the concessionaires. Based on these findings, the study recommended an enhancement program to improve various aspects of the current e-government implementation of Calamba Water District. The proposed program focuses on addressing privacy and security risks, enhancing the user-friendliness of CWD e-government services, improving service quality related to ICT infrastructure and online communication, and enhancing the competency of CWD personnel. These enhancements are expected to bolster the overall program and ultimately increase public trust among concessionaires.

Keywords: E-government; Calamba Water District; Public trust; Concessionaires; Implementation.

1.0 Introduction

Governance is a system that includes principles usually supported by laws and regulations when managing an organization. It encompasses how an organization legally operates, directs, and holds stakeholders accountable. In the current generation, governance is more important than ever. This is because people tend to trust and look for someone with the authority to deliver, listen, and meet their changing needs. In doing so, e-government that uses technology has come into the picture.

As it is, technology continues to be relevant in people's daily lives. Almost everything is done online nowadays, and the use of Information Communication Technologies (ICTs) has become convenient in the service industry. Most agencies and institutions in the public sector are also now leaning towards technology-based services to extend further and deliver quality public service to their stakeholders. Electronic government (e-government) is one of the technology-based services that has been adopted in diverse parts of the world. Its purpose is to provide

government information on the web that is clickable and accessible anytime and anywhere for the stakeholders' convenience. It also aims to positively influence the government's service delivery and increase efficiency, transparency, and citizen participation. In this view, E-government used ICTs as a transformational support tool in advancing good governance.

In the Philippines, the House of Representatives (HOR) passed the E-Governance Act on March 6, 2023, with the aim of expediting public service delivery (Press and Public Affairs Bureau, 2023). The House Bill (HB) No. 7327, authored by House Speaker Ferdinand Martin G. Romualdez, was titled "An Act Institutionalizing the Transition of the Government to E-Governance in the Digital Age, Creating for the Purpose the Philippine Infostructure Management Corporation and Appropriating Funds thereof". Among its key objectives, HB No. 7327 sought to "promote the use of the internet, ICTs, and emerging technologies within and across government agencies to provide citizen-centric government information and services and improve the public trust and citizen participation in the government".

In Calamba Water District (CWD), e-government initiatives are being processed. CWD launched electronic collections through online-based platforms such as Landbank LinkBiz Portal and GCash in August 2020 and July 2021, respectively. These were launched to provide a convenient means of paying water bills and other fees online to their 66,108 concessionaires. A communication system in the form of text blasting, which aims to inform the concessionaires of their water bill due balances, disconnection water service interruption, and other announcements, has also been available since 2020. Moreover, the CWD website or online portal is already available for the different concerns of concessionaires since its launch in 2015. With these existing e-government initiatives, however, there still needed to be a question of public trust or whether the public had a positive perception and confidence about the actions and initiatives of the government to be correct and fair to them.

As previously mentioned, HB No.7327 laid out policies that can establish citizen-centric government information and services, resulting in improved public trust. The concept of public trust in e-government was the citizen's participation in using ICTs to acquire services and conduct transactions with the government. E-government implementation was said to be one of the government's solutions to maintain a positive image and relationship with the citizens through ICT.

The Philippines needed to catch up in terms of e-government implementation. Based on the United Nations (UN) E-Government Development Index 2022, the Philippines dropped 12 and placed 89th out of 193 UN members in the E-Government Survey. The index measured the readiness and capacity of national institutions to use ICTs to deliver public services (Business World, 2022). It was a concerning problem, mainly because the funding support for e-government in the Philippines was institutionalized in the national budget and was stated to amount to an average of Php 1 billion a year (Bajar, 2020). With this vast amount of public funds appropriated to e-government implementation, public trust should be ensured. Thus, it was essential to identify the status of Philippine government agencies in e-government implementation. To do this, the aspects of e-government implementation should be looked at. The extent of e-government implementation and its effect on public trust will be identified from then.

The primary objective of this research was to examine the correlation between e-government implementation and public trust, specifically in the context of Calamba Water District (CWD). As the main provider of water and sanitation services in Calamba, CWD's e-government initiatives hold significant implications for public trust. The insights gained from this study could serve as a cornerstone for CWD in developing an enhancement program that promotes e-government services and initiatives, thereby fostering public trust. This research also paves the way for future studies on e-government implementation in other government organizations.

2.0 Methodology

2.1 Research Design

The quantitative research design, specifically the descriptive-correlational approach, was strategically chosen for this study. It was instrumental in determining the relationship between the implementation of e-government in Calamba Water District (the independent variable) and the public trust level (the dependent variable). The use of descriptive analysis to depict the level of e-government implementation and discuss the level of public trust, and

correlational analysis to measure the association between these variables, was crucial. These analyses not only ensured validity for the measurements, tested the hypotheses, and interpreted the results, but also provided a comprehensive understanding of the data gathered from the respondents. The method chosen, the descriptive-correlational method, was selected with the intent to describe and discover the relationship between the variables of the study. It's important to note that this method, as Canonizado (2020) explains, does not manipulate the variables or seek a direct cause-effect relationship. Instead, it aims to understand, describe, and assess the statistical relationship between the independent and dependent variables of a study, which aligns perfectly with the objectives of this research. Furthermore, the research aimed to establish a link or relationship between variables. To achieve this, data relevant to the study, based on the behavior and feedback of the participants, were collected. This was done through the administration of survey questionnaires, ensuring that the data collected was directly from the participants, thereby enhancing the reliability of the study's findings.

2.2 Research Participants

The research was conducted in Calamba City, particularly in the Calamba Water District (CWD). A total sample size of 397 concessionaires was selected to be the respondents of this study. This study employed quota sampling to select the corresponding number of respondents. Quota sampling was a non-random technique for selecting representatives from the population subgroup that the researcher defines (Frost, 2022).

2.3 Research Instrument

This study adopted the survey instrument (Alkhateeb & Abdalla, 2021), which represented the level of e-government implementation of Calamba Water District from the concessionaires' perspective. Moreover, Capistrano's (2020) survey instrument was adopted to represent the level of public trust among concessionaires. These were adopted based on the review of related literature regarding e-government implementation and public trust. Permission to adopt the survey instruments of the authors above was asked for and given through email communication with these authors. The survey instrument consisted of two parts. The first part regarded the constructs of e-government implementation by Calamba Water District from the concessionaries' perspective, and the second part determined the level of the concessionaires' or public trust.

The results of the reliability and validity tests of the adopted research instrument items were tested using Cronbach's Alpha Coefficient and Confirmatory Factor Analysis, respectively. The reliability and validity of the research instrument items were tested using Cronbach's Alpha Coefficient. All of the coefficient values were above the cutoff value of 0.7, as determined by Nunnally (1978, as cited in Amirrudin et al., 2020), which is the acceptance measure for reliability.

Moreover, the adopted research instrument items were tested using Multigroup Confirmatory Factor Analysis. Following the standard rules of thumb on validity and reliability by Hair et al. (2020), acceptable average variance extracted (AVE>0.50) and composite reliability (CR>0.70) were achieved. All the coefficient results for each survey item were proven to be significant and acceptable.

2.4 Data Gathering Procedure

The survey questionnaires were administered to the respondents to retrieve ratings on the e-government implementation of CWD and public trust. These were distributed in two ways. Some were administered on the premises of CWD for those concessionaires who were approached and agreed to answer the questionnaire during office hours. In addition, most concessionaires were contacted through email to answer the questionnaire online via Google Forms. After the responses to the questionnaires were gathered, data was scored, tallied, and tabulated for presentation and analysis. With the expertise and guidance of the statistician, the necessary statistical treatments were done to the data to further analyze, interpret, and incorporate it to answer the study's problem statement and hypothesis.

2.5 Ethical Considerations

Ethical considerations were followed in the study. Furthermore, the study was executed following the five principles for research ethics as mentioned in the American Psychological Association's Ethics Code, which included beneficence and non-maleficence, fidelity and responsibility, integrity, justice, and respect for people's rights and dignity (Cherry, 2023). The survey questionnaire was made sure to be voluntarily answered by the

concessionaires. Respondents were also assured that their opinions and other personal information would be protected in compliance with the Data Privacy Act of 2012. The primary and secondary data gathered were treated with the utmost confidentiality, and the related studies of other researchers and authors were cited correctly.

2.6 Data Analysis

The Statistical Package for Social Sciences (SPSS) analyzed the data. The simple mean, four-point Likert scale, and standard deviation were used to measure the perception of Calamba Water District concessionaires on the level of e-government implementation and level of public trust. The Pearson Product-Moment Correlation was used to measure the strength and direction of the relationship between the level of e-government implementation in Calamba Water District and the level of public trust from the perspective of concessionaires.

3.0 Results and Discussion

3.1 E-Government Implementation Level In Calamba Water District as Assessed by the Concessionaire ICT Infrastructure

Table 1. Descriptive statistics of e-government implementation level in terms of ICT infrastructure

INDICATORS	MEAN	INTERPRETATION
1. Through the available ICT infrastructure used in the e-government services of Calamba Water District, I get the government information I need anywhere and anytime.	3.00	Implemented
2. The available ICT infrastructure supporting the e-government services of Calamba Water District is always reliable.	2.93	Implemented
3. The available ICT infrastructure supporting the e-government services of Calamba Water District is always secure.	3.02	Implemented
4. Digital information provided by e-government services of Calamba Water District is up-to-date.	2.88	Implemented
5. Overall, the available ICT infrastructures used by Calamba Water District to operate their e-government services are satisfactory.	2.98	Implemented
General Assessment	2.96	Implemented

Legend: 3.25-4.00 Strongly Agree - Fully Implemented (FI) 2.50-3.24 Agree - Implemented (I) 1.75-2.49 Disagree - Partially Implemented (LI) 1.00-1.74 Strongly Disagree - Not Implemented (NI)

As shown in Table 1, the indicator “The available ICT infrastructure supporting the e-government services of Calamba Water District is secure all the time” yielded the highest mean of 3.02, interpreted as Implemented. This underscores the robust security measures in place, providing a sense of reassurance. On the other hand, the indicator “Digital information provided by e-government services of Calamba Water District is up-to-date” received the lowest mean score of 2.88, interpreted as Implemented. The finding suggests that the e-government services of Calamba Water District are equipped with cyber security and protection software, which ensures that there are no harmful contents on any of their platforms, be it their website, emails, or online payment portals. Likewise, it ensures that the end-users are protected from the threats of hackers, data loss, phishing, malware, and ransomware, to name some. Calamba Water District is constantly improving its online services and offers its customers secure access to e-government information, enabling a reliable, transparent and efficient government through their ICT infrastructures.

In support of this, the studies of Kuldosheva (2021) and Glyptis et al. (2020) cited that ICT infrastructures were considered a critical factor in e-government implementation and its success. ICT infrastructures were the input and the main driver of e-government services. Its implementation would not be possible without it. In this regard, Sikaonga and Tembo’s (2020) findings in the study can be applied, “without the availability of infrastructure, the implementation of e-government will be considered as an unrealistic program”. It allowed government service delivery using information technology that included but was not limited to software, hardware, firmware, online payment networks, websites, computers, mobile phones, and the internet. This underscores the crucial role of ICT infrastructures in enabling efficient government services, highlighting their importance.

Similarly, the findings of Hazineh et al. (2022) support this as they stated that these infrastructures were considered vital for the sustainability of e-government services. Therefore, these should be present and available throughout its implementation. It should also be secure and reliable. To do that, a considerable budget should be dedicated and invested by the government to establish available strong ICT infrastructures that could encourage citizens to adopt and trust its services. As Maksimova et al. (2022) cited, investing in the hardware and software infrastructure that supported e-government platforms ensured secure end-user access and was thus considered a

key factor in “enabling reliable, transparent, and efficient government.” This emphasizes the necessity of government investment in strong ICT infrastructures, underlining its urgency and importance.

Online Services Communication

Table 2. Descriptive statistics of e-government implementation level in terms of online services communication

INDICATORS	MEAN	INTERPRETATION
1. E-government services of Calamba Water District offer prompt online communication to citizens.	2.90	Implemented
2. E-government services of Calamba Water District are responsive to citizens' requests.	2.92	Implemented
3. My online communication with the e-government services of Calamba Water District has always been good.	2.97	Implemented
4. I have no negative experiences in transacting online with the e-government services of Calamba Water District.	2.97	Implemented
5. In general, my transactions with the e-government services of Calamba Water District are satisfactory.	2.99	Implemented
General Assessment	2.95	Implemented

As shown in Table 2, online services communication under e-government was found to be Implemented ($\bar{X}=2.95$; $\sigma=0.59$) in Calamba Water District. The indicator “In general, my transactions with the e-government services of Calamba Water District are satisfactory” yielded the highest mean of 2.99, interpreted as Implemented. Meanwhile, the indicator “E-government services of Calamba Water District offer prompt online communication to citizens” had the lowest mean of 2.90, interpreted as Implemented.

This implies that the concessionaires generally agreed that their communication and transactions with Calamba Water District's e-government services are satisfactory. The standard deviation observed also indicates that the gathered data are consistent around the mean, and there is less data variability in the responses of the concessionaires. Survey results show that, in general, the online communication of the respondents with Calamba Water District has always been good and that they have no negative experiences reaching out to them online. It means that the Calamba Water District and its services are visible and accessible online to cater to the needs of their customers. The findings further infer that Calamba Water District's e-government services offered a communication that is responsive and interactive, making it easier for the concessionaires to engage with them online and get the services and information they need through their email, official website, and online payment portals.

In support, the OECD (2022) stated that the Internet was one of the many components of online services communication. Access to it was vital to get the full benefit of e-government services, and the concept of the digital divide was one of the many challenges of its implementation. The results of a previous study by Tejedo-Romero et al. (2022) specified that the quality of online service communication was important in e-government implementation because it made the government institution more visible and accessible to the citizens. This was also in line with the findings of Camilleri (2019), who noted the importance of online service communication in publicizing e-government services and sharing awareness with the citizens that they can transact and engage with them online. In this way, the customers would ultimately and positively view the government's public service delivery and strengthen their relationship and trust with the institution.

Human Capital

Table 3. Descriptive statistics of e-government implementation level in terms of human capital

INDICATORS	MEAN	INTERPRETATION
1. The Calamba Water District personnel have a reputation for considering citizens' interests when providing e-government services.	3.05	Implemented
2. Calamba Water District personnel have a reputation for being honest and truthful in carrying out and processing citizens' online transactions.	2.99	Implemented
3. The Calamba Water District personnel have the reputation of being competent and skillful in carrying out and processing citizens' online transactions.	3.01	Implemented
4. The Calamba Water District personnel have the reputation of being dependable in their services.	3.01	Implemented
5. Generally, the level of the provided e-government services through Calamba Water District personnel is satisfactory.	3.03	Implemented
General Assessment	3.02	Implemented

As shown in Table 3, the human capital under e-government in Calamba Water District was Implemented ($\bar{X}=3.02$; $\sigma=0.56$). As observed, the indicator “The Calamba Water District personnel have the reputation of taking the interests of the citizens into consideration with their e-government services” had the highest mean of 3.05, interpreted as Implemented. Meanwhile, the lowest mean value of 2.99 was observed for the indicator “The Calamba Water District personnel have the reputation of being honest and truthful in carrying out and processing online transactions of citizens,” also interpreted as Implemented.

The foregoing findings indicate that their interests include tasks and information they needed to accomplish and access anytime and anywhere concerning Calamba Water District services. For example, refund requests from concessionaires due to incorrect information they provided through the online payment portals require customer support to rectify it. These concerns were considered by the Calamba Water District personnel, who had the necessary knowledge, skills, and capability to assist and accommodate the concessionaires. The findings imply that the e-government services through CWD personnel were being executed in the concessionaires’ best interest.

In support, Kumajas (2021) stated that human capital, in terms of competency and capability to manage and process online transactions, was a governmental factor that held a crucial role in e-government implementation. According to them, the reason behind it was its relation to the level of trust and confidence of the citizens towards the government institutions and the belief that its workforce had the knowledge and capability to provide effective services in the best interest of the citizens. Relatively, Alshaher (2020) also mentioned that the perceived support quality, which translated to the overall customer support given by the service provider, was a human capital dimension that was important and critical in measuring e-government implementation.

Customer support quality of human capital, as Suardi (2021) and Alateyah et al. (2021) found in their respective studies, refers to the literacy and knowledge of the people involved in the e-government process on how to utilize its services to make the success of its implementation possible. The findings of Jacob et al. (2021) also suggested that the low levels of technology knowledge or computer literacy within the public service provider were one of the challenges of e-government reforms in developing countries.

Privacy Risks

Table 4. Descriptive statistics of e-government implementation level in terms of privacy risks

INDICATORS	MEAN	INTERPRETATION
1. My personal information given to Calamba Water District’s e-government services may be shared with other government agents to whom I do not want to provide the information.	2.17	Partially Implemented
2. Calamba Water District's e-government services may allow another party to access my personal information without my consent.	2.15	Partially Implemented
3. My personal information may be used in an unintended way by Calamba Water District through its e-government services.	2.14	Partially Implemented
General Assessment	2.15	Partially Implemented

As shown in Table 4, Privacy risks under e-government were Partially Implemented ($\bar{X}=2.15$; $\sigma=0.65$) in Calamba Water District. The indicator “My personal information given to Calamba Water District’s e-government services may be shared with other government agents to whom I do not want to provide the information” had the highest mean of 2.17, interpreted as Partially Implemented, while “My personal information may be used in an unintended way by Calamba Water District through their e-government services” acquired the lowest mean of 2.14, interpreted as Partially Implemented.

The findings imply that the concessionaires do not worry about losing control over their personal information when transacting online with Calamba Water District’s e-government services. Moreover, it means that Calamba Water District takes measures to ensure that the private information of its concessionaires is controlled and preserved so that sharing personal data with others is avoided. If personal data is to be shared with other government institutions, the concessionaires would need informed permission and consent to protect personal information’s confidentiality and availability.

As Pribadi et al. (2021) mentioned, privacy risks were important to consider in e-government implementation as they were critical characteristics that stakeholders looked at before using a technological system. This was because it specifically translated to preserving their personal information, not sharing it with others by anonymity, and including informed permission that was all in line with their right to control private property. Khan et al. (2020) also stated the importance of minimal privacy risks in e-services as it translated to stakeholders who were at ease and did not worry about losing control over their personal information.

Security Risks

Table 5. Descriptive statistics of e-government implementation level in terms of security risks

INDICATORS	MEAN	INTERPRETATION
1. Hackers may be able to intrude into Calamba Water District's e-government services and steal my personal information stored on the web.	2.34	Partially Implemented
2. It is not secure to send sensitive information to the e-government services of Calamba Water District.	2.26	Partially Implemented
3. Overall, it is not safe to send information to the e-government services of Calamba Water District.	2.30	Partially Implemented
General Assessment	2.30	Partially Implemented

As shown in Table 5, security risks under e-government services of Calamba Water District were Partially Implemented ($\bar{X}$ =2.30; σ =0.67). The indicator "Hackers may be able to intrude into e-government services of Calamba Water District and steal my personal information stored on the web" had the highest mean of 2.34, interpreted as Partially Implemented, while "It is not secure to send sensitive information to the e-government services of Calamba Water District" had the lowest mean of 2.26 verbally interpreted as Partially Implemented.

This means that the concessionaires discerned secure online services and connection with Calamba Water District and feel assured that these are safe enough to use. It suggests that security risks with Calamba Water District's e-government services are low. Moreover, it infers that Calamba Water District implemented technical procedures and measures to secure the concessionaires' online public service experience. It means that they consider the risks associated with the security of online connections and give importance to mitigating them by including the encryption mechanisms of their official website and online communication to protect their customers.

In support of the foregoing findings, Munyoka and Maharaj (2019) stated that risks relating to privacy and security were both major issues in implementing e-government. In the study of security in the context of e-government, the safety of the information and administrative data of both users and service providers was related to privacy and security. Privacy and security were both important to consider in online public service delivery because they assured users that they could confidently patronize the government and its services.

According to the book of Shah et al. (2022), risks regarding these two aspects were found to be the threats to e-government implementation. As stated in the research findings in the book, this was one of the reasons why organizations needed to ensure an efficient level of data privacy and integrity along with user authorization to have a level of security for all online transactions. It was suggested that providing e-government services with the necessary privacy and security measures and mechanisms was not optional; it was critical for its existence and success.

Ease of Use of E-government Services

As shown in Table 6, the Ease of use of e-government services of Calamba Water District was Implemented ($\bar{X}$ =2.92; σ =0.59). The indicator "It is easy to learn how to use e-government services of Calamba Water District" yielded the highest mean of 2.97, interpreted as Implemented. On the other hand, the indicator "The use of e-government services of Calamba Water District is flexible" received the lowest mean of 2.80, interpreted as Implemented.

This implies that the e-government services of Calamba Water District are easy to use, particularly in the aspect that these are easy to learn. It further infers that the e-government services of Calamba Water District have a user-friendly interface that creates a positive online experience for the concessionaires. Easy to learn online services of

Calamba Water District conserve the time it will take for customers to accomplish the tasks they need to do and create an opportunity to do more with these services.

Table 6. Descriptive statistics of e-government implementation level in terms of ease of use

INDICATORS	MEAN	INTERPRETATION
1. It is easy to learn how to use the e-government services of Calamba Water District.	2.97	Implemented
2. The use of e-government services of Calamba Water District is clear and understandable.	2.96	Implemented
3. The use of e-government services of Calamba Water District is flexible.	2.80	Implemented
4. Overall, the e-government services of Calamba Water District are easy to use.	2.95	Implemented
General Assessment	2.92	Implemented

The result was consistent with the findings of Balaskas et al. (2023), who stated that information provided by e-government that was flexible and user-friendly without any restrictions was referred to as perceived ease of use. According to Afable (2020), the success and significant benefit of e-government services were from the perspective of online customers in that they were easy to use and could conserve their time. E-government services that featured and offered ease to online users increased the public's trust in these services, as the findings of Li (2021) also suggested.

The Usefulness of E-government Services

Table 7. Descriptive statistics of e-government implementation level in terms of the usefulness of e-government services

INDICATORS	MEAN	INTERPRETATION
1. I can quickly access information online through the e-government services of Calamba Water District.	2.84	Implemented
2. E-government services of Calamba Water District facilitate transparency and accountability.	2.92	Implemented
3. E-government services of Calamba Water District are more effective and convenient than traditional services.	3.06	Implemented
4. E-government services of Calamba Water District are useful in meeting my purposes.	2.95	Implemented
General Assessment	2.94	Implemented

As shown in Table 7, the usefulness of e-government services of Calamba Water District was Implemented ($\bar{X}$ =2.94; σ =0.60). The indicator "E-government services of Calamba Water District are more effective and convenient than traditional services" gained the highest mean of 3.06, interpreted as Implemented. Meanwhile, the indicator "I can quickly access information online through e-government services of Calamba Water District" had the lowest mean of 2.84, interpreted as Implemented.

The foregoing results infer that the e-government services of Calamba Water District are deemed useful in accomplishing the services and tasks that concessionaires need to do at their most convenience. Particularly, concessionaires view online services as the most effective in meeting their needs and more convenient than traditional face-to-face or over-the-counter transactions. It also implies that the e-government services of Calamba Water District offer a public service delivery that contributes positive value and benefits the performance of tasks required by the concessionaires by providing the advances of interactive online services that can be accessed anywhere and anytime.

The importance of the usefulness of e-government services in its implementation was also supported by Elkheshin and Saleeb (2020), who stated that usefulness perceived by online users referred to e-government services that promoted effectiveness, performance, and community benefit. Customers patronized government services that added value to their tasks and interests. More so if it were to allow them access to online services and information wherever they wanted and order a product whenever it was suitable for them.

3.2 Public Trust to E-Government Implementation as Assessed by the Concessionaires *Information Quality*

As shown in Table 8, the concessionaires had High Trust ($\bar{X}$ =2.96; σ =0.60) in information quality relative to the e-government implementation of Calamba Water District. The indicator "I believe that the information provided by the online system of Calamba Water is relevant" had the highest mean of 3.07, verbally interpreted as High Trust. Meanwhile, the indicator "I believe that the information provided by the online system of Calamba Water District is up-to-date" had the lowest mean of 2.89, verbally interpreted as High Trust.

Table 8. Descriptive statistics of public trust level relative to e-government implementation in terms of information quality

INDICATORS	MEAN	INTERPRETATION
1. I believe that the information provided by the online system of Calamba Water District is up-to-date.	2.89	High Trust
2. I believe that the information provided by the online system of Calamba Water is relevant.	3.07	High Trust
3. I believe that the information provided by the online system of Calamba Water District meet my needs.	2.94	High Trust
4. I believe that the information provided by the online system of Calamba Water District is easy to read and understand.	2.97	High Trust
5. The information provided by Calamba Water District's online system is sufficient for the task at hand.	2.94	High Trust
General Assessment	2.96	High Trust

Legend: 3.25-4.00 Strongly Agree - Very High Trust (VHT) 2.50-3.24 Agree - High Trust (HT) 1.75-2.49 Disagree - Low Trust (LT) 1.00-1.74 Strongly Disagree - Very Low Trust (VLT)

It implies that the concessionaires perceived the quality of information being provided based on its appropriateness to their needs and interests. In this regard, the measure of their confidence level and trust was based on their expectation of information that was relevant, appropriate, and updated. As previously mentioned, concessionaires needed information daily, especially when it concerned them (e.g., water bill due dates).

In support of this, the study by Abu Shanab (2019) found the significance of information quality as a measure of public trust in the context of e-government implementation. The reason for its significance was that information was one of the products being provided by the e-government services. In line with this, Khan et al. (2021) found that the citizens' confidence and trust level in information quality was dictated by their perceptions of the fullness and correctness of e-government information.

Moreover, Janssen et al. (2021) stated in their study that information quality was important in measuring public trust in e-government implementation because there was an expectation that the information delivered was accurate, relevant, updated, sufficient, readable, and understandable. It was one of the important factors that affected and motivated the customers' use of e-government services.

Service Quality

Table 9. Descriptive statistics of public trust level relative to e-government implementation in terms of service quality

INDICATORS	MEAN	INTERPRETATION
1. I believe that the service provided by the online system of Calamba Water District responds quickly to my needs.	2.89	High Trust
2. I believe that the service provided by the online system of Calamba Water District is dependable.	2.94	High Trust
3. I believe that the service provided by the online system of Calamba Water District understands my needs.	2.91	High Trust
General Assessment	2.91	High Trust

As shown in Table 9, the concessionaires had High Trust ($\bar{X}=2.91$; $\sigma=0.57$) in service quality relative to the e-government implementation of Calamba Water District. The indicator "I believe that the service provided by the online system of Calamba Water District is dependable" incurred the highest mean of 2.94, verbally interpreted as High Trust. In contrast, "I believe that the service provided by the online system of Calamba Water District responds quickly to my needs" acquired the lowest mean of 2.89, verbally interpreted as High Trust.

The foregoing findings imply that they perceive the online services of Calamba Water District as trustworthy and reliable in meeting their needs. This means that they can perform the tasks that they need to accomplish through the help and convenience of these online services with the confidence that they can use them again for their subsequent transactions. In the study by Rasool et al. (2020), the service attributes such as reliability, availability, quality, and usability of the e-government service dictated the public trust in its implementation. In this regard, service quality was explicitly defined as the characteristic of e-government services in addressing customer needs and best interests. It was stated that the response of the online service provider needed not only to be prompt but also appropriate to their needs. According to Alneyadi et al. (2021), trust in service quality specifically measures citizens' confidence and trust in using e-government services. It was important for the service attributes of e-government implementation to be of high quality so that the citizens could support its services.

System Quality

Table 10. Descriptive statistics of public trust level relative to e-government implementation in terms of system quality

INDICATORS	MEAN	INTERPRETATION
4. I believe and trust the online system interface of Calamba Water District because it is easy to use.	2.96	High Trust
5. I believe and trust the online system of Calamba Water District because it is well-organized.	3.00	High Trust
6. I believe in and trust Calamba Water District's online system because it is easy to navigate and use to finish my tasks.	2.95	
7. I believe and trust that the online system of Calamba Water District can be accessed immediately.	2.85	High Trust
General Assessment	2.94	High Trust

As shown in Table 10, the concessionaires had High Trust ($\bar{X}=2.94$; $\sigma=0.60$) in system quality relative to the e-government implementation of Calamba Water District. The indicator “I believe and trust in the online system of Calamba Water District because it is well-organized” gained the highest mean of 3.00, which is interpreted as High Trust. Meanwhile, the indicator “I believe and trust in the online system of Calamba Water District can be accessed immediately” had the lowest mean of 2.85, interpreted as High Trust.

This indicates that the e-government system is working effectively and successfully because of the Calamba Water District's good organization. This includes the organization of online information and transactions and how they are presented to the concessionaires through the features and functions of the e-government system that are necessary for users to interact with.

This result aligns with Purwanto et al. (2020) findings that system quality was a transactional delivery attributed to public trust in e-government implementation. They noted that system quality was the completeness and convenience of features and functions necessary for users to interact with online services. Thus, it was considered an important factor that explained the building of trust in the context of e-government implementation. Moreover, Dmour (2021) noted the importance of how essential e-government technologies could make a system well-organized and provide better quality of public service delivery, which in turn enhanced public trust in the government. Therefore, it was vital for government institutions to consider the quality of the e-government system being implemented to gain the public trust and encourage them to engage with its services.

Technology

Table 11. Descriptive statistics of public trust level relative to e-government implementation in terms of technology

INDICATORS	MEAN	INTERPRETATION
1. I believe and trust that the internet has enough safeguards to make me feel comfortable using it to transact with Calamba Water District.	2.99	High Trust
2. I feel assured that Calamba Water District's legal and technological structures adequately protect me from problems on the internet.	3.01	High Trust
3. I feel confident that encryption and other technological advances on the internet make it safe for me to transact online with Calamba Water District.	3.01	
4. The internet is now a robust and safe environment to transact with government institutions like Calamba Water District.	3.08	High Trust
General Assessment	3.02	High Trust

As shown in Table 11, the concessionaires had High Trust ($\bar{X}=3.02$; $\sigma=0.60$) in technology relative to the e-government implementation of Calamba Water District. The indicator “I believe that the internet is now a robust and safe environment to make transactions with the government institution like Calamba Water District” gained the highest mean of 3.08, interpreted as High Trust, while the indicator “I believe and trust that the internet has enough safeguards to make me feel comfortable using it to transact with Calamba Water District” had the lowest mean of 2.99 interpreted as High Trust.

It implies that the concessionaires felt assured that they could safely transact and communicate with Calamba Water District e-government services that involve the use of the internet and other technology. They agreed that the internet is now a well-established, safe environment to make transactions with government institutions like Calamba Water District. It also suggests that the privacy and security measures of technology used in government

services of Calamba Water District are in place to assure the concessionaires that they are protected in using these services.

In support of this, the findings of Alawadhi (2021) highlighted that having trust in technology meant that the citizens believed that the technology used to facilitate e-government services was reliable and secure enough to ensure its integrity and maintain their confidence in it. They particularly stated that technology attributes that affected public trust included the e-government services' design, encryption, and the overall integrity of the used program. It was noted that trust in e-government implementation was specifically defined for government applications of technology and its safety measures, making it widely considered an enabler of the public's trust and adoption of e-government services.

Government Institution

Table 12. Descriptive statistics of public trust level relative to e-government implementation in terms of government institution

INDICATORS	MEAN	INTERPRETATION
5. I believe that Calamba Water District acts in the citizen's best interest.	2.93	High Trust
6. I believe that Calamba Water District is truthful, honest, and genuine in its dealings.	2.95	High Trust
7. I believe that Calamba Water District is competent and effective.	2.96	
8. Calamba Water District is reliable in meeting its obligations.	2.95	High Trust
General Assessment	2.95	High Trust

As shown in Table 12, the concessionaires had High Trust ($\bar{X}=2.95$; $\sigma =0.60$) in technology relative to the e-government implementation of Calamba Water District. The indicator "I believe that Calamba Water District is competent and effective" received the highest mean of 2.96, interpreted as High Trust. On the other hand, the indicator "I believe that Calamba Water District acts in citizen's best interest" had the lowest mean of 2.93, interpreted as High Trust.

The foregoing findings indicate that the concessionaires believe that the Calamba Water District, through its implementation of e-government services, is a competent government organization that effectively delivers high-quality public service to them. These imply that they highly trusted the government institution because it offered them a transformational and alternative service that could cater to their needs anywhere and anytime through online transactions and communications with the personnel's help.

This notion was supported by the findings of Bayaga et al. (2020), which stated that trust in the government was a measure of public trust in e-government implementation and the citizens' perceptions of the actual government institution implementing e-government. Relatively, Mahmood et al. (2020) found that citizens trust government based on its "performance, level of transparency, and real actions against officials who hinder the transformation of government services and associated initiatives." Trust in e-government, as stated by Pérez-Morote et al. (2020), was thus reflected in the government-to-citizen relationship, where citizens expected the government to act in a right and fair manner to them. It was, therefore, a reciprocal relationship between government agencies that provided public services and the citizens who expected the government institution and its workforce to be trusted.

3.3 Relationship between the Level of E-Government Implementation and Public Trust

There was a significant relationship between the level of e-government implementation in Calamba Water District and the public trust level among the concessionaires (Table 13). This was shown in the probability values of .000, which was less than the significance level of .05. Thus, the decision was made to reject the null hypothesis. The negative r values of -.506, -.489, -.500, -.441, -.451, -.433, -.404, -.465, and -.444 for variables privacy and security risks indicated a negative relationship. The positive R values are between 0.80 to 1.00, indicating a very strong positive correlation, while the negative R values are between -0.59 and -0.40, which indicate a moderately negative correlation.

Moreover, it indicates that there is a substantial link between the level of e-government implementation in terms of ICT infrastructure, online services communication, human capital, privacy and security risks, ease of use, and usefulness of e-government services and public trust level among the concessionaires in terms of information, service, system quality, technology, and the government institution. This also specifically indicates that the higher the level of e-government implementation, the higher the public trust level among the concessionaires.

Meanwhile, the negative r values of privacy and security risks suggest that when the risk associated with e-government implementation decreases, the public trust level increases and vice versa.

Table 13. Correlation analysis of the relationship between the level of e-government implementation and public trust

E-GOVERNMENT IMPLEMENTATION	PUBLIC TRUST	R-VALUE	P VALUE	REMARKS	DECISION
ICT Infrastructure	Information Quality	.899**	.000	Significant	Reject Ho
	Service Quality	.892**	.000	Significant	Reject Ho
	System Quality	.909**	.000	Significant	Reject Ho
	Technology	.818**	.000	Significant	Reject Ho
	Government Institution	.878**	.000	Significant	Reject Ho
Online Services Communication	Information Quality	.922**	.000	Significant	Reject Ho
	Service Quality	.932**	.000	Significant	Reject Ho
	System Quality	.916**	.000	Significant	Reject Ho
	Technology	.810**	.000	Significant	Reject Ho
	Government Institution	.895**	.000	Significant	Reject Ho
Human Capital	Information Quality	.880**	.000	Significant	Reject Ho
	Service Quality	.884**	.000	Significant	Reject Ho
	System Quality	.879**	.000	Significant	Reject Ho
	Technology	.890**	.000	Significant	Reject Ho
	Government Institution	.849**	.000	Significant	Reject Ho
Privacy Risks	Information Quality	-.506**	.000	Significant	Reject Ho
	Service Quality	-.489**	.000	Significant	Reject Ho
	System Quality	-.500**	.000	Significant	Reject Ho
	Technology	-.441**	.000	Significant	Reject Ho
	Government Institution	-.450**	.000	Significant	Reject Ho
Security Risks	Information Quality	-.433**	.000	Significant	Reject Ho
	Service Quality	-.404**	.000	Significant	Reject Ho
	System Quality	-.465**	.000	Significant	Reject Ho
	Technology	-.481**	.000	Significant	Reject Ho
	Government Institution	-.444**	.000	Significant	Reject Ho
Ease of Use of e-government services	Information Quality	.876**	.000	Significant	Reject Ho
	Service Quality	.922**	.000	Significant	Reject Ho
	System Quality	.922**	.000	Significant	Reject Ho
	Technology	.825**	.000	Significant	Reject Ho
	Government Institution	.846**	.000	Significant	Reject Ho
Usefulness of e-government services	Information Quality	.902**	.000	Significant	Reject Ho
	Service Quality	.939**	.000	Significant	Reject Ho
	System Quality	.886**	.000	Significant	Reject Ho
	Technology	.823**	.000	Significant	Reject Ho
	Government Institution	.808**	.000	Significant	Reject Ho

** . Correlation is significant at the 0.01 level

* . Correlation is significant at the 0.05 level (2-tailed).

The foregoing findings are supported by various studies, including that of Defitri et al. (2020), who found that the higher the level of implementation of ICT infrastructure and human capital the government had, the higher the public trust level and confidence of the citizens in them. It also proved that the availability of the necessary infrastructure and highly competent and IT-qualified government employees was vital in the effectiveness of e-government implementation in gaining the trust of the public

Meanwhile, Ejdays et al. (2019) found that perceived security and privacy risks associated with government implementation negatively affected public trust. It was reiterated that as the users of the system perceived that there was a low implementation of privacy and security risk and that their information was secured enough and could not be used in any actions that violated specific laws, their trust in the e-government was enhanced. Habib et al. (2020) also found that a secure e-government implementation that ensured there were enough technological and legal structures in place safeguarded the information provided by the citizens for their privacy, and protected all e-government users would gain higher trust among the citizens.

In addition, Aljazzaf (2019) stated that the perceived ease of use of e-government services positively and significantly influenced public trust. The empirical evidence revealed that citizens' trust in using e-government services would increase if citizens perceived the implementation of the services as easy to use. Similarly, Nofal et al. (2021) found that the higher the level of e-government implementation in terms of the ease of use of e-government services, the higher the public trust in e-government and the more frequent the adoption of its services. Also, according to the study by Capistrano (2020), a significant portion of trust in e-government was

influenced by perceived ease of use. The finding suggested that citizens perceived the internet as easy to find information about e-government. Thus, when the internet was considered easy for citizens to find information about e-government, they tended to trust its services.

On the other hand, Chen and Aklikokou (2020) noted that the perceived usefulness of e-government services positively and significantly influenced public trust. They noted that the more the government implemented useful e-government services, the higher public trust can be gained for both the government institution and the technology. The findings of Hutahaeen et al. (2023) also stated that the perceived usefulness of e-government services significantly influenced public trust. This finding confirmed that when citizens find e-government information online as valuable and insightful, it would lead them to have high trust in e-government. Furthermore, it reiterated that trust in e-government tended to increase when e-government information was considered beneficial to society.

3.4 Proposed Enhancement Program

Table 14. Proposed Enhancement Program

KEY AREAS	OBJECTIVES	STRATEGIES /ACTIVITIES	FREQUENCY/TIME FRAME	PERSONS INVOLVED	SOURCE OF FUND	SUCCESS INDICATORS
Additional Provisions to the Privacy and Security Risks Measures	To improve the provisions of privacy and security measures in place of e-government services of Calamba Water District	Inclusion and incorporation of Data Privacy Statement on top of privacy and security policies currently implemented	Annually	CWD Management Information Services (MIS) Section personnel	CWD-Information Systems Strategic Plan's (ISSP) Corporate Operating Budget	100% Data Privacy Statement incorporated and updated annually
Improve Knowledge and Awareness to Enhance Ease of Use of CWD e-government Services	To involve concessionaires and educate them on the use of the CWD e-government services	Conduct of concessionaire orientation or dry runs on the use of CWD e-government services	Annually	CWD MIS personnel and the concessionaires	Admin Department Budget for Seminars, Trainings, and Orientation	80 - 100% attendance of concessionaires per barangay orientation or dry run conducted
Enhance Service Quality through Improved ICT infrastructures and online services communication	To enhance e-government services offered through improved ICT infrastructure and online services communication	Update the outdated software and hardware used in the current program Improved online services communication through internet upgrade	Annually	ISSP Steering Committee	ISSP Corporate Operating Budget	80% - 90% ICT infrastructures and online services communication were improved and updated
Enhance Service Quality through Capable and Competent Human Capital	To enhance the service quality under e-government by developing capable and competent customer support that will be focused on monitoring e-government services	Seminars and trainings conducted Competency matrix Establishment of the CWD IT Division	Monthly Semi-annually By the end of 2025	CWD-MIS personnel and other office personnel ISSP Steering Committee	Admin Department Budget for Seminars, Trainings, and Orientation ISSP Corporate Operating Budget	90% - 100% personnel developed competency and work engagement 100% CWD IT Division established

An e-government enhancement program was proposed to include key areas that needed to be improved on the current e-government implementation of Calamba Water District (CWD) that may ultimately enhance and increase the public trust and confidence of the concessionaires to patronize the government and its e-government services. These key areas included the indicators of e-government implementation and public trust that garnered the lowest general assessment of the concessionaires who answered the research instrument. Specifically, these consisted of the privacy and security risks, the ease of use of the CWD e-government services, service quality, especially in terms of the ICT infrastructure and online services communication, and the competency of the CWD management and personnel to deliver public service in the citizen's best interest.

4.0 Conclusion

With the discussion of the study's findings, the following conclusions were drawn:

- a) That the concessionaires have a positive perception concerning the e-government services of Calamba Water District. Though limited, Calamba Water District constantly improves their online services that concessionaires positively see as reliable, transparent, and efficient through the ICT infrastructure under e-government; responsive and interactive through online services communication that makes it easier for them to get the services and information they need; competent personnel who can assist and accommodate their interest and concerns; private and secured online services that make it comfortable for them to use it; user-friendly interface that creates a positive and easy online experience for them; and a system that contributes positive value and benefit to the performance of tasks required by them.
- b) That the Public Trust Relative to E-government Implementation of Calamba Water District in terms of information quality, service quality, system quality, technology, and the government institution gain positive responses from the concessionaire. Thus, it is concluded that the concessionaires tend to have a high trust and confidence level in the implementation of e-government services if the quality of information provided by the e-government services of Calamba Water District is relevant and appropriate to their needs and interests, the quality of service was trustworthy and reliable in meeting their needs, the e-government system quality was working in an effective, successful and well-organized way, the privacy and security measures of technology used are in place to assure that they are protected, and the government institution competently and effectively delivers high-quality public service. These attributes are all found to be crucial in securing the public trust relative to e-government implementation.
- c) That there is a substantial link between the level of e-government implementation in terms of ICT infrastructure, online services communication, human capital, privacy and security risks, ease of use, and usefulness of e-government services and public trust level among the concessionaires in terms of information, service, system quality, technology, and the government institution. This also specifically indicates that the higher the level of e-government implementation, the higher the public trust level among the concessionaires. It also suggests that when the risk associated with e-government implementation decreases, the public trust level increases and vice versa.
- d) The e-governance enhancement program is necessary to enhance the key areas in the current e-government implementation of Calamba Water District and subsequently increase public trust.
- e) The literature for e-government implementation under public administration review is locally scarce. Therefore, more research on e-government implementation specifically in relation to public trust in government institutions in the Philippines should be done. This way it would contribute and minimize the gap in the availability of related local research regarding this topic.

5.0 Contributions of Authors

The sole author conceptualized and implemented the study.

6.0 Funding

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7.0 Conflict of Interests

The author declares no conflicts of interest about the publication of this paper.

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Impact of Parental Involvement on Students' Reading Proficiency

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Abstract. This study aimed to determine the extent of parental involvement in the development of reading proficiency among Grade 7 students. Utilizing a descriptive-correlational research design, the study employed systematic sampling to identify 280 parents of Grade 7 students from 11 secondary public schools in the Sibulan 1 and 2 Districts, Division of Negros Oriental. Data collection was facilitated through the Philippine Informal Reading Inventory (Phil IRI) Assessment Tool and a validated questionnaire. Statistical analyses included percent, weighted mean, mean, and multiple regression analysis. The findings indicated that parental involvement in parenting was "high," while involvement in communicating, volunteering, learning at home, and decision-making was "somewhat high." The results showed that students' word reading scores were at the "instructional" level, whereas their comprehension scores were at the "frustration" level. Additionally, the study identified parenting as the only significant predictor of students' word reading and comprehension scores. Furthermore, student characteristics such as sex, age, and school location significantly predicted word reading scores, with female, younger, and urban-based students performing better. These findings underscore the critical role of parental involvement, particularly in parenting, in enhancing students' reading proficiency. The study suggests that targeted interventions to increase parental engagement in various forms could potentially improve reading outcomes for Grade 7 students.

Keywords: Reading proficiency; Parental involvement; Phil IRI.

1.0 Introduction

Reading proficiency encompasses the skills and techniques necessary to read and comprehend written materials effectively. These skills include the ability to decode words, understand language structure, grasp the meaning of phrases and paragraphs, and make inferences from the text. According to Khalilova (2023), enhancing reading proficiency is vital for overall language development and academic success. Reading proficiency can be improved through specialized methods such as engaging textbooks, group reading activities, and access to diverse reading materials.

Greef et al. (2021) highlighted a troubling trend: an increasing number of children worldwide struggle with reading, with four out of ten students unable to master this fundamental skill. The COVID-19 pandemic has further exacerbated this issue. Data from the 2018 Program for International Student Assessment (PISA) indicated that an average of 19.6% of 15-year-olds in the 27 European Union countries performed poorly in reading, demonstrating difficulty in using reading as a learning tool. The 2022 PISA results revealed that Filipino students scored an average of 347 points in reading, similar to the 2018 results, indicating persistent challenges.

In response, the Department of Education initiated measures to enhance students' academic performance, particularly in reading, as outlined in Department Memorandum 001, series of 2024. Education is a collaborative

effort involving multiple stakeholders, including teachers and parents, who play crucial roles in fostering reading skills by providing continuous support and reinforcing positive reading habits. Mendoza et al. (2023) emphasize that parental involvement is essential, especially in guiding students through modular lessons during distance learning, ensuring comprehensive support both at school and home, which is critical for academic success.

Numerous studies support the positive impact of parental involvement on children's academic performance. Tifora (2020) identified a significant correlation between students' academic success and parental engagement, noting that increased parental participation leads to better academic outcomes. This study distinguishes itself by focusing specifically on the impact of parental involvement on students' reading performance, particularly in the post-pandemic context. The current research examined how parental support influences the development of students' reading skills, with the goal of determining whether increased parental participation can lead to a more supportive school environment, higher student achievement, and improved satisfaction among parents and teachers.

2.0 Methodology

2.1 Research Design

The study utilized the descriptive-correlational research design. It is descriptive since it identified the significance of family involvement and the level of reading proficiency of the learners. It is likewise correlational since these variables were correlated.

2.2 Research Participants

The respondents of the study are the Grade 7 learners and their parents within Sibulan Districts 1 and 2, Negros Oriental Division. Out of the 742 total population of the eleven junior high schools, 280 learners were taken as samples for their reading proficiency level, along with corresponding parents. These learners were chosen using systematic sampling, in which every second learner on the list was part of the study.

2.3 Research Instrument

This study adopted the Philippine Informal Reading Inventory (PHIL-IRI) Assessment Tool and a self-made questionnaire. A dry run was conducted with 30 students. Using Cronbach's alpha coefficient, the researcher obtained the following results: 0.796 for parenting, 0.732 for communicating, 0.887 for volunteering, 0.732 for learning at home, and -0.777 for decision-making. Since all values are >0.70 , the items in the set are deemed reliable.

2.4 Data Gathering Procedure

A letter of request to conduct the study was sent to the school heads of Sibulan 1 and 2 Districts for their approval. It was endorsed by the supervisors and approved by the Schools Division Superintendent of the Division of Negros Oriental. The signed and approved request was presented back to the respective supervisors, school heads, and advisers of the students. During the distribution, the retrieval of the questionnaires was done right after the parents had answered the questions. The results were tallied, analyzed, and interpreted. The researcher explained to the teachers the purpose and importance of the research. The English teacher conducted the reading assessment using the assessment tool PHIL-IRI to identify the level of learners' reading proficiency.

2.5 Ethical Considerations

To ensure the study's ethical standards, the rights to self-determination, anonymity, informed consent, and confidentiality were strictly observed. Informed consent was obtained from participants before they completed the questionnaires. Respondents were informed of their right to refuse participation voluntarily and to withdraw from the study at any time without any consequences. The study's objectives, data collection methods, and assurances of no associated risks or costs were thoroughly explained to the participants. Additionally, respondents were assured that their responses would be kept confidential and used exclusively for academic research purposes.

2.6 Data Analysis

The data gathered were cleansed, tabulated, and analyzed descriptively and inferentially.

3.0 Results and Discussion

3.1 Extent of Parental Involvement in Students' Reading

In terms of Parenting

Table 1 reveals that the extent of parental involvement in the development of students' reading proficiency in terms of parenting is "high," as evidenced by the composite value ($w\bar{x} = 5.46$). This suggests that parenting significantly influences a child's desire and attitude towards reading. Regardless of their financial situation, increased parental participation in children's reading education can lead to higher-quality learning experiences and enhanced reading skills. Specifically, the table indicates that parents show a "high" level of interest in guiding their children with school-related tasks ($w\bar{x} = 6.09$) and encourage participation in library reading programs ($w\bar{x} = 5.59$).

Table 1. Descriptive statistics for parental involvement in reading in terms of parenting

Indicators	$w\bar{x}$	VD	EoPI
1. We show interest in guiding our child to do her/his homework, and projects and help in his reading ability.	6.09	U	H
2. We encourage our children to participate in library reading programs.	5.59	U	H
3. We instill good study habits such as a love of reading.	5.54	U	H
4. We update ourselves on the reading level of our children.	5.53	U	H
5. We encourage our children to read during free time.	5.46	U	H
6. We establish a reading time and set rules at home that are to be strictly followed.	5.10	F	SoH
7. We have conversations before, during, and after reading together.	4.93	F	SoH
Composite	5.46	U	H
Legend:	Verbal Description (VD) Extent of Parental Involvement (EoPI)		
6.15 – 7.00	Every Time (ET)	Very High (VH)	
5.29 – 6.14	Usually (U)	High (H)	
4.43 – 5.28	Frequently (F)	Somewhat High (SoH)	
3.57 – 4.42	Sometimes (S)	Moderate (M)	
2.71 – 3.56	Occasionally (O)	Somewhat Low (SoL)	
1.85 – 2.70	Rarely (R)	Low (L)	
1.00 – 1.84	Never (N)	Very Low (VL)	

This demonstrates that parents engage in positive parenting practices related to reading. Gino (2023) asserts that parents who assist their children with schoolwork and remind them to study for tests can significantly improve their children's chances of both short-term and long-term success. Moreover, the table highlights that parents "highly" instill good study habits in their children, such as a love of reading ($w\bar{x} = 5.54$), keep updated on their children's reading level ($w\bar{x} = 5.53$), and encourage reading during free time ($w\bar{x} = 5.46$). These findings indicate that parents prioritize fostering their children's enthusiasm for reading. Children learn by observing their parents, and seeing their parent's passion for reading can be a tremendous motivation, naturally increasing the children's reading enthusiasm (Gino, 2023).

Furthermore, the table shows that establishing a reading time and setting rules at home ($w\bar{x} = 5.10$), and conversing before, during, and after reading ($w\bar{x} = 4.93$) are "somewhat highly" practiced. This implies that parents often find ways to make reading more enjoyable. Gino (2023) acknowledges that parents can employ various strategies to cultivate a love of reading in their children. These strategies include involving children in book selection, developing a nightly reading habit, reading aloud, engaging in book-related conversations, joining or starting a family book club, and encouraging children to write, all of which can enhance the enjoyment and excitement of reading.

In terms of Communicating

Table 2 indicates that the extent of parental involvement in developing students' reading proficiency through communication is "somewhat high," with a composite value ($w\bar{x} = 5.13$). Effective communication between parents and schools is crucial, as it helps parents understand expectations for their children and how to support and encourage their reading development at home. Oranga et al. (2023) emphasize the importance of frequent communication from educators and school support professionals via email, phone calls, class letters, newsletters, and face-to-face interactions to convey details about school programs and children's needs and accomplishments.

Table 2. Descriptive statistics for parental involvement in reading in terms of communicating

Indicators	$w\bar{x}$	VD	EoPI
1. We attend and interact in school during PTA meetings and programs.	5.90	U	H
2. We listen to feedback from his/her teachers to help improve our child's performance.	5.70	U	H
3. We attend a short conference with my child's teachers after every grading period.	5.58	U	H
4. We visit and talk to our children's teachers about school programs and activities when summoned.	4.94	F	SoH
5. We ask questions and give information to the teacher about our children to establish mutual interaction to cater to the needs of our children.	4.80	F	SoH
6. If communicating with the school is difficult, we will call or give a short message to the teachers.	4.58	F	SoH
7. We visit our child's teachers to monitor my child's progress in school.	4.41	S	M
Composite	5.13	F	SoH

The table shows that parents "highly" participate and interact during PTA meetings and programs ($w\bar{x} = 5.90$), listen to feedback from teachers to help improve their child's performance ($w\bar{x} = 5.70$), and attend short conferences with teachers after every grading period ($w\bar{x} = 5.58$). This indicates strong relationships between schools and parents. Tifora (2020) asserts that parental participation and communication in school are foundational for all other forms of parental involvement in education.

Additionally, the table depicts that parents "somewhat highly" visit and talk to teachers about school programs and activities when summoned ($w\bar{x} = 4.94$), ask questions and provide information to teachers to establish mutual interaction for meeting learners' needs ($w\bar{x} = 4.80$), and, when direct communication with the school is difficult, call or send short messages to teachers ($w\bar{x} = 4.58$). These findings suggest that the manner in which schools engage and communicate with parents significantly influences the extent and quality of parental involvement in their children's education at home. Actively involved parents gain a better understanding of the school's academic program and receive advice on how to support their children (Tifora, 2020).

Furthermore, the table details a "moderate" level of parents visiting their child's teachers to monitor academic progress ($w\bar{x} = 4.41$). This indicates that parents occasionally visit teachers to learn more about their child's academic development. Good parent-school communication benefits parents by increasing their awareness of their children's progress, understanding school policies, and enhancing their communication skills (Epstein et al., 2018; Salac et al., 2022).

In terms of Volunteering

Table 3. Descriptive statistics for parental involvement in reading in terms of volunteering

Indicators	$w\bar{x}$	VD	EoPI
1. We help children with special needs.	5.04	F	SoH
2. We offer our assistance in the preparation of school activities.	4.66	F	SoH
3. We help facilitate and organize fundraising activities to cater to school needs.	4.59	F	SoH
4. We share our skills, talents, and expertise in training the students if necessary.	4.44	F	SoH
5. We assist schoolteachers and coaches with sports and fitness programs in school.	4.28	S	M
6. We assist teachers during school programs.	4.17	S	M
7. We help supervise the students in the playground or the cafeteria or canteen.	4.05	S	M
Composite	4.46	F	SoH

Table 3 indicates that the extent of parental involvement in terms of volunteering is "somewhat high," with a composite value of $w\bar{x} = 4.46$. Parental volunteering can help children recognize their hidden talents, skills, and potential career paths. Oranga (2023) emphasizes that volunteering should encompass assisting schools at various functions, joining parent support groups, contributing to environmental initiatives, and organizing fundraisers to support school programs.

The table shows "somewhat high" levels of involvement for parents who help children with special needs ($w\bar{x} = 5.04$), assist in the preparation of school activities ($w\bar{x} = 4.66$), help organize and facilitate fundraising activities ($w\bar{x} = 4.59$), and share their skills, talents, and expertise in training students when necessary ($w\bar{x} = 4.44$). This indicates that parents play an active role in organizing and leading fundraising events, significantly contributing to the school's needs. Tifora (2020) underscores the importance of parental support and participation in school programs and activities.

Additionally, the table reveals “moderate” levels of assistance to schoolteachers and coaches with sports and fitness programs ($w\bar{x} = 4.28$), assistance to teachers during school programs ($w\bar{x} = 4.17$), and helping teachers supervise students in the playground or cafeteria ($w\bar{x} = 4.05$). This suggests that parents and family members are active participants in various school activities, which benefits both the school and the students. Activities such as helping with school maintenance for safety and operational efficiency, supporting educators, and assisting other parents are crucial. According to Epstein et al. (2018) and Salac et al. (2022), volunteering enhances children's ability to communicate with older individuals, fostering intergenerational understanding and cooperation.

In terms of Learning at Home

Table 4. Descriptive statistics for parental involvement in reading in terms of learning at home

Indicators	$w\bar{x}$	VD	EoPI
1. We see to it that our child is doing his/her homework or projects.	5.94	U	H
2. We maintain a safe, clean, and orderly study room free from distraction.	5.66	U	H
3. We provide appropriate reference or learning materials like books.	5.56	U	H
4. We see to it that our child has a study room or place conducive to learning.	5.55	U	H
5. We conduct a short review of the day's lesson in preparation for the test.	5.22	F	SoH
6. We manifest willingness and patience in conducting remediation activities for the subjects where he/she is weak.	5.22	F	SoH
7. We ask or hire a tutor or somebody who can help our child in his/her review if I or any family member cannot do it.	3.71	S	M
Composite	5.27	F	SoH

Table 4 shows that the extent of parental involvement in students' learning at home is “somewhat high,” with a composite value of $w\bar{x} = 5.27$. According to Epstein's framework, when parents are equipped with the necessary information and skills to support their children's learning at home, they can more effectively collaborate with educators in the teaching-learning process.

The data indicate that parents “highly” ensure their child completes homework or projects ($w\bar{x} = 5.94$), maintain a safe, clean, and orderly study room free from distractions ($w\bar{x} = 5.66$), provide appropriate reference or learning materials such as books ($w\bar{x} = 5.56$), and ensure their child has a conducive study area ($w\bar{x} = 5.55$). These findings suggest that parents generally establish suitable learning environments for their children at home. Oranga (2023) articulates that parents are expected to create effective learning environments at home to improve their children's academic performance.

Additionally, the data reveal that conducting a short review of the day's lesson in preparation for tests ($w\bar{x} = 5.22$) and showing willingness and patience in conducting remediation activities for subjects where the learner is weak ($w\bar{x} = 5.22$) are “somewhat high.” This implies that parents regularly participate in their children's academic activities by assisting with schoolwork and assignments. Epstein (2018) emphasizes that educators can guide parents on how to oversee homework, convey homework expectations, and assist children as they work on schoolwork at home. Eden (2024) highlights that improved school scores are often linked to a positive attitude toward homework, which correlates with a successful home-learning environment.

Meanwhile, hiring a tutor or someone to help the child with their review if the parent or any family member cannot do it ($w\bar{x} = 3.71$) received a “moderate” response. This indicates that parents sometimes employ tutors to assist their children's learning at home. According to Kao (2021), outsourcing tutoring can reduce parent-child conflict, maintain the mother's caretaker role, and provide another adult role model for the child.

In terms of Decision-Making

Table 5. Descriptive statistics for parental involvement in reading in terms of decision-making

Indicators	$w\bar{x}$	VD	EoPI
1. We attend and cooperate in the implementation of school programs and projects.	5.21	F	SoH
2. We participate in crafting school rules.	5.13	F	SoH
3. We actively participate in organizing school activities.	5.08	F	SoH
4. We help in deciding on school projects.	5.01	F	SoH
5. We are involved in crafting school improvement programs.	4.64	F	SoH
Composite	5.01	F	SoH

Table 5 indicates that the extent of parental involvement in decision-making is "somewhat high," as reflected by the composite value ($w\bar{x} = 5.01$). This component involves parents participating in crucial school decisions by joining decision-making bodies such as the PTA and the Student Governance Council.

The table shows that parents "somewhat highly" attend and cooperate in implementing school programs and projects ($w\bar{x} = 5.21$), participate in crafting school rules ($w\bar{x} = 5.13$), actively organize school activities ($w\bar{x} = 5.08$), assist in deciding on school projects ($w\bar{x} = 5.01$), and get involved in developing school improvement programs ($w\bar{x} = 4.64$). These findings suggest that parents frequently engage in school decision-making bodies, supporting the notion that their involvement can help students achieve academic goals.

Moreover, parental organizations often lead fundraising activities and contributions that benefit both the school and their children (Epstein, 2018). Epstein et al. (2018) recommend that parents actively participate in school decision-making by serving as leaders and representatives, thereby enhancing the school's overall effectiveness and fostering a collaborative school environment.

3.2 Level of Learners' Reading Proficiency

Table 2 presents the reading proficiency levels of the learners. For the word reading score, 52.14% of the learners fall under the independent level, 37.50% belong to the instructional level, and 10.36% are at the frustration level. In contrast, the reading comprehension score shows that only 12.14% of learners are at the independent level, 22.14% fall into the instructional level, and a significant 65.72% are at the frustration level.

Table 6. Descriptive statistics for learners reading proficiency (n = 280)

CLASSIFICATION	WORD READING		COMPREHENSION		READING PROFICIENCY	
	f	%	f	%	f	%
Independent	146	52.14	34	12.14	34	12.14
Instructional	105	37.50	62	22.14	64	22.86
Frustration	29	10.36	184	65.72	182	65.00
Mean	95.20 (Instructional)		49.68 (Frustration)			
SD	5.07		24.43			

Overall, 65% of the learners fall under the frustration level for reading proficiency, indicating significant difficulties with reading. Only 12.14% of the students meet the criteria for independent reading, suggesting they can read and comprehend texts on their own with ease. Around 22.86% fall into the instructional reading category, meaning they require some support to comprehend the material. This data underscores a critical need for targeted interventions to improve reading skills, particularly focusing on enhancing comprehension abilities.

3.3 Relationship between Parental Involvement and Reading Proficiency

In terms of Word Reading Score

Table 7 presents data on the relationship between parental involvement and students' reading proficiency, specifically focusing on word reading scores. Through multiple regression analysis, it is revealed that the overall p-value (0.001) is less than the level of significance (0.05), indicating that one construct of parental involvement significantly predicts students' reading proficiency in terms of word reading scores.

Table 7. Multiple regression analysis of parenting involvement variables influencing reading proficiency in terms of word reading

Variables	Coefficients	SE	t Stat	P-value
Intercept	90.102	1.598	56.384	<.001
Parenting	1.248	0.380	3.285	0.001
Communicating	-0.397	0.355	-1.116	0.265
Volunteering	0.159	0.306	0.519	0.604
Learning at Home	0.386	0.365	1.056	0.292
Decision-Making	-0.484	0.284	-1.704	0.090
R = 0.2712				
R ² = 0.0736				
adjusted R ² = 0.0567				
F-ratio = 4.352				
p-value = 0.001 (significant)				
Level of significance = 0.05				

The regression output indicates that out of the five constructs of parental involvement, only parenting ($p = 0.001 < \alpha = 0.001$) emerges as a significant determinant of students' reading proficiency in word reading scores. The positive coefficient (1.248) suggests that higher levels of parenting correlate with higher word reading scores among students. However, the other four constructs of parental involvement—communicating, volunteering, learning at home, and decision-making—are not significant predictors of students' word reading scores. This suggests that these variables do not directly impact students' word reading scores, implying that certain responsibilities of parents, schools, and the community are best handled independently. These findings assert that student reading progress and the influence of the four non-significant variables have no direct effect on students' acquisition of word reading skills.

This finding aligns with a study by Tifora (2020), which also found no significant relationship between parental participation and academic success among respondents from private schools. Moreover, parental involvement among public school students is "high" in terms of parenting and "moderate" in terms of communication, volunteering, home learning, and decision-making. While this result does not contradict previous findings, it underscores the significance of parenting in influencing children's reading skills and development.

In terms of Comprehension

Table 8 reveals the relationship between parental involvement and students' reading proficiency in terms of comprehension scores. Among the five constructs of parental involvement, only parenting ($p = 0.001 < \alpha = 0.001$) emerges as a significant predictor of students' reading proficiency in terms of comprehension scores. The positive coefficient (4.973) indicates that higher levels of parenting are associated with greater comprehension scores among students.

Table 8. Multiple regression analysis of parenting involvement variables influencing reading proficiency in terms of comprehension

Variables	Coefficients	SE	t Stat	P-value
Intercept	29.572	7.880	3.753	<.000
Parenting	4.973	1.873	2.655	0.008
Communicating	-1.647	1.752	-0.940	0.348
Volunteering	-0.323	1.511	-0.214	0.831
Learning at Home	2.260	1.801	1.255	0.211
Decision-Making	-1.810	1.401	-1.292	0.198
R = 0.2289				
R ² = 0.0524				
adjusted R ² = 0.0351				
F-ratio = 3.031				
p-value = 0.011 (significant)				
Level of significance = 0.05				

This finding suggests that parents' involvement in reading activities positively influences students' reading comprehension, motivation, and attitudes toward reading. However, the other constructs of parental involvement—communicating, volunteering, learning at home, and decision-making—are not significant determinants of students' comprehension scores. Therefore, it can be inferred that reading comprehension is a skill that can be improved even in the absence of parental involvement in school activities.

3.4 Relationship between Profile and Reading Proficiency

In terms of Word Reading

Table 9 indicates that students' profiles in terms of sex, age, and school location are significant predictors (all p -values $< \alpha = 0.05$) of students' reading proficiency in word reading scores. The coefficients of each variable and their coding reveal the following insights: (a) female students achieve higher reading scores than male students; (b) younger students tend to achieve higher word reading scores; and (c) students from urban areas attain higher word reading scores compared to students from rural areas.

This finding aligns with previous research by Jabbar and Warraich (2023), who noted that gender differences have a significant impact on reading development. Similarly, Thresia (2022) found that female students consistently outperformed male students in reading scores, serving as strong predictors of reading competency based on word reading scores.

Table 9. Multiple regression analysis of demographic variables influencing reading proficiency in terms of word reading

Variables	Coefficients	SE	t Stat	P-value
Intercept	110.347	4.700	23.479	<.001
Sex (female = 0, male =1)	-1.060	0.369	-2.874	0.004
Age	-1.214	0.570	-2.129	0.034
School Location (urban=0, rural=1)	-3.144	0.584	-5.388	<.001
R = 0.3780				
R ² = 0.1429				
adjusted R ² = 0.1336				
F-ratio = 15.337				
p-value = <.001 (significant)				
Level of significance = 0.05				

The significant relationship between age and word reading scores suggests that early language training empowers and enhances students' confidence in acquiring fundamental literacy skills. Chen et al. (2022) argue that starting language acquisition at a young age is motivated by the belief that 'earlier is better,' indicating that the age of language acquisition is a robust predictor of language learning success.

Furthermore, the result regarding students' location is consistent with Lee's (2022) observation that despite Chinese students' exceptional performance in international academic examinations such as PISA, there remains a significant achievement gap between urban and rural areas. Rural areas tend to have a higher proportion of underperforming students compared to urban areas, resulting in a notable difference in average scores between the two.

In terms of Comprehension

Table 10 reveals that students' profiles in terms of sex and school location are significant predictors (all p-values < $\alpha = 0.05$) of students' reading proficiency in comprehension scores. The coefficients of each variable and their coding provide the following insights: (a) female students attain higher comprehension scores than male students, and (b) students from urban areas achieve higher comprehension scores compared to students from rural areas.

Table 10. Multiple regression analysis of demographic variables influencing reading proficiency in terms of comprehension

Variables	Coefficients	SE	t Stat	P-value
Intercept	123.846	22.352	5.541	<.001
Sex (female = 0, male =1)	-5.124	1.754	-2.921	0.004
Age	-5.079	2.712	-1.873	0.062
School Location (urban=0, rural=1)	-18.721	2.775	-6.745	<.001
R = 0.4296				
R ² = 0.1846				
adjusted R ² = 0.1757				
F-ratio = 20.826				
p-value = <.001 (significant)				

This finding underscores the importance of considering gender differences when assessing reading comprehension skills. It aligns with the affirmation by Manu et al. (2023) that girls outperform boys in nearly every prereading and reading skill. Girls tend to excel in reading and writing on standardized tests as early as fourth grade. Manu et al. (2023) further note that boys may face peer pressure to conform to male expectations, potentially prioritizing other activities over reading.

Contrary to expectations, age is not a significant predictor of reading comprehension in this study. This finding contradicts the assertion by Chen et al. (2022) that early English language learning leads to higher competence levels, providing an advantage in today's globalized society.

Additionally, school location emerges as a significant predictor of reading proficiency, with students from urban areas outperforming those from rural areas in comprehension scores. Learners in rural areas may encounter various challenges, including limited access to educational resources and technology. Urban areas typically offer more specialized educational programs and better access to resources. Drescher et al. (2022) found moderate variations in results between rural and nonrural students, particularly pronounced among specific socioeconomic, racial-ethnic, and geographical categories.

4.0 Conclusion

In summary, parental involvement plays a crucial role in fostering children's early literacy skills, primarily through the provision of learning resources and frequent library visits. Additionally, parents serve as inadvertent models for their children's reading habits, which can significantly influence their literacy development. However, as children progress into high school, parental involvement tends to diminish due to factors such as increased time spent in formal educational settings and adolescents' growing autonomy. Despite these challenges, ongoing parental support remains instrumental in fostering students' reading proficiency. While parenting emerges as a significant predictor of reading proficiency, it is important to acknowledge the complex interplay of various factors when parents are actively engaged in their children's literacy development. Further research is warranted to explore effective strategies for sustaining parental involvement throughout the adolescent years and beyond.

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Effect of Workplace Environment on Employees' Performance in the Accommodation Sector

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Abstract. The hospitality industry, specifically the accommodation sector, recognizes the significance of the workplace environment in shaping employee performance. The decline in performance among housekeeping employees has been a challenge for hotel and accommodation businesses, affecting organizational stability. Therefore, this study assessed the factors that affects employee performance among the selected accommodations in Iligan City and aims to better understand which among the factors significantly explains employee performance. Survey questionnaires were collected from 53 housekeeping department respondents and employee ratings were obtained from supervisors. Using an Ordinary Least Square multiple linear regression to analyze the relationship between employee performance and identified explanatory variables, the results showed that income, hours spent on personal care, hours of sleep, and frequency of overtime per week are among the significant factors that explain housekeepers' performance. Higher hours of sleep and personal care positively affected their performance, while income and frequent overtime work negatively impacted their performance. The information from this study provides vital information to local accommodation management in guiding them on how to effectively manage their employees, particularly the housekeepers. This study has demonstrated the usefulness of multiple linear regression to explain job performance in the hospitality industry which eventually showed feasible results. It has provided empirical evidence in the hospitality research applied in the local context which has contributed to the existing pool of knowledge.

Keywords: Employee performance; Workplace environment; Accredited accommodations; Housekeeping; Work-life balance.

1.0 Introduction

In today's dynamic and competitive business landscape, organizations and business establishments strive to optimize their performance and achieve success. One of the fastest-growing sectors attempting to accomplish this endeavor is the Philippine Tourism. It provided working opportunities to 5.7 million people in 2019 and was ranked as the world's fourth fastest-growing economy in 2021 (Caynila et al., 2022) (Mordor Intelligence, 2023). One of its sectors, accounting for 9.8% of the Philippines' total employment in 2019, is the accommodation sector,

with an employment rate of 33.8% (Caynila et al., 2022). This shows how the Philippines is a domain to various accommodation establishments across its three significant islands as it holds a high employment rate.

The accommodation facility is a large unit comprising several departments that work together to ensure guests' comfort during their stay. Among these departments, housekeeping plays a crucial role. Responsible for maintaining cleanliness, decor, and overall upkeep of the entire establishment, the housekeeping department is integral to the hotel's or accommodation's smooth operation (Bhatnagar & Dheeraj, 2019). They are also responsible for daily operational tasks such as changing the bed linens, making the bed, cleaning bathrooms, disposing of garbage, cleaning floors, restocking personal care amenities, and sanitizing public areas (Indeed, 2022). Therefore, the quality of service the housekeeping department and its staff provide significantly shapes the guest experience and satisfaction within the hotel or lodging establishment (Mishra & Ohja, 2014; Bhatnagar & Dheeraj, 2019).

The workplace environment plays a crucial role in the employees' quality of service. It encompasses the surroundings in which employees carry out their job responsibilities. An effective workplace enables employees to achieve desired outcomes as management expects (Dardeer et al., 2017). The work environment comprises various factors surrounding employees and can influence their job performance. According to Omari and Okashesh (2017), the working environment encompasses external and internal conditions that can impact motivation and lead to efficient task completion. It is a crucial factor that determines the quality of work produced by employees and their level of productivity (Satyendra, 2019).

The work environment encompasses all the forces and influential factors affecting employees' activities and performance. According to Chandrasekar (2011), as cited by Alemu (2022), key factors such as the physical workspace, management style, rewards, training, and work-life balance significantly impact motivation and performance. A study by Hailemariam & Yang (2019) on workers at Bole Lemi Industrial Park in Ethiopia found a notable correlation between the physical work environment, rewards, training, and employee performance. Furthermore, Alemu's (2022) study, "Effect of Workplace Environment Factors on Performance of Employees: Empirical Study on Wollo University Staff," emphasized the strong linear relationship between employees' work-life balance, rewards, and workplace performance.

Tourism is crucial in boosting the economy and creating numerous job opportunities, particularly in the accommodation or lodging sector. However, the industry encounters a distinct workforce dilemma despite its continuous growth. Employers need help attracting, retaining, and motivating their employees. These workers face various challenges within their work environment, resulting in demotivation, reduced productivity, and difficulty completing tasks. The poor workplace conditions contribute to these issues (Luintel, 2023). Research conducted by Castillo et al. (2013) reveals that hotel or accommodation employees face various challenges in their workplace. These challenges include the inadequate provision of equipment and facilities by the management, lack of incentives for additional work, and the absence of benefits such as the 13th-month pay.

As the department that constantly faces the challenge of keeping track and maintaining all of the hotel facilities and public areas (Mishra, 2022), the decline of performance among housekeeping employees has also been a challenge for hotel and accommodation businesses as it dramatically affects its stability (Kartiwi, 2018). Therefore, employee performance is essential in achieving organizational success in the accommodation sector. Studies show that the performance of employees is influenced by a myriad of factors, including the environment in which they work. Understanding the relationship between these factors is vital for organizations to design a work environment that enables employees to reach their full potential while maintaining the standards expected by the company, which, in return, sets the satisfaction of guests and provides quality services for the employees.

With all the challenges faced by housekeeping employees, the primary goal of this study was to thoroughly assess how various factors in the workplace environment affect the overall performance of employees in specific DOT-accredited Mabuhay and homestay accommodation sectors in Iligan City. In addition to gaining a deeper understanding of the factors that contribute to employee performance and how they interact within the accommodation industry, this research focused on the locality of Iligan City, Philippines, due to insufficient literature within the scope. The study examined the relationship between the Socio-Demographic and Economic

Profile of the Respondents, Physical Workplace Environment, Employee Rewards, Training and Development, and Work-Life Balance on Employee Performance.

2.0 Methodology

2.1 Research Design

The study utilized quantitative research design since it uses numerical data, specifically survey questionnaires, to examine the relationship between the dependent and independent variables. To be specific, the correlational research design was applied in the study to explore the correlation between the independent variables, which are Socio-Demographic and Economic Profile, Physical Workplace Environment, Rewards for Employee, Employee Training and Development, and Work-Life Balance towards the dependent variable, which is the Employee Performance.

2.2 Research Locale

The research was carried out in Iligan City, Philippines. The city has a total of nineteen (19) accommodation establishments, which are accredited by the Department of Tourism in 2023–2025. However, one (1) establishment in the city was not included: GoHotels, a known local establishment that is not established nor owned locally. It was the only establishment classified as a Hotel, and the rest were classified as Mabuhay accommodation and homestay. The study specifically focused on the eighteen (18) DOT-accredited accommodation sectors in Iligan City.

2.3 Research Participants

The study gathered fifty-three (53) responses from face-to-face surveys using a purposive sampling method. The responses were collected from fourteen (14) out of eighteen (18) DOT-accredited accommodation establishments whose management allowed employees to participate in the study. The inclusion criteria of the respondents were based on the following: (a) housekeeping employees in the DOT-accredited accommodation establishments; (b) employment status are Permanent/Regular, Probationary and Casual Employees; (c) whose job positions are Laundry Attendant, Public Area Attendant, Linen Attendant, Uniform Attendant, Room Attendant and Pool Attendant; currently residing in Iligan City and lastly (e) respondents who have willingness to participate in the research study through completing the consent forms regarding the respondents' voluntary participation.

2.4 Research Instrument

A survey questionnaire was employed to gather data as the basis of the study. The statements in the research instrument were contextualized based on the housekeeping employee's workplace setting or environment. The survey questionnaire had 46-item statements and was divided into five sections: the first section collected the Socio-Demographic and Economic information of the respondents. The second section focused on the Physical Workplace Environment, the third section was on the Reward for Employees, followed by Employee Training and Development, and the last section was on Work-Life Balance. The questions from the first section until the fifth section were structured to produce numerical or numbered answers.

The survey questionnaire underwent pilot testing before being distributed to the research respondents for higher reliability. Moreover, results were also submitted to a reliable professor for validation. Corrections and suggestions were accepted for the questionnaire's minor revisions, in which only a few pieces of information and questions were changed, removed, and added.

Furthermore, a performance evaluation form was also used as part of the study's research instrument. The instrument was adapted from the performance evaluation forms used by the Department of Hospitality and Tourism Management to evaluate students' performance in their on-the-job training. The forms were explicitly used to distribute a uniform format of evaluation forms to measure the performance of each participating housekeeping employee. The performance evaluation form has a total of 35-item statements and was subdivided by six performance criteria, which were Professionalism (7 items), Productivity (7 items), Initiative (4 items), Attitude (9 items), Reliability (4 items) and Cooperation (4 items).

The employee's performance was rated through a 5-scale rating. Five (5) as outstanding, four (4) as Very satisfactory, three (3) as Satisfactory, two (2) as fairly satisfactory, one (1) as needs improvement, and zero (0) as

not applicable. With an evaluation form with a total of 35 items and five as the highest rating, the overall performance evaluation form has a total score of 175. Both of these research instruments were essential to the study as the numerical results of both instruments were used to test the relationship between the independent variables towards Employee Performance through multiple linear regression.

2.5 Data Gathering Procedure

This research study gathered fifty-three (53) responses within three (3) weeks of utilizing physical questionnaires distributed to the participating accommodation establishments. Out of seventy-one (71) questionnaires distributed to the fourteen (14) accommodation establishments that participated in the study, eighteen (18) were either not returned or answered. The three (3) weeks duration involved asking permission from the management to conduct the research study on their premises and to their employees. Before distributing the questionnaires to participating accommodation establishments, the researchers secured an endorsement letter from the Department of Tourism of Iligan City. The letter was then distributed to management regarding the following gathering procedure. The letter served as a communication bridge between the researchers and the accommodation establishments, further formalizing the data gathering. In addition to the questionnaires distributed to the respondents, a performance evaluation form was also distributed to the supervisors or persons in charge of evaluating the performance of the employees who answered the questionnaires.

2.6 Data Analysis

An ordinary least square (OLS) multiple linear regression was used to analyze and identify the variables that can statistically explain the relationship to the dependent variable. As seen in equation 1,

$$\text{Job Performance} = \beta_0 + \beta_1 Y + \beta_2 \text{HR} + \beta_3 \text{HS} + \beta_4 \text{FO} + \varepsilon \quad (\text{Eq. 1})$$

Where:

Y = income
 HR = hours on personal recreation
 HS = hours of sleep
 FO = frequency of overtime in a week
 β_0 = constant
 β_n = coefficients (n=1,2,3 and 4)
 ε = error term

This study uses four variables to explain the dependent variable, employee performance: hours on personal recreation, hours of sleep, and frequency of overtime in a week.

Test for Multicollinearity

Variance Inflation Factor was used to check the data for multicollinearity. A VIF of 1 means that the data has no correlation among the identified explanatory variables. Accordingly, VIF values of 10 and greater show signs of serious multicollinearity. This study followed the general rule which is VIF value of 4 and lesser is accepted which shows very little correlation among the variables.

Test for Heteroskedasticity

The Breusch-Pagan Test was used to detect any linear form of heteroskedasticity in the model. A large chi-square would indicate that the model suffers from heteroskedasticity while a small chi-square would mean that heteroskedasticity was not a problem. In this study, robust standard errors was used to deal with problems of heteroskedasticity.

2.7 Ethical Considerations

Letter of Intent and Consent Form

The study's survey questionnaire included a letter of intent and a consent form to encourage respondents to answer truthfully and honestly. Respondents were also informed about the study's nature and purpose to help them decide whether to participate.

Confidentiality and Data Privacy

Respondents were informed that all their answers would be treated with the utmost confidentiality per the Data Privacy Act of 2012, as some of the questionnaires were personal, particularly the socio-economic profile. They were also given the option of providing their names and other personal information in the questionnaire or not.

Voluntary Participation

Regarding the content of the study's questionnaire, respondents were asked if they were willing to participate. They could also withdraw from the survey at any time, as voluntary participation is required.

3.0 Results and Discussion

3.1 Profile of the Respondents

The socio-demographic and economic profile of the respondents is shown in Table 1. The results revealed that most respondents were female, with 27 (51%) respondents. Males come in second with 25 (47%) respondents and LGBTQ with 1 (2%) respondent. This shows that there are more female employees when it comes to Mabuhay and homestay accommodations in Iligan City. Based on a survey report conducted by Croes et al. (2021), in the hospitality sector, female employees make up the majority of laborers (71% of all workers), followed by men (27%) and LGBTQ workers (3%). However, according to a study by Canoja et al. (2022) among housekeeping employees, most respondents were male employees, followed by female employees. Based on the records of the Philippine Statistics Authority (2019), the number of laborers, including those in the lodging sector, is much higher in males than in females. Hence, this explains why there is not much difference in the number ratio between males and females compared to LGBTQ, as observed in the data.

Next, the age of the respondents was indicated in most of the respondents age 21-30 years old with 26 (49%) of the respondents, followed by 31-40 years old with 10 (19%) of the respondents, 41-50 years old with 7 (13%) of the respondents, 18-20 years old with 5 (9%) of the respondents, 51-60 years old with 4 (8%) of the respondents. Lastly, 1 (2%) out of all the respondents belong to the age bracket of 60 years old and above. According to a survey report by Croes et al. (2021), most employees employed in the hospitality industry are between the ages of 25-34. Furthermore, in a study conducted by Canoja et al. (2022), their results showed that their respondents were 21-30 years old, and the least number of their respondents were those who were older, ranging from 41-50 years old. In 2020, the employment rate of the Philippines was 94.7%, and among the employed people, most were 25-34 years old. More than half of the people employed in 2020 are working in the service sector, which includes the housekeeping department in accommodation establishments (Philippine Statistics Authority, 2020).

Then, the civil status of the respondents was revealed. With 32 (60%) responses, it is evident that most respondents are single. Married respondents comprise 18 (34%), while widowed respondents comprise 3 (6%). The results show more single employees in Mabuhay and homestay accommodations in Iligan City. Research conducted in 2018 by Abao et al. revealed that among employees in lodging facilities, including the housekeeping department, 32 (80%) of respondents were single, making up the majority of respondents. Meanwhile, married workers represented just 8 (20%) of the total population. Moreover, based on a survey report by Croes et al. (2021), in the hospitality industry, Single employees dominated the labor workforce by 38%, Married employees at 33%, and widowed employees at 4% of the labor workforce population. Therefore, this shows that single employees are more prominent among accommodation establishments than married and widowed employees.

Meanwhile, the educational attainment of the respondents was shown the majority of the respondents, with 13 (25%) educational attainment are at most Junior High School level, followed by the College level with 11 (21%) of the respondents, Senior High School graduates with 8 (15%), vocational graduate with 6 (11%) of the respondents, college graduates with 5 (9%) of the respondents, junior high school graduate with 4 (8%) of the respondents, senior high school level with 3 (6%) of the respondents, elementary graduate with 2 (4%) of the respondents. The lowest number of respondents for educational attainment, with only 1 (2%) among the total respondents, is elementary level. Croes et al. (2021) asserted in their survey report that the educational attainment of most employees employed in the hospitality industry is high school graduates, which is 45% of the total population. However, in a study conducted by Canoja et al. (2022), the results show that the majority of the housekeeping

employees' educational attainment is college graduates, which is 77.08% of the population of housekeeping employees in selected accommodation establishments in Tagaytay City.

Furthermore, the estimated monthly income of the respondents was stated wherein the majority, a total of 33 (62%), have the range of estimated monthly income of Php 9,001- Php 12,000, followed by Php 3,001- Php 6,000 with 9 (17%) respondents, and Php 6,001- Php 9,000 and Php 12,001 - Php 15,000 where both have a total of 4 (8%) respondents. The estimated monthly income of Php 15,000 - above has the lowest number of respondents, representing 2 (4%) of the total number of respondents. Only a few employees working at DOT-accredited establishments in Iligan City are compensated a lot monthly. The majority have been compensated at a low amount based on the results. Based on a survey conducted by the Philippine Statistics Authority (2022), the average monthly income for housekeepers is Php 10,906. Similarly, a study conducted by De Castro (2017) has shown that most Hospitality and Restaurant Management graduates earn Php 5,000 to less than Php 10,000 a month, comprising 29% of the total respondents. Only a few earn Php 15,000 and above every month, comprising 14% of those earning Php 15,000 to less than Php 20,000, 3% for those earning Php 25,000 above, and 1% for those earning Php 20,000 to less than Php 25,000. According to the technical report of Rutkowski (2016), Mindanao is known to be a low-wage region. On average, wages in Mindanao are 20% lower than Luzon but closely the same in Visayas. One worker in three has a low-paid job in Mindanao, compared with one in five in Luzon. This explains why more employees in Mindanao, particularly housekeepers, have low wages compared to those with high salaries.

Correspondingly, the employment status of the respondents was asserted. It revealed that most respondents are Regular/Permanent employees, with 44 (83%) respondents. Meanwhile, casual employees only represented the population with 9 (17%) respondents. The results showed that regular or permanent employment is more prominent than casual employment. According to a survey report conducted by the Philippines Statistics Authority called "Integrated Survey on Labor and Employment (ISLE) Employment of Specific Group of Workers"(2020), regular employees had the highest number of persons under the accommodation category in Northern Mindanao, than non-regular workers including casual employees.

Moreover, a high number of regular employees in the accommodation sector compared to non-regular workers was maintained from 2016 to 2020 based on the ISLE open stat data. Furthermore, a study by De Castro (2016) found that among hotel and restaurant management graduates in Zamboanga City, Philippines, they were employed in the hospitality sector, including the housekeeping department. 51% of the respondents were regularly employed, followed by 24% who were contractual, 10% were temporary, and 3% were self-employed, meaning most respondents held regular positions within their respective companies. This provides evidence that lodging facilities in the Philippines, particularly in Mindanao. When hiring and retaining employees, management or human resources prefer regular or permanent employment over casual or non-regular employment.

Finally, the respondents' years of work experience was included. The result indicated that most of the respondents worked in their respective establishments for less than a year and 3-5 years, with both having 13 (25%) of the respondents, succeeded by 11 (21%) of the respondents with 6-8 years of work experience, then 10 (19%) of the respondents who worked for 1-2 years, and 3 (6%) of the respondents who worked for more than ten years. Lastly, only 2 (4%) of the respondents have a work experience of 9-10 years. The result shows that most employees working in establishments in Iligan City have less than a year of experience, and only a few have worked for more than nine years and above. Marasigan et al. (2021) revealed that most employees working in a hotel have a work experience of 1-5 years, with 41.6% out of the total respondents, followed by 11 months and below, which comprised 22.5% out of the total respondents and only 8.8% worked for 11-15 years. Consequently, Calicdan et al. (2022) noted that 66.3% of the respondents worked for 1-3 years, and only 2% worked for ten years and above. In the hospitality industry, particularly in the Philippines, employees worked in their respective jobs for only a few years to look for better opportunities. As per British-American multinational financial services, Aon PLC (2023), the Philippines has one of the highest attrition rates in 2022 among Southeast Asian countries at 18%, second to Singapore at 19.6%, while leading in 2023 at 17.5%. Among the factors that cause job dissatisfaction and employee turnover is limited career progression (Inquiro, 2023).

Table 1. Socio-demographic and economic profile of the respondents

Item	Option	Frequency	%
Gender	Female	27	51
	Male	25	47
	LGBTQ	1	2
Age	21-30 years old	26	49
	31-40 years old	10	19
	41-50 years old	7	13
	18-20 years old	5	9
	51-60 years old	4	8
	60 and above years old	1	2
Civil Status	Single	32	60
	Married	18	34
	Widowed	3	6
Educational Attainment	Junior High School Level	13	25
	College Level	11	21
	Senior High School Graduate	8	15
	Vocational Graduate	6	11
	Junior High School Graduate	4	8
	Senior High School Level	3	6
	Elementary Graduate	2	4
	Elementary Level	1	2
Monthly Income	Php 9,001- Php 12,000	33	62
	Php 3,001- Php 6,000	9	17
	Php 6,001- Php 9,000	4	8
	Php 12,001- Php 15,000	4	8
	Php 15,000 and above	2	4
Employment Status	Regular/Permanent	44	83
	Casual	9	17
Years of Work Experience	Less than a year	13	25
	3-5 years	13	25
	6-8 years	11	21
	1-2 years	10	19
	More than 10 years	3	6
	9-10 years	2	4

3.2 Results of the Multiple Linear Regression

The results of multiple linear regression underwent a series of models to check the multicollinearity, normality, and heteroskedasticity and correct the heteroskedasticity of variables such as the Socio-Demographic and Economic Profile, Physical Workplace Environment, Rewards for Employees, Training and Development, and Work-Life Balance and its correlation with Employee Performance.

The final model shows how employee rating is a function of the variables showing significance in the previous two models, such as income, hours spent on personal care, hours of sleep, and frequency of overtime. The value of R-squared is 0.3825. Since the value is between 0 and 1, the regression model allows for the partial prediction of employee performance. This means that 38% of the variance in employee performance is affected by their income, hours of personal recreation, hours of sleep, and frequency of overtime in a week; meanwhile, 62% of the variance in employee performance is unexplained by the regression model. Consequently, employees' income, hours of personal recreation, hours of sleep, and frequency of overtime significantly affect their performance at work. Furthermore, $\text{prob} > f$ is 0.0000. This p-value of the regression model indicates the Reliability of employees' income, hours of personal recreation, hours of sleep, and frequency of overtime to predict employee performance. In checking multicollinearity, the mean VIF is less than five at 1.13, which is widely accepted. As a result, there is no multicollinearity present among all the variables. Next, normality has been checked through the test of the probability of skewness, kurtosis, and chi-square. Residuals show normal distribution since the p-value of skewness > 0.05 at 0.1108 and the p-value of kurtosis > 0.05 at 0.2320. In addition, the chi-square is greater than 0.05 at 0.1268, implying its confidence level of 5%, and the null hypothesis is not rejected. The Breusch-Pagan test was used to check heteroscedasticity. The value of $\text{prob} > \text{chi-square}$ is 0.9654, thus, greater than $p = 0.05$. This

means there is no heteroskedasticity present and the variances are close to each other, hence, homoskedastic. Finally, robust regression has been utilized. The result shows that four variables are significant in this study: income is significant at $p = 0.000$, hours spent on personal care is significant at $p = 0.053$, hours of sleep is significant at $p = 0.011$, and frequency of overtime per week is significant at $p = 0.006$.

The significant variables in relationship with employee performance rating was shown in table 2 wherein, $p = 0.01$, $p = 0.05$, and $p = 0.10$ level of significance, which is accepted in this study. There are significant variables that are significant to explain employee performance ratings such as income, hours spent on personal recreation, hours of sleep, and the frequency of overtime in a week.

Based on the final model, income has a negative relationship with the employee performance rating with $p = 0.000$ and is acceptable at $p < 0.01$ significance level. This implies that the higher the income given to the employees, the lower the employee's productivity. Therefore, a (1) one peso increase in an employee's salary is a decrease of 0.016632% in the employee performance rating.

Bansal (2022) supported the results and relationship between income and employee performance. As indicated in the study, hotel managers in luxury hotels face challenges and difficulties in effectively managing employees with a strong sense of entitlement. This could result in less work satisfaction, dishonesty, and engagement with unethical practices among employees (Harvey & Martinko, 2009; Chen et al., 2013; Thomason & Brownlee, 2018; Brownlee et al., 2015, as cited by Bansal, 2022).

Demographic variables such as high levels of education, job experience, and work exposure to the workplace are the potential determinants of employee entitled behavior (Lerner & Mikula 2013; Major 1994, as cited by Bansal 2022). Moreover, entitlement is different from the psychological contract. People's willingness to contribute to the success of their organization is far from their expectations of treatment, rewards, and benefits that they could receive from their organization. Hence, the perceptions of entitlement reside in an individual's unbalanced sense of reciprocity (Naumann et al., 2002, as cited by Bansal, 2022).

In the hospitality industry, employees' entitlement could arise from long work hours and lower wages, eliminating the fear of turnover. However, it opposes Sherman (2005), as cited by Bansal (2022), that in luxury hotel establishments, employee entitlement could arise from higher pay, pride, association with a great organization, or knowledge acquired to deal with elite customers.

As outlined in the previous study, demographic factors such as job experience and work exposure are one of the possible determinants of entitled behavior among employees; this coincided with the results of the study, given that it was evident that housekeeping employees that have significantly low performance are those who have been working in the DOT accredited establishments for around 3 to 20 years. Referring to the related literature, luxury hotel establishments, entitlement can stem from attributes such as higher pay. This also coincided with the study's results, as it was evident that housekeeping employees earning Php 10,000 and above have significantly low-performance ratings compared to employees earning less than Php 10,000. This could imply that these employees have become complacent and develop entitlement, possibly stemming from their years of service and high income, leading to decreased efficiency and effort in their performance.

According to the Peter Principle, employees often get promoted because of their performance in their current position. However, if the promoted individual needs the necessary skills for the new role, they might need help and show incompetence, reducing their chances of further promotions. This could decrease productivity in higher-paying positions, especially if they still need proper training or support. This could explain why employees with higher salaries (presumably due to promotions or more years of employment in the establishment) show lower productivity. Employees in such situations may become overwhelmed or overly reliant on newer colleagues, leading to uneven workload distribution and, ultimately, lower overall team productivity.

Moreover, according to Saleh (2024), the income effect suggests that an increase in salary or wages will cause employees to spend more money and time on leisure activities and reduce hours worked. The demand for leisure will increase, which will mean a reduced quantity of labor supplied (Duberstein and Mason, 1991). This means

that when a higher salary is given to employees, there is a change in consumer purchasing power, which will enable the consumer to spend more on expensive goods and services.

In examining Adam's Theory of Inequity by Goodman and Friedman (1971), an employee experiences inequity when the ratio of their outcomes to inputs differs from other employees. Outcomes are what an employee receives from the management after performing his responsibilities at work, which include pay and job status. At the same time, inputs are his contributions at work, such as age, education, and effort. The theory suggests that overpaid employees justify their higher pay by increasing their input, leading to longer work hours and exhaustion (*Why Does Equity Theory Matter at Work?*, 2022). Aboagye et al. (2019) found that severely exhausted employees have the highest level of impaired work performance compared to those with no or moderate levels of exhaustion.

Another theory supporting the results of income and employee performance is the Deci-Ryan Theory of Cognitive Evaluation (1985); it suggests that there are two motivation systems: intrinsic and extrinsic motivators. Intrinsic motivators are achievement, responsibility, and competence. That stems from labor itself, which is the innate interest of the work. Meanwhile, extrinsic motivators are pay, promotion, feedback, working conditions, and workplace aspects controlled by others. The Theory of Cognitive Evaluation by Deci and Ryan (1985), as cited by Fang et al. (2013), posits that the impact of extrinsic rewards on employees' intrinsic motivation depends on their interpretation of these two. Intrinsic motivation increases when employees perceive extrinsic rewards as enhancing their competence and self-control.

Conversely, if extrinsic rewards are seen as controlling, intrinsic motivation decreases. The theory also emphasized that the different types of rewards vary in terms of their effects on employees' intrinsic motivation. Task-noncontingent rewards (e.g., benefits) do not affect intrinsic motivation, while task-contingent rewards (e.g., higher income) and performance-contingent rewards (e.g., monetary benefits) negatively affect intrinsic motivation. This further supports the result of the study, which found that housekeeping employees' performance decreases when their income increases. Furthermore, the influence of social context, such as interpersonal pressure and controlling verbal rewards, reduces intrinsic motivation, whereas informational verbal rewards that provide positive feedback enhance motivation and self-esteem.

Furthermore, Rosemberg and Li (2018) discovered a significant adverse connection between income and employee performance, as evidenced by their study on hotel housekeepers, a demographic akin to the current research. Their findings revealed that more than half of the participants with high Effort-Reward Imbalance (ERI) suffered from reduced productivity, often leading to lost work hours or impaired performance. This echoes the study results, indicating a direct relationship between elevated ERI and decreased work productivity. Both investigations underscore the damaging effects of an imbalance between effort and reward on employee performance within the hospitality sector.

However, the study conducted by Inanda et al. (2017) highlights a positive correlation between productivity and wages. In other words, increased productivity often leads to higher salaries, which aligns with traditional productivity theory (Blocher, 2000). Another study by Nugraha et al. (2023) states that salary has a notable positive impact on employee performance. The literature appeared to contradict the results of income and employee performance.

Moreover, the hours spent on personal recreation have a positive relationship with employee performance rating at $p = 0.053$ and is acceptable at $p < 0.10$ level of significance, which means that when the employees spend more hours doing recreational activities, their performance rating will increase. Therefore, a one (1) hour additional to the number of hours the employee spends in their recreation, there is an increase of 1.546867% in their performance rating.

According to the study conducted by Mercanoglu and Simsek (2023), employee recreation can be appropriately used to increase employee productivity, which then leads to better performance. Recreational activities can have a positive effect on an individual's physical health, mental health, social skills, and personal development. In a study conducted by Suwal and Uprety (2023), their research findings indicate a moderate positive correlation

between each independent variable examined, including physical fitness, mental health, entertainment, and employees' productivity.

The organization and its employees recognize and endorse the importance of workplace recreational activities. When implemented effectively, these activities are expected to directly enhance employee performance (Mokaya & Gitari 2012, as cited by Mokaya 2023; Mbaabu 2013, as cited by Suwal and Uprety 2023). The research demonstrated a positive correlation between physical fitness activities and employee productivity. This suggests that employees who participate in recreational physical activities, such as sports, tend to exhibit higher levels of productivity and performance (Suwal and Uprety, 2023; Gupta, 2019).

The hours of sleep by the employees has a positive relationship with employee performance rating at $p = 0.011$ and is acceptable at $p < 0.05$ significance level. This indicates that employee performance rating will increase by 1.472025% for every 1-hour of additional sleep they get. Consequently, the more hours of sleep the employees get, the more they become efficient, which increases their performance rating.

As the study of Niwemushabire (2022) observed, sleep quality is significantly related to work performance. The higher the employees' sleep quality, the more productive they become at work. Quality sleep improves learning, memory, and retention capabilities while reducing the likelihood of illness or injury. Moreover, it fosters a sense of relaxation and reduces anxiety among employees in the workplace, leading to increased engagement and creativity in their job duties (Fisher et al., 2019). In addition to sleep duration, sleep quality and regularity are equally important factors to consider. To fully benefit from sleep, employees should aim for consistent, natural sleep patterns without the influence of drugs or alcohol, ideally totaling seven to nine hours per night (Phillips et al., 2017).

On the other hand, the study of Peng et al. (2023) has explored the connection between sleep quality and employees' occupational well-being. The findings indicated a negative correlation between poor sleep quality and occupational well-being, suggesting that employees experiencing lower sleep quality report lower job satisfaction. Additionally, they experience fewer positive effects and more negative effects in the workplace. Moreover, sleep plays a significant role in psychological capital, with low sleep quality leading to a deficit in employees' psychological capital. Consequently, insufficient psychological capital due to job demands results in a decline in occupational well-being (Sarwar et al., 2021).

In the United Kingdom, workers in the hospitality sector are reported to experience the highest levels of sleep deprivation compared to other professions, such as banking, construction, retail, and transport. According to findings from bed manufacturer Sealy, 14% of surveyed hospitality employees, out of 830, admitted to recent workplace accidents stemming from fatigue. Additionally, a significant portion, 63%, acknowledged losing their temper due to tiredness. In comparison, 28% reported decreased productivity, and 86% believed their work performance would improve with better sleep quality (Pathiaki, 2017).

Lastly, results also showed that the frequency of overtime in a week has a negative relationship with the employee performance rating at $p = 0.006$ and is acceptable at $p < 0.01$ level of significance. This implies that the more days of overtime are increased in a week, the more the employee's performance rating significantly decreases. Therefore, a (1) day increase of overtime in a week will reduce their performance rating by 1.756558%.

The findings in the study by Li et al. (2023) show results that a higher frequency of overtime work plays a negative role in promoting employees' motivation to work further tasks and their willingness to actively work overtime due to the existence of overtime culture in the workplace and higher work challenges or workload. According to Guga (2021), among Greek and Dutch employees in the hospitality industry, there is a positive relationship between prolonged working hours or overtime in a week and exhaustion. As described by Anarta et al. (2008), as cited in the work of Harjanti & Todani (2018), exhaustion may result in reduced job effectiveness, a heightened inclination to leave one's employment, increased absenteeism, familial challenges, diminished self-confidence, impaired focus, and withdrawal from social interactions.

However, as referenced in the study of Mashau and Vallo (2020) among employees in South Africa, there was a positive correlation between working long hours a week and productivity. 60.2% of employees work overtime more than four times per month, compared to 83% of the total staff, which indicates that workers will work overtime and produce more output.

Given that the first two literatures coincided with the result for the frequency of overtime, it further proved that the increase or prolongation of overtime per week significantly decreases the performance of the employees. This could potentially imply that several factors contribute to the decrease in performance. As claimed by these previous findings of related literature, work challenges and the workload of the job, particularly if the workload itself is rigorous or extensive, result in exhaustion or burnout among employees and affect their productivity and performance.

Meanwhile, the third study contradicts this study's result regarding the frequency of overtime. The literature findings indicated that an increase in overtime or weekly working hours also increases employee output. This suggests that variances in results may be attributed to differences in the literature's geographical scope and work environment.

Table 2. OLS regression of employee performance rating and significant variables

Variables	Coefficient	Robust Std. Err	t	P> t
Income	-0.0016632	.0004175	-3.89	0.000***
Hours on Personal Recreation	1.546867	.7787329	1.99	0.053*
Hours of Sleep	1.472025	.556579	2.64	0.011**
Frequency of Overtime in a week	-1.756558	.614119	-2.86	0.006***
Constant	91.26498	7.51832	12.14	0.000
Number of Observations	F (4, 48)	Prob > F	R-squared	
53	14.54	0.0000	0.3825	

Significance level at ***p<0.01, **p<0.05, *p<0.10 is accepted.

4.0 Conclusion

When assessing the impact of various variables such as Socio-Demographic and Economic factors, physical workplace environment, training and development, and rewards for employees on the performance of housekeeping staff, it appears that factors associated with work-life balance—specifically, a higher frequency of overtime in a week, increased hours spent on personal recreation, and sufficient hours of sleep—are assumed to have a notable influence. Additionally, a higher income, falling within the socio-demographic and economic factors, is also deemed to affect employee performance significantly. Conversely, other variables, including rewards, training and development, and the physical workplace environment, are found to lack substantial influence on the performance of housekeeping employees in the selected DOT-accredited Mabuhay and homestay accommodations. The information from this study provides vital information to local accommodation management in guiding them on how to manage their employees, particularly the housekeepers, effectively.

This study demonstrated the usefulness of multiple linear regression in explaining job performance in the hospitality industry, which eventually showed feasible results. It has provided empirical evidence in hospitality research applied in the local context, which has contributed to the existing pool of knowledge. Overall, the study successfully applied statistical methodology to test scientifically the possible factors that could explain employee performance. Moving forward, it is suggested that all fields in the hospitality industry should be studied because there is a need for the local hospitality industry to be examined. Moreover, it is highly encouraged to utilize an interdisciplinary methodology that adapts from the fields of economics, sociology, psychology, and statistics to achieve holistic research in the field of hospitality.

5.0 Contributions of Authors

Conceptualization of the Study- AA Arcadio, KA Cantoja, MEJ Lugatiman, ER Salvo

Literature Review- AA Arcadio, KA Cantoja, MEJ Lugatiman, ER Salvo

Methods of the Study- AA Arcadio, KA Cantoja, GA Babanto, MEJ Lugatiman,

Development of Research Questionnaire- AA Arcadio, KA Cantoja, GA Babanto, MEJ Lugatiman, ER Salvo

Gathering of Data- AA Arcadio, KA Cantoja, MEJ Lugatiman, ER Salvo

Data Interpretation- AA Arcadio, KA Cantoja GA Babanto, MEJ Lugatiman, ER Salvo

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The authors affirm that there is no conflict of interest

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The Motivation and Research Competencies among Educators in Government Higher Education Institutions in Northern Samar: A Cornerstone towards Productive, Quality and Efficient Research Community

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Abstract. This research study aimed to investigate the relationship between motivation and the research competencies among educators in Government Higher Education Institutions (GHEIs) to identify factors that contribute to a productive, quality, and efficient research community. The study employed a quantitative research approach particularly the descriptive correlational research design to focus on quantifying the accumulation and assessment of data and descriptive design to provide a snapshot of the current situation and describes the traits of the population or occurrence on the phenomenon from educators in Government higher education institutions. The study worked only with a motivational survey that covers both Intrinsic and extrinsic motivation that focused on motivation, external governance, introduced governance, acknowledged governance, and unified governance, and Intrinsic motivation as well as the research professor's competencies that entail six domains on instruction, values and morality, uniqueness and creativity, research development, and digital readiness. The data analyzed using both descriptive and inferential statistics, including path analysis, to examine the direct and indirect relationships between the variables. The findings showed that motivation and research competencies have a significant relationship in building productive, quality, and efficient research communities. Therefore, all three indicated hypotheses were found rejected when evaluated using the data gathered from the respondents. This finding is expected to contribute to the development of effective strategies and interventions for enhancing motivation and research competencies among educators in Government higher education institutions, which would ultimately lead to a productive, quality, and efficient research community.

Keywords: Motivation; Research competencies; Path analysis; Quality research; Productive Research Community.

1.0 Introduction

The potential for the viability of community programs (extensions) increases when a specific higher education institution (HEI) has observable research findings that support the effectiveness of instruction. The advancement of the group and the advancement of the country prompted fellow educators to do research. Additionally, the purpose of research beyond merely expanding the body of knowledge, as stated by Georghiou (2015). Georghiou (2015) added that there were many ways that research has implications and makes a significant contribution. Including the growing body of information that was useful, it also assists in developing experienced staff, also aids in developing new scientific instrumentation and frameworks, joining forces with users in the utilization of these services, and working on research programs and channels with account holders. Another important duty of

HEIs was research, where faculty members were expected to generate knowledge that was useful to the establishment and the country's development. However, not every faculty member at HEIs was involved in conducting research.

According to Gay, L. R., Mills, G.E., & Airasian P.W., (2012), it is possible that most of educators stay in their teaching comfort zones, or the research culture in universities may be still in its infancy. A minimum of 10% of full-time faculty must have patents or publications in peer-reviewed journals, and at least 50 full-time faculty members or at least 30% of full-time faculty, whichever was higher, must have actively engaged in research or creative work in the previous five years. At least 5% of these full-time faculty members have books or publications in internationally indexed journals that released within the previous five (5) years by reputable academic presses. The management's financial and technical support, training, and research experience had an impact on the research output as well. Despite institutional efforts to provide other beneficial elements, the University's goal would be fruitless if there were no basic drivers, according to Bay and Clerigo (2013) who stated that skills and self-motivation were the major variables driving academics to do research.

In accordance with Prosekov et al. (2020), research activities was planned so that participants could learn educational and cognitive strategies and take effective measures geared toward resolving personal and socially meaningful challenges. Leaders of the organization must effectively articulate their study objectives and establish them in the academic environment. According to Building a Culture of Research: Recommended Practices (2014), in order to achieve the goals, it is necessary to have a thoroughly defined plan for evaluating research success, as well as any corresponding modifications in compensation. Additionally, administrators advised to revise job descriptions to incorporate clear statements regarding expectations related to research and instructions. According to Goodal (2013), one strategy to improve a university's standing was by employing top academics and placing them in influential roles such as divisional head, director, or research chief. The greatest academics who are employed and allocated would impart their knowledge and research expertise that would aid in the growth of a research culture.

Many studies have stated that the research output and distribution are also influenced by the management's financial and technical assistance, training, and research experience. Research aims, goals, agenda, networks, and linkages all have an impact on how the outcome of a paper is disseminated and used according to Alim & Diokolano (2011). While Bay and Clerigo (2013) noted that skills and self-motivation were the key factors encouraging academics to conduct research, the University's mission would be unsuccessful if there were no core drivers notwithstanding institutional efforts to provide other helpful aspects. According to Prosekov et al. (2020), a plan was made for research activities so that participants could learn educational and cognitive strategies and take effective measures geared toward resolving personal and socially meaningful challenges. With the foregoing background on research competencies of professors in Higher Educational institutions, it was the intent of the study to dissect and assess the hypothesized connection between job inclination and research competencies among educators in government higher education institutions. Which can serve as one cornerstone for building programs that would pave a way towards a more engaged, productive, quality, and efficient research community in the target group. The implications of the study would also uncover the room for improvements in enhancing the research competencies through a directed use of a work motivation approach.

2.0 Methodology

2.1 Research Design

This employed a quantitative research approach, particularly the descriptive correlational research design. Quantitative research was a strategy that focuses on quantifying the accumulation and assessment of data through a range of quantifying designs, methods, and techniques (Bryman, 2012). One of the designs of quantitative research was the descriptive design, that provides a snapshot of the current situation and gave a description of the traits of the population or occurrence that focuses primarily on describing the nature of a demographic segment or the subjects of the research without focusing on the particular phenomenon. Moreover, correlational research refers to a non-experimental research method, which focused on studies regarding the relationship between two variables with the use of statistical analysis. It estimated the intensity of the relationship between two important variables.

Bryman, 2012, this type of research applied to the current study in which the variables on the assessment of work motivation and research competencies of the educators in a government higher educational institution using a path analysis. Path analysis was a form of multiple regression statistical analysis that used to evaluate causal models by examining the relationships between a dependent variable and two or more independent variables. In this research, the causal relationship between work motivation and the research competencies among educators were determined by using a diagram that serves as a visual representation of the relationship.

2.2 Research Locale

The study carried out in the Province of Northern Samar, Philippines. This study's research area included eight private colleges, two government colleges, one university, and two university extension schools. Each school has an average of 40 or more employees. Northern Samar (Norte San Samar) is a province in the Philippines located in the Eastern Visayas Region. The capital municipality of Northern Samar is Catarman and is located at the northern portion of the Island of Samar. Bordering the province to the south are the province of Samar and Eastern Samar. To the northwest, across the San Bernardino strait is Sorsogon; to the east is the Philippine Sea of the Pacific Ocean and to the west is Samar Sea. The province occupies 3, 692.93 km² (1,425.85 sq mi).

2.3 Research Participants

The respondents of the study were the faculty members and college heads/deans of every college and department in the university and other government higher education institutions in the Province of Northern Samar. Specifically, the target group of respondents were those handling research subjects and requested to participate in this study, simple random sampling employed to get the sample size of the target population of this study. The College head was composed of 400 respondents of the total population while the faculty members represented 45% of the total population or individuals, summing up a universal sampling of individuals would be included in this research.

2.4 Research Instrument

The research instrument is composed of three parts. Part 1 deals with the characteristics profile of the respondents in terms of respondent's category, assigned college/department, years of services, and highest educational attainment. Part 2 is composed of the motivation survey questionnaire. This entails an assessment of the school leaders' and teachers' respondents on the Work Extrinsic and Intrinsic Motivation Scale by Maxime A. Trembay, Sara Taylor, and Luc G. Pelletier published by the Canadian Journal of Behavioral Science 2009, Vol 41 No 4. The research questionnaire was made of 18 motivational statement questions. The internal consistency of the motivational antecedent of Cronbach Alpha of 0.97 that interpreted as the high validity of the research instrument. Part 3 is composed of the research professors' competencies survey questionnaire. The focus of the research instrument was to determine the research competencies of the school heads and faculty members. The content of the survey questionnaire covers fourteen statements related to the modification of civilization, six (6) statements entail research development, three (3) statements for uniqueness and creativity, three (3) statements deal with instruction, while two (2) statements for values and morality and lastly three (3) statements cover digital expertise. All scales of the research instruments attained acceptable levels and were performed using Cronbach Alpha reliability analysis that was able to show a 0.911 with an interpretative description of an excellent research instrument.

2.5 Data Gathering Procedure

Each of the respondents were given a structured set of questions through an electronic form (ie. Google Form). For school heads and faculty members, the online research survey questionnaire with online platforms using Google Forms and face-to-face survey questionnaires utilized in the distribution. The link sent to the target respondent's email account. All answers automatically recorded on Google Sheets, which provides the data, needed for processing and statistical treatment. Google Forms checked for the completeness of the answers.

2.6 Ethical Considerations

For this research, the risk to the individual subjects assessed to be minor, and it may result in a very slight disturbance of the regular school routine. Respondents' safety was likewise, the primary concern of the researcher. To safeguard the respondents' basic rights, an informed consent would be part of the electronic survey questionnaire. The respondents' participation was voluntary, they permitted to leave at any moment, and they

were not obligated to justify. Proper debriefing conducted following the data-gathering procedure to confirm that the participants felt comfortable about their participation in this study. In a similar vein, the freedom to self-determination upheld by making the study's details completely transparent. Data privacy observed in collecting data and rest assured that such is treated with strict and utmost confidentiality. Summary of responses and other identifying participants' information would be saved and protected in a locked Google drive while finishing the research and would be properly disposed of thereafter. Participant data would be kept confidential and would be used for academic and research purposes.

3.0 Results and Discussion

3.1 Demographic Profile

Table 1. Descriptive statistics of respondents' demographic profile

Demographic Profile	Frequency	Percentage (%)
Position		
Faculty member	200	50.0
School head	200	50.0
College or department		
College of Business and Entrepreneurial Technology	317	79.3
College of Education Laboratory High School	83	20.8
Years in service		
0-4 year	51	12.8
5-15 years	301	75.3
More than 15 years	48	12.0
Highest Educational Attainment		
Bachelor's Degree	99	24.8
Masteral	231	57.8
Doctorate	70	17.5

Table 1 shows the frequency and percentage of the category of the respondents, (1) Faculty member, and (2) school head. It was evident from the results of the study that both Faculty members and school heads occupied respondent numbers with an equal 50% percent equivalent to 200 respondents. This data showed that respondents commonly dominated by both Faculty members and school head respondents. The frequency and percentage of college or department, (1) College of Business and Entrepreneurial Technology and (2) College of Education Laboratory High School. It was evident from the table that the College of Business and Entrepreneurial Technology occupied the most respondent number with 79.3 percent equivalent to 317 respondents. On the other hand, the College of Education Laboratory High Schools received 20.8 percent, which was equal to 83 respondents. This data showed that respondents commonly dominated by the College of Business and Entrepreneurial Technology. The frequency and percentage of Years in service, (1) 0-4 years, (2) 5-15 years, and (3) 15 years and above. It was evident from the table that 5-15 years of experience occupied the most respondent number with 75.3 percent equivalent to 301 respondents. On the other hand, 0-4 years of experience received 12.8 percent. Lastly, 15 years and above experience received 12 percent equivalent to 48 respondents. This data showed that respondents commonly dominated by 5 -15 years of experience. The frequency and percentage of respondents' highest educational attainment. It was evident from the table that professors who have Masteral occupied the most respondents with 57.8 percent equivalent to 231 respondents. On the other hand, bachelor's Degrees received 24.8 percent equivalent to 99 respondents and the rest were Doctoral with 17.5 percent of the 70 respondents. This data showed that respondents commonly dominated by Masteral respondents.

3.2 Work Motivation

Table 2 presents the result of the assessment of the respondents on the level of work motivation, classified by Intrinsic, Extrinsic, and Educational Management. The category turned out to be 4.19 with an interpretation of "Always" that assesses the level of work motivation on students' participation. These findings connected to the study of Zhu, C (2021); according to him, most professors were being interactive in their students, as of 2015, when 2.5 million students asked about their educators and they said that 1,960,000 professors were helping them in their studies that it increase their educational capabilities. (Ugochukwu, 2021).

Table 2. Descriptive statistics of respondents' work motivation

Indicators	Mean	SD	Interpretation
Intrinsic			
1. Do you control what you can exert over disruptive classroom behavior?	3.75	0.98	Often
2. Do you stimulate students who lack interest in schoolwork?	4.16	0.60	Often
3. Do you get students to think they were capable of completing school work?	4.01	0.92	Often
4. Do you help your students value learning?	4.92	0.39	Always
5. Do you craft good questions for your students?	4.11	0.73	Often
Category Mean	4.19	0.72	Often
Extrinsic			
1. Do you get the students to follow classroom rules?	4.64	0.48	Always
2. Do you calm a student who was disruptive or noisy?	3.88	0.93	Often
3. Do you establish a classroom management system with each group of students?	4.52	0.66	Always
4. Do you use a variety of assessment strategies?	4.18	0.74	Often
5. Do you provide an alternative explanation or example when students were confused?	4.81	0.59	Always
Category Mean	4.41	0.68	Always

The category turned out to be 4.41 with an interpretation of "Always" that assesses the level of work motivation on Extrinsic. The category means turned out to be 4.02 with an interpretation of "Often" assesses the respondents on the level of work motivation. These findings were connected to the study of Tschannen-Moran, M., & Hoy, A. W. (2019); according to them, most Chinese Educators do not know Extrinsic. Various causes were affecting Extrinsic in Northern Samar, Philippines but it affects the education system since in today's learning, people connect to each other, professionally. (Shengnan, L., & Hallinger, P., 2020).

3.3 Research Competency

Table 3. Descriptive statistics of respondents' research competency

Indicator	Mean	SD	Interpretation
Modification of civilization			
1. Develop a focused set of annual academic goals	4.27	0.62	Always
2. Utilize student performance data while setting academic goals for the school.	4.11	1.00	Often
3. Develop goals that were easily understood and used by Educators in the school	4.27	0.56	Always
4. Develop school uniqueness and educational plan.	4.24	0.64	Always
5. Communicate the school's Modification of civilization effectively to members of the school community.	4.25	0.60	Always
Category Mean	4.23	0.68	Always
Research development			
1. Ensure that the classroom priorities of Educators were consistent with the goals and direction of the school	4.23	0.61	Always
2. Review student work products when evaluating classroom instruction	4.08	1.04	Often
3. Make clear who was responsible for coordinating the curriculum across grade levels	4.50	0.50	Always
4. Participate actively in the review of curricular materials that would motivate students	4.01	0.87	Often
5. Develop school-based curriculum around school priority on the healthy well-being of the students.	4.25	0.67	Always
Category Mean	4.21	0.74	Always
Uniqueness and creativity			
1. Encourage Educators to use instructional time for teaching and practicing new skills and concepts	4.06	0.50	Often
2. Take time to talk informally with students and Educators during recess and breaks	3.96	1.06	Often
3. Compliment Educators privately for their efforts or performance	4.04	0.65	Often
4. Acknowledge Educators' exceptional performance by writing memos for their personnel files	4.00	0.77	Often
5. Create professional growth opportunities for Educators as a reward for special contributions to the school	4.06	0.57	Often
Category Mean	4.02	0.71	Often

Table 3 shows the frequency and percentage distribution for respondents' research competency. The category turned out to be 4.23 with an interpretation of "Always" that the respondent's feedback on Modification of civilization as Professors' research competency. The findings inclined with the study's results featuring they study

about educators by Lu, X., and R. Smith (2020); he stated that having a lot of knowledge on Modification of civilization makes you accustomed to lots of things, especially in teaching.

For a long time, scholars, Educators, and policymakers believed that learning Modification of civilization interfered with a child's ability to develop academically and intellectually. (Liu, Q., D. Turner, and X. Jing, 2019) They were correct about the interference; there was plenty of proof that students were engaged in their class, which can lead to situations in which the universities acquire more competitive students. (Leithwood, K., 2019). The category means turned out to be 4.21 with an interpretation of "Always" that the respondent's feedback on Research development as Professors' research competency.

Multiple Research development exposure improves more effective communication in class, according to research. The study's researchers divided professors who were having more experience in universities. (Hallinger, P., 2018). Gougas, V., (2021) discovered that whereas other professors struggled with different Research development, it allows them to be more competitive and students experience a lot about their topic. This manifests in numerous ways. The category mean turned out to be 4.02 with an interpretation of "Often" that the respondent's feedback on Uniqueness and creativity as Professors' research competency.

Numerous professors and experts around the world have highlighted that it was better to begin learning self-efficiency especially if encountering it in work-related chores like teaching. (Piekkari, R., 2018) International empirical research has demonstrated that a professor who begins self-efficiency acquires a higher competency level than those who begin learning later in life. (Janssens, M., 2018)

3.4 Differences in Work Motivation

Table 4. Analysis for the difference in the assessment of the work motivation when grouped according to profile

	F	Sig.	Interpretation
Category of respondents			
Intrinsic	52.16	0.000	Significant
Extrinsic	1.218	0.270	Not Significant
College or department			
Intrinsic	0.972	0.325	Not Significant
Extrinsic	11.22	0.001	Significant
Years in service			
Intrinsic	77.65	0.000	Significant
Extrinsic	77.57	0.000	Significant
Highest Educational Attainment			
Intrinsic	193.0	0.000	Significant
Extrinsic	168.0	0.000	Significant

Table 4 shows that the category of respondents and assessment of the respondents on the level of work motivation in educational reforms in Northern Samar, Philippines in terms of Intrinsic showed that there was a significant relationship. On the other hand, the Category of respondents and assessment of the respondents on the level of work motivation in educational reforms in Northern Samar, Philippines in terms of Extrinsic showed that there was no significant relationship. College or department and assessment of the respondents on the level of work motivation in educational reforms in Northern Samar, Philippines in terms of Intrinsic showed that there was no significant relationship.

Next, the College or department and assessment of the respondents on the level of work motivation in educational reforms in Northern Samar, Philippines in terms of Extrinsic showed that there was a significant relationship. Years in service and assessment of the respondents on the level of work motivation in educational reforms in Northern Samar, Philippines in terms of Intrinsic showed a significant relationship. Next, Years in service and assessment of the respondents on the level of work motivation in educational reforms in Northern Samar, Philippines in terms of Extrinsic showed a significant relationship.

The highest Educational Attainment and assessment of the respondents on the level of work motivation in educational reforms in Northern Samar, Philippines in terms of Intrinsic showed a significant relationship. Next, Highest Educational Attainment and assessment of the respondents on the level of work motivation in educational

reforms in Northern Samar, Philippines in terms of Extrinsic showed a significant relationship. This showed that the statement "There was no significant disparity in the assessment of the work motivation and its effectiveness in research competencies when grouped according to the Characteristics profile."

The Research hypothesis was not true. Numerous professors and experts around the world have highlighted that it was better to begin learning self-efficiency especially if encountering it in work-related chores like teaching. (Piekkari, R., 2018) International empirical research has demonstrated that a professor who begins self-efficiency acquires a higher competency level than those who begin learning later in life. (Janssens, M., 2018)

3.5 Differences in Research Competency

Table 5. Analysis for the difference of the respondents' research competency

	F	Sig.	Interpretation
Age			
Modification of civilization	4.082	0.044	Significant
Research development	0.304	0.582	Not Significant
Uniqueness and creativity	0.626	0.429	Not Significant
College or department			
Modification of civilization	2.295	0.131	Not Significant
Research development	0.528	0.468	Not Significant
Uniqueness and creativity	2.336	0.127	Not Significant
Years in service			
Modification of civilization	78.34	0.000	Significant
Research development	84.32	0.000	Significant
Uniqueness and creativity	77.12	0.000	Significant
Highest Educational Attainment			
Modification of civilization	250.3	0.000	Significant
Research development	118.1	0.000	Significant
Uniqueness and creativity	62.52	0.000	Significant

Respondents' research competency classified by Modification of Civilization and years in service showing that there was a significant relationship. Next, professors' research competency classified by Research Development and Age showed that there was no significant relationship. Lastly, professors' research competency classified by Uniqueness creativity, and Age showed that there was no significant relationship. Professors' research competency classified by Modification of civilization and College, or department showed that there was no significant relationship. Next, professors' research competency classified by Research Development and College, or department showed that there was no significant relationship. Lastly, professors' research competencies classified by Uniqueness and creativity and College or department showed that there was no significant relationship. Professors' research competency classified by Modification of civilization and Years in service showed that there was a significant relationship. Next, professors' research competencies classified by Research Development and Years in service showed that there was a significant relationship. Lastly, professors' research competencies classified by Uniqueness and creativity and Years in service showed that there was a significant relationship. Professors' research competency classified by Modification of Civilization and Highest Educational Attainment showed that there was a significant relationship. Next, professors' research competencies classified by Research Development and Highest Educational Attainment showed that there was a significant relationship. Lastly, professors' research competency classified by Uniqueness and creativity and Highest Educational Attainment showed that there was a significant relationship. This showed that the statement "There was no significant link between work motivation and research competencies as evaluated by the respondents." In the Research hypotheses, was not true.

3.6 Path Analysis

The degree to which a teacher was self-sufficient was a key component of their personality and directly influenced their capacity to manage their classroom. In the realm of theory, it has been proposed that contextual circumstances play a significant role in the development of the work environment as well as its implications. However, there was a paucity of knowledge regarding the ways in which the demands of the job and the resources available to Educators were related to their perceptions of their own levels of competence and the consequences of the actions they take in their professional lives. The effectiveness of education in meeting predetermined educational goals while minimizing associated expenses as much as feasible. To put it another way, efficiency was

defined as effectiveness plus the need that it be carried out in the most cost-effective manner possible (OECD, 2013). When compared to its counterpart, an educational system that was more efficient either generates superior results with the same amount of resources or produces results that were comparable while requiring a smaller amount of resources. In order to do an efficiency analysis, the cost of the inputs must first be determined.

Bandura believes that learning settings that are both cooperative and comprehensive encourage Intrinsic as well as a sense of self-worth in the learner. When people were in situations like these, they were more likely to have positive feelings about themselves and to score better on academic examinations than they would if they were by alone. Students who were in an encouraging classroom setting were more likely to accept challenges, and their Educators were more likely to view difficult assignments as something that should be embraced rather than avoided. They acquire amazing levels of perseverance, resiliency, and self-assurance as a consequence. The following were some tactics that can be used in the classroom to improve students' feeling of work environment:

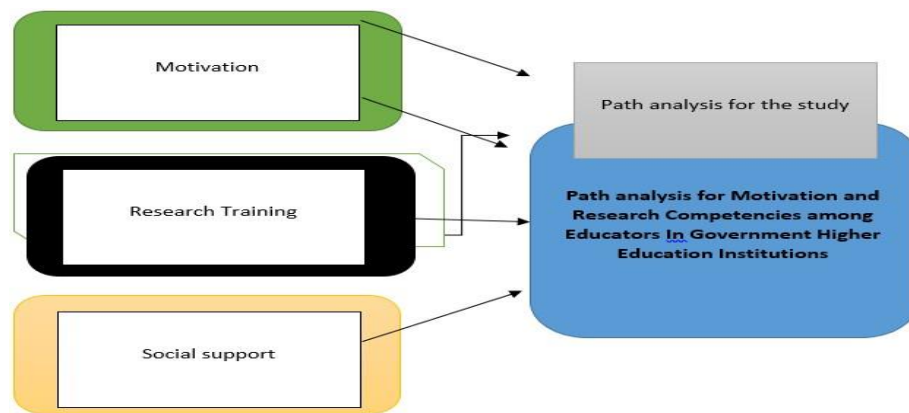


Figure 1. Path analysis direction based on the result of the study

Motivation: this variable would measure the level of intrinsic and extrinsic motivation among educators in GHEIs. Intrinsic motivation would refer to the inner drive that comes from the satisfaction of performing an activity, while extrinsic motivation would refer to external rewards or pressures, such as monetary rewards and promotions. A successful connection with students was crucial for effective teaching and learning. It involves building trust, showing empathy, and fostering a positive Research development. The first step to establish a connection with students was to get to know them personally, their interests, strengths, and weaknesses. This would help teachers understand their students better and tailor their teaching approach to meet their individual needs. Additionally, effective communication, active listening, and a non-judgmental attitude were essential in building a successful connection with students. Teachers who are approachable, supportive, and caring create a safe and welcoming Research development that encourages students to learn, grow, and succeed. Ultimately, a successful connection with students leads to improved academic performance, higher engagement, and better student-teacher relationships. Children may acquire skills through effective communication, such as setting goals, identifying talents, and focusing on strengths. When students were aware of their goals and self-conscious, the teaching work environment was more comfortable. One simple way to practice good communication in the classroom was to acknowledge a student's sincere effort. Even if a pupil does not achieve, the encouragement would prevent them from doubting their skills.

Research Training: this variable would measure the level of research training programs available for educators in GHEIs. The research training considered an exogenous variable that would influence motivation and research competencies. It involves providing constructive feedback in a manner that is honest, respectful, and supportive. Authentic criticism encourages students to take ownership of their learning and to strive for excellence. A positive environment was crucial in creating a safe and trusting space where students can receive feedback without fear of judgment or criticism. Teachers who provide authentic criticism in a positive environment help students develop a growth mindset and the confidence to take risks and learn from their mistakes. Ultimately, a positive

environment that encourages authentic criticism fosters a culture of continuous improvement and lifelong learning. There must be genuine praise. If professors continue to compliment students despite their lack of effort or accomplishment, the student would soon start to believe lies about themselves. Educators and other classroom leaders must be aware of when to acknowledge accomplishments and correct mistakes while also making sure that no genuine effort was overlooked. Even the smallest amount of praise from a teacher or mentor for a student's accomplishments can go a long way toward boosting their self-confidence. They can learn from their mistakes and better their performance the next time. A great way to enhance the work environment in the classroom was to create a stress-free learning atmosphere. An engaging group activity, a spirited and nonjudgmental review, or an interactive lesson can all enhance the Research development. Students will not have any communication barriers and would feel less burdened overall.

Social Support: this variable would measure the level of social support, such as mentorship and collaboration, among educators in GHEIs. Social support considered an exogenous variable that would influence motivation and research competencies. An encouraging approach with students was vital for promoting a positive and productive learning experience. It involves providing support, guidance, and motivation to students to help them achieve their full potential. Teachers who adopt an encouraging approach help students develop self-confidence and a growth mindset, encouraging them to take risks and learn from their mistakes. Praising effort, not just achievement, and providing specific feedback on how to improve was a key aspect of an encouraging approach. Encouraging students to take ownership of their learning and to set achievable goals helps to foster a sense of responsibility and engagement. Ultimately, an encouraging approach with students creates a safe and nurturing environment that promotes academic success and personal growth. In the classroom, effective educational practices for raising students' levels of work environment include the use of tactics that aim to build courage and confidence in the students (Schunk and Pajweres, 2018). These strategies may include establishing short-term goals and assisting students in completing them one at a time, allowing individuals to discuss their problems and their plans for resolving them, allowing a child to proceed at their own pace and not comparing them to other students, and setting goals based on each person's capabilities.

4.0 Conclusion

All the findings and results indicated the assessment of the respondents on the level of work motivation in educational reforms, in terms of intrinsic and extrinsic. The researchers also evaluated the effect of the assessment of the respondents on the level of work motivation in terms of Modification of civilization, Research Development, and Uniqueness and creativity. It was evident that there was an assessment of the respondents on the level of work motivation in terms of intrinsic, and extrinsic. It can be shown, and it was evident from Table 2 presenting the score mean of Intrinsic and extrinsic, which was 3.93 with the verbal interpretation of Seldom. It was evident that the 4.15 mean got the highest mean with the seldom-verbal interpretation that deals with the statement "Communicate the school's Modification of civilization effectively to members of the school community." Leadership can make a change; it builds development and makes orders for the group to foster and grow.

This study aimed to assess the effect of the newly implemented Educational Reforms on Educators' Efficiency in Northern Samar, Philippines to make a Framework Guide for Standard Educational reforms. Specifically, in Northern Samar, Philippines. This study would evaluate the assessment of the respondents on the level of work motivation in terms of intrinsic and extrinsic. The researcher would also evaluate the effect of the assessment of the respondents on the level of work motivation in terms of Modification of civilization, Research Development and Uniqueness, and creativity. The study sought to provide a framework guide for standard educational reforms.

The researcher created and presented a framework that would help the academe or school curriculum to how the efficiency in classroom management would empower. To uplift the teachers' self-efficiency and boost student openness and confidence. The framework talks about the connections the school should have to their students, authentic criticism that would encourage students to try harder, and encouraging students. Being an inspiration also helps the administration to have an effective Educational Policy and Management. The study sought to know the significant difference in the efficiency of educational reforms in Northern Samar, Philippines, according to the demographic profile of the respondents. The researcher concluded that the null hypothesis number one saying, "There was no significant difference in the assessment of the respondents on the level of work motivation in educational reforms according to the demographic profile of the respondents" was rejected. Second, the

researchers indicated that the null hypothesis number two saying "There was no significant difference in the professors' research competency, according to the demographic profile of the Educators in Northern Samar, Philippines." was rejected. Lastly, the researcher indicated that the null hypothesis number three saying "There was no significant relationship between the assessment of the respondents on the level of work motivation in educational reforms and the effect assessment of the respondents on the level of work motivation in educational management rejected.

5.0 Contributions of Authors

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7.0 Conflict of Interests

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Organizational Climate as Predictor of Job Commitment Among Nurses in Government Hospitals in Davao de Oro

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Abstract. The study used a descriptive-predictive research design to determine whether organizational climate can predict job commitment among staff nurses in government hospitals in Davao de Oro. One hundred staff nurses were chosen through quota sampling for the study. The study utilized adapted questionnaires to measure organizational climate and job commitment. The questionnaires were validated (CVI = 1.00) and tested for reliability, yielding Cronbach alpha results of 0.099 for organizational climate and 0.097 for job commitment. Findings revealed that most respondents were middle-aged female nurses working in hospital settings, earning within the mid to senior salary grade range. The study revealed a high level of organizational climate, particularly in the role clarity aspect, though improvements are needed in the reward system domain. Additionally, job commitment among staff nurses was found to be high, especially in continuance commitment, but lower in affective commitment. A significant positive relationship between organizational climate and job commitment was identified, suggesting that enhancing organizational climate can improve job commitment among staff nurses. Nonparametric regression indicated that organizational climate predicts job commitment, although a small portion of variation remains unexplained, implying potential influences from other factors.

Keywords: Nursing; Job commitment; Organizational climate; Government hospital; Davao De Oro; Philippines.

1.0 Introduction

Many healthcare organizations must build an efficient workplace despite the importance of keeping skilled staff. This lack of focus can lead to high turnover since dissatisfied staff members are more prone to leave (Torlak et al., 2021; Rasdi & Tangaraja, 2020). Disengaged staff are also less productive, hindering the organization's success (Aiken et al., 2019). Despite a growing body of research highlighting the significance of favorable workplace conditions for nurses (Callado et al., 2023; Lan et al., 2020), many healthcare institutions need help to create these supportive settings. This lack of focus can decrease the quality of care (Callado et al., 2023). Stressful work situations increase the risk of errors by nurses that cause patient injury and dissatisfaction. (Callado et al., 2023). Studies such as Yang et al. (2021) in Chinese hospitals have identified a direct correlation between perceived unfairness, lack of trust in leadership, and decreased job commitment among nurses. This phenomenon implies that cultivating a positive organizational climate—marked by trust, transparency, and supportive leadership—is essential for enhancing job commitment (Laschinger & Leiter, 2021).

Like many countries, the Philippines needs help retaining nurses due to high turnover rates that negatively impact patient care, costs, and overall healthcare performance (Artificion et al., 2020). A favorable work environment may aid nurse retention; however, studies also highlight negative factors that contribute to job dissatisfaction and, ultimately, a decline in patient care (Estrellado & Chavez, 2023). While a positive work environment improves

nurse job commitment (Tibebu, 2020), hostile work environments create a vicious cycle. When nurses feel unsupported and distrustful, communication breaks down, and teamwork suffers (Yang et al., 2021). This situation stifles collaboration and the exchange of ideas, essential for innovation and problem-solving that hinders the hospital's ability to adapt to new challenges and maintain competitiveness in a changing healthcare environment (Wong & Laschinger, 2020). A hostile work environment ultimately weakens individual nurses and the entire healthcare institution.

A previous study by Aksu et al. (2017) only explored the connection between job satisfaction, work environment, and nurses' organizational commitment in a Turkish university hospital, highlighting significant relationships and limitations due to the cross-sectional design and in a single setting. Similarly, Abdul-Rahim et al. (2019) investigated the effects of organizational interaction and job satisfaction on nurses' performance in Iraq. However, their study design needs more generalizability and focuses on quantitative data. Laschinger et al. (2023) only explored work engagement among nurses, highlighting the importance of job commitment for patient safety. However, their research focused on a single hospital system and primarily investigated work engagement rather than directly addressing job commitment. Finally, Yang et al. (2017) systematically reviewed organizational commitment and job satisfaction among nurses. They identified limitations in existing research, with a majority focusing on job satisfaction and neglecting a deeper exploration of job commitment specific to nurses in government hospitals. These findings highlight the need for more investigation into the elements affecting nurses' dedication to their jobs in various healthcare environments, including public hospitals.

By investigating whether the organizational environment can influence job commitment among staff nurses in government hospitals in Davao de Oro, this study seeks to close these research gaps. The authors aim to investigate the elements affecting nurses' dedication to their jobs, particularly in public hospital settings, and to understand the role of organizational climate in enhancing job commitment. The research objectives include assessing the current state of organizational climate and job commitment among nurses, identifying specific areas needing improvement, and determining the extent to which organizational climate influences job commitment. Through this study, the authors intend to provide insights to help healthcare organizations create more supportive work environments, ultimately leading to better nurse retention and improved patient care.

2.0 Methodology

2.1 Research Design

This research used a descriptive-predictive research design, a quantitative approach that aims to describe a phenomenon (organizational climate in government hospitals) and predict its influence on another variable (job commitment among nurses). This design allows the study first to characterize the current state of both factors. The descriptive aspect involves measuring different dimensions of the organizational climate, such as leadership style, communication flow, support offered, workload demands, and decision-making processes.

This circumstance paints a detailed picture of being a nurse in these government hospitals. Additionally, the study assesses the nurses' level of job commitment, considering their affective commitment (emotional attachment to the job), normative commitment (sense of obligation to stay), and continuance commitment.

The research then moves into prediction. Statistical analysis determines the relationships between the various components of the organizational climate and the nurses' job commitment levels. This trend identifies which work environment elements might influence how committed nurses feel to their jobs. The research may even develop a model that predicts job commitment based on data regarding the organizational climate by using methods such as regression analysis (Nijjar, 2020). This chosen design offers several advantages. First, it offers a thorough understanding of the phenomenon under investigation, allowing for description and explanation (Creswell & Creswell, 2020). Secondly, the predictive capabilities of the design enable the development of practical applications, such as interventions aimed at improving organizational climate and enhancing nurses' job commitment.

2.2 Research Locale

The research was conducted in two government hospitals, each with a 100-bed capacity, located in Davao de Oro, Philippines. Established in 1979 and 1985, these hospitals offer valuable context for studying the link between

organizational climate and job commitment among nurses. As government institutions, they provide healthcare to a substantial portion of the population, especially in underserved areas. Understanding the factors influencing nurses' job commitment in this setting is crucial for enhancing their satisfaction at work, fulfillment, and, ultimately, the standard of patient care provided.

2.3 Research Participants

The respondents were 100 staff nurses working in a government hospitals in Davao de Oro, Philippines. Nurses were chosen due to their critical role in patient care (World Health Organization, 2020). Their regular dealings with colleagues and patients within the healthcare setting provide insightful information about the facility's operation. Additionally, nurses are essential for running the hospital smoothly, handling patient assessments, medication administration, and treatment coordination (International Council of Nurses, 2023). Their expertise and dedication are central to both quality care and patient safety. The study implemented specific inclusion criteria to ensure a focused and representative sample. Participants needed to be: a) registered nurses, b) working full-time as staff nurses in these public hospitals, and c) have at least three years of experience in a hospital setting. This focus on full-time staff with established tenure aims to capture the experiences of nurses who are likely more integrated into the long-term fabric of the organizational climate. Nurses with part-time positions or less experience were excluded, as their experiences might need to fully reflect the complexities and dynamics associated with a full-time job commitment within this specific healthcare environment. The researcher used a convenience-quota sampling approach to recruit participants to strengthen the study's internal validity and generalizability.

2.4 Research Instrument

The research instruments used in this study are all adapted questionnaires, meaning the questionnaires were adapted but have been modified for use in this study. The research questionnaire was adapted from Adrian Furnham and Leonard D. Goddstein (1996) for the organizational climate. This tool delved into 14 key factors that shape employee experience. It includes indicator role clarity with 9 item statements, Respect with 6 item statements, communication with 12 item statements, Reward system with 11 item statements, Career development with 10 item statements, Planning and Decision Making with 11 item statements, innovation with 5 item statement, Relationship with 5 item statements, Teamwork, and Support with 9 item statements, Quality of Services with 4 item statements, Conflict Management with 5 item statements, Commitment and Morale with 9 item statements, Training and Learning with 7 item statements and lastly the indicator Direction with 6 item statements – a total of 108 item statements to measure the organizational climate. The job commitment research questionnaire was adapted from the Affective, Normative, and Continuance Commitment (Meyer & Allen, 1991) questionnaires. The questionnaire consists of 24 item statements divided into three subscales: Affective Commitment with 8 item statements involving the degree to which An employee identifies with the goals and core principles of the company. Normative commitment is an 8-item statement that focuses on the feeling of obligation to stay with an organization because of social or moral reasons. Continuance Commitment is an 8-item statement that focuses on how employees stay with an organization because of the lack of better.

2.5 Data Gathering Procedure

The researcher presents the research protocol to the Research Ethics Committee (REC) for approval, aiming to obtain a Certificate to Conduct a Study. The Dean was approached for endorsement and permission, and a panel of experts evaluated survey profiles and questionnaires. Permission letters were sent to hospital administrators, and the researcher distributed authorization to respondents for data collection and consent. Informed Consent Forms were obtained before administering the survey. A brief orientation session was arranged, with vernacular inquiries and polite explanations. Respondents were instructed to choose a peaceful and secure location before responding. The researcher examined the questionnaire and allowed respondents to correct any inaccuracies. After the study, respondents were given a token of appreciation. Data was tabulated and sent to a statistician for analysis. Secure data storage was ensured, with questionnaires kept in a safe, undisclosed location to protect privacy.

2.6 Ethical Considerations

The researcher ensured ethical compliance by obtaining approval from the Master of Arts in Nursing Program Chair at Davao Doctors College, prioritizing informed consent and emphasizing voluntary participation. This

formal authorization from the ethics committee ensured that the research met the necessary ethical standards and safeguarded the respondents' welfare. The study's social value lies in its potential to inform strategies for a supportive work environment, reducing burnout, and improving patient care. Risks, including potential psychological burdens, were mitigated through clear communication and the provision of support resources. Confidentiality was maintained according to Republic Act 10137 and institutional regulations, with data securely stored and disposed of after three years. Participants were strongly encouraged to contact the researcher with any inquiries or for clarification about the study. Participants' rights were upheld through open communication channels and access to the Ethics Review Committee for inquiries or concerns.

3.0 Results and Discussion

3.1 Demographic Profile

The study aimed to determine whether the organizational climate can predict job commitment among staff nurses in government hospitals in Davao de Oro. The study's objective was to assess the level of work environment for staff nurses, assess their level of dedication to their jobs, and explore the connection between the two variables.

Table 1. Descriptive statistics of the demographic profile of the respondents

Demographic Profile	Frequency	Percentage
Age		
20-25 y.o	10	10.0%
26-30 y.o	17	17.0%
31-35 y.o	30	30.0%
36-40 y.o	29	29.0%
41-45 y.o	6	6.0%
46-50 y.o	8	8.0%
Sex		
Male	26	26.0%
Female	74	74.0%
Length of Hospital Work Experience		
<1 yr	10	10.0%
1-4 yrs	26	26.0%
5-9 yrs	42	42.0%
10-14 yrs	13	13.0%
15-19 yrs	6	6.0%
20-14 yrs	1	1.0%
25 & above yrs	2	2.0%
Monthly Salary		
<20,000	2	2.0%
20,000-24,000	13	13.0%
25,000-29,000	3	3.0%
30,000-34,000	38	38.0%
35,000-39,000	39	39.0%
40,000-44,000	4	4.0%
45,000 & above	1	1.0%
Position		
Casual Nurse	2	2.0%
Staff Nurse	15	15.0%
Nurse I	77	77.0%
Nurse II	6	6.0%

Table 1 shows valuable insights into the demographic makeup of the 100 respondents. The age group of 31–35-year-olds holds the largest share, with 30 respondents (30.0%) falling within this range. This fact suggests a potential concentration of mid-career professionals in the sample. Similarly, the category "5-9 years" dominates the "Length of experience working in the hospital" section, with 42 respondents (42.0%) having that experience level, which might indicate a high retention period among nurses after their initial years on the job. The trend continues when examining monthly salary. The "35,000-39,000" bracket boasts the highest frequency, with 39 respondents (39.0%) earning within that range. This trend could be due to factors like seniority or specialization in nursing. Finally, the most prevalent position is "Nurse I," with 77 respondents (77.0%) holding that title. This dominance suggests a particular focus or stage in the typical career path for these nurses.

In 2021, a report by the American Association of Colleges of Nursing (AACN) confirmed the findings, highlighting that the 25-34 and 35-44 age groups account for most registered nurse (RN) employment. The finding of the

concentration of nurses in the 31-35 age group aligns with this national trend. Moreover, regarding years of experience, the "5-9 years" experience category holds the most significant share, suggesting a higher retention period during these mid-career years. This case might correlate with nurses gaining confidence and achieving desired skill sets. A study by Aiken et al. (2021) suggests that supportive work environments can contribute to nurse retention (Aiken et al., 2021).

3.2 Organizational Climate

Table 2. Descriptive statistics of the nurses' level of organizational climate

Indicators	Mean	SD	Description
Role Clarity.	6.00	0.83	High
Respect.	6.09	0.82	High
Communication.	5.65	0.90	High
Reward System.	5.17	1.24	Slightly high
Career Development.	5.38	1.10	High
Planning and Decision Making.	5.43	1.00	High
Innovation.	5.49	1.09	High
Relationship.	5.38	1.09	High
Teamwork and Support.	5.39	1.11	High
Quality of Service.	5.84	0.91	High
Conflict Management.	5.59	1.08	High
Commitment and Morale.	5.55	1.05	High
Training and Learning.	5.46	0.98	High
Direction.	5.70	1.05	High
Overall	5.58	1.02	High

Legend: 6.17-7.00---Very High; 5.31-6.16---High ;4.45-5.30--- Slightly High; 3.59-4.44--- Neutral; 1.88-3.58--- Low; 1.87-2.72---Slightly low;1.00-1.86---Very low; SD- Standard Deviation

Presented in Table 2 is the Nurses' Level of Organizational Climate, which shows the overall mean score is 5.58, with a standard deviation of 1.02 and a descriptive level of high. This indicates that the organizational climate of staff nurses in the government hospital in Davao De Oro is excellent. The standard deviation of 1.02 for the nurses' level of organizational climate indicates that the results are distributed throughout the mean of 5.58. In this context, where the data likely represents scores on a survey instrument, a standard deviation of 1.02 suggests a moderate variation in how nurses perceive the organizational climate.

Moreover, in the organizational climate, the indicator "Respect" got the highest mean score (6.09), a standard deviation of 0.82, and a description of "high." This level denotes a strong sense of mutual Respect within the hospital's work environment. The significance of this finding extends beyond surface-level cordiality. A climate of Respect fosters clarity of roles and responsibilities for nurses. As supported by Marsango's (2023) study, this Respect empowers nurses and contributes to a greater sense of purpose and direction. Ultimately, it leads to increased efficiency and improved patient care. The evidence overwhelmingly suggests that Respect is a critical element within a positive organizational climate for nurses (Rehmat et al., 2020). By fostering a work environment built on Respect, healthcare institutions can empower their nursing workforce, reduce burnout, and ensure optimal patient outcomes (Lan et al., 2020).

On the other hand, the indicator with the lowest mean score is the "Reward System," with a means score of 5.17 and a standard deviation of 1.24 with a description of "slightly high." This level implies that while some nurses perceive the reward system as adequate, a significant portion might find it lacking. An inadequate reward system can act as a resource constraint. This fact can demotivate nurses and contribute to burnout (Martin & Uribe, 2021). These results suggest a possible area for development. The hospital administration should review and enhance the reward structure to recognize nurses better and incentivize them. This situation could involve implementing a more transparent performance-based pay system, offering non-monetary rewards like flexible scheduling, or creating opportunities for professional development. Moreover, in the study by Ge et al. (2021), the administrator must identify a balance between effort and reward and offer possibilities for training and career growth to improve the employees' health.

3.3 Job Commitment

Table 3. Descriptive statistics of the nurses' level of job commitment

Indicators	Mean	SD	Description
Affective Commitment	5.14	1.19	Slightly high
Normative Commitment	5.26	1.27	Slightly high
Continuance Commitment	5.36	1.26	High
Overall	5.25	1.24	High

Table 3 sheds light on the nurses' level of job commitment, with a mean score of 5.25 and a standard deviation of 1.24, with a slightly high description. This level implies that the job commitment of staff nurses in the government hospital in Davao De Oro is categorized as very good. It also shows that among the indicators for job commitment, the indicator Continuance commitment got the highest mean score of 5.36 and a standard deviation of 1.24 with a high description. This high standard deviation (1.24) indicates a spread in the scores, with some nurses feeling a strong sense of security or necessity in their positions and others feeling less so. Furthermore, a high mean continuance commitment indicates that many nurses feel a sense of security or necessity that keeps them tied to their current positions.

The study is supported by research by De Clercq et al. (2021), which suggests that sufficient resources positively influence continuance commitment and that the findings regarding adequate resources are certainly encouraging. Also, while adequate resources are undeniably a positive factor, as Galanaki (2020) supported, it is crucial to consider a broader perspective. Continuance commitment driven primarily by a lack of options might translate to a different level of engagement and motivation than commitment fueled by genuine satisfaction with the work. Thus, continuance commitment refers to the circumstance in which a person believes quitting would cause them to lose more than gain. In effect, continuance commitment is the fear of being lost if they leave. Any loss, including social, financial, friendship, or position losses, is possible. (Gilbert & Konya, 2020).

However, the indicator with the smallest average score is affective commitment, with a score of 5.14, a standard deviation of 1.19, and a description of slightly high. This level implies that many nurses may need to be more emotionally attached to their jobs or feel a strong identification with the hospital. The low affective commitment score in the study is a cause for concern. Research by Dominguez et al. (2020) suggests that this can indicate potential burnout or a lack of engagement among nurses.

These aspects may hurt patient care, staff well-being, and hospital performance. Clemons (2020) further highlights the role of emotional resources in fostering affective commitment. When nurses feel emotionally drained and lack the resources to cope with the demands of their jobs, their attachment to both their jobs and the institution weakens. Thus, affective commitment is found when employees feel their values and priorities align with the company's mission and feel at home (Gomes et al., 2023).

3.4 Relationship Between Organizational Climate and Job Commitment

Table 4. Analysis for the relationship between organizational climate and job commitment among nurses

	rs	P-value	Decision	Remarks
Role Clarity.	0.615	<.001	Reject H ₀₁	Significant
Respect.	0.661	<.001	Reject H ₀₁	Significant
Communication.	0.852	<.001	Reject H ₀₁	Significant
Reward System.	0.783	<.001	Reject H ₀₁	Significant
Career Development.	0.901	<.001	Reject H ₀₁	Significant
Planning and Decision Making.	0.863	<.001	Reject H ₀₁	Significant
Innovation.	0.895	<.001	Reject H ₀₁	Significant
Relationship.	0.847	<.001	Reject H ₀₁	Significant
Teamwork and Support.	0.828	<.001	Reject H ₀₁	Significant
Quality of Service.	0.713	<.001	Reject H ₀₁	Significant
Conflict Management.	0.785	<.001	Reject H ₀₁	Significant
Commitment and Morale.	0.885	<.001	Reject H ₀₁	Significant
Training and Learning.	0.792	<.001	Reject H ₀₁	Significant
Direction.	0.777	<.001	Reject H ₀₁	Significant

Table 4 shows the Relationship between organizational climate level and nurses' job commitment. There was a significant and favorable correlation found between nurse's organizational climate in terms of role clarity, Respect, communication, reward system, career development, planning and decision making, innovation, Relationship, teamwork and support, quality of service, conflict management, commitment and morale, training and learning, and direction. As a result, the null hypothesis was rejected (H01) as their p-values are less than 0.05 alpha level of significance, which is 0.000. Moreover, it further implies that an increase in nurses' organizational climate, in general, is correlated with an increase in their level of job commitment, meaning that when the organizational climate of staff nurses is high, their commitment to their jobs is better.

The result is supported by Aiken et al. (2020) that indicates a positive correlation between nurses' perceptions of a supportive organizational climate (including aspects like staffing adequacy, teamwork, and communication) and their level of job commitment, which suggests that an effective workplace with sufficient resources fosters job commitment. When hospitals invest in nurses' professional development through training courses and mentorship and create a supportive work environment, it cultivates a feeling of value and investment in their future. This development leads to improved skills, increased job satisfaction, and a decreased desire to leave the organization (Laschinger & Leiter, 2021). Moreover, Zhang et al. (2021) and Antoniou et al. (2021) emphasize how specific workplace culture characteristics affect employees' commitment to their jobs. Furthermore, a study by Alruwaili (2021) suggests that a supportive organizational climate fosters engagement among nurses. This factor translates to a workplace with motivated and invested employees, leading to increased job commitment. A positive organizational climate, characterized by clear communication, recognition, and support, is linked to reduced stress and burnout among nurses (Kutcher et al., 2022). Nurses are more likely to feel a sense of purpose and fulfillment in their roles, which increases commitment to their work when they see that their employer values and encourages them.

3.5 Influence of Organizational Climate on Job Commitment

Table 5. The influence of organizational climate on job commitment of nurses

JC	Observed Estimate	Bootstrap SE	Z	P-value	Decision	Remarks
Mean JC	5.302	0.068	77.90	0.000		
Effect						
RC	0.573	0.125	4.57	0.000	Reject	Significant
RES	0.631	0.184	3.42	0.001	Reject	Significant
COM	0.888	0.116	7.66	0.000	Reject	Significant
RS	0.758	0.094	8.05	0.000	Reject	Significant
CD	0.714	0.066	10.77	0.000	Reject	Significant
PDM	0.842	0.064	12.89	0.000	Reject	Significant
INNO	0.623	0.079	7.88	0.000	Reject	Significant
REL	0.610	0.048	12.63	0.000	Reject	Significant
TS	0.803	0.090	8.95	0.000	Reject	Significant
QOS	0.761	0.145	5.25	0.000	Reject	Significant
CM	0.688	0.107	6.41	0.000	Reject	Significant
CAM	0.726	0.099	7.34	0.000	Reject	Significant
TAL	0.709	0.089	7.97	0.000	Reject	Significant
DIR	0.650	0.062	10.49	0.000	Reject	Significant

Legend: Significant if p-value < .05; R² = 0.6917; IV-OC (RC, RES, COM, RS, CD, PDM, INNO, REL, TS, QOS, CM, CAM, TAL, DIR); DV-JC.

Table 5 reveals whether organizational climate predicts the job commitment of nurses. The finding demonstrates that organizational climate, particularly in role clarity, Respect, communication, reward system, career development, planning and decision making, innovation, Relationship, teamwork, and support, quality of service, conflict management, commitment and morale, training and learning, and direction significantly predicted the level of job commitment of staff nurses in a government hospital in Davao De Oro, these resulted in the null hypothesis being rejected as their p-values are less than 0.05 alpha level of significance, which is 0.000. The findings suggest that the organizational climate predicts job commitment among staff nurses. Furthermore, the findings were apparent in the results of nonparametric regression analysis, in which 69.17% of the variance of job

commitment can be explained by organizational climate, as indicated by an r-square of 0.6917. In this case, 30.83% of the variation can be ascribed to variables other than the independent variable.

The result is supported by the study of Dantas et al. (2021), which explores how sustained positive organizational climates can lead to long-term job commitment among nurses. Hospitals can foster a more resilient and dedicated nursing workforce by consistently investing in creating a supportive and empowering work environment. Also, Zhang et al. (2022) suggest that a favorable work environment can indirectly impact job commitment through work engagement. When nurses sense encouragement and significance at work, it leads to higher work engagement characterized by enthusiasm, dedication, and focus. Work engagement, in turn, strengthens their job commitment.

Moreover, Meng et al. (2022) linked a positive organizational environment to reduced emotional exhaustion and increased job engagement in nurses. Studies by Han et al. (2020) and Sun et al. (2021) found that increased autonomy within the organizational climate positively impacted nurses' job commitment. Also, Park et al. (2020) explored the link between feeling a sense of purpose and recognition within the organizational climate and job commitment among nurses.

4.0 Conclusion

The study revealed a strong positive relationship between job commitment and organizational climate among staff nurses in a government hospitals in Davao de Oro, with specific strengths noted in areas like role clarity, communication, and conflict resolution. It offers an excellent assessment of the organization's climate. However, there is room for improvement, especially regarding rewards and professional development. The findings underscored the importance of creating a work environment that nurtures nurses' dedication to their roles. Enhancing the organizational climate may increase nurse commitment to their jobs, enhancing retention and satisfaction.

In summary, this study highlights the importance of fostering supportive work environments in healthcare settings by highlighting the critical Relationship between organizational climate and nurse job commitment. This report provides actionable insights to improve nurse satisfaction and retention for hospital administrators, HR professionals, and policymakers by emphasizing specific organizational climate strengths and areas for growth. In the end, supporting nurses' personal growth and professional well-being benefits the individual employees and enhances patient care results and the system's overall resilience. Therefore, to ensure a thriving staff and, eventually, better healthcare delivery for all, this research highlights the significance of continuous efforts to prioritize and optimize organizational climate in healthcare organizations.

5.0 Contributions of Authors

The author initiated the research project by conceptualizing its objectives, methodologies, and scope. The author led the data collection, analysis, and interpretation throughout the study. Additionally, the manuscript was drafted, incorporating feedback from mentors and reviewers. Finally, the author approved the final version of the manuscript for submission.

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7.0 Conflict of Interests

The authors declare no conflicts of interest about the publication of this paper.

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English Teachers' Instructional Practices as Determinants to Students' 21st Century Skills

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Abstract. The study aimed to examine how the instructional methods employed by English teachers and the overall academic performance of students contribute to the development of 21st-century skills. The research involved 277 students from public senior high schools in Bais City. It utilized a descriptive-correlational approach, using a validated questionnaire for data collection, and applied statistical methods including mean, weighted mean, and Multiple Linear Regression Analysis for data analysis. The study revealed that the extent of teachers' instructional practices in terms of drills, contextualization, mediated learning, technology in the classroom, visualization, cooperative learning, and inquiry-based learning is "high." It was also found that the students' 21st-century skills in terms of problem-solving, information literacy, and critical thinking are classified as "high." Moreover, the visualization and inquiry-based learning practices of the teachers were found to be significant predictors of the students' problem-solving skills. In addition, the results indicated that contextualization, use of technology in class, visualization, and cooperative learning are determinants of students' information literacy skills. Lastly, the findings signified that the use of technology in class and cooperative learning significantly predict students' critical thinking skills.

Keywords: English teaching; Instructional practices; 21st-century skills.

1.0 Introduction

The Middle East continues to struggle with the lowest English proficiency levels globally, as indicated by the 2019 EF English Proficiency Index (EPI), which noted a slight decline from previous assessments. Despite government initiatives, no significant improvements have been observed (EF, 2019; Valderama, 2019; Annie et al., 2022). The 2023 EF EPI also reported a troubling decrease in English proficiency among young adults aged 18–20 in countries such as India, Indonesia, Mexico, and Japan, exacerbated by the pandemic (VOA Learning English, 2024). This decline could negatively impact global communication, business, education, and diplomacy (Rao, 2019), as well as job opportunities, where English is often a prerequisite (Tursunova, 2024).

This situation underscores the urgent need for substantial investment in language education and systemic reforms to prepare future generations for a globalized world. In the Philippines, the Department of Education (DepEd) and the Bureau of Education Assessment (BEA) conduct the National Achievement Test (NATG12) to evaluate Senior High School (SHS) students' proficiency in core subjects and essential 21st-century skills, such as problem-solving and critical thinking (Helpline PH, DepEdTrends). In the Bais City Division, concerning trends have emerged in assessment scores. Initial cohorts of SHS students achieved mean percentage scores (MPS) of 36.71 and 36.45 in the NATG12, which declined to 36.29 in the 2018-19 school year, down from 36.66 the previous year (DepEd Bais, 2019). The most recent data showed an improvement to an MPS of 40.23% (BEA, 2023), yet these scores still indicate significant challenges. These results highlight the necessity for ongoing monitoring and

intervention to close achievement gaps and meet the national target average of 66% to 85%, moving towards mastery.

Numerous studies have examined the impact of teachers' instructional practices on student performance. However, this study sets itself apart by concentrating on the factors that influence SHS students' 21st-century skills, such as problem-solving, information literacy, and critical thinking, rather than focusing solely on student characteristics predictive of standardized test scores, as seen in Afable (2023). This research aims to identify instructional methods that cultivate these essential skills. While Afable (2023) emphasized teacher-related factors as key predictors of student performance, this study delves deeper to provide recommendations for enhancing instructional effectiveness, student outcomes, and the development of 21st-century skills. These skills are crucial for navigating the complexities of modern society.

Research shows that individuals with strong 21st-century skills are better equipped to adapt to rapidly changing environments and succeed in various personal and professional endeavors (OECD). Studies have also highlighted the correlation between information literacy skills and academic achievement, with proficient information users demonstrating higher levels of academic performance and critical thinking abilities (Chu et al., 2020). Effective instructional strategies empower students to become independent learners by selecting and utilizing suitable strategies to complete tasks, enhancing their concentration and ability to synthesize information for comprehension and retention (Francisco & Celon, 2020).

As a school head, entrusted with the authority, responsibility, and accountability by the Department of Education under Republic Act 9155 and guided by the MATATAG Agenda, the researcher possesses the essential skills in educational leadership and policy implementation necessary to produce holistic graduates equipped with 21st-century skills. This position provides a strong foundation for investigating the instructional methods of English teachers and analyzing students' cumulative performances in relation to their development of 21st-century skills. The goal is to uncover instructional practices that nurture these skills and provide actionable recommendations to improve educational outcomes.

2.0 Methodology

2.1 Research Design

The study utilized a descriptive-correlational design with 277 students from 18 senior high schools in Bais City Division, gathering data through a validated questionnaire that assessed instructional practices and students' 21st-century skills. The number of respondents in each school varied depending on its population. The instructional practices evaluated included drills, contextualization, mediated learning, technology in the classroom, visualization, cooperative learning, and inquiry-based learning. Descriptive statistics calculated the mean and weighted mean to assess instructional practices, and multiple linear regression analysis identified significant predictors of 21st-century skills.

2.2 Research Locale

The study was carried out in Bais City Division, which comprises 35 barangays, 42 elementary schools, and 18 secondary schools. Bais City is situated in the northern part of Negros Oriental. Known for its coastal charm, the city's culture reflects its diverse heritage, influenced by indigenous traditions, Spanish colonization, and modern Filipino culture. With its bustling social interactions and average-paced lifestyle, Bais City embodies a blend of coastal serenity and bustling community life, making it a unique destination in Negros Oriental.

The schools within the division are located in various areas, including coastal areas, haciendas, barangays, and hinterlands. The residents engage in different types of livelihoods, such as fishing, agriculture, and entrepreneurship like selling farm crops at very cheap prices. Others work in government offices, private companies, haciendas, alcohol industries, sugar milling companies, and other establishments located in the city. The city is described as average-paced in terms of socio-economic development, wherein people are exposed to seemingly busy daily social interactions.

2.3 Research Participants

The grade 12 representatives, officially enrolled in 18 senior high schools of the Division of Bais City, are the study's respondents. They were randomly selected. The number of students/representatives who served as respondents differed depending on the school's population.

2.4 Research Instrument

This study utilized a researcher-made questionnaire divided into four sections. Part I includes the disclosure statement, in which the teachers grant the researcher permission to collect data, provided that confidentiality of data would be observed. It also contains the purpose of the study. Part II covers the instructional practices utilized by the English teachers, and Part III tackles the students' 21st century skills in terms of problem-solving skills, information literacy, and critical thinking skills.

The researcher-made questionnaire was validated with the help of three experts in the field for content validity and cross-checking to see if the items were aligned with the specific problems of the study. The draft copy was also proofread by an English expert for the grammar structure. Final copies of the tool were distributed to the identified respondents after getting the necessary permit from the division superintendent. To ensure item reliability, a dry run was conducted. Thirty selected grade 12 students from Bais City National Science High School served as the respondents for the dry run. This number was calculated to verify the internal consistency and reliability of the items.

The reliability test results offer valuable insights into the consistency of instructional practices and 21st-century skills scales. Higher Cronbach's Alpha coefficients indicate greater internal consistency, with "Inquiry-Based Learning" and "Information Literacy Skills" demonstrating the highest coefficients of 0.912 and 0.923, respectively. These results suggest that these scales reliably capture their intended constructs. "Contextualization" and "Mediated Learning" also show strong internal consistency, while "Visualization" exhibits slightly weaker consistency. Nonetheless, these findings provide important information about the effectiveness of instructional practices and the development of essential 21st-century skills.

2.5 Data Gathering Procedure

The survey was disseminated via Google Forms to facilitate convenient access for the respondents through messaging platforms or email. During the distribution, the researcher explained to the school head, coordinator, and advisers the purpose and importance of the research. The collection of responses was automatically stored since the researcher was using an online platform. The results were then tallied, and a spreadsheet was extracted from the Google Form. Classification, tabulation, computation, analysis, and interpretation of the data followed, which served as the basis for drawing conclusions and recommendations for the study.

2.6 Ethical Considerations

This research study followed ethical guidelines. The researcher seriously adhered to the protocols set by DepEd as part of the ethical considerations. Permission from the Schools Division Superintendent to conduct the study among senior high school students for Academic Year 2023-2024 was secured. Next, the researcher distributed the questionnaires and informed the respondents via electronic mail about the study's purpose and the significance of their responses. The respondents were also briefed that the information they provided would be treated with utmost confidentiality.

3.0 Results and Discussion

3.1 Instructional Practices

In Terms of Drill

Table 1 shows that the extent of teachers' utilization of instructional practices in terms of drills is "high" as evidenced by the composite weighted mean of 3.74. To specify, teachers "highly" utilized checking students' writing and provided corrections and suggestions to enhance their learning ($w\bar{x} = 4.02$). This result indicates that teachers are actively involved in reviewing students' work and providing feedback to improve their writing skills. The statement of Eraga (2022) corresponds to this finding, as she emphasized in her study the essence of assessment and feedback, allowing teachers to make important instructional decisions.

Table 1. Descriptive statistics of the teachers' utilization of instructional practices in terms of drill (n = 277)

Indicators	Mean	Description	Extent
1. Checks our writing & composition and returns our paper with some corrections & suggestions	4.02	Agree	High
2. Reads stories aloud and asks questions to check our comprehension	3.96	Agree	High
3. Unlocks difficult terms for our vocabulary development	3.77	Agree	High
4. Demonstrates in class how to handle the telephone conversation correctly	3.76	Agree	High
5. Teaches phonics and word recognition by reading the word first and we follow	3.68	Agree	High
6. Gives us 10 words to spell before the class started	3.25	Moderate	Moderate
Composite	3.74	Agree	High

The table also exposes that reading stories aloud and checking comprehension is “highly” practiced ($w\bar{x} = 3.96$) by the teachers. Indicators like unlocking difficult terms for vocabulary development ($w\bar{x} = 3.77$), demonstrating how to handle telephone conversations ($w\bar{x} = 3.76$), and teaching phonics and word recognition ($w\bar{x} = 3.76$) are also “highly” utilized by the teachers. This explains that teachers play a crucial role in expanding students' vocabulary by explaining complex terms. Likewise, Majeed and Hussain (2023) disclosed that teachers utilize a range of techniques to enrich the vocabulary of young learners, including reading texts aloud, incorporating word games, utilizing flashcards, and employing other methods.

The above finding also suggests practical skills like observing telephone etiquette, wherein teachers must not only focus on academic skills. This is also stressed by Olivar and Alcaraz (2024), who emphasized the significance of personality development in students, including aspects such as telephone etiquette, establishing rapport, and employing strategies for politeness, which are valuable across various professional domains.

With regard to phonics, instruction is a key element in teaching students to read and recognize words, as these practices are highly utilized and effective. The importance of phonics is highlighted in the study of Shenoy, Iyer, and Zahedi (2022). The outcomes indicate that students who underwent either one or two years of phonics instruction during preschool demonstrated notably superior performance on all evaluated literacy skills compared to those who did not receive any phonics instruction.

Meanwhile, in giving spelling tests, the extent of teachers’ utilization is only “moderate” ($w\bar{x} = 3.25$). This is alarming, as highlighted in the study by Yousif et al. (2024), which raised concerns regarding students' spelling errors when writing in English. Many of these students, who learn English as a foreign language, encounter challenges in writing accurately.

Irving (2021) acknowledged that drill is a method of instruction characterized by systematic repetition of concepts, examples, and practice problems. It involves disciplined and repetitive exercises aimed at teaching and perfecting a skill or procedure. Studies indicate that the drill technique, if used appropriately, can be a very productive and proactive way for students to memorize and retain vocabulary and structural context within a sentence. It could be argued that when learning a foreign language, repeating phrases correctly multiple times can lead to mastering that language (Pachina, 2019).

In Terms of Contextualization

Table 2. Descriptive statistics of the teachers’ utilization of instructional practices in terms of contextualization (n = 277)

Indicators	Mean	Description	Extent
1. Gives problem-solving tasks common in the community	3.79	Agree	High
2. Utilizes local resources for student projects	3.73	Agree	High
3. Uses local stories	3.69	Agree	High
4. Localizes poetry by using local stories	3.60	Agree	High
5. Substitutes foreign terms with the local ones	3.43	Agree	High
Composite	3.65	Agree	High

Table 2 depicts that teachers mainly have “high” utilization of instructional practices in terms of contextualization ($w\bar{x} = 3.79$). Particularly, the teachers have “high” usage of giving problem-solving tasks common in the community ($w\bar{x} = 3.79$) and employment of local resources for student projects ($w\bar{x} = 3.73$). These data signify that teachers are using real-world problems to stimulate critical thinking and problem-solving skills among students. The teachers further contextualize their instruction and integrating them into the curriculum, which help students

to connect their learning to their local environment. Indeed, Andijon (2024) uncovered that contextualized vocabulary teaching provides learners with practical instances of word usage, facilitating their understanding of meanings, nuances, connotations, and correct application. Instruction that embeds words within context assists learners in applying new vocabulary in real-world contexts, promoting not only memorization but also the ability to use words effectively in various communication contexts.

It is also evident in the table that the teachers have “high” utilization of local resources for student projects ($w\bar{x} = 3.73$) and employing local stories ($w\bar{x} = 3.69$) for students to comprehend. Doing these practices makes the lessons more relatable and engaging for the students. It goes the same with localizing poetry by using local stories ($w\bar{x} = 3.60$). Teachers are using local content to teach poetry, which may help students better understand and appreciate the art form. These findings confirm the conclusions drawn by Rafael and Tamban (2022) that utilizing English reading materials tailored to local contexts can bolster learners' reading abilities. They underscored the effectiveness of incorporating localized reading resources as a strategy for teaching reading, which can lead to enhanced performance among learners.

Moreover, the table reveals that the teachers have “high” usage of substituting foreign terms with local ones ($w\bar{x} = 3.43$), which aids students to understand foreign concepts by relating them to familiar and local terms. Rafael and Tamban (2022) also argued that localization offers the benefit of enhancing reader comprehension and appreciation by presenting the text in the reader's native language and within a relatable and familiar context.

In Terms of Mediated Learning

Table 3. Descriptive statistics of the teachers' utilization of instructional practices in terms of mediated learning (n = 277)

Indicators	Mean	Description	Extent
1. practices the class on how to defend our answers	4.15	Agree	High
2. asks feedback from the class	4.09	Agree	High
3. requires the class to write a reflection paper to know our thoughts	3.95	Agree	High
4. assigns the class number heads for us to be alert in the oral recitation	3.91	Agree	High
5. encourages us to debate to express our different perspectives	3.86	Agree	High
6. scaffolds learning by explaining well if she/he finds that some do understand the lesson	3.79	Agree	High
7. processes activities thru HOTS questions	3.64	Agree	High
8. calls each one of us for a one-on-one coaching	3.51	Agree	High
Composite	3.86	Agree	High

The data in Table 3 show the extent to which teachers utilize instructional practices related to mediated learning. The table includes various practices and their corresponding composite $w\bar{x}$ of 3.86 signified a “high” level of practice. Explicitly, teachers have “high” utilization of the following: practicing the class on how to defend answers ($w\bar{x} = 4.15$), asking for feedback from the class ($w\bar{x} = 4.09$), requiring reflection papers to understand students' thoughts ($w\bar{x} = 3.95$), and assigning number heads for oral recitation ($w\bar{x} = 3.91$). These results entail that teachers want the students to express their thoughts that will enable them to think critically. With these practices, it is clear that teachers are guiding the students to connect to the lessons. Tzurriel (2019) suggests that critical skills, such as drawing connections between lessons across different domains, can be effectively taught through the process of mediation.

Meanwhile, the table also specifies that teachers have “high” utilization of the following instructional practices: encouraging debates to express different perspectives ($w\bar{x} = 3.86$), scaffolding learning by explaining concepts ($w\bar{x} = 3.79$), processing activities through higher-order thinking skills (HOTS) questions ($w\bar{x} = 3.64$), and providing one-on-one coaching ($w\bar{x} = 3.51$). It is recognized by Farrell, Alani, and Mikroyannidis (2022) that teachers' utilization of mediated learning can have positive effects on student learning outcomes and engagement.

In Terms of Technology in the Classroom

Table 4 on the next page depicts that teachers predominantly have “high” extent of utilizing technology in the classroom as shown in the composite $w\bar{x} = 3.82$. Specifically, the teachers have a “high” integration of educational apps or games as interactive aids ($w\bar{x} = 4.17$) and PowerPoint presentations ($w\bar{x} = 4.14$). These practices enhance lesson delivery and engage students in an interactive learning experience. These results align with the findings of

Farrell et al. (2022), indicating that the use of technology in teaching and learning promotes the swift recovery of knowledge and enhances engagement among both teachers and students.

Table 4. Descriptive statistics of the teachers' utilization of instructional practices in terms of technology in the classroom (n = 277)

Indicators	Mean	Description	Extent
1. Utilizes apps or games as interactive aid in explaining well the lesson	4.17	Agree	High
2. Uses powerpoint presentation to aid her/his lesson	4.14	Agree	High
3. Shows videos to introduce her lesson	3.98	Agree	High
4. Gives the class the chance to make short movie-making	3.89	Agree	High
5. Shows the movie and let the class make a review after	3.80	Agree	High
6. Allows us to experience radio and tv broadcasting	3.58	Agree	High
7. Trains the class in writing a blog	3.53	Agree	High
8. Uses zip grade assessment	3.45	Agree	High
Composite	3.82	Agree	High

Furthermore, the teachers also have “high” utilization of visual aids to support their lessons and facilitate better understanding among students like showing videos to introduce lessons ($w\bar{x} = 3.98$). The use of videos as a multimedia tool to capture students' attention and provide real-life examples related to the lesson allows the class to make short movies ($w\bar{x} = 3.89$). These strategies not only enhance student engagement but also promote critical thinking and collaborative skills. According to Rasheed and Shoukat (2024), educators employed multimedia tools such as projectors, images, sound clips, and animations to enrich students' learning experiences. Their research further revealed that 35% of respondents acknowledged that the utilization of multimedia by teachers aided in their comprehension of various subjects.

Another strategy in using technology in the classroom that is “highly” utilized by the teachers is showing movies and conducting reviews ($w\bar{x} = 3.80$). Using films stimulates students' critical thinking and encourages students to analyze and reflect on the content. This corresponds with the findings of Marissa and Anasse (2024), that movies offer students contextualized language input, promote cultural awareness, and ignite their enthusiasm for learning English. Additionally, Walay (2022) highlighted that movies present a distinctive opportunity for language acquisition and cross-cultural comprehension owing to their abundant audiovisual content, cultural context, and complex narratives.

Moreover, the teachers “highly” provide opportunities for students to experience radio and TV broadcasting ($w\bar{x} = 3.58$) and train the class in writing blogs ($w\bar{x} = 3.53$). These strategies allow students to explore different media platforms and gain practical knowledge of communication. Incorporating blogging as a writing activity improves students' digital literacy skills and encourages self-expression. Using zip-grade assessment ($w\bar{x} = 3.45$), which is also “highly” practiced by the teachers to simplify the grading process, provides timely feedback to students and facilitates data analysis for teachers.

Kosimov's study (2023) underscores the growing use of TV shows, movies, and news broadcasts in language classrooms as authentic and engaging learning materials. These multimedia resources provide students with exposure to real-life language use and cultural contexts, thereby facilitating the enhancement of listening, speaking, and vocabulary skills.

Regarding blogging, Al-shaboul (2023) acknowledges the importance of blogging sites within Web 2.0 technology for language learning. Beyond serving as mere sources of information, these platforms provide language learners with readily available materials and a user-friendly platform for acquiring language skills. Moreover, Mikroyannidis (2022) emphasized that the widespread adoption of information and communication technologies (ICTs) has shifted learners into the realm of digital learning, prompting educators to incorporate technology into their teaching methods.

In Terms of Visualization

Table 5 presents that collectively the teachers have a “high” extent of utilization of instructional practices in terms of visualization. To specify, the teachers have a “high” utilization of showing pictures and allowing the class to share their visual interpretations ($w\bar{x} = 3.98$). This result indicates that teachers encourage students to engage with

visual content and promote active participation. With this approach of sharing their interpretations, students can develop their visual literacy skills and critical thinking abilities.

Table 5. Descriptive statistics of the teachers' utilization of instructional practices in terms of visualization (n = 277)

Indicators	Mean	Description	Extent
1. Shows picture and let the class share their visual interpretations	3.98	Agree	High
2. Encourages students to engage their imagination to use sensory details from the text and construct mental images of scenes, characters, and concepts	3.96	Agree	High
3. Asks students to illustrate their understanding of the lesson through creative drawings	3.91	Agree	High
Composite	3.95	Agree	High

By employing visual aids, educators can create a more engaging and effective learning environment for idiomatic expressions, fostering comprehension and application among language learners. The initial findings from Ulusoy's (2024) investigation suggest that contemporary students highly value and expect visual aids in educational environments. Visuals are instrumental in fostering active and meaningful engagement during classroom discussions.

On the other hand, the indicator with the lowest score is asking students to illustrate their understanding of the lesson through creative drawings, with a composite $w\bar{x} = 3.91$. Although this score is still relatively "high," it suggests that there is slightly less utilization of this strategy compared to the other two practices. However, it is important to note that this practice still demonstrates a significant level of implementation, indicating that teachers are providing opportunities for students to visually represent their knowledge and promote creativity. Overall, the results suggest that teachers are effectively incorporating visualization techniques into their instruction, fostering deeper understanding and engagement among students. Correspondingly, research has shown that the use of visual aids in the classroom supports the development of visual literacy skills. Visual literacy refers to the ability to interpret and create visual messages, and it is becoming increasingly important in today's visually-oriented society (Hobbs, 2017).

In Terms of Cooperative Learning

Table 6. Descriptive statistics of the teachers' utilization of instructional practices in terms of cooperative learning (n = 277)

Indicators	Mean	Description	Extent
1. Gives a scenario to students and lets them role-play	4.11	Agree	High
2. Allows students to experience clock partnership for an activity	3.66	Agree	High
3. Gives activities like Jigsaw puzzle	3.58	Agree	High
4. Groups students by two to do the Think-Pair-Share	3.57	Agree	High
5. Groups students in dyad or triad	3.55	Agree	High
6. Conducts speech choir by grouping the class	3.55	Agree	High
Composite	3.67	Agree	High

Table 6 presents the extent of teachers' utilization of instructional practices in terms of cooperative learning. One of the most "highly" utilized practices is giving scenarios to students and allowing them to role-play ($w\bar{x} = 4.11$). Role-playing activities provide students with the opportunity to apply their knowledge and skills in real-life situations, enhancing their understanding and communication abilities. Clock partnership, where students work in pairs for a specific activity, is another practice that teachers frequently employ ($w\bar{x} = 3.66$). This strategy promotes peer interaction and collaboration, as students support and learn from each other. Khan et al. (2024) back up these results claiming that cooperative learning positively influences social behavior.

It is also seen in the table that activities like jigsaw puzzles ($w\bar{x} = 3.58$) are "highly" used by the teachers since these promote cooperative learning. In Jigsaw activities, students are divided into small groups, and each group becomes an expert on a specific topic. They then share their knowledge with the rest of the class, fostering a sense of interdependence and collective learning. According to Pan et al. (2023), the general agreement within theories of human learning is that collaborative learning produces superior outcomes compared to solitary learning efforts. Other practices include grouping students in pairs or triads ($w\bar{x} = 3.55$), conducting speech choir by grouping the class ($w\bar{x} = 3.55$), and implementing the Think-Pair-Share strategy ($w\bar{x} = 3.57$). These practices create opportunities for students to collaborate, exchange ideas, and learn from one another. The composite score ($w\bar{x} = 3.67$) suggests

that English teachers are highly utilizing cooperative learning practices in their classrooms, coinciding with the findings of Smith et al. (2021). This implies that these teachers are effectively implementing strategies that involve students working together in small groups or teams, which is a key component of cooperative learning.

According to Gray (2021), teachers can create projects that encourage students to collaborate and deeply engage in their work, even during distance learning. Research has consistently shown that cooperative learning can lead to higher academic achievement, better interpersonal relationships, and improved self-esteem among students. Moreover, research by Gillies (2016) suggests that when teachers receive training and support in implementing cooperative learning practices, they are more likely to use these strategies effectively in their classrooms. This highlights the importance of professional development and ongoing support for teachers in enhancing the effectiveness of cooperative learning.

In Terms of Inquiry-based Learning

Table 7. Descriptive statistics of the teachers' utilization of instructional practices in terms of inquiry-based learning (n = 277)

Indicators	Mean	Description	Extent
1. Teaches the class how to conduct the three-Step Interview	4.16	Agree	High
2. Teaches the class how to conduct a case study	4.08	Agree	High
3. Guides students in conducting symposium	4.04	Agree	High
4. Encourages the class to brainstorm in a group study	3.77	Agree	High
5. Explains and guides students in conducting action research	3.28	Agree	High
Composite	3.86	Agree	High

Table 7 presents that the extent of teachers' utilization of inquiry-based learning is "high" as reflected in the composite weighted mean of 3.86. To reiterate, the teachers have a "high" utilization in terms of teaching the class how to conduct the three-step interview ($w\bar{x} = 4.16$), case study ($w\bar{x} = 4.08$), symposium ($w\bar{x} = 4.04$), brainstorming in a group study ($w\bar{x} = 3.77$), and action research ($w\bar{x} = 3.28$). By incorporating these practices, students are encouraged to become active participants in their own learning process, promoting a deeper understanding, problem-solving skills, and collaboration. Worgan (2023) acknowledged that this method can help students feel more engaged in the class and more in charge of their own learning. Kasuba et al. (2023) also recognized that inquiry-based learning plays a crucial role in improving students' English vocabulary skills.

3.2 Students' 21st Century Skills

In Terms of Problem-Solving

Table 8. Descriptive statistics of the students' 21st century skills in terms of problem-solving (n = 277)

Indicators	Mean	Description	Extent
1. Presents all work in an exceptionally clear, neat, organized, and course-specific manner using technology and/or a variety of resources to communicate information.	3.96	Agree	High
2. Demonstrates the ability to construct a clear and insightful problem statement and to identify multiple approaches to solve a problem	3.88	Agree	High
3. Reviews results relative to the problem with specific consideration of the need for further investigation.	3.84	Agree	High
4. Interprets, draws logical conclusions, reflects, and clearly & confidently communicates results.	3.82	Agree	High
5. Selects and applies highly efficient problem-solving strategies to find a solution.	3.77	Agree	High
6. Analyzes all of the relevant data in great detail	3.75	Agree	High
7. Solves correctly the problem with a logical and sequential written response that integrates substantial and pertinent information, important details, and concepts	3.75	Agree	High
8. Indicates insightful comprehension of the problem & carefully addresses multiple contextual factors	3.70	Agree	High
9. Comprehends the problem and carefully addresses multiple contextual factors and thoroughly reviews results relative to the problem with specific consideration of need for further work.	3.70	Agree	High
10. Faces a problem, I try to analyze all the facts and put them in systematic order	3.67	Agree	High
Composite	3.78	Agree	High

Based on Table 8, generally, the students' displayed a "high" extent of problem-solving skills as revealed in the composite $w\bar{x}$ of 4.08. To point out, students are able to present an exceptionally clear, neat, and organized manner using technology and varied resources to relay information ($w\bar{x}$ = 3.96). These are "highly" manifested by the students. These findings mean that students have developed the ability to effectively utilize available tools. They are capable of conveying complex ideas in a coherent and engaging manner, which is essential for success in various academic and professional settings. Additionally, their proficiency in utilizing diverse resources highlights their adaptability and resourcefulness. This finding aligns with the importance of technology integration in enhancing communication skills and presentation abilities emphasized by Smith et al. (2021).

The table also unveils that students "highly" demonstrate the ability to construct a clear and insightful problem statement and to identify multiple approaches to solve a problem ($w\bar{x}$ = 3.88). The students likewise manifest "high" extent of skills to review results relative to the problem with specific consideration of the need for further investigation ($w\bar{x}$ = 3.84) and interpret, draw logical conclusions, reflect, and confidently communicate results ($w\bar{x}$ = 3.82). This shows that students possess a strong sense of critical evaluation and research acumen and that they are capable of processing complex information, synthesizing it effectively, and articulating their insights with clarity and conviction.

The "high" extent of skills highlights the need to further enhance students' strategic thinking and decision-making skills in problem-solving contexts (Jones & Johnson, 2018). Smith et al. (2021) also stressed the importance of developing well-rounded problem-solving skills among students to thrive in the 21st-century context.

In Terms of Information Literacy

Table 9. Descriptive statistics of the students' 21st century skills in terms of information technology literacy (n = 277)

Indicators	Mean	Description	Extent
1. I recognize the need for information.	4.13	Agree	High
2. I recognize that accurate and complete information is the basis for intelligent decision making.	4.07	Agree	High
3. I can use information in critical and problem solving.	3.84	Agree	High
4. I have access sources of computer-based information	3.80	Agree	High
5. I have developed successful search strategies.	3.78	Agree	High
6. I can identify potential sources of information.	3.73		
7. I can evaluate information	3.73	Agree	High
8. I can organize information for practical applications.	3.70	Agree	High
9. I can integrate new information into an existing body of knowledge	3.70	Agree	High
Composite	3.83	Agree	High

Table 9 shows that students have acquired a "high" extent of information literacy as evident in the composite weighted mean of 3.83. To highlight, the students have a "high" extent of skills in recognizing the need for information ($w\bar{x}$ = 4.13) and accurate and complete information is the basis for intelligent decision-making ($w\bar{x}$ = 4.07). This connotes that the students have ideas that fundamental to intelligent decision-making process and that they are well-prepared to navigate complex situations and make informed choices. They must have a strong understanding of the importance of thorough research and data analysis which guide them in making wise judgments. This discovery corresponds with the outcomes of Muaña's (2023) study, which revealed that students possess "high" proficiency in identifying credible and authentic sources. Additionally, she observed that students are adept at efficiently sharing the information they gather online.

On the other hand, the table reflects that the students display "high" skills in evaluating information ($w\bar{x}$ = 3.73), organizing information for practical applications ($w\bar{x}$ = 3.70), and integrating new information into an existing body of knowledge ($w\bar{x}$ = 3.70). This proficiency suggests that students possess strong critical thinking abilities, enabling them to assess the reliability and relevance of information effectively. The minor changes in technology, even if they follow typical learning patterns, can lead to unexpected transformations. The ability to analyze and convert human tasks into software code affects skill needs. This underscores the importance of effectively evaluating information, as seemingly small developments can greatly impact society and employment Ciarli et al. (2021). Developing strong information literacy skills equips students with the ability to critically evaluate and apply information in various contexts, contributing to their academic and professional success. These findings are

consistent with the results of a study by Estera et al. (2020), indicating that students exhibit a strong proficiency in media and information literacy. Contrary to the present findings, Bulangis (2021) reported that students' information literacy skills were rated as "low," particularly in their capacity to manage, identify, and communicate information effectively. This assertion is supported by the research of Arifah, Suyitno, and Dewi (2020), which revealed that numerous students produced incomplete or irrational conclusions due to their failure to consider pertinent information.

In Terms of Critical Thinking

Table 10. Descriptive statistics of the students' 21st century skills in terms of critical thinking (n = 277)

Indicators	Mean	Description	Extent
1. Ensure to stay updated with crucial information	3.83	Agree	High
2. Share the newly gained information	3.82	Agree	High
3. Recall information about which I once read	3.81	Agree	High
4. Combine information from different texts	3.70	Agree	High
5. Try to use practical examples to justify my answer when discussing	3.62	Agree	High
6. Repeat important threads from the text	3.60		
7. Express same content in many different ways	3.58	Agree	High
8. Understand texts from various fields	3.55	Agree	High
9. Give many examples when explaining	3.50	Agree	High
10. In-depth analyses of reality are a waste of life	2.62	Moderate	Moderate
Composite	3.56	Agree	High

The data presented in Table 10 provides insights into the extent of 21st-century skills exhibited by the students in terms of critical thinking. Collectively, the students display a "high" extent of critical thinking skills. Clearly, the students have "high" skills in ensuring to stay updated with crucial information ($w\bar{x} = 3.56$), sharing the newly gained information ($w\bar{x} = 3.82$), and recalling information they once read ($w\bar{x} = 3.81$). These findings point out that students demonstrate a high level of awareness regarding the importance of staying updated with crucial information, a willingness to share newly gained knowledge, and the ability to recall information from past readings.

On the other hand, the table reveals that students "moderately agree" that in-depth analysis of reality is not a waste of life" ($w\bar{x} = 2.62$). This indicates that students may have a lower inclination towards engaging in in-depth analyses of reality. It suggests that they may not prioritize or see value in exploring complex issues deeply, which could be an area for improvement in their critical thinking skills. Smith (2020) found that students demonstrated a high level of critical thinking skills in the area of inference, while Johnson et al. (2020) reported that students have a strong ability to analyze information. Additionally, students showed a good level of critical thinking skills in understanding and interpreting information, according to Brown et al. (2019). Furthermore, students exhibited a moderate level of critical thinking skills in providing explanations. On the contrary, Brown et al. (2019) exposed that students struggled to provide clear and comprehensive explanations, while Smith (2020) highlighted that students' critical thinking skills were still very low when it came to systematic answers and recall of information.

3.3 Relationship Between Teachers' Instructional Practice and Students' Problem-Solving Skills

Table 11. Relationship between teachers' utilization of the instructional practices and students' problem-solving skills (n = 277)

Variables	Coefficients	SE	t Stat	P-value
Intercept	0.802	0.181	4.431	<0.001
Drill	0.099	0.098	1.019	0.309
Contextualization	0.074	0.094	0.793	0.429
Mediated Learning	0.01	0.093	0.105	0.916
Technology in the Classroom	-0.131	0.087	-1.51	0.132
Visualization	0.384	0.069	5.568	<0.001
Cooperative Learning	0.039	0.079	0.489	0.625
Inquiry-Based Learning	0.286	0.077	3.696	<0.001
R = 0.762				
R ² = 0.581				
adjusted R ² = 0.57				
F-ratio = 53.286				
p-value = <0.001 (significant)				

Table 11 shows the data in identifying the relationship between the extent of teachers' utilization of the seven instructional practices in teaching English and the students' 21st-century skills in terms of problem-solving. Using Multiple Linear Regression Analysis, the study reveals that the overall F-test is significant ($p < .001$). Every p-value of the explanatory variables also depicts that among the seven instructional practices in teaching English, only practices such as visualization ($p < .001$) and inquiry-based learning ($p < .001$) can significantly predict the students' problem-solving skills. This finding implies that teachers who utilize these practices to a high level tend to have students who acquire and exhibit better problem-solving skills and vice versa. In the study by Olayvar 2021, it was found that students lacking problem-solving skills tend to view problems as daunting challenges, resulting in diminished confidence in their ability to solve them.

The data also point out that teachers' instructional practices like drill, contextualization, mediated learning, technology utilization in class, and cooperative learning do not significantly relate to students' problem-solving skills (0.05). This result connotes that the shifts in the extent of teachers' utilization of the aforementioned practices are not associated with the changes in the extent of problem-solving skills exhibited by the students, and these instructional practices do not show a substantial impact on the development of problem-solving skills in English. Research suggests that drill-based learning primarily focuses on repetitive practice rather than critical thinking. Contextualization, while enhancing understanding, may not directly develop problem-solving skills as it may lack specific strategies for complex problem-solving. Mediated learning, although effective in facilitating understanding, may need to be combined with other strategies. The same goes with cooperative learning, though it promotes social skills and knowledge sharing, may not consistently impact problem-solving skills due to various factors such as task nature and student roles within the group. Technology in the classroom also, if not purposefully integrated, becomes ineffective. That is why, these practices might not substantially improve students' problem-solving skills (Bucu, 2022). Consequently, in developing problem-solving skills effectively, it is crucial to incorporate strategies that specifically target critical thinking, analytical reasoning, and real-world application.

3.4 Relationship Between Teachers' Instructional Practice and Students' Literacy Skills

Table 12. Relationship between teachers' utilization of the instructional practices and students' literacy skills (n = 277)

Variables	Coefficients	SE	t Stat	P-value
Intercept	0.402	0.147	2.735	0.007
Drill	0.057	0.079	0.723	0.47
Contextualization	0.228	0.076	2.982	0.003
Mediated Learning	-0.036	0.076	-0.478	0.633
Technology in the Classroom	0.174	0.071	2.46	0.015
Visualization	0.165	0.056	2.949	0.003
Cooperative Learning	0.256	0.065	3.965	<0.001
Inquiry-Based Learning	0.068	0.063	1.074	0.284
R = 0.837				
R ² = 0.701				
adjusted R ² = 0.693				
F-ratio = 90.073				
p-value = <0.001 (significant)				

Table 12 discloses that out of the seven areas of teachers' instructional practices, only contextualization ($p = 0.003$), technology in the class ($p = 0.015$), visualization ($p = 0.003$), and cooperative learning ($p < .001$) are found to be significant determinants of students' information literacy skills. In other words, teachers who utilize the enumerated instructional practices more often tend to have students who manifest higher information literacy skills than those teachers who utilize them less. Cooperative Learning has the highest coefficient of 0.256, indicating a significant positive relationship with literacy skills.

This research finding supports the notion that cooperative learning can be an effective instructional approach for promoting achievements in reading and writing. It aligns with the growing interest in cooperative learning as a method to enhance various aspects of education, including conceptual development in science, problem-solving in mathematics, and higher-level thinking and reasoning (Cooperative Learning: Developments in Research-Ed). In the study of Harianingsih, I., & Jusoh, Z. (2022), cooperative learning is viewed as a widely used instructional

approach that emphasizes group work and peer interaction to promote student learning and achievement. While there is a large body of research on the effects of cooperative learning on education, the findings have been mixed and often inconclusive due to variations in study design, sample characteristics, and outcome measures Roseth et al., (2023). Therefore, a systematic and rigorous synthesis of the existing evidence is needed to provide a more reliable estimate of the overall effect of cooperative learning on student achievement.

Moreover, the current data show that the non-significant relationship between the extent of teachers' utilization of instructional practices like drill, mediated learning, and inquiry-based learning and the students' information literacy skills (all p-values > $\alpha = 0.05$) would mean that these practices cannot predict the extent of students' information literacy skills. Instructional practices like drill-based learning, mediated learning, and inquiry-based learning have been widely used in educational settings. Each of these methods has its distinct characteristics and potential impacts on the learning experience of students.

The drill method is regarded as a suitable approach for instructing learning content to enhance practical abilities. According to the literature, it has been observed that employing the drill method helps students become proficient and adept in the material being taught and this could be an analytical component to information literacy (Pramesti, 2020) Inquiry-based learning, on the other hand, encourages students to ask questions and seek answers. It has been found to be effective in promoting learning outcomes such as deep thinking and the ability to apply knowledge and reasoning skills (School Libraries Worldwide, n.d.).

3.5 Relationship Between Teachers' Instructional Practice and Students' Critical Thinking Skills

Table 13. Relationship between teachers' utilization of the instructional practices and students' critical thinking skills (n = 277)

Variables	Coefficients	SE	t Stat	P-value
Intercept	0.346	0.164	2.112	0.036
Drill	0.165	0.088	1.862	0.064
Contextualization	0.128	0.085	1.499	0.135
Mediated Learning	-0.022	0.085	-0.263	0.793
Technology in the Classroom	0.271	0.079	3.441	0.001
Visualization	0.073	0.062	1.173	0.242
Cooperative Learning	0.269	0.072	3.744	0.000
Inquiry-Based Learning	-0.004	0.07	-0.052	0.959
R = 0.79				
R ² = 0.624				
adjusted R ² = 0.614				
F-ratio = 63.734				
p-value = <0.001 (significant)				

Table 13 illustrates that out of the seven areas of instructional practices of the teachers, only technology utilization in classroom (p < .001) and cooperative learning (p < .001) can be related to the extent of students' critical thinking skills. This connotes that the shifts in the extent of teachers' utilization of these two instructional practices in teaching English correspond to the changes in the extent of students' critical thinking skills. The results show that several instructional practices have a significant relationship with students' critical thinking skills. Technology in the class and cooperative learning have positive coefficients (0.271 and 0.269, respectively), indicating a positive relationship with critical thinking skills. This finding suggests that when teachers utilize these instructional practices in their English teaching, students tend to exhibit better critical thinking skills.

Additionally, it means that teachers often use instructional practices like storytelling to engage students and assess their understanding of the material. This finding coincides with the result of Nair and Yunus (2021), which also showed that engaging students through storytelling improves their comprehension of concepts and enhances their retention of information. In Laabidi's (2023) research, titled "The Role of Technology in Fostering Critical Thinking Skills," the focus is on investigating how the incorporation of technology in education impacts students' critical thinking capabilities. The study also examined the beneficial outcomes of utilizing cooperative learning methods in enhancing students' critical thinking and problem-solving abilities. These findings highlight the importance of utilizing certain instructional practices, such as technology integration and cooperative learning, to enhance students' critical thinking skills in English education.

4.0 Conclusion

The study underscores the importance of employing diverse instructional practices to enhance critical 21st-century skills among students in English subjects and the utilization of effective strategies to promote critical thinking, problem-solving, and information literacy skills. In terms of the relationship between instructional practices and 21st-century skills, visualization and inquiry-based learning are significant predictors of students' problem-solving abilities. Contextualization, technology integration, and cooperative learning also play important roles in influencing students' information literacy skills. Additionally, technology integration and cooperative learning are crucial factors in developing students' critical thinking skills.

5.0 Contributions of Authors

The following authors have the following contributions:

Dr. Groselie B. Ragay managed the study's conceptualization, designing the overall framework and objectives. She was actively involved in writing the manuscript, ensuring that the ideas were clearly and effectively communicated. Additionally, Dr. Ragay conducted the data collection, gathering the necessary information and materials for the research. She also performed data analysis, interpreting the collected data to draw meaningful conclusions.

Meanwhile, Dr. Maria Chona Z. Futral handled the treatment of the data, applying appropriate methodologies to process and prepare the data for analysis. She contributed significantly to the analysis, examining the data to identify relationships, and perceptions. Dr. Futral also took charge of editing the manuscript, refining the content for clarity, coherence, and academic precision. She provided a critical review of the manuscript, ensuring the study's validity and reliability. Furthermore, she supervised the entire research study, guiding the research process and ensuring adherence to the standards.

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The authors state that there are no conflicts of interest related to the execution of the research study. None of the authors have financial or personal ties that could impact the impartiality of the study results

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Attitudes and Educational Settings: A Correlational Analysis

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Abstract. This study explored the relationship between students' attitudes towards mathematics and their educational settings at Pangasinan State University (PSU) Binmaley Campus. Using a descriptive-correlational research design, data was collected from 160 students across four programs: Criminology, Environmental Science, Fisheries and Aquatic Sciences, and Secondary Education major in Science. A survey questionnaire was administered to gather detailed insights into students' perceptions and experiences in mathematics classes. Results indicated that the majority of participants were in their late teens, with significant representation from 19 and 20-year-olds. Female students constituted 57.5% of the sample. First-year students were the predominant group, highlighting the need for transitional support in higher education. The study found that while students generally agreed that mathematics was important and felt confident in their abilities, it was not necessarily their favorite subject. Perceptions of the educational setting at PSU Binmaley were generally positive, with the highest agreement on the classroom environment being conducive to learning. However, areas such as noise level management and teaching pace received slightly lower scores. Importantly, a significant moderate positive correlation ($r = 0.444$, $p < 0.01$) was found between students' perceptions of their educational setting and their attitudes towards mathematics, emphasizing the impact of a supportive learning environment on student engagement. These findings underscored the critical role of tailored educational interventions to enhance mathematics learning and engagement, aligning with broader educational policies and research. The study's insights were valuable for informing strategies to improve mathematics education at PSU Binmaley, fostering a more positive and engaging learning experience.

Keywords: Attitudes towards Mathematics; Educational settings; Student attitudes; Higher education; Descriptive-correlational research; Philippines.

1.0 Introduction

Education plays a pivotal role in shaping the future of individuals and societies, and mathematics, as a core subject, is crucial for developing logical reasoning and problem-solving skills. At the Pangasinan State University (PSU) Binmaley Campus, understanding the attitudes and educational settings that influence students' engagement in mathematics is essential for improving educational outcomes. Research indicates that students' affective engagement in mathematics is significantly impacted by various school and student factors (Lee et al., 2023). This study seeks to explore these dynamics, addressing the critical need to enhance mathematics education and student engagement at PSU Binmaley.

Research consistently shows that the environment where students learn plays a significant role in shaping their attitudes and engagement. The educational environment encompasses various factors including physical classroom settings, school climate, teacher support, and peer interactions. For instance, Lee et al. (2023) conducted a comprehensive study examining both school and student factors and their influence on affective mathematics

engagement. Their findings indicate that a positive school climate, characterized by supportive relationships and a sense of belonging, significantly contributes to students' emotional connection to mathematics. This emotional connection is crucial as it enhances students' intrinsic motivation and engagement with the subject matter.

Moreover, Lee et al. (2023) identified individual student characteristics, such as self-efficacy and prior academic achievement, as critical determinants of their engagement levels. These factors interplay with the broader school environment to shape students' attitudes towards mathematics. For example, students who perceive their school environment as supportive are more likely to develop a positive attitude towards learning and show higher levels of engagement in mathematics activities.

Similarly, Li et al. (2023) highlight the critical role of perceived teacher support in boosting math engagement and reducing anxiety among elementary school students. Their longitudinal study, which tracked students over four waves, found that consistent and positive teacher support not only enhances students' engagement but also alleviates various dimensions of mathematics anxiety. This underscores the importance of a supportive learning atmosphere where teachers actively engage with students, provide constructive feedback, and foster a positive learning environment.

Li et al. (2023) also discovered that teacher support influences students' perceptions of their own abilities in mathematics. When students feel supported by their teachers, they are more likely to develop confidence in their mathematical abilities, which in turn, reduces anxiety and promotes sustained engagement. This dynamic relationship between teacher support and student engagement emphasizes the need for teachers to be trained in providing effective emotional and academic support to students.

In the Philippines, the Department of Education (DepEd) has recognized the importance of enhancing math education to meet global standards and improve student outcomes. The Department has issued several guidelines aimed at fostering a more engaging and effective learning environment. One such directive is DepEd Order No. 72, s. 2020, which calls for the implementation of innovative teaching strategies to motivate students and enhance their performance in mathematics. This directive is part of a broader effort to align Philippine education with international best practices, recognizing that strong STEM (Science, Technology, Engineering, and Mathematics) skills are essential for national economic development and competitiveness.

DepEd Order No. 72, s. 2020, encourages educators to adopt creative and interactive teaching methods, integrate technology into the curriculum, and utilize data-driven approaches to identify and address learning gaps. By fostering a culture of continuous improvement and innovation in teaching practices, the directive aims to create a learning environment that is both stimulating and supportive for students.

Nationally, there is a growing body of research highlighting the need for ongoing professional development for teachers to improve math instruction. Dicdiquin, Mobo, and Cutillas (2023) conducted a study evaluating the effectiveness of professional development programs for junior high school mathematics teachers within the K to 12 curriculum framework. Their research emphasizes that well-designed professional development programs are crucial in equipping teachers with the necessary skills and knowledge to implement innovative teaching strategies effectively. The study found that teachers who participated in these programs showed significant improvements in their instructional practices, which subsequently led to better student performance and more positive attitudes towards mathematics.

The findings of Dicdiquin et al. (2023) underscore the importance of continuous professional development in enhancing the quality of math education. These programs often include workshops, training sessions, and collaborative learning opportunities that help teachers stay updated with the latest pedagogical techniques and educational technologies. By improving teachers' competencies, these programs ensure that students receive high-quality instruction that can foster their interest and engagement in mathematics.

Furthermore, research by Doño and Mangila (2021) on mathematics teacher engagement and student motivation in the Philippines highlights the direct correlation between teacher engagement and student outcomes. Their study suggests that teachers who are more engaged and motivated are better able to inspire their students and

create a positive learning environment. This finding aligns with the broader literature indicating that teacher enthusiasm and commitment play a critical role in student engagement and academic success.

Collectively, these efforts and research findings highlight a concerted push towards improving math education in the Philippines. By focusing on teacher professional development, innovative teaching strategies, and creating supportive learning environments, the DepEd aims to enhance student attitudes and performance in mathematics. This multifaceted approach recognizes that both structural changes at the policy level and practical improvements at the classroom level are necessary to achieve meaningful progress in math education.

Locally, Pangasinan State University (PSU) recognizes the need to boost math engagement among its students. Previous research, including Pereyras' (2019) study on sustainable practices at PSU, shows the university's commitment to progressive strategies. Yet, there's still a gap in understanding how PSU Binmaley students' attitudes towards math are influenced by their educational settings.

Recent local assessments reveal a concerning trend: many students show low motivation and engagement in math. Querido (2023) found that interactive classroom tools can significantly enhance student engagement and performance, though their use is not yet widespread. Additionally, Balala et al. (2021) point out that early numeracy activities play a crucial role in shaping long-term attitudes towards math, indicating a need to strengthen these foundational practices.

Despite efforts to improve, the current educational system faces several challenges. Traditional teaching methods often don't meet the diverse needs of students or address their anxieties about math. Davadas and Lay (2020) note that factors like teaching styles and classroom environments greatly influence students' attitudes towards math. At PSU Binmaley, these issues are compounded by a lack of resources and adequate teacher training, resulting in a learning environment that doesn't fully support student engagement.

This study is motivated by a desire to find effective ways to improve math education at PSU Binmaley. By examining the link between students' attitudes and their educational settings, we hope to uncover insights that can help shape better policies and practices. This research is justified by the urgent need to enhance math engagement, as emphasized by educational authorities and supported by a wealth of literature.

Thus, this study addresses a critical issue: the low engagement and negative attitudes towards math among students at PSU Binmaley. Through detailed analysis, we aim to contribute to the creation of more supportive and effective educational environments, ultimately fostering a more positive and engaging learning experience in math.

2.0 Methodology

2.1 Research Design

This study employs a descriptive-correlational research design to explore the relationship between students' attitudes towards mathematics and their educational settings at Pangasinan State University (PSU) Binmaley Campus. This approach involves collecting comprehensive data through surveys to describe students' perceptions and experiences in their mathematics classes. By using statistical analysis to examine correlations between these attitudes and various educational factors such as teacher support and classroom environment, the study aims to identify significant relationships without manipulating any variables. This design is ideal for providing insights into how different aspects of the educational setting influence mathematics engagement, thereby informing strategies to enhance mathematics education at PSU Binmaley.

2.2 Research Locale

The study was conducted at the Pangasinan State University (PSU) Binmaley Campus, one of the nine campuses of Pangasinan State University. PSU Binmaley Campus is renowned for its distinction as a Center of Excellence for Fisheries, reflecting its commitment to high-quality education and research in this field. Located in the coastal town of Binmaley, Pangasinan, the campus provides a unique learning environment that integrates academic rigor with practical, hands-on experiences, particularly in fisheries and aquatic sciences. This campus not only serves as a hub for aspiring professionals in fisheries but also offers a diverse range of programs, including Bachelor of

Science in Criminology, Bachelor of Science in Environmental Science, and Bachelor of Secondary Education major in Science. The vibrant academic atmosphere, coupled with state-of-the-art facilities and a strong emphasis on research and community engagement, makes PSU Binmaley Campus an ideal setting for this study on the attitudes towards mathematics among its students. This rich educational landscape ensures that the findings of the research are grounded in a context that values both academic excellence and practical application, thereby providing valuable insights for enhancing mathematics engagement across various disciplines.

2.3 Research Participants

The research participants for this study were drawn from Pangasinan State University - Binmaley Campus, comprising a total of 160 respondents. The participants included 40 students each from four different programs: Bachelor of Science in Criminology, Bachelor of Science in Environmental Science, Bachelor of Fisheries and Aquatic Sciences, and Bachelor of Secondary Education major in Science. This diverse group of students provided a comprehensive representation of the campus population, allowing for a thorough examination of the various attitudes towards mathematics across different academic disciplines. By including respondents from these distinct fields of study, the research aimed to capture a wide range of perspectives and experiences, thereby enriching the analysis and findings.

The sampling technique employed in this study was stratified random sampling. This method involves dividing the population into distinct subgroups, or strata, that share similar characteristics and then randomly selecting participants from each stratum. In this case, the strata were the four academic programs mentioned: Bachelor of Science in Criminology, Bachelor of Science in Environmental Science, Bachelor of Fisheries and Aquatic Sciences, and Bachelor of Secondary Education major in Science.

By using stratified random sampling, the study ensured that each academic program was proportionately represented, which helped in capturing the diversity of attitudes towards mathematics within the university. This technique also enhanced the reliability and validity of the findings by reducing sampling bias and ensuring that the sample accurately reflected the overall population of students at Pangasinan State University - Binmaley Campus.

2.4 Research Instrument

The sampling technique employed in this study was stratified random sampling. This method involves dividing the population into distinct subgroups, or strata, that share similar characteristics and then randomly selecting participants from each stratum. In this case, the strata were the four academic programs: Bachelor of Science in Criminology, Bachelor of Science in Environmental Science, Bachelor of Fisheries and Aquatic Sciences, and Bachelor of Secondary Education major in Science.

The survey questionnaire was distributed to the selected respondents in a structured format, ensuring that each participant had an equal opportunity to provide their responses. The questions were designed to elicit comprehensive information on the students' attitudes towards mathematics, focusing on various dimensions such as their emotional engagement, perceived teacher support, and the overall learning environment. This approach facilitated the collection of nuanced data that could be analyzed to understand the correlational relationships between educational settings and student attitudes towards mathematics.

2.5 Data Gathering Procedure

The data gathering procedure for this study involved preparing and validating a survey questionnaire to capture students' attitudes towards mathematics and their perceptions of the educational settings at Pangasinan State University (PSU) Binmaley Campus. The researcher collaborated with faculty members to distribute the questionnaires to 160 students from four different programs, ensuring balanced representation. The surveys were administered during class times to maximize response rates and ensure minimal disruption. Students were informed about the study's purpose and assured of confidentiality. The collected data was then organized and analyzed to identify students' attitudes, understand their perceptions of the educational environment, and examine the relationship between these perceptions and their attitudes towards mathematics.

2.6 Ethical Considerations

Ethical considerations were paramount throughout this study to ensure the integrity and respect for all participants involved. Prior to data collection, the researcher obtained informed consent from all student participants, ensuring they were fully aware of the study's purpose, procedures, and their right to withdraw at any time without any consequences. Confidentiality was strictly maintained, with all responses anonymized to protect the identities of the participants. Additionally, the data was securely stored and used solely for research purposes. The study adhered to the ethical guidelines set forth by the institution and relevant academic bodies, ensuring that the research was conducted with the highest standards of ethical responsibility and respect for the participants' rights and well-being.

3.0 Results and Discussion

3.1 Demographic Profile

Table 1. Descriptive statistics of the demographic profile of the respondents

Age	Frequency	Percentage (%)
18 and below	7	4.40
19	71	44.4
20	61	38.1
21	8	5.00
22 and above	13	8.10
Sex		
Male	68	42.5
Female	92	57.5
Year		
1st Year	98	61.3
2nd Year	58	36.3
3rd Year	2	1.30
4th Year	2	1.30
Course		
Bachelor of Science in Criminology	40	25.0
Bachelor of Science in Environmental Science	40	25.0
Bachelor of Science n Fisheries and Aquatic Sciences	40	25.0
Bachelor of Secondary Education (Science)	40	25.0

Table 1 reveals that the majority of respondents are aged 19 (44.4%) and 20 (38.1%), predominantly female (57.5%), and primarily first-year students (61.3%). This age distribution aligns with typical university enrollment ages, with younger students often showing higher enthusiasm yet greater anxiety towards mathematics (Davadas & Lay, 2020). The slight female majority is noteworthy, as gender differences significantly impact math attitudes and performance (Espinoza & Taut, 2020). The high proportion of first-year students suggests that early academic experiences in mathematics are crucial, as highlighted by Diddiquin et al. (2023). The evenly distributed representation across four academic programs ensures a comprehensive analysis, supporting Querido's (2023) emphasis on tailored educational strategies to enhance math engagement across diverse fields.

3.2 Attitudes Towards Mathematics

Table 2. Descriptive statistics of the attitudes of the respondents towards mathematics

Attitudes	Mean	SD	Description
1. I enjoy learning Mathematics.	2.99	0.476	Agree
2. Mathematics is an important subject for my future career.	3.14	0.446	Agree
3. I feel confident when solving Mathematics problems.	2.60	0.771	Agree
4. I find Mathematics concepts easy to understand.	2.58	0.696	Agree
5. I am motivated to study Mathematics outside of class.	2.76	0.601	Agree
6. Mathematics is one of my favorite subjects.	2.38	0.875	Agree
7. I believe I can get good grades in Mathematics.	2.66	0.743	Agree
8. I look forward to Mathematics classes.	2.74	0.687	Agree
9. I feel anxious when it comes to Mathematics exams.	3.11	0.634	Agree
10. I find real-life applications of Mathematics interesting.	2.78	0.660	Agree
Overall	2.77	0.659	Agree

Table 2 shows that respondents generally have a positive attitude towards mathematics, with an overall mean score of 2.77. The highest agreement was with the statement "Mathematics is an important subject for my future

career" (Mean = 3.14, SD = 0.446), emphasizing the perceived career value of math, in line with Dicdiquin et al. (2023). However, moderate levels of confidence and understanding were noted, with mean scores of 2.60 (SD = 0.771) and 2.58 (SD = 0.696), respectively. This suggests that while students see the importance of math, there is a need to enhance their confidence and comprehension, as highlighted by Espinoza and Taut (2020) and Li et al. (2023), who emphasize the role of supportive educational environments.

A notable level of anxiety was observed with a mean score of 3.11 (SD = 0.634) for the statement "I feel anxious when it comes to Mathematics exams," reflecting findings from Lee et al. (2023) and Li et al. (2023) on math anxiety. Despite this, students expressed motivation to study math outside class (Mean = 2.76, SD = 0.601) and looked forward to math classes (Mean = 2.74, SD = 0.687), indicating a recognition of math's importance. To address areas of low confidence and high anxiety, innovative teaching strategies and ongoing teacher support, as suggested by Querido (2023), Balala et al. (2021), Doño and Mangila (2021), and Chua (2023), could be implemented to improve student attitudes and engagement in mathematics.

3.3 Educational Setting

Table 3. Descriptive statistics of the respondents' perception to the educational setting

Attitudes	Mean	SD	Description
1. The classroom environment is conducive to learning.	3.06	0.383	Agree
2. The classroom is equipped with adequate seating and lighting.	2.96	0.493	Agree
3. The noise level in the classroom is manageable and does not disrupt learning.	2.71	0.587	Agree
4. The teaching methods used in Mathematics classes are engaging.	2.86	0.570	Agree
5. Instructors use a variety of teaching methods to cater different learning styles.	2.96	0.493	Agree
6. The pace of teaching in Mathematics classes is appropriate for my understanding.	2.79	0.605	Agree
7. The availability of textbooks and other learning materials for Mathematics is satisfactory.	2.86	0.588	Agree
8. There are sufficient technological resources (e.g., computers, projectors) to support Mathematics learning.	2.81	0.555	Agree
9. Online resources provided by the school are helpful for my Mathematics studies.	2.82	0.525	Agree
10. The overall educational setting at PSU Binmaley supports my engagement in Mathematics.	3.04	0.378	Agree
Overall	2.89	0.518	Agree

Table 3 illustrates the respondents' perceptions of the educational setting at PSU Binmaley Campus, with an overall mean score of 2.89, indicating general agreement that the environment supports their mathematics learning. The highest-rated statement was "The classroom environment is conducive to learning" (Mean = 3.06, SD = 0.383), which suggests that students find their physical learning environment supportive. This is consistent with findings by Davadas and Lay (2020), who emphasized the importance of a conducive classroom environment in enhancing students' attitudes towards mathematics.

Other aspects of the educational setting also received favorable ratings. Statements like "The classroom is equipped with adequate seating and lighting" (Mean = 2.96, SD = 0.493) and "Instructors use a variety of teaching methods to cater different learning styles" (Mean = 2.96, SD = 0.493) highlight the adequacy of physical resources and the diversity in teaching approaches, which are crucial for catering to various learning preferences (Dicdiquin et al., 2023). However, the relatively lower mean score for "The noise level in the classroom is manageable and does not disrupt learning" (Mean = 2.71, SD = 0.587) suggests that noise control could be improved to further enhance the learning environment. Studies by Lee et al. (2023) and Li et al. (2023) support the notion that a well-managed classroom environment significantly impacts student engagement and reduces anxiety. Overall, the educational setting at PSU Binmaley appears supportive of mathematics learning, aligning with Querido's (2023) findings on the importance of a supportive learning environment for enhancing student engagement in mathematics.

3.4 Relationship Between Educational Setting and Attitudes

Table 4 shows the relationship between respondents' perspectives on the educational setting at PSU Binmaley Campus and their attitudes towards mathematics. The correlation coefficient ($r = 0.444$) indicates a moderate positive relationship, which is statistically significant at the 0.01 level ($p = 0.000$). This suggests that improvements in the educational setting are associated with more positive attitudes towards mathematics among the students.

Table 4. Analysis for the relationship between educational setting and their attitudes towards mathematics

Relationship	Correlation Coefficient	Attitudes towards Mathematics	Interpretation
Educational Setting	r	0.444**	Moderate
	Sig.	0.000	Positive Relationship

** . Correlation is significant at the 0.01 level (2-tailed).

This finding is consistent with previous research emphasizing the significant role of the learning environment in shaping students' attitudes and engagement with mathematics. For instance, Lee et al. (2023) and Li et al. (2023) highlighted how supportive educational settings, including effective teaching methods and adequate resources, contribute to higher levels of student engagement and reduced math anxiety. Furthermore, Dicdiquin et al. (2023) and Querido (2023) have demonstrated that diverse and interactive teaching strategies enhance student motivation and performance in mathematics. Therefore, the moderate positive relationship observed in this study underscores the importance of fostering an enriching and supportive educational environment to improve students' attitudes towards mathematics.

4.0 Conclusion

The findings from this study provide a comprehensive understanding of the attitudes towards mathematics among students at Pangasinan State University (PSU) Binmaley Campus, highlighting various demographic, academic, and environmental factors. The majority of participants were in their late teens, particularly 19-year-olds, indicating a critical stage in higher education where attitudes are significantly influenced by their educational environment. Female students constituted a higher percentage of the sample, which is consistent with broader educational trends and emphasizes the importance of understanding gender-specific factors in mathematics engagement. First-year students were predominantly represented, suggesting the necessity of focusing on transitional support to enhance their mathematics experiences. The equal distribution of respondents across different academic programs allowed for a balanced analysis, revealing that while students generally acknowledge the importance of mathematics and feel confident in their abilities, it is not necessarily their favorite subject. Perceptions of the educational setting at PSU Binmaley were generally positive, with students appreciating the conducive learning environment and diverse teaching methods, though areas for improvement were identified. Importantly, the study found a significant moderate positive relationship between students' perceptions of their educational setting and their attitudes towards mathematics, underscoring the critical role of a supportive educational environment in fostering positive mathematical engagement. These insights align with existing literature and provide valuable guidance for developing targeted interventions to enhance mathematics education at PSU Binmaley.

5.0 Contributions of Authors

This study was conducted solely by the author, who was responsible for all aspects of the research. The author independently carried out the writing, editing, data gathering, data analysis, encoding, and interpretation of the findings. Every stage of the research process, from conceptualization to final reporting, was meticulously managed by the author to ensure the study's integrity and coherence. This comprehensive involvement underscores the author's dedication and expertise in the subject matter.

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7.0 Conflict of Interests

The author indicated that there are no conflict of interests in the publication of this paper.

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Leadership Traits and Academic Performance of Grade 12 Accountancy, Business, and Management Students of Mabolo National High School

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Abstract. Solid and effective leadership qualities are paramount in shaping and influencing students' academic performance. These leadership attributes motivate and inspire students to strive for and attain their full potential. Furthermore, such qualities are instrumental in fostering the development of essential skills among students and encouraging their active participation in contributing to the progress and advancement of their community and nation. This descriptive-correlational study examined the leadership traits and academic performance of the grade 12 accountancy, business, and management (ABM) of Mabolo National High School. Using Slovin's formula, the study drew seventy-three (73) respondents selected randomly to represent the school's ABM students. The authors used a modified tool to gather data from the respondents, and the tool has undergone a validity and reliability test. The study employed a weighted mean and Pearson correlation coefficient to analyze the data. Based on the results, the respondents perceived social skills and emotional intelligence as dominant leadership traits, while conflict resolution and people management were weak traits as perceived by the respondents. Also, it was found that leadership traits have a significant relationship to academic performance. Therefore, the study concludes that leadership qualities exhibited by students in the ABM strand have a noteworthy influence on their academic achievements, their capacity to engage in productive collaboration with their peers, and their positive contributions to the overall learning atmosphere. The study offered a sweeping set of recommendations to address deficiencies in leadership qualities. These recommendations are intended to cultivate well-rounded societal leaders among students.

Keywords: Leadership traits; Academic performance; Well-rounded leaders, Descriptive-correlational; Mabolo National High School; Cebu City.

1.0 Introduction

Education is always placed on top. It was the perfect path to chase our dreams. Education is essential as it is the step-by-step process to achieve the goals and a key to unlocking opportunities within desired companies for individuals. Education helps us improve our academic performance. This is where students can showcase their ability and activeness in learning. Acquiring a quality education is crucial because it makes an individual more capable of leading and serves as the foundation for leadership, where they can develop and strengthen their leadership abilities.

Leadership involves inspiring, motivating, and influencing people or groups toward a common goal or vision, frequently by setting a good example and making wise choices. According to Ward (2023), leadership is the skill

of inspiring a group of individuals to act in the direction of a shared objective. Leadership behavior refers to Leaders who can learn these actions and strategies to enhance the efficiency of those in their vicinity, and individuals employ these behaviors to inspire people to act when they possess a vision for an organization, a product, or a group of people (Indeed, 2023). Also, leaders inspire others, offer guidance, foster a positive work environment, and take initiative to drive action (Wale, 2019). Academic performance is the achievement and success of a person or group in educational settings. It is often assessed using a variety of measures, including grades, test results, participation in class, and overall educational success.

Understanding leadership traits can lead to better teamwork and collaboration in academic and professional settings, fostering a positive group dynamic. According to Yasmin (2018), leadership characteristics such as motivational support, recognition, appreciation, leadership, and an optimistic attitude are essential for improving job performance and achieving employee satisfaction. Identifying leadership traits helps individuals make more effective decisions in leadership roles or when contributing to group choices. Developing leadership traits can enhance career prospects, as employers highly value strong leadership skills. Academic performance can assist in educational planning, helping students set realistic goals and improve their study habits. High academic performance can lead to scholarships and other financial incentives for students, reducing the cost of education.

Several studies proved that leadership traits contribute to academic performance. According to Dabesa and Cheramlak (2021), a positive and significant correlation exists between leadership effectiveness and students' academic achievement. In Handy's (2017) research, a positive correlation was observed between leadership skills and both grade point average (GPA) and Measures of Academic Progress (MAP) reading scores. The scores reflecting leadership skills also explained 20% of the variation in GPA, independent of the influence of control variables. Moreover, the leadership style of a school's principal impacts students' performance, particularly student accomplishment, according to Chen et al. (2022). The leadership approaches of individuals have been observed to impact their performance, whether in a professional or academic setting (Chan, 2023).

Although many studies provide valuable insights into the impact of leadership styles on a student's academic performance, the question of how leadership traits impact the Academic Performance of Grade 12 students in Accountancy, Business, and Management of Mabolo National High School and how they relate with sex remains unanswered highlighting the need for further research. This study specifically aims to identify the relationship between leadership traits and students' academic performance and to check whether gender matters in being a leader.

Knowing one's leadership traits for today's students cannot be underestimated. In their future careers, ABM students will experience the unpredictable global market of today's work environments. Overall, the result of this study aims to aid the students in knowing their leadership traits and using them to their advantage toward academic achievement despite their gender.

2.0 Methodology

2.1 Research Design

To overcome the research problems presented, this study used a descriptive-correlational research approach to ascertain the students' leadership traits and academic performance. The information gathered from the survey questionnaire helped produce the final product. The frequency distribution and weighted mean are two data types and statistics used in this study.

2.2 Research Locale

The study was conducted at Mabolo National High School (MNHS), a public Senior High School located at Pope John Paul II Avenue, Cebu City, 6000, specifically in the Accountancy, Business, and Management (ABM) strand. This school was chosen for the investigation because of its handy location – it is close to SM City Cebu, Police Station 4, and Saint Joseph the Patriarch Parish.

2.3 Research Respondents

The students from Mabolo National High School served as the research respondents. These students are enrolled in the 12th grade for Accountancy, Business, and Management in the 2023–2024 school year. The study will use a

simple random sampling method to select 73 respondents from the Accountancy, Business, and Management strands. As mentioned earlier, the researchers believed that students in grade 12 of senior high school from the mentioned strand were eligible to take part in the research.

2.4 Research Instrument

This research considers two (2) quantitative (used questionnaires) instruments. The questionnaire's origins are described in depth on the page that follows. Part 1: The Level of Agreement of Leadership Traits The tool for the level of agreement of leadership traits is adapted from the research study of Socorro Austria, Angel E. Billones, Justin Galarse, Nikki O. Josol, Hans Stephen G. Maringuran, and Stephanie P. Recla entitled Leadership Competencies of Accountancy, Business, and Management Students at Mabolo National High School in 2023. The researchers altered the existing questionnaire by adding a new question: the demographic profile (sex). Part 2: The Level of Agreement of Academic Performance The tool for the level of agreement of academic performance was adopted by Carson Birchmeier, Emily Grattan, Sarah Hornbacher, and Christopher McGregory in 2015. Cronbach's alpha was employed to determine the reliability and consistency of the tool, providing a reliability coefficient score. The pilot test yielded a result of 0.8276, indicating internal consistency in the responses from the respondents.

2.5 Data Gathering Procedure

The researchers started by brainstorming ideas for study topics and discussing their choice of title with their teacher. After accepting the title, their teacher permitted them to conduct this investigation. Additionally, the researchers sent the assisting principal a second letter asking permission to conduct the investigation. Subsequently, they finished the core initial stages of the study, encompassing the problem statement, demographic profile, and variables. In the end, the researchers created and printed the necessary questionnaires. Researchers conducted a survey from room to room to gather data, a process expected to span two to three days before the quarterly examination. Some students declined participation, citing the lengthy questionnaire. Additionally, certain teachers are unwilling to permit data collection as immediate lesson discussions are prioritized due to the impending examination.

2.6 Data Analysis

Microsoft Excel was used to carefully count, tabulate, and analyze the survey results. The statistical treatments used by the researchers are the frequency distribution, simple percentage, weighted mean, and Pearson Product Moment Correlation Coefficient. Frequency distribution was employed to arrange the data collected by the researchers from survey questionnaire participants. This allows researchers to examine the entire dataset quickly. Also, one may calculate the average statistically using the weighted mean by multiplying the weights by their respective means and adding the results. This kind of averaging gives weights to individual values according to the significance of each observation. To get the weighted mean, multiply the weight by the quantitative result, then sum each product. If every weight is the same, so are the weighted and arithmetic means. Moreover, the Pearson Product Moment Correlation Coefficient (Pearson r) test was used to assess if leadership traits (x) and academic performance (y) had a significant relationship.

2.7 Ethical Consideration

The study will place a great deal of emphasis on ethical issues, particularly throughout gathering data. Instead of discriminating, the researchers will use social values of responsibility, objectivity, and child welfare. Researchers must remain unbiased when distributing surveys to avoid being swayed by their feelings, opinions, or interpersonal connections. The researchers make sure that this study has a positive effect on the environment around the students.

3.0 Results and Discussion

3.1 Demographic Profile

This section highlights a detailed presentation, analysis, and interpretation of the data about the particular goals of the investigation. The following demographic information was recorded and tabulated: Sex and Grade Level, with 73 students responding to the survey.

Table 1. Sex profile of the respondents

Sex	Frequency	Percentage
Male	35	47.95
Female	38	52.05
Total	73	100

Table 1 presents data from a sample size of 73 respondents, 35 of whom were male and 38 of whom were female. Most participants in this survey are female. The fact that there are more female students in leadership roles may be the cause of the outcome. On the contrary, Njaramba et al. (2022) reveal in their findings that most respondents are male student leaders.

3.2 Leadership Traits

Table 2. Descriptive statistics of the leadership traits of Grade 12 ABM students

Leadership Traits	Mean	Descriptive Equivalent	Rank
Social Skills	3.40	Strongly Agree	1
Emotional Intelligence	3.23	Agree	2
Conflict Management	3.10	Agree	3
Empowering	3.05	Agree	4
Adaptability	2.93	Agree	5.5
Being Helpful	2.93	Agree	5.5
Setting and Sharing a Compelling Vision	2.93	Agree	5.5
Problem-solving	2.86	Agree	8
Conflict Resolution	2.64	Agree	9
People Management	2.63	Agree	10
Overall Mean	2.97	Agree	

Table 2 shows the scores of Accountancy, Business, and Management students, the interpretation for each score, and the ranking of each attribute. Mabolo National High School's accountancy, business, and management students generally agreed with the leadership trait variable. Furthermore, the table above shows that the grade 12 Accountancy, Business, and Management students of Mabolo National High School ranked social skills as the highest weighted mean, 3.40, with a strongly agreed interpretation. Social skills, as per Herrity (2023), encompass various forms of communication, such as spoken, nonverbal, written, and visual. They are commonly known as "interpersonal" or "soft skills." Also, according to Breil et al. (2021), social skills like persuasion, compassion, and calm are critical in both business and educational environments, and selection procedures benefit greatly from evaluating these abilities. Multiple studies supported the study's findings regarding social skills. Just like the study of Ramesh et al. (2021) indicates that enhanced academic success correlates with high personal and social competence. Therefore, social skills training contributes to healthy development and prevents academic underachievement by improving students' social skills, lowering behavioral difficulties, and improving academic performance (Souza et al., 2018). In addition, people management came in at number ten, having the lowest weighted mean of 2.63 and an agreeable interpretation. According to Dutta and Chaudhry (2021), people management is the attitude of monitoring people's mindsets and using developed abilities and attitudes to accomplish goals and objectives in the workplace. Ghosh (2023) defines it as a series of practices encompassing the entire talent acquisition, optimization, and retention spectrum. These practices provide ongoing support to the business and guidance to employees within the organization. Several papers claimed that people management is essential to becoming a leader. In the study of Shi (2021), people management is essential for students' academic success because it enables them to create sensible career plans and uphold moral principles. According to Muluk (2020), students who possess outstanding management abilities should embrace behavioral and motivational strategies that favorably impact their social and academic performance.

3.3 Academic Performance

As shown in Table 3, the item with the highest received weighted mean of 3.62 has a strongly agreed interpretation: "I want to get good grades in every subject," meaning every student wants good grades in all subjects so they will not fail. The item "I start my papers and projects as soon as they are assigned, and I enjoy homework and activities because they help me improve my skills in every subject." scored the lowest in the table with a weighted mean of 2.74, indicating that the person initiates their papers and projects promptly upon assignment and finds enjoyment in homework and activities, seeing them as opportunities to enhance skills across various subjects.

Table 3. Descriptive statistics of the academic performance of Grade 12 ABM students

Academic Performance	Mean	Descriptive Equivalent
I made myself ready in all my subjects.	3.04	Agree
Pay attention and listen during every discussion.	3.16	Agree
I want to get good grades in every subject.	3.62	Strongly Agree
I actively participate in every discussion.	2.97	Agree
I start papers and projects as soon as they are assigned.	2.74	Agree
I enjoy homework and activities because they help me improve my skills in every subject.	2.74	Agree
I exert more effort when I do assignments.	2.99	Agree
Solving problems is a valuable hobby for me.	2.82	Agree
Overall Mean	3.01	Agree

The academic performance variable was found to be agreeable by the respondents, as indicated by the overall mean of 3.01 in the table shown above. Mappadang et al. (2022) assert that a student's academic achievement is essential since it reflects their attitudes, knowledge, and skills during college. Their academic performance primarily determines students' success in their future careers. How well a society uses its educational system to meet the requirements of each individual and accomplish its objectives is reflected in how well its academic performance is developing (Abdi & Zandipayam, 2019).

3.4 Relationship Between Variables

Table 4. Analysis for the relationship between sex and academic performance

Source of Relationship	Degree of Freedom	Computed r	Critical r value	Decision	Interpretation
Sex	71	0.284	0.232	Reject	Significant
Leadership Traits					

Table 4 presents a significant relationship between sex and respondents' leadership traits. To get the degree of freedom, a total sample size of 73 respondents was deducted for each of the two variables, academic performance and leadership traits, which come up with 71 degrees of freedom. The choice of H₀ with @0.05 alpha failed to accept the null hypothesis since the calculated r value of 0.284 is greater than the tabulated r value of 0.232. As a result, a decision will be made that there is a significant relationship between sex and respondents' leadership traits. McKee et al. (2018) state that the personality qualities and gender of the leader significantly influence self-other agreement in leadership judgments. Businesses with more gender-diverse top management teams are believed to perform somewhat better since male and female leaders have fundamentally different traits and styles (Wille et al., 2018).

Table 5. Analysis for the relationship between leadership traits and academic performance

Source of Relationship	Degree of Freedom	Computed r	Critical r value	Decision	Interpretation
Leadership Traits	71	0.554	0.232	Reject	Significant
Academic Performance					

Table 5 presents a significant relationship between leadership traits and academic performance. To get the degree of freedom, a total sample size of 73 respondents was deducted for each of the two variables, academic performance and leadership traits, which come up with 71 degrees of freedom. The choice of H₀ with @0.05 alpha failed to accept the null hypothesis since the calculated r value of 0.554 is greater than the tabulated r value of 0.232. As a result, a decision will be made that there is a significant relationship between leadership traits and academic performance.

A leader may improve academic achievement over the short and long terms, assert Deng et al. (2020). According to the study, taking on a leadership role enhances student independence in learning while reducing study time, and boosting academic achievement. People's leadership styles have been shown to affect how well they perform in both professional and academic contexts (Chan, 2023). Additionally, similar results were found in the study by Priyadarshini et al. (2019), which led the authors to suggest that higher education institutions assist students in building leadership abilities. The study demonstrated that student leadership influenced their academic performance.

4.0 Conclusion

The study's findings enable the following conclusions to be reached: (1) Mabolo National High School students studying Accountancy, Business, and Management agree on most of the leadership traits listed above. (2) With a weighted mean of 3.40, "social skills" is the item that respondents agree on the most. (3) In contrast, people management and conflict resolution have the lowest weighted mean of 2.63 and 2.64, respectively, making them the two least effective leadership traits. The respondents found these two to be pleasant only because they gave the sense that managing relationships between team members was optional. After all, some respondents still need to mature in character fully. With this mindset, people prefer to handle things independently rather than manage others. Furthermore, (4) most leadership traits are agreed with, which suggests that Mabolo National High School students studying Accountancy, Business, and Management are qualified for leadership positions.

The study's findings revealed a connection between sex and leadership traits, and leadership and academic performance. It also showed a statistical relationship between students' leadership traits and their academic performance. This study opens the way for future research on bridging the knowledge gap between school and work and assisting students in acquiring leadership skills. The study was designed to add to an existing database of information identifying the leadership traits of students and comparing them to their academic performance in the Accountancy, Business, and Management strands. The purpose of the study was to repeat the findings by comparing students' leadership traits to their sex and academic performance since it has been demonstrated that there is a relationship between leadership styles and how well they perform in both professional and academic contexts (Chan, 2023). The study's findings indicate a connection between leadership traits and academic performance, sex, and Leadership traits of students in the Accountancy, Business, and Management strands. Furthermore, according to this survey, most students possess social skills as their primary leadership characteristic. However, the results showed that people management received the lowest rating, suggesting that developing social skills alone is insufficient for effective people management.

Based on the study's findings, the researchers applaud the following actions to help improve students' academic performance and leadership traits:

- a) The administration of Mabolo National High School ought to permit students to participate in group activities conducted at other schools to help them develop the leadership and communication skills necessary to be successful leaders.
- b) This department should incorporate leadership development initiatives into the Accountancy, Business, and Management curriculum. Create courses that address various leadership topics, such as team management, strategic thinking, communication skills, and decision-making. Provide realistic tasks and role-plays for participants with first-hand experience in leadership scenarios.
- c) Teachers should give ABM students group tasks and team-based projects. Place students in various teams so they may practice leadership, cooperation, and teamwork. Give students the chance to switch around the leadership responsibilities on the teams so they may hone and improve their leadership skills.
- d) Students should look for leadership opportunities. Try to look for initiatives or leadership responsibilities that will allow you to test your leadership abilities. This can include becoming a member of student organizations, offering to lead groups of people, or volunteering for leadership roles. Students must learn and grow constantly. Maintain an open mind and a curious nature. Participate in leadership development programs, get input from others, and keep learning and developing your leadership-related knowledge and abilities.
- e) Future researchers who are interested in the study may accomplish this. This will be a big proposal to enhance the current study and assist future researchers in reaching more reliable conclusions if more accountancy, business, and management students are investigated. Furthermore, the researchers recommended that future researchers recreate the study and use mixed-methods research, reaching out to various groups of respondents such as students studying the General Academic Strand (GAS), STEM (science, technology, engineering, and mathematics), HUMSS (humanities and social sciences), TVL (technical vocational livelihood), and even college students.

6.0 Contributions of Authors

The authors confirm the equal contribution in each part of this work. All authors reviewed and approved the final version of this work.

Marzarette T. Repuela: Contributed to the conception and design of the study and drafted the initial sections of the manuscript, including the introduction and literature review.

Christine Mae De Los Santos: Served a key role in data collection and statistical analysis and assisted in writing the methodology and results sections and in revising the manuscript.

Anika Faye A. Viking: Examined the research instruments, ensured their validity and reliability, and helped write the methodology section.

Dr. Mark Anthony N. Polinar: Contributed overall guidance and oversight throughout the research process, assisted with data interpretation, and led the final writing and revision stages of the manuscript.

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8.0 Conflict of Interests

All authors declare that they have no conflicts of interest.

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Empowering the Future: The Sangguniang Kabataan's Role in Shaping the Lives of Young Filipinos

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Abstract. The Sangguniang Kabataan (SK) serves as the youth council in the Philippines, providing a platform for young individuals to engage in local governance and advocate for youth interests. This study explores the experiences of Sangguniang Kabataan Chairpersons in Barangay Kiwalan from 1992 to 2021. Using oral interviews, the researcher gathered insights from Sangguniang Kabataan Chairpersons and selected local residents for data validation. The goal was to gain a deeper understanding of youth leadership and governance at the local level. The study reveals that the Sangguniang Kabataan was established through the Local Government Code of 1991 and Republic Act No. 7160, aiming to facilitate youth participation in governance and empower young Filipinos aged 15 to 30. Over the study period, Barangay Kiwalan saw six elected Sangguniang Kabataan Chairpersons, each shouldering significant responsibilities. Their experiences varied but collectively served as milestone achievements and foundational experiences for their future endeavors beyond Sangguniang Kabataan leadership. Recommendations include ongoing training and support for Sangguniang Kabataan officials, guidance from Barangay Officials, regular consultations, transparency in transactions, and active participation from the Katipunan ng Kabataan. These measures are essential for enhancing Sangguniang Kabataan performance and fostering community peace and harmony.

Keywords: Sangguniang Kabataan; Youth leadership; Local governance.

1.0 Introduction

The Sangguniang Kabataan (SK) in the Philippines is a community council representing youth in barangays. It was established to empower young leaders and engage them in community affairs. Its main functions include promoting youth objectives, initiating social, political, economic, cultural, spiritual, and physical development programs, and conducting fundraising programs. According to Santos & Ocat (2019), the Sangguniang Kabataan is the predecessor of the Kabataan ng Barangay, which was implemented through the Local Government Code of 1991 (Republic Act 7160) to offer young people (ranging from ages 15 to 30) an opportunity to actively participate in local government activities in their barangays and serve as a training ground for them to become the next leaders of our nation.

According to ohchr.org (2021), young people should be able to shape responses actively and be meaningfully involved in all parts and phases of the reaction. Certain privileges for Sangguniang Kabataan officials are stipulated in the implementing rules and regulations of the Republic Act no. 10742, which incentivizes young individuals to run for positions in the Sangguniang Kabataan. People participated in politics for various reasons or motivations. Upon assumption to office, the Sangguniang Kabataan Chairperson serves as an ex officio member of the Sangguniang Barangay, elected by youth members, representing the youth's aspirations and concerns, bridging the gap between the younger demographic and the barangay council. They organize meetings, lead the

formulation of the Comprehensive Barangay Youth Development Plan, and implement policies in coordination with the Sangguniang Barangay and the Youth Development Council. They supervise the affairs of the Sangguniang Kabataan, appoint key members, coordinate with other youth organizations, and automatically become a member of the Sangguniang Barangay.

The researcher focused on the Sangguniang Kabataan Chairpersons of Barangay Kiwalan from 1992 to 2021 because it is one of the earliest settlements and one of the oldest local government units in Iligan City. Its strategic location makes it suitable for human settlement and economic activities, and it is home to a diverse population of youth with various interests and aspirations. The researcher is also the former Sangguniang Kabataan Chairperson of Barangay Kiwalan (2021-2023), who can provide unique insights into the realities faced by youth leaders. Drawing from personal experiences, the researcher can offer practical recommendations for improving Sangguniang Kabataan programs, fostering youth participation, and strengthening community partnerships. This firsthand perspective enriches academic discourse and policymaking, ensuring that the voices and needs of the youth are heard and addressed effectively.

In this paper, the researcher explored the experiences and challenges of Sangguniang Kabataan Chairpersons navigating their leadership role within the youth council. It aims to examine the role and responsibilities of a Sangguniang Kabataan Chairperson and their impact on community development, highlighted the significance of empowering youth leadership within local governance structures like the Sangguniang Kabataan. It demonstrates how youth participation and activism can contribute to positive social change and sustainable development at the grassroots level.

2.0 Methodology

2.1 Research Design

This study will be using a qualitative research approach that aims to collect and analyze non-numerical data obtained through open-ended questions, specifically the phenomenological research method, which is well suited for collecting narratives of the former Sangguniang Kabataan Chairpersons. Therefore, this allows researchers to gather information on the experiences of Sangguniang Kabataan Chairpersons of Barangay Kiwalan.

2.2 Research Locale

This study revolved around Barangay Kiwalan, Iligan City. The Barangay is situated at approximately 8.2857, 124.2878, in the island of Mindanao. Elevation at these coordinates is estimated at 302.5 meters or 992.4 feet above mean sea level.

2.3 Research Participants

The Researcher uses purposive sampling to select the former Sangguniang Kabataan Chairpersons of Barangay Kiwalan from 1992 to 2021. This is just right as the group is not randomly distributed but is defined by their former role and the time period they served. The former SK Chairpersons possess unique insights and experiences relevant to your research objectives. Their firsthand knowledge and historical perspectives on local governance and youth participation are crucial for understanding the evolution and impact of the SK in Barangay Kiwalan.

2.4 Research Instrument

The Researcher used an interview guide questionnaire containing a set of questions that will allow the Former Sangguniang Kabataan Chairpersons of Barangay Kiwalan to share their experiences, particularly on the contributions and challenges that affected their roles towards the youth of Barangay Kiwalan.

2.5 Data Gathering Procedure

The researcher forwarded a permission letter to the Department of Interior and Local Government and Local Government Unit of Barangay Kiwalan to conduct the study because Sangguniang Kabataan is under these offices. Once approved, the researcher will disseminate a document containing the letter of consent to the participants. The narratives of the former Sangguniang Kabataan Chairpersons of Barangay Kiwalan gathered through in-depth interviews that allowed them to share their lived experiences, challenges, and contributions during their terms from 1992 to 2021. The gathered narratives directly from Former Sangguniang Chairpersons, researchers can gain valuable insights into the challenges they faced, the strategies they employed, and the lessons they

learned during their tenure. The interview will be recorded with the permission of the participants for the researchers to review their responses and for documentation purposes. For additional information, the researcher has accessed the internet, research, articles, and PDFs about the roles and functions of the Sangguniang Kabataan Chairperson.

2.6 Data Analysis

The data is cleaned, reduced, and clustered into themes to create textural descriptions of participants' perceptions of a phenomenon. These descriptions are then used to construct structural descriptions, incorporating the experiences into a narrative format. The researcher synthesizes the data by creating two narratives, describing "what" and "how" the experience occurred. This phenomenological research method helps gather information on Sangguniang Kabataan members' experiences and perspectives on their roles towards the Filipino youth, providing a thorough understanding for future reforms.

2.7 Ethical Considerations

This research study followed ethical guidelines. The researcher ensures that the identities of the Sangguniang Kabataan Chairperson remain confidential. Before interviewing the participants, the researcher obtained informed consent, explaining the purpose of the study, potential risks, and benefits, and allowing the participants to voluntarily participate or withdraw. The researcher strives for objectivity and avoids bias when analyzing Sangguniang Kabataan Chairpersons' narratives.

3.0 Results

3.1 The Roles and Responsibilities of Sangguniang Kabataan

The Sangguniang Kabataan (SK) is a community council that represents the youth in each barangay in the Philippines. The roles and responsibilities of Sangguniang Kabataan Chairpersons are shaped by the Local Government Code of 1991 and the Sangguniang Kabataan Reform Act (RA 10742). The Sangguniang Kabataan is tasked with addressing the needs and aspirations of the youth sector and the entire barangay community. They are expected to engage in activities and projects that promote youth development and participation in local governance. Sangguniang Kabataan Chairpersons have several key duties, including organizing and leading meetings of the youth council, formulating the Comprehensive Barangay Youth Development Plan, implementing youth-focused policies and programs in coordination with the Sangguniang Barangay, and supervising the affairs and activities of the Sangguniang Kabataan. They also automatically become members of the Barangay Council and lead the Committee on Youth and Sports. A study by Malaluan et al. evaluated the performance of Sangguniang Kabataan officials under the 1991 Local Government Code and the Lyceum Community's perception of Sangguniang Kabataan abolition. The results showed that Sangguniang Kabataan officials performed their duties well, but respondents believed reformation would correct shortcomings. Recommendations included reviewing Republic Act 7160, evaluating officials' performance through annual and end-of-term reports, and enhancing the annual *Linggo ng Kabataan* through collaboration with higher-level government units. The Sangguniang Kabataan serves as a platform for emerging youth leaders to hone their skills in public service. With the reforms introduced by RA 10742, such as raising the age range of Sangguniang Kabataan members and creating the Local Youth Development Council, the Sangguniang Kabataan is poised to play an even more significant role in promoting youth empowerment and community development in the Philippines.

Republic Act 10742 introduced significant reforms, including raising the age of Sangguniang Kabataan officials from 15 to 18 years old, prohibiting individuals from seeking appointments who are related to elected or appointed officials, and creating a Local Youth Development Council to support Sangguniang Kabataan programs. The Sangguniang Kabataan Chairpersons are expected to undergo training and capacity building to enhance their skills and knowledge in governance and youth development. The Sangguniang Kabataan has a budget allocated for its activities and projects, emphasizing the importance of effective financial management for successful implementation. Sangguniang Kabataan Chairpersons are accountable to their constituents and must ensure transparency and openness in their decision-making processes. This reform was supported by Maranon II (2018), which highlighted the need to exclude individuals under 18 years old due to their political immaturity. On the other hand, Balane (2015) observed that young people are actively participating in various initiatives, such as advocating for gender equality and sustainable development. The Commonwealth (2015) emphasized the importance of empowering young people by providing them with choices, informed decision-making, and

accountability. The UNRC (2011) also emphasized the right of youths to express their views and opinions. The Sangguniang Kabataan plays a crucial role in nation-building and ensuring youth inclusivity in good governance.

Implementation Strategies

Sangguniang Kabataan Chairpersons in different barangays, such as Barangay Kiwalan, may employ diverse strategies for implementing activities, projects, and youth engagement. These approaches can be influenced by their personal experiences, local context, and the needs of their constituents. A strong relationship between the Sangguniang Kabataan and the Barangay Council is crucial for addressing the needs and aspirations of the youth sector and the entire barangay community. This collaboration can lead to more effective governance and better outcomes for the community. The roles and responsibilities of Sangguniang Kabataan Chairpersons are shaped by the Local Government Code of 1991 and the Sangguniang Kabataan Reform Act. Effective governance and youth engagement require a combination of strategic planning, financial management, and collaboration with other local government units. As Gorospe (2018) noted, if the requirements for aspiring youth politicians were measured by their skills in leadership and management, their constituencies would have fewer headaches in choosing the best among the worst. Similarly, Vivas (2015) observed that the Sangguniang Kabataan, under its current structure, had lost its effectiveness in advancing the democratic ideals of service-oriented youth leadership. The community has already observed that the young leaders duly elected are inefficient in their respective offices. On the other hand, the ineffectiveness of the Sangguniang Kabataan's performance may be due to a lack of engagement, which stems from a lack of trust between youth and adult community members in the government (Winkler n.d.).

3.2 The Experiences, Contributions, And Challenges Of The Former Sangguniang Kabataan Chairpersons

This section is the presentation of narratives highlighting the experiences, challenges, and contributions of the Former Sangguniang Kabataan Chairpersons of Barangay Kiwalan during their term. By delving into these narratives, the researcher can uncover valuable insights into the realities faced by Sangguniang Kabataan Chairpersons, the obstacles they encounter, and the positive impacts they made within their communities. These narratives provide a platform for Former Sangguniang Kabataan Chairpersons to share their firsthand experiences, offering a nuanced perspective on the challenges they navigate, such as political pressures, limited resources, and community expectations. It emerges of the dedication, resilience, and leadership qualities exhibited by Sangguniang Kabataan Chairpersons. This insight not only informs future research on youth governance but also serves as a testament to the importance of empowering youth leaders and fostering their growth within the Sangguniang Kabataan framework.

Experiences

Former Sangguniang Kabataan (SK) Chairpersons have reported a range of experiences in their roles, which are supported by the literature on youth leadership and governance. One common challenge faced by Sangguniang Kabataan Chairpersons is feelings of low self-esteem and confidence, especially when first taking on the position. This can significantly impact their ability to effectively engage with youth and implement programs. As Gorospe (2018) noted, if the requirements for aspiring youth politicians were measured by their skills in leadership and management, their constituencies would have fewer headaches in choosing the best among the worst.

Another issue highlighted by former Sangguniang Kabataan Chairpersons is the difficulty in reaching and engaging with youth in far-flung sitios that lacked access to basic services. This geographical barrier can hinder the Sangguniang Kabataan's efforts to promote youth development and empowerment across the entire barangay. The study by Vivas (2015) also observed that the Sangguniang Kabataan, under its current structure, had lost its effectiveness in advancing the democratic ideals of service-oriented youth leadership. Sangguniang Kabataan Chairpersons also reported facing criticism and a lack of support from some community members, which impacted their morale and motivation. This lack of trust between youth and adult community members in the government can stem from a lack of engagement, as noted by Winkler (n.d.). Overcoming these challenges requires strong leadership skills and the ability to build bridges between different stakeholders.

Over time, many Sangguniang Kabataan Chairpersons experienced a change in perspective on their roles and responsibilities, often due to the challenges faced. This growth in understanding can lead to more effective governance and better outcomes for the community. However, the ineffectiveness of the Sangguniang Kabataan's

performance may also be due to a lack of engagement, which stems from a lack of trust between youth and adult community members in the government. Finally, the Covid-19 pandemic has significantly restricted the ability of Sangguniang Kabataan Chairpersons to engage youth and implement programs. This global health crisis has highlighted the need for innovative approaches to youth development and the importance of digital literacy and access to technology.

However, the experiences of former Sangguniang Kabataan Chairpersons, as reported in the literature, underscore the challenges and complexities of youth leadership and governance. Addressing these issues requires a multi-faceted approach that focuses on building the capacity of youth leaders, fostering community engagement, and adapting to changing circumstances. By learning from the experiences of past Sangguniang Kabataan Chairpersons, current and future leaders can work towards creating a more inclusive and effective system of youth governance in the Philippines.

Contributions

The contributions made by former Sangguniang Kabataan Chairpersons, as described in the statement, align with the findings of a study by Balanon (2015) titled "The Impact of Youth Participation in the Local Government Process". The study highlights the importance of youth participation in local governance and the role of the Sangguniang Kabataan in fostering a culture of youth involvement and community engagement. Implementing sports programs that helped engage youth and promote community development is a key aspect of the Sangguniang Kabataan's role in fostering a culture of youth involvement and community engagement. This aligns with the findings of Balanon's study, which emphasizes the importance of engaging youth in community development initiatives. Advocating for participatory, accountable, and empowered youth constituents in community development is a crucial aspect of the Sangguniang Kabataan's role in ensuring that youth voices are heard and valued in decision-making processes. This aligns with the literature on the importance of participatory governance and the need for youth to be involved in decision-making processes that affect their lives.

Partnering with the Local Youth Development Council (LYDC) to plan and execute projects on issues like good governance, climate change, disaster risk reduction, youth employment, health, and anti-drug abuse demonstrates the Sangguniang Kabataan's commitment to collaborative governance and the importance of interagency coordination in addressing complex community issues. This aligns with the findings of a study by Titigah et al. (2023) titled "Examining Youth Participation in Local Governance: The Case of Selected Districts in Ghana", which highlighted the importance of collaboration and coordination between different stakeholders in achieving effective governance. Finally, adopting policies on full disclosure of transactions and documents involving public interest is a critical aspect of ensuring transparency and accountability in governance. This aligns with the literature on the importance of transparency and accountability in governance and the need for youth to be involved in decision-making processes that affect their lives.

Overall, the contributions made by former Sangguniang Kabataan Chairpersons demonstrate the importance of empowering youth in community development and the need for collaborative governance in addressing complex community issues. These findings are supported by the literature on youth participation in local governance, which emphasizes the importance of engaging youth in community development initiatives, ensuring participatory governance, and promoting transparency and accountability in decision-making processes.

Challenges

The challenges faced by former Sangguniang Kabataan Chairpersons, as identified in the study, align with the findings of a report by the National Youth Commission (2020) titled "Strengthening Youth Participation in Local Governance". The report highlights the need to address the capacity building and resource gaps faced by youth leaders in effectively implementing programs and engaging their constituents. Many programs and activities did not effectively address the real issues and concerns of youth, which can be attributed to the lack of capacity building and leadership training opportunities for Sangguniang Kabataan Chairpersons. As Balanon et al. (2007) noted in their study "The Impact of Youth Participation in the Local Government Process", empowering youth leaders with the necessary skills and knowledge is crucial for designing and implementing impactful programs. The lack of financial resources to fully implement planned programs and activities is another significant challenge faced by Sangguniang Kabataan Chairpersons. The study by Flores (2021) on "Advancing Youth Governance in

the Philippines" emphasizes the need for adequate funding and resources to support the Sangguniang Kabataan's initiatives. Difficulty in mobilizing youth participation in community development initiatives can be attributed to the lack of trust and engagement between youth and adult community members in the government. As Winkler (n.d.) observed, this lack of trust can stem from ineffective communication and outreach strategies employed by youth leaders. To address these challenges, the National Youth Commission (2020) recommends providing capacity building and leadership training opportunities for Sangguniang Kabataan Chairpersons, ensuring adequate financial resources for program implementation, and fostering stronger partnerships between youth leaders and adult community members. By investing in the development of youth leaders and providing them with the necessary support, the Sangguniang Kabataan can become more effective in addressing the real issues and concerns of youth and driving meaningful change in their communities.

Overall, the challenges faced by former Sangguniang Kabataan Chairpersons, as identified in the study, underscore the need for a comprehensive approach to strengthening youth participation in local governance. By addressing the capacity building, resource, and engagement gaps, the Sangguniang Kabataan can become more effective in fulfilling its mandate and empowering the youth to become active and engaged citizens.

3.3 After Service: New Career Path, Learnings, And Recommendations

This chapter delves into the learnings and recommendations of the former Sangguniang Kabataan Chairpersons for the aspiring members of the Sangguniang Kabataan. The former Sangguniang Kabataan Chairpersons acquire valuable learnings through their roles, which are essential for their growth as youth leaders and community advocates. Based on their experiences and challenges faced during their terms, the former Sangguniang Kabataan Chairpersons can offer recommendations for aspiring Sangguniang Kabataan Members. These recommendations aim to guide and empower future Sangguniang Kabataan leaders to effectively fulfill their roles and responsibilities within the youth governance framework.

New Career Path

The transition from Sangguniang Kabataan (SK) Chairperson to various roles demonstrates the transferability of skills and traits acquired during the Sangguniang Kabataan tenure. The individuals featured, Mr. Dumaug, Mr. Villarin, Ms. Palomo, Ms. Centeno, Ms. Casera, and Ms. Francisco have successfully applied their skills in different roles, showcasing adaptability, emotional intelligence, and resilience. The Sangguniang Kabataan experience has equipped these individuals with valuable skills such as interpersonal skills, leadership styles, policymaking expertise, financial management, and proposal writing, which are transferable to different roles. These skills are essential for effective governance and community development, as highlighted by the study by Balanon et al. (2007) on the role of Sangguniang Kabataan Chairpersons in shaping the future of youth. Each individual has demonstrated adaptability in their transition, whether it was from a demanding role to a more relaxed position or from a specific field to a new industry. The ability to interact with diverse people, maintain emotional intelligence, and adapt to challenging situations has been a key factor in their success in various roles. This adaptability and emotional intelligence are crucial for effective leadership and community engagement, as emphasized by the study by Flores (2021) on the importance of emotional intelligence in leadership. The Sangguniang Kabataan experience has contributed to personal growth, resilience, and a holistic perspective, enabling them to navigate different challenges and transitions. This personal growth and resilience are essential for effective governance and community development, as highlighted by the study of Acheron et al. (2020) on the role of Sangguniang Kabataan Chairpersons in shaping the future of youth. The inclusive approach, fostering diverse perspectives, is a testament to the value of youth engagement in shaping well-rounded professionals. This inclusive approach is crucial for effective governance and community development, as emphasized by the study of Mosaid (2023) on the importance of inclusive governance in building a better society. The Sangguniang Kabataan experience has had a lasting impact on personal and professional development, shaping their approach to work, interpersonal relationships, and personal growth. This lasting impact is essential for effective governance and community development, as highlighted by the study of Malacas (2021) on the role of Sangguniang Kabataan Chairpersons in shaping the future of youth.

Nevertheless, the transition from Sangguniang Kabataan Chairperson to various roles demonstrates the transferability of skills and traits acquired during the Sangguniang Kabataan tenure. The individuals featured have successfully applied their skills in different roles, showcasing adaptability, emotional intelligence, and

resilience. The Sangguniang Kabataan experience has contributed to personal growth, resilience, and a holistic perspective, enabling them to navigate different challenges and transitions. The inclusive approach, fostering diverse perspectives, is a testament to the value of youth engagement in shaping well-rounded professionals.

Learnings

The statements from former Sangguniang Kabataan (SK) Chairpersons highlight the transformative impact of youth leadership roles on personal growth, skill development, and community service. These experiences align with the literature on the role of youth leadership in shaping personal growth, skill development, and community engagement.

The transformative impact of youth leadership is well-documented in the literature. For instance, a study by Steinberg (2011) highlights the importance of transformative leadership in shaping the future of youth. Steinberg emphasizes that traditional hierarchical leadership approaches need critical revisiting and that youth leadership can be transformative when grounded in the premise that youth have distinct needs, views, and cultures. The statements from former Sangguniang Kabataan Chairpersons emphasize the importance of personal growth and skill development through their experiences. This aligns with the literature on the role of youth leadership in shaping personal growth and skill development. For example, a study by Wexler et al. (2017) found that youth leadership development programs can enhance school engagement, cultural and personal identities, and reduce risks of bullying, violence, and drug and alcohol abuse. The statements also highlight the importance of community engagement and service through the experiences of former Sangguniang Kabataan Chairpersons. This aligns with the literature on the role of youth leadership in shaping community engagement and service. For instance, a study by Acheron et al. (2020) found that the Sangguniang Kabataan serves as one of the mechanisms for the youth to live up to the century-old challenge posed by our national hero, Dr. Jose P. Rizal. The youth are not simply given space for participation in government through the Sangguniang Kabataan mechanism; they are also given the right and obligation to govern. The statements from former Sangguniang Kabataan Chairpersons also highlight the challenges faced and the resilience developed through their experiences. This aligns with the literature on the role of youth leadership in shaping resilience and adaptability. For example, a study by Mosaid (2023) found that the Sangguniang Kabataan can live up to the ideals and noble purpose for which it was created when given the right motivation, guidance, and support from competent authorities and service providers. The statements from former Sangguniang Kabataan Chairpersons demonstrate the transformative impact of youth leadership roles on personal growth, skill development, and community service. These experiences align with the literature on the role of youth leadership in shaping personal growth, skill development, and community engagement. The transformative impact of youth leadership is well-documented in the literature, emphasizing the importance of transformative leadership in shaping the future of youth.

Recommendations of the Former Sangguniang Kabataan Chairpersons

The recommendations of former Sangguniang Kabataan (SK) Chairpersons highlight the importance of effective leadership, inclusivity, and community engagement in the Sangguniang Kabataan. These recommendations align with the literature on the role of youth leadership in shaping personal growth, skill development, and community engagement.

It emphasize the importance of effective leadership, which is well-documented in the literature. For instance, a study by Steinberg (2011) highlights the importance of transformative leadership in shaping the future of youth. Steinberg emphasizes that traditional hierarchical leadership approaches need critical revisiting and that youth leadership can be transformative when grounded in the premise that youth have distinct needs, views, and cultures. Mr. Villarín's recommendations emphasize the importance of consultative planning and long-term projects, which are well-documented in the literature. For instance, a study by Callina et al. (2014) found that hope in context is a developmental profile of trust, hopeful future expectations, and civic engagement across adolescence. This study highlights the importance of long-term projects and consultative planning in fostering hope and civic engagement among youth. It also emphasize the importance of openness to criticism and youth engagement and advocacy, which are well-documented in the literature. For instance, a study by Even et al. (2016) found that leadership education in youth movements is crucial for empowering youth and fostering community engagement. This study highlights the importance of openness to criticism and youth engagement and advocacy in fostering effective leadership and community engagement. Ms. Centeno's recommendations emphasize the

importance of fostering a culture of collaboration and inclusivity, which is well-documented in the literature. For instance, a study by Daudi (2013) found that the art of leading oneself is crucial for effective leadership and community engagement. This study highlights the importance of fostering a culture of collaboration and inclusivity in fostering effective leadership and community engagement. Ms. Palomo's recommendations emphasize the importance of prioritizing joy and fulfillment, which is well-documented in the literature. For instance, a study by Fairholm (2014) found that leadership is crucial for fostering personal growth and skill development among youth. This study highlights the importance of prioritizing joy and fulfillment in fostering personal growth and skill development among youth. Ms. Francisco's recommendations emphasize the importance of assertiveness and confidence, which are well-documented in the literature. For instance, a study by Derue et al. (2011) found that trait and behavioral theories of leadership are crucial for effective governance and community engagement. This study highlights the importance of assertiveness and confidence in fostering effective leadership and community engagement. also emphasize the importance of creating programs that empower youth, which is well-documented in the literature. For instance, a study by Mosaid (2023) found that the Sangguniang Kabataan can live up to the ideals and noble purpose for which it was created when given the right motivation, guidance, and support from competent authorities and service providers. This study highlights the importance of creating programs that empower youth and foster community engagement. The recommendations of former Sangguniang Kabataan Chairpersons highlight the importance of effective leadership, inclusivity, and community engagement in the Sangguniang Kabataan. These recommendations align with the literature on the role of youth leadership in shaping personal growth, skill development, and community engagement.

3.4 Discussion

The Sangguniang Kabataan of Barangay Kiwalan, from its inception in 1992 until 2021, has undergone significant transformations driven by the necessity to reform its governance structure for better youth representation. Established through the Local Government Code of 1991 (Republic Act No. 7160), its primary objective was to facilitate youth engagement in local governance and empower Filipinos aged 15 to 30. Initially mirroring the structure of barangay councils, it comprised a chairperson, a secretary, and councilors, tasked with creating youth development programs, overseeing welfare, and advocating for youth concerns.

However, over time, the Sangguniang Kabataan encountered challenges such as corruption, financial mismanagement, and ineffective leadership. One prominent issue was the encroachment of decision-making authority by certain barangay officials. Recognizing these problems, Republic Act No. 10632 was enacted in 2013, postponing elections and introducing reforms. These included training programs for leaders, stricter eligibility criteria, and mechanisms for transparent fund management, aimed at combating inefficiency and corruption. By providing a legal mandate and budget allocation for youth involvement in local governance, the Sangguniang Kabataan aimed to integrate youth perspectives into policymaking and address societal issues effectively. Despite skepticism from some quarters, youth participation was deemed crucial for local development. Finally held in 2018 after several delays, the Sangguniang Kabataan elections strengthened its role in youth development and governance.

Changes included raising the age limit of members to 18 to 24, enhancing financial transparency, and aligning programs with the Barangay Development Plan. Members were encouraged to manage their 10% fund separately for easier access, albeit with stringent documentation requirements. The evolution of the Sangguniang Kabataan in Barangay Kiwalan reflects a continuous effort to rectify shortcomings and enhance its efficacy as a platform for youth engagement in local governance. While challenges persist, the reforms implemented seek to foster transparency, accountability, and genuine youth representation at the grassroots level of governance.

4.0 Conclusion

The journey of the Sangguniang Kabataan (SK) from its establishment in 1992 to 2021 has been a dynamic one, marked by both notable achievements and persistent challenges. In Barangay Kiwalan, this evolution mirrors a narrative of growth, adaptation, and resilience. Despite facing hurdles along the way, the Sangguniang Kabataan remains a vital institution for empowering young Filipinos and shaping the landscape of local governance in the nation.

To thrive, the Sangguniang Kabataan requires a supportive framework from local government representatives and stakeholders, ensuring adequate oversight, assistance, and guidance. The efficacy of youth participation hinges significantly on the clarity and robustness of local and national policies governing their roles and procedures. In Barangay Kiwalan, the Sangguniang Kabataan remains committed to advocating for the welfare and interests of its youth constituents, striving to implement initiatives that best serve their needs.

Moreover, fostering a harmonious relationship between the Barangay Council and the Sangguniang Kabataan is paramount. Collaboration between these entities cultivates an environment conducive to innovation and joint problem-solving. By leveraging each other's strengths, expertise, and networks, both councils can effectively address the multifaceted challenges impacting youth development in the community. In essence, the journey of the Sangguniang Kabataan of Barangay Kiwalan underscores the importance of perseverance, collaboration, and responsive governance. As it continues to navigate the complexities of local governance, the Sangguniang Kabataan remains steadfast in its commitment to championing the voices and aspirations of the youth, contributing to the holistic development of Barangay Kiwalan and beyond.

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Only one author have done the editing, writing, supervising, data analysis, and encoding.

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Leveling Up Mathematical Skills: The Effectiveness of Game-Based Learning

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Abstract. This quantitative study, using an experimental approach, aimed to determine the effectiveness of game-based learning in teaching mathematics. The respondents were fourth-grade pupils in an elementary school in Aleosan, North Cotabato, Philippines. Data were gathered using a pre-test questionnaire adopted by the researcher and a researcher-made post-test questionnaire validated by experts. The data were analyzed using weighted means and paired and unpaired t-tests. Results revealed that academic performance in mathematics during the pre-test was poor. However, there was a highly significant difference between the scores before and after the intervention. There was also a significant difference between the control and experimental groups ($t=-2.337$, $p=0.022$), with the experimental group ($M=19.18$) scoring significantly higher than the control group ($M=16.31$). Based on the findings, it can be affirmed that implementing game-based learning strategies in mathematics instruction is highly effective, resulting in a notable enhancement of learners' academic performance compared to conventional teaching methods. Moreover, the results encourage teachers to revisit their instructional materials and integrate game-based learning materials aligned with specific learning objectives. Additionally, the study provides substantial evidence that game-based learning significantly enhances academic performance in mathematics compared to traditional instructional resources.

Keywords: Academic achievements; Effectiveness; Game-Based learning; Mathematics; Quantitative; Philippines.

1.0 Introduction

Numerous fields rely on mathematics as an essential tool worldwide. Not only is it a field of research and a subject taught in schools, but it also serves as a playground for learners as a challenging subject that can be regarded as everyone's modern-day survival kit (Zigler & Loos, 2017). The development of civilizations is strikingly evident wherever a high priority is placed on mathematical knowledge. The way that man lives and understands the universe revolves around numbers, and computations are essential to the development of an individual and our current society (Abd Algani, 2022).

Unfortunately, many learners feel stressed and anxious when they have to do math, which also affects their performance (Sokolowski & Ansari, 2017). Several nations all over the world are deeply concerned about math achievement gaps. One of the countries experiencing the same trends, pressures, and concerns is the Philippines. Based on the 2019 Trends in International Mathematics and Science Study (2020), the Philippines came in "significantly lower" than any other nation that took part in the math assessments for grade 4. It received the lowest score of any of the 58 participating countries, with a score of 297.

According to the findings of a research study conducted in Tanzania and selected schools in Mpumalanga Province, South Africa, ineffective learning and assessment strategies, institutional resources, failure to

comprehend instructions, and instructor didactic strategies are all factors in exam failure or poor performance of learners (Mazana et al., 2019; Mabena et al., 2022).

When games are encouraged in a classroom setting, teamwork and social contact will be developed, and math anxiety will be reduced more effectively, according to Dondio et al. (2022). Game-based Learning (GBL) will significantly enhance the teaching-learning process in mathematics and one that can be applied in the classroom with ease. The ability to support and promote learners' motivation, and games are a highly effective part of this teaching technique. It is a technique that uses the notion of playing a game to fulfill learning goals, whether they relate to knowledge, abilities, or attitudes (Falciani, 2020). Using educational games is successfully employed in teaching and can enhance mathematical learning skills, based on a review of the data from 30 research that were analyzed (Hasanah & Andayani, 2022).

Based on a study conducted in Trinidad and Tobago's primary schools, instructors responded "strongly agreed" that using games to teach young children can be quite effective at making complex ideas simple, and in primary school classrooms, game-based learning should gradually become more prevalent among learners (Pinder, 2016). However, insufficient empirical evidence exists to substantiate the efficacy of game-based learning in enhancing academic performance compared to traditional instructional resources. Additionally, the study of Munda, Endrinal, and Nequinto (2024) and Munda and Endrinal (2022) applied game-based learning with their experimental high school participants. Their study found statistically significant differences in the pre-test and post-test performances of their student subjects after applying the educational games. The use of educational game-based activities in the projects COUNTS and Math-stery, respectively, helped improve the numeracy skills of the high school students.

Furthermore, limited research has been conducted on developing game-based learning materials that align with specific learning objectives. The main objective of the study was to level up the mathematical skills of fourth-grade learners through game-based learning as an effective strategy in teaching. The specific objectives were determining the academic performance of the respondents before the intervention, determining the academic performance of the respondents after utilizing the intervention, determining the significant difference between the academic achievement before and after utilizing the game-based strategy in terms of learners' scores, and determining the significant difference between control and experimental group in academic performance in mathematics.

2.0 Methodology

2.1 Research Design

The research utilized an experimental research design by creating instructional and learning material utilizing a game-based strategy. It determined the academic performance of Aleosan Central Grade IV learners before and after the intervention. It also assessed the effectiveness of game-based learning in improving academic achievement in mathematics. Before administering the test, a meticulously crafted scoring key was developed. This key was designed to clearly identify the correct answer for each question, aligning precisely with the course objectives and content during the intervention period. Subsequently, during the scoring process, each learner's responses were thoroughly compared to the key. Points were then awarded for correct answers, typically granting one point for each accurately chosen option, while incorrect or unanswered items received no points.

2.2 Research Respondents

The respondents of this study were the grade IV learners of an elementary school in Aleosan, North Cotabato, who are officially enrolled in the academic year 2023-2024. The study employed complete enumeration in which the population of grade IV was composed of two sections assessed through a pre-test; however, only the low-performing group was given an intervention. Thus, the other section served as the control group. According to Ortega and Sumayo (2024), using complete enumeration is appropriate since it allows the researchers to get good generalizability.

2.3 Research Instrument

The researcher created sixteen (16) game-based learning instructional and learning materials suitable for one (1) month of experimentation and could be applied to specific mathematics topics. The instructional and learning

materials were validated by three (3) experts or validators before being used. The sixteen (16) game-based learning instructional and learning materials were used from Week 1 to Week 4, except Fridays. They were aligned with the target learning competencies in Mathematics Most Essential Learning Competencies (MELCs) of the Department of Education.

In Week 1 of the experimentation, which started in the 2nd Week of the 1st Quarter of Grade IV Mathematics class, there were two most essential learning competencies: the learner rounded numbers to the nearest thousand and ten thousand (M4NSIb-5.2) and ordered numbers up to 100,000 in increasing or decreasing order (M4NSIb-13.4). In Week 3, the most essential learning competencies were that the learner multiplied mentally 2-digit by 1-to 2-digit numbers with products up to 200, explained the strategies used (M4NSId-42.3), and solved routine and non-routine problems involving multiplication of whole numbers, including money, using appropriate problem-solving strategies and tools (M4NSId-45.4).

For Week 2 of the experimentation, the most essential learning competencies included the learner multiplying numbers up to 3-digit numbers by up to 2-digit numbers without or with regrouping (M4NSIc-43.7) and estimating the products of 3- to 4-digit numbers by 2- to 3-digit numbers with reasonable results (M4NSIc-44.2). In Week 4, the learner solved multi-step routine and non-routine problems involving multiplication and addition or subtraction using appropriate problem-solving strategies and tools (M4NSIe-45.5).

To determine the academic performance of Central Grade IV learners before and after the intervention, a pre-test adopted from K12DepEd (2020) entitled "Grade 4 Self-Learning Modules" was utilized. For the post-test, a researcher-made questionnaire validated by experts was employed. Pre-test and Post-test were pilot-tested with a Cronbach alpha result of .865 and .872. The 40-item multiple choice pre-test measured learners' current level of achievement with a scoring of one point each for the correct item, and the 40-item multiple choice post-test measured their achievement after the Game-Based learning method had been implemented with a scoring of one point per correct item.

2.4 Statistical Analysis

After one (1) month of experimentation, the evaluation results were gathered. The collected data were calculated using statistical tools appropriate to this study. A Paired T-test was used to determine if there was a significant difference between academic achievement before and after utilizing the game-based strategy in terms of learners' scores. Also, the Unpaired T-test was used to determine if there was a significant difference between the control group and the experimental group.

2.5 Ethical Considerations

The researchers ensured that the gathered data were utilized to fulfill the study's objectives only while adhering to ethical guidelines and protocols. Subsequently, the respondents' voluntary engagement was sought through an informed consent form (Royer & Sumayo, 2024). All the data gathered were treated with utmost privacy and used for research purposes only and ensured that the respondents were in complete anonymity (Redocto & Sumayo, 2024).

3.0 Results and Discussions

3.1 Academic Performance

Pre-test

Table 1. Descriptive statistics of the academic performance in Mathematics during pre-test

Variables	Minimum	Maximum	Mean	SD	Interpretation
Group A	6	23	11.36	3.78	Poor
Group B	4	20	11.33	3.83	Poor

The findings presented in Table 1 reveal that both Group A and Group B demonstrated poor academic performance in mathematics during the pre-test, as evidenced by mean scores of 11.36 for Group A and 11.33 for Group B. It conforms with the results based on the 2019 Trends in International Mathematics and Science Study (2020); the Philippines came in "significantly lower" than any other nation that took part in the math assessments for grade 4 and received the lowest score of any of the 58 participating countries, with a score of 297.

The results suggest that it is plausible that learners encountered difficulties in comprehending and understanding given problems, particularly those presented in English and situational form, raising questions about the efficacy of teachers' strategies in imparting mathematical knowledge. This is also supported by the Deficit Theory established by Rebecca Eller (1989), which tries to explain why learners with disadvantages typically fail frequently. In this context, the disadvantages that the learners experienced were low comprehension in situational form.

This observation aligns with the findings of Mazana et al. (2019), who identified didactic strategies employed by mathematics teachers' factors influencing academic performance. As highlighted by Zhang (2022), learners' anxiety about mathematics is directly correlated with their teachers' teaching strategies. Ismael et al. (2021) found that certain teacher behaviors, such as quick pacing, excessive notetaking, abundant exercises, and punitive measures, significantly intensify mathematics anxiety. It solidifies the theory of Sigmund Tobias (1971), the concept of the Debilitating Anxiety Model, where learners' performance is affected by their fear or anxiety. The notably low mean scores results underscore the urgency of implementing intervention or improvement strategies to enhance the mathematical proficiency of learners in both groups.

Post-test

Table 2. Descriptive statistics of the academic performance in Mathematics during post-test

Variables	Minimum	Maximum	Mean	SD	Interpretation
Group A (Control)	3	26	16.31	4.45	Poor
Group B (Experimental)	7	32	19.18	6.25	Average

Table 2 presents valuable insights into the post-test performance of two distinct groups in the field of mathematics. Group A, referred to as the control group, exhibits a mean score of 16.31, categorized as "poor" according to the legend. In this present study, the findings imply that learners in this group are performing below the expected level in rounding numbers to the nearest thousand and ten thousand, ordering numbers up to 100 000 in increasing or decreasing order, multiplying numbers up to 3-digit numbers by up to 2-digit numbers without regrouping, and multiplies mentally 2-digit by 1-to 2-digit numbers with products up to 200 but not really on multiplying numbers up to 3-digit numbers by up to 2-digit numbers with regrouping and estimating the products of 3- to 4-digit numbers by 2- to 3- digit numbers since it is in traditionally way of teaching where in the teacher-centered classroom setting that may lead to lack of learners' engagement. If there is a lack of learners' engagement, academic boredom and disinterest follow and may also be contributing factors, resulting in difficulties in comprehension, understanding, and overall learning.

The result of the study conforms to the study of Yeh et al. (2019); the majority of elementary Mathematics classrooms in Taiwan continue to be dominated by traditional teacher-led instruction, leading to a persistent lag behind the expected level of academic accomplishment. The findings align with Tularam and Machisella's (2018) study, highlighting the significant role of teachers as instructors who determine the teaching-learning methods. Often, learners are perceived as having knowledge gaps that teachers must fill with information, leading to a separation of mathematical education from learners' daily experiences. This lack of engagement can result in academic boredom, as emphasized by Xie (2021) and Ozerk (2020). Xie's (2021) study underscores the importance of engagement in preventing boredom, while Ozerk's (2020) study categorizes academic boredom as a negative deactivating emotion that adversely affects goal achievement in a learning environment.

Conversely, Group B, identified as the experimental group using game-based learning, exhibits a mean score of 19.18, classified as "average." The same study result was presented in the study of Yeh et al. (2019), which describes a two-year experiment with 215 elementary learners from grades 2 to 3 in a game-based learning environment. They discovered that students' achievement in mathematics has increased because of this experiment, particularly in terms of word problems and calculation.

In the present study, the finding implies that most of the learners were able to answer rounding numbers to the nearest thousand and ten thousand, ordering numbers up to 100 000 in increasing or decreasing order, multiplying numbers up to 3-digit numbers by up to 2-digit numbers without regrouping, and multiplies mentally 2-digit by

1-to 2-digit numbers with products up to 200 but not really on multiplying numbers up to 3-digit numbers by up to 2-digit numbers with regrouping and estimating the products of 3- to 4-digit numbers by 2- to 3- digit numbers.

The integration of game-based learning in mathematics class appears to have a positive impact, fostering an environment where learners are unafraid to try and make mistakes that lead to learning. These current findings resonate with Mera et al. (2021) emphasis on errors as learning opportunities could have positive consequences for learning. Errors generated during learning are beneficial for later correct-recall. Despite this, it should be considered that if learners do make errors, the literature suggests that receiving corrective feedback is essential. Thus, a more in-depth understanding of the advantages of experiencing errors could promote the idea that failure is an important part of constructive learning and that the active exploitation of mistakes is essential in education.

3.2 Comparison of the Academic Performance in Mathematics Before and After Utilizing Game-Based Learning

Table 3. Analysis for the difference in the academic performance in Mathematics

Variable	Mean	Mean Difference	t	df	p-value
Pre-test	11.33	-7.850	-6.666**	38	0.000
Post-test	19.18				

*- Significant at 5% level of significance

** - Highly Significant at 1% level of significance

The presented findings in Table 3 strongly support the rejection of the null hypothesis, as the p-value falls below 0.01 or 1%. This signifies a highly significant contrast in scores before and after the intervention ($t=-6.666$, $p\text{-value}=0.000$). Specifically, the results indicate an improvement in scores following the intervention (pre-test= 11.33, post-test=19.18), emphasizing the effectiveness of game-based learning in enhancing mathematical academic performance but urging to extend the period in conducting game-based learning to yield more effective and comprehensive results. It is also observed in the study of Mao et al. (2021) that Game-based learning demonstrated a significant and positive overall effect on learners' critical thinking.

The game-based learning conducted during the intervention was for week 1, with the most essential competencies of rounding the numbers to the nearest thousand and ten thousand and ordering numbers up to 100 000 in increasing or decreasing order were Math Dice Rounding Numbers, Mathgical Card Number, Numerical Sequence Game with Paper Coins, and Block Arrangement. For Week 2, the most essential competencies of multiplying numbers up to 3-digit numbers by up to 2-digit numbers without or with regrouping and estimating the products of 3-to 4-digit numbers by 2-to 3-digit numbers with reasonable results were Multiplication Learning Activity, Math Clues: Clap or Snap, Optimize Math Puzzle, and Balland the Spinners. For week 3, the most essential learning competencies of multiplying mentally 2-digit by 1-to 2-digit numbers with products up to 200 and solving routine and non-routine problems involving multiplication of whole numbers were Navigation of Balls of Product, Multiplication Bingo Challenge, Interactive Circle Problem Solving Activity, and Stone Toss Game. For week 4, the most essential competencies of solving multi-step routine and non-routine problems involving multiplication and addition or subtraction were Interactive Graphing Exercise, Math Clues: Clap or Snap, Optimize Math Puzzle, and Animal Picture Questioning with Step Exercise.

The results of this study were supported by Munda, Endrinal, and Nequinto (2024) and Munda and Endrinal (2022), which showed that using game-based activities to teach in the COUNTS and Math-tery projects really helped students improve their math skills. Researchers conducted a study that revealed statistically significant disparities in the pre-test and post-test scores of the student participants following the implementation of educational games. Additionally, the previous study by Russo et al. (2021) indicated that most primary teachers self-reported playing mathematical games at least once per week in their classrooms. Games were used for different pedagogical purposes, including as a "warm-up" activity, introducing new mathematical concepts, consolidating skills and knowledge, and practicing fluency. Interestingly, playing cards and dice, oral games, pen and paper, and other games requiring minimal or no materials were the most popular choices for teachers.

Non-digital games demonstrated superior effectiveness compared to digital games. Games lowered math anxiety more effectively when they promoted social and cooperative interactions that were controlled by the length of the intervention and the type of gameplay (Dondio et al., 2023).

Game-based learning fosters engagement, motivation, and a renewed interest in learning mathematics through active participation, excitement, and joy of learners derived from the games. This dynamic approach contributes to a comprehensive understanding of concepts, ultimately leading to elevated academic achievement. The Game-based Learning approach is anchored to the Constructivism Learning Theory developed by Jean Piaget and Lev Vygotsky, in which learners participate in the process of solving the problem by interacting with their surroundings. The acknowledged capacity to captivate learners and ensure their full participation is one of its strengths (Brau, 2020).

The current study was reported on the study of Hui and Mahmud (2023), emphasizing the entertainment element in Game-based learning, which leads learners to approach learning with enthusiasm. Based on the study of Falciani (2020) and Brezovszky et al. (2019), the enjoyment derived from games seems to positively influence factors such as student motivation, math fluency, and adaptive number knowledge. Additionally, academic interest was proven to significantly determine academic performance (Mappadang et al., 2022).

Moreover, Dondio et al. (2023) emphasized that teachers in their study believe that game-based learning aids in the development of the four key skills emphasized in the Australian Curriculum: Applied Mathematics (ACARA, 2019) – comprehension, fluency, problem-solving ability, and logic. Interestingly, non-digital games exhibited greater efficacy compared to digital counterparts. Their study suggests that games are particularly effective in reducing math anxiety when they facilitate social and cooperative interactions, contingent on the intervention duration and game type.

The current study underscores the importance of collaborative learning present in game-based learning as a cornerstone for developing both social and cognitive skills. Additionally, insights offered by Adipat et al. (2021) study that it delves into the role of game-based learning in mindset development and growth.

3.3 Comparison of the Academic Performance in Mathematics Between Control and Experimental Group

Table 4. Analysis for the difference in the academic performance in Mathematics

Variable	Mean	Mean Difference	t	df	p-value
Control	16.31				
Experimental	19.18	-2.87	-2.337*	68.83	0.022

*- Significant at 5% level of significance

** - Highly Significant at 1% level of significance

Table 4 shows the difference between the control and experimental groups in academic performance in mathematics. The result shows that there is a significant difference between the control and experimental group ($t=-2.337$, $p=0.022$), which reveals that the experimental group ($M=19.18$) is significantly higher than the control group ($M=16.31$). The same result was reported in the study of Lei et al. (2022), revealing that Game-Based Learning taught students significantly more than traditional instruction in that intervention was not applied.

The present study suggests that the intervention or treatment implemented with the experimental group, which likely involved Game-Based Learning, had a positive impact on their academic performance compared to the control group. Game-based learning effectively boosts academic achievement in Mathematics. These findings emphasize the significance of Game-Based Learning in driving improvements in academic performance.

According to the study of Zhong (2019), game-based learning transforms the educational paradigm from a teacher-centered approach to one where learners actively participate in teamwork to grasp new concepts. This approach not only enhances cognitive abilities but also develops communication and teamwork skills. By incorporating game design elements into the learning process, an immersive and enjoyable educational environment is created, fostering learner initiative, creativity, and collaborative learning.

Furthermore, Wang and Zheng's (2021) research emphasized that the adoption of game-based learning methods proves highly beneficial for improving academic performance in mathematics. Mao et al.'s (2022) investigation explores the broader implications of game-based learning, focusing on its impact on the critical thinking of learners. A study by Wardoyo et al. (2020) underscores the analytical approach that employs gain-score methodology, which involves scrutinizing and assessing the learning outcomes of both the experimental group exposed to learning games and the control group to evaluate their efficacy. The analyses revealed that the implementation of game-based learning significantly enhances learning outcomes.

4.0 Conclusion

Based on the result of this study, game-based learning indicates a positive shift in learners' academic performance; thus, improvement is still needed. More so, the student-centered approach is the preferred learning environment of learners as it promotes engagement rather than lecturing. Notably, game-based learning emerges as a potent strategy for enhancing academic proficiency in mathematics, proving its effectiveness compared to traditional teaching methods.

Based on the findings and conclusions, educators are encouraged to adopt game-based learning that accounts for the diverse needs and potential learning barriers of learners. They should consider adjusting their teaching approaches to ensure better understanding and comprehension among learners. Furthermore, it is advisable for the Department of Education (DepEd) to explore, research, and implement game-based learning tailored to design a curriculum that aligns with current educational needs.

Future researchers are urged to conduct studies over an extended period to yield more effective and comprehensive results. It is also encouraged to give the other factors aside from the teachers' pedagogy and strategies in teaching that influence learners' learning process in mathematics.

5.0 Contributions of Authors

The authors confirm the equal contribution in each part of this work. All authors reviewed and approved the final version of this work.

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7.0 Conflict of Interests

All authors declare that they have no conflicts of interest.

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Staff Responsiveness and Communication on Passenger Satisfaction: Bases for Passenger Service Satisfaction Framework

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Abstract. This study aimed to assess the impact of staff responsiveness and communication on passenger satisfaction, contributing to the development of a passenger service satisfaction framework for Godofredo P. Ramos Airport (Caticlan Airport) in Caticlan, Malay, Aklan. The study employed a descriptive-correlational approach with four hundred fifty (450) passengers as respondents chosen through random sampling. Data were gathered using a researcher-constructed questionnaire. Statistical tools included frequency, percentage, mean, standard deviation, and Spearman's rho correlation. Results revealed that most respondents were single, aged between 28-37, local, traveling 2-3 times annually, employed in private sectors, or as entrepreneurs with monthly incomes ranging from Php10,001 to Php50,000. Ground handlers or airline representatives were rated as "Moderately Responsive" but demonstrated "excellent" communication. Passenger satisfaction was found to be "very satisfied," with significant correlations between staff responsiveness/communication and satisfaction levels. These results imply that there is a need for the airline industry and airport management to consider staff responsiveness and communication as key factors in improving passenger satisfaction and to use this insight strategically for service enhancement, staff training, and policy development. The study suggests a framework for enhancing passenger service satisfaction that could be utilized by the airline industry and airport management.

Keywords: Passenger satisfaction; Staff responsiveness; Airport service; Caticlan airport.

1.0 Introduction

In today's fast-paced and competitive transportation market, offering a great client experience has become a major concern for service providers. The degree to which customers perceive the quality of the services they receive is greatly influenced by the responsiveness and communication skills of the staff. Travelers frequently view the effectiveness and clarity of communication channels, along with the efficiency and attentiveness of staff interactions, as critical components of their overall experience.

According to CAAP, 2022, Godofredo P. Ramos Airport, also known as Caticlan Airport, recently known as Boracay Airport by its developer Transaire, is an airport servicing the general region of the town of Malay in the Philippines' Aklan province. The airport is the seventh busiest in the Philippines and the third busiest in Western Visayas, with 761,961 passengers in 2008. The airport had 599,956 passenger movements in 2021 and 2,308,195 in 2022, representing a change of 284.73%. There were 5,956 aircraft movements in 2021, compared to 18,500 in 2022, representing a 210.61% increase. Staff, ground handlers, and airline officials all play important roles in airport operations, helping to ensure that air travel runs smoothly and efficiently. Ground handlers and airline agents are frequently the first points of contact for passengers. They help with a variety of activities, including check-in,

baggage management, and delivering important flight information. In the event of a flight disruption, they assist passengers with rebooking and resolve problems to provide a pleasant customer experience. Ground handlers and airports ensure safety, security, and operational efficiency, resulting in a great overall travel experience.

According to Zámková et al. (2022) found that the company's overall share of delayed flights did not increase over the designated time range. However, it was discovered that bigger aircraft tended to endure lengthier delays. While charter flight delays have decreased slightly, they are increasing owing to a variety of operational reasons such as airline operations, aircraft maintenance, and crew standards. In addition, Zámková and Prokop (2016) discovered that technical and maintenance-related delays are the most common in Prague, as are delays induced by high airspace concentration, operational management, and crew duty requirements.

Based on the reviews posted on various websites such as TripAdvisor, Skaytrax, etc., as well as on the observations, some passengers complaining about the delays in some flights of service airline companies due to various issues such as traffic congestions from NAIA, and the airport is too small to cater the large tourist's arrivals. Staff responsiveness and communication are very critical to ensure customer satisfaction. When the staff is attentive, helpful, and communicative effectively with the customer or passenger it can lead to positive feedback and a high level of satisfaction. Providing regular training for staff in effective communication and encouraging customer centers can improve this aspect of service in the travel industry and or other related businesses. This study investigated the staff communication and responsiveness on passengers' contentment. The findings can provide valuable insights for businesses to optimize their customer service practices, particularly in terms of staff responsiveness and communication, with the ultimate goal of enhancing passenger satisfaction and, consequently, overall business success.

2.0 Methodology

2.1 Research Design

The descriptive-correlational design of research was utilized in this study. A descriptive correlational design seeks the link between variables without attempting to manipulate any of them (Copeland, 2022). In the context of this study, a descriptive-correlational design would entail monitoring and documenting the level of staff responsiveness and communication in a transportation setting, as well as investigating how these factors connect to passenger satisfaction. Similarly, it would provide useful insights into the elements impacting passenger happiness in transportation settings, as well as influence attempts to improve passenger service quality.

2.2 Research Participants

The respondents of the study were 450 passengers equally distributed among the three (3) airlines (Cebu Pacific Air, Philippine Airlines, and Philippines AirAsia) in Godofredo P. Ramos Airport, Caticlan, Malay. The sample group was chosen based on the following criteria: (a) either male or female, LGBTQIA+ (b) eighteen years old and above, and (c) traveled three times or more. In addition, the respondents were chosen through a stratified random sampling method.

2.3 Research Instrument

The data needed in this study were gathered through the use of a researcher-constructed questionnaire as well as an adapted questionnaire. The questionnaire consisted of four parts. Part I dealt with determining the socio-demographic profile of respondents. Part II measures the level of responsiveness. Part III measures the level of communication. Part IV of the questionnaire measures passenger satisfaction. Part IV of the questionnaire is adapted from Lamputi's (2015) study "Level of Passenger Satisfaction on the Services of Cebu Pacific Air". The questionnaire was validated, pilot-tested, and tested its reliability. Based on the reliability test variable (Staff Responsiveness) generated Cronbach's Alpha of .877 and was interpreted as "Good". More so, the variable (Staff Communication) and variable (Passenger Satisfaction) generated Cronbach's Alpha of .907 and .898 which were interpreted as "Excellent and Good", respectively.

2.4 Data Gathering Procedures

The researcher individually handed out survey questions to each passenger. This was accomplished by physically going to the terminal where the passengers were waiting for their flights and distributing questionnaires at the

terminal or pre-departure area. During the administration of the study instrument, respondents were instructed on what to do. The researcher also retrieved the surveys.

2.5 Data Analysis

In the analysis of data, statistical tools such as descriptive (mean, standard deviation, and percentages) and inferential (Spearman's rho correlation) were used.

2.6 Ethical Considerations

The researcher considered ethical considerations when carrying out the study. These are required to protect the respondents' privacy, as well as to get consent. Consent and secrecy were among the key concerns considered since they involve sensitive issues such as the level of knowledge regarding airline operations, the level of awareness surrounding airline operations, and customer satisfaction with the airlines. The respondents' confidentiality was maintained by not disclosing their names or personal information in the study; only relevant details about them were provided.

3.0 Results and Discussion

3.1 Socio-demographic Profile of the Respondents

Table 1 presents the socio-demographic profile of the respondents.

Table 1. Descriptive statistics of the socio-demographic profile of the respondent

CATEGORY	FREQUENCY	PERCENTAGE
Age		
18-27	126	28.00
28-37	194	43.10
38-47	81	18.00
48-57	28	6.20
58-67	21	4.70
Gender		
Male	220	48.90
Female	203	45.10
LGBTQIA+	20	4.40
I prefer not to say	7	1.60
Civil Status		
Single	297	66.00
Married	137	30.40
Widow	16	3.60
Average Monthly Income		
10,000 and below	75	16.70
10,001- 30,000	168	37.30
30,001- 50,000	154	34.20
50,001 and above	53	11.80
Occupation		
Government Employee		
Private Employee/	149	33.10
Entrepreneur	301	66.90
Type of Passenger		
Local	372	82.70
Foreign	78	17.30
Frequency of Travel in Aklan		
Once a year	92	20.40
2-3 times a year	214	47.60
4-5 times a year	88	19.60
More than 5 times a year	56	12.40

3.2 Responsiveness of Staff

The study presented in Table 2 examines the level of responsiveness of ground handlers or airline representatives at Godofredo P. Ramos Airport. The results revealed that the ground handlers or airline representatives were rated "completely responsive" in demonstrating commitments to serve passengers, accountability, willingness to help and guide passengers, proactivity in identifying and addressing potential issues, and their ability to understand and cater to passengers with unique requirements. Additionally, the ground handlers were

"completely responsive" in quickly responding to passenger requests and inquiries. However, they were only rated as "moderately responsive" in quickly resolving passenger problems and grievances.

Table 2. Descriptive statistics of the level of responsiveness of the ground handler or airline representative

INDICATORS	MEAN	SD	DESCRIPTION
1. Quickly respond to requests or inquiries of passengers.	4.21	0.61	Completely Responsive
2. Exhibits willingness to help and guide.	4.28	0.61	Completely Responsive
3. Treats public situations with care and seriousness.	4.16	0.62	Moderately Responsive
4. Provides proper services promptly.	4.13	0.61	Moderately Responsive
5. Is flexible enough to accommodate traveler's specific requests.	4.15	0.76	Moderately Responsive
6. Is proactive in identifying and addressing potential issues before escalating them to the higher authority.	4.22	0.60	Completely Responsive
7. Takes time to understand and cater to passengers with unique requirements.	4.21	0.70	Completely Responsive
8. Quickly resolves problems and grievances of passengers.	4.08	0.69	Moderately Responsive
9. Engages with feedback and makes necessary improvements.	4.16	0.74	Moderately Responsive
10. Demonstrates commitment to serving passengers and Accountability.	4.40	0.65	Completely Responsive
Composite Mean	4.20	0.45	Moderately Responsive

Legend: 1.00-1.80 - Not Responsive at all; 1.81-2.60 - Slightly Responsive; 2.61-3.40 - Neutral;
3.41 - 4.20 - Moderately Responsive; 4.21-5.00 - Completely Responsive

Overall, the level of responsiveness of the ground handlers or airline representatives was assessed as "Moderately Responsive". The standard deviation indicates that the assessments of the respondents were closely aligned.

These findings suggest that the ground handlers or airline representatives have a baseline level of responsiveness, but may not consistently meet all expectations in terms of speed and thoroughness of their responses. This could lead to a mix of positive and negative experiences for customers, with some feeling adequately assisted while others may feel their needs were not fully met or addressed promptly (Nadimi et al., 2023). Improving the responsiveness of ground handlers or airline representatives can enhance customer satisfaction, operational efficiency, and competitive advantage in the airline industry

The result implies that ground handlers or airline representatives are somewhat responsive but may not consistently meet all expectations in terms of speed or thoroughness in their responses. Also, being moderately responsive may lead to mixed experiences for customers, with some feeling adequately assisted while others may feel their needs were not fully met or addressed promptly. Further, being moderately responsive indicates a baseline level of effectiveness highlighting areas for improvement that can lead to enhanced customer satisfaction, operational efficiency, and competitive advantage in the airline industry.

These results highlight the importance of the responsiveness of ground handlers or airline representatives. According to Shakeerah et al., (2020), responsiveness is the ability of customers to respond to customer needs when they need service. This means that employees can efficiently execute work content, and it also represents their ability to plan when responding to customer needs according to the needs of the staff. Similar result to the study of Shakeerah et al. (2020), responsiveness is the ability of customers to respond to customer needs when they need service. This means that employees can efficiently execute work content, and it also represents their ability to plan when responding to customer needs according to the needs of the staff. Further, the advantage of responsiveness can compete in many of the same industries. It can enhance the company's competitiveness while also achieving better performance, which is critical to the company's healthy growth (Schonberger & Brown, 2017).

The study's findings align with prior research on airport service quality and passenger satisfaction.(Nadimi et al., 2023). For instance, a study on service quality improvement of ground staff at Don Mueang International Airport found that passengers' perceptions of ground staff service quality varied by gender and age group (Sricharoenpramong, 2018). Another study exploring the impact of the COVID-19 pandemic on passenger satisfaction revealed positive sentiment towards airport staff and the environment, with significant associations between ratings and the check-in process, the environment, and personnel.

3.3 Level of Communication of Staff

Table 3. Descriptive statistics of the level of communication of the ground handler or airline representative

INDICATORS	MEAN	SD	DESCRIPTION
1. Provides comprehensive public announcements related to flight information, gate changes, and other essential details.	4.18	0.62	Above Average
2. Ensures Clarity in delivering public announcements.	4.32	0.62	Excellent
3. Provide timely and accurate information in response to passengers' inquiries and concerns.	4.16	0.70	Above Average
4. Assists passengers in multiple languages to cater to a diverse range of travelers.	4.32	0.69	Excellent
5. Provides accessibility to information desk or help centers to assist passengers.	4.19	0.73	Above Average
6. Utilizes digital channels such as mobile apps, social media, and websites to provide real-time updates and information.	4.06	0.75	Above Average
7. Exhibits consistency in communication across various channels.	4.13	0.80	Above Average
8. Demonstrates communication and coordination among airport personnel during disruptions, such as flight delays or cancellations.	4.24	0.69	Excellent
9. Communicate and assist passengers with special needs, ensuring a comfortable and inclusive experience.	4.36	0.63	Excellent
10. Provides feedback mechanism for passengers to share their opinion on the quality of communication and assistance received.	4.21	0.66	Excellent
Composite Mean	4.22	0.48	Excellent

The results presented in Table 3 highlight the exemplary level of communication demonstrated by the ground handlers or airline representatives at Godofredo P. Ramos Airport. The ground handlers or airline representatives were rated "excellent" in various aspects of communication, reflecting their professionalism and dedication to ensuring a positive experience for passengers.

One of the key strengths observed was the ground handlers' or airline representatives' ability to communicate effectively with passengers, particularly those with special needs. The study found that they were highly skilled in assisting these passengers and ensuring their comfort and inclusion during the travel experience. Similarly, the ground handlers or airline representatives exhibited excellent communication in delivering clear and understandable public announcements, catering to a diverse range of travelers by providing assistance in multiple languages, and demonstrating effective coordination and communication among airport personnel during disruptions such as flight delays or cancellations.

Furthermore, the ground handlers or airline representatives were praised for their provision of feedback mechanisms, allowing passengers to share their opinions on the quality of communication and assistance received. This reflects a commitment to continuous improvement and a customer-centric approach. Interestingly, the ground handlers or airline representatives were also found to utilize digital channels and websites to provide real-time updates and information, though this was rated as "above average" rather than "excellent." This suggests that there may be room for improvement in fully leveraging digital communication channels to enhance the passenger experience.

Overall, the study findings indicate that the ground handlers or airline representatives at Godofredo P. Ramos Airport have a strong grasp of effective communication, which is a critical aspect of airline operations and customer service interactions. This aligns with previous research highlighting the importance of communication skills for aviation management trainees and ground staff (Kaur et al., 2021; Sricharoenpramong, 2018). The high level of communication proficiency displayed by the ground handlers or airline representatives likely contributes to the positive outcomes and passenger satisfaction observed at the airport.

Further, the study's findings underscore the need for continuous investment in communication training and development for airport personnel to maintain and enhance the level of service quality and passenger experience. It is evident from the study that the ground handlers and airline representatives at Godofredo P. Ramos Airport have consistently demonstrated exceptional communication skills, significantly contributing to the overall positive passenger experience. Their ability to effectively communicate with passengers, particularly those with special needs, showcase their commitment to inclusivity and passenger welfare. Moreover, the provision of multilingual assistance and clear public announcements reflects their dedication to catering to a diverse range of travelers.

Thus, the result implies the importance and positive outcomes of effective communication in the context of airline operations or customer service interactions. Also, the ground handler or airline representative was proficient in conveying clear and effective communication and often reflects professionalism in handling tasks and interactions with passengers. Further, excellent communication was not just adequate but also understanding. This indicates that the ground handler or airline representative likely went above and beyond in addressing and answering the concerns and questions of the passengers as well as by assisting customers in the airport.

The results of the study aligns with the findings of (Kaur et al., 2021; Iwara et al., 2020; Tianyue, 2022; and Türeli et al., 2019), which emphasize the significance of effective communication skills in the aviation industry and the positive impact it can have on customer satisfaction and organizational performance.

These results highlight the importance of communication between ground handlers and airline representatives. In fact, according to the study by Lee (2017) the symbols of messages used in the communication process to convey thoughts and feelings to others verbally and non-verbal, and said that language, a socially established symbol system, is the most basic means of communication. The passengers will communicate throughout the voyage. They will begin by welcoming passengers on board and communicating with them in a language, such as clarifying safety and services or sympathizing with their position. Furthermore, a study by Leigh and Summers (2022) found that non-verbal factors were more influential than linguistic factors. Among nonverbal characteristics, spatial language and comparable language were found to have a significant impact on service quality, followed by physical appearance, verbal communication, and body language, all of which confirm the current study's conclusions.

3.4 Level of Passenger Satisfaction

Table 4. Descriptive statistics of the level of passenger satisfaction to the ground handler or airline representative

INDICATORS	MEAN	SD	DESCRIPTION
1. Sincerity and patience of staff in resolving passengers' problems.	4.62	0.64	Very Satisfied
2. Knowledge and skills of staff in terms of provision of services.	4.46	0.67	Very Satisfied
3. Instillation of safety and confidence to passengers.	4.31	0.71	Very Satisfied
4. Convenience of flight schedules and easy ticketing channels.	4.13	0.69	Satisfied
5. Pleasant demeanor of staff in providing individual attention.	4.08	0.74	Satisfied
6. Availability of other travel-related partners such as car rentals, hotel accommodations, and travel insurance.	4.18	0.79	Satisfied
7. Promptness of staff in responding to passengers' requests or complaints.	4.41	0.73	Very Satisfied
8. Willingness of staff to help.	4.52	0.62	Very Satisfied
9. Dissemination of information about some changes and services to be performed.	4.16	0.83	Satisfied
10. Accuracy of services being performed.	4.38	0.67	Very Satisfied
11. On-time flight performance.	4.12	0.88	Satisfied
12. Remedial procedures for delayed or missing baggage.	3.79	1.13	Satisfied
13. Neat and properly dressed staff.	4.78	0.43	Very Satisfied
14. Visually attractive, modern, and clean physical on-board facilities.	4.60	0.59	Very Satisfied
15. A variety of up-to-date videos/ magazines/ newspapers on board.	3.68	1.11	Satisfied
Composite Mean	4.28	0.44	Very Satisfied

The data in Table 4 presents the results of a passenger satisfaction survey conducted at Godofredo P. Ramos Airport. The results revealed that passengers were "very satisfied" with various aspects of the airport's services and facilities, including the neatness and proper attire of staff, the visual appeal and cleanliness of the physical facilities, and the staff's sincerity, patience, and knowledge in resolving passengers' problems.

Specifically, the survey found that passengers were very satisfied with the neatness and proper attire of staff ($M=4.78$, $SD=0.43$), the visual appeal, modernity, and cleanliness of the physical facilities ($M=4.60$, $SD=0.59$), the sincerity and patience of staff in resolving passengers' problems ($M=4.62$, $SD=0.64$), the staff's willingness to help ($M=4.52$, $SD=0.62$) and the staff's knowledge and skills in providing services and performing accurate services ($M=4.46$; $SD=.67$). Additionally, passengers were very satisfied with the promptness of staff in responding to requests and complaints, as well as the staff's ability to instill a sense of safety and confidence ($M=4.41$, $SD=0.73$) as well as safety and confidence to passengers ($M=4.31$; $SD=.71$).

However, the survey also found that passengers were only "satisfied" with the pleasant demeanor of staff in providing individual attention ($M=4.08$, $SD=0.74$), the remedial procedures for delayed or missing baggage ($M=3.79$, $SD=1.13$). Further, a variety of up-to-date videos/magazines/newspapers on board ($M=3.68$; $SD=1.11$) displayed a "satisfied" result. Generally, the level of passenger satisfaction at Godofredo P. Ramos Airport was found to be "very satisfied" ($M=4.28$; $SD=.44$). Likewise, the standard deviation provides that the assessments of respondents on the level of passenger satisfaction at Godofredo P. Ramos Airport are closed to each other. These findings suggest that the airport is performing well in terms of passenger satisfaction, but there may be opportunities for improvement in certain areas, such as staff interaction and in-flight entertainment.

The results imply that majority of the passengers share a similarly high level of satisfaction which indicates a strong overall satisfaction level among passengers at Godofredo P. Ramos Airport, which is beneficial for the airport's reputation, competitiveness, and stakeholder relationships. Ongoing efforts to maintain and improve this satisfaction level are essential for long-term success and positive passenger experiences. These results highlight the significance of passenger's satisfaction with ground handlers or airline representatives. Surveys such as those conducted by Shakeerah Mohd Shukri, Mohd Shukri Ab Yazid, and Jacqueline Tham (2020) have shown that most respondents agreed that specific characteristics are vital to service provider-consumer interaction.

The results of this study are consistent with previous research on passenger satisfaction at airports (Bakır et al., 2022). The development of a new customer service model has helped airports in the United Arab Emirates better understand passenger perceptions and identify areas for improvement (Wahab et al., 2015; Bakır et al., 2022; Nadimi et al., 2023; Bakır et al., 2022). Similarly, a study on airport service quality in India found that airport facilities and services play a significant role in overall passenger satisfaction (Pappachan, 2020). These findings highlight the importance of continuously monitoring and improving the passenger experience at airports to remain competitive in the industry.

In addition, the results of the study support the findings of Lamputi (2015), who found that passenger satisfaction depends upon the various factors of the services provided or products delivered. The service given can be tangible or intangible; if it does not match the passenger's criteria, it is rejected. Thus, passenger happiness may be viewed as both a baseline standard of performance and a potential criterion of excellence for any corporate organization. As a result of these experiences, poor levels of satisfaction reduce customer loyalty to the airline. When a consumer's contentment improves, so does his loyalty. As a result, users' contentment with an airline is directly influenced by their overall pleasure. On the other hand, (Xu et al., 2018), underscored that service failure may therefore have a major influence on satisfaction and have negative consequences for customer loyalty, especially given that satisfaction has been recognized as a critical antecedent of recommendation likelihood (Serić & Pranićević, 2018).

3.5 Relationship Between Responsiveness and Passenger Satisfaction

Data in Table 5 presents the relationship between the level of responsiveness of the ground handler or airline representative and the level of passenger satisfaction at Godofredo P. Ramos Airport. The study reveals a significant relationship between the level of responsiveness of ground handlers or airline representatives and the level of passenger satisfaction at Godofredo P. Ramos Airport. The results showed a computed p-value of .000, which is less than the level of significance alpha of .05 leading to the rejection of the null hypothesis. Additionally, the positive correlation found between responsiveness and passenger satisfaction suggests that responsiveness plays a crucial role in shaping passenger satisfaction levels.

Table 5. Correlation analysis for the relationship between the level of responsiveness and level of passenger satisfaction

VARIABLE	SPEARMAN RANK CORRELATION COEFFICIENT	DEGREE OF RELATIONSHIP	P- VALUE	DECISION
Level of Responsiveness of the Ground Handler or Airline Representative Level of Passenger Satisfaction	0.571	Moderately Positive Correlation	0.000*	Reject Null Hypothesis

*Highly significant at .01 level of significance

**Significant at .05 level of significance

***Not Significant at .05 level of significance

When ground handlers or airline representatives are more responsive to passenger needs, inquiries, or complaints, passengers are likely to have a better overall experience, resulting in higher satisfaction levels. This is consistent with previous research that has found a positive effect of passenger earliness of arrival on overall satisfaction, as earlier arrival allows passengers to be more relaxed and less stressed during the airport process (Bezerra & Gomes, 2015). Furthermore, the moderately positive correlation highlights the significance of excellent customer service practices in the aviation industry and emphasizes the potential benefits of prioritizing and enhancing responsiveness to meet passenger expectations effectively.

For instance, a study on service quality and passenger satisfaction in the Nigerian aviation industry found that empathy and care shown by airlines can increase passengers' approval rating of their services, and that responsiveness has a significant influence on passenger satisfaction, with a 40.9% increase in satisfaction for every unit increase in responsiveness (Wojuade & Onatade, 2020). Similarly, research on the impact of a global pandemic on passenger satisfaction at airports revealed that despite the ongoing challenges, there was an overall positive sentiment towards staff and the airport environment, highlighting the importance of qualified personnel in shaping passenger experiences.

The findings of this study underscore the critical role of responsiveness in driving passenger satisfaction at Godofredo P. Ramos Airport. To enhance the overall passenger experience, airport operators and airlines should prioritize improving the responsiveness of ground handlers and airline representatives through training, empowerment, and continuous feedback mechanisms. These results underscore the significance of the relationship between the responsiveness of ground handlers or airline representatives and the level of passenger satisfaction that supports the findings of Türelia et al (2019) stated the importance of customer satisfaction is increasing in the aviation industry in other sectors with the developing economy and changing technology. Employees who provide ground handling services at airports also play an essential role in client satisfaction. Employees in ground handling services can acquire value by fulfilling the changing demands and needs of airport terminal services, where innovative technology is at the forefront. It has been determined that organizational factors, ground handling job factors (including team characteristics and relationships), and individual factors can increase the impact of idea generation, idea promotion, and idea realization, all of which have a positive effect on empowerment, value co-creation, customization, and perceived quality, resulting in passenger satisfaction.

3.6 Relationship Between Communication and Passenger Satisfaction

Table 6. Correlation analysis for the relationship between communication and passenger satisfaction

VARIABLE	SPEARMAN RANK CORRELATION COEFFICIENT	DEGREE OF RELATIONSHIP	P- VALUE	DECISION
Level of Communication of the Ground Handler or Airline Representative Level of Passenger Satisfaction	0.638	Moderately Positive Correlation	0.000*	Reject Null Hypothesis

Data in Table 6 presents the results on the relationship between the level of communication of the ground handler or airline representative and the level of passenger satisfaction at Godofredo P. Ramos Airport. The study's findings reveal a significant relationship between the level of communication of the ground handler or airline representative and the level of passenger satisfaction at Godofredo P. Ramos Airport. The computed p-value of .000, which is less than the alpha level of significance at .05 indicates that the null hypothesis can be rejected (Nadimi et al., 2023). Furthermore, the correlation coefficient of .638 suggests a moderately positive relationship between the two variables, meaning that as the level of communication improves, there is a tendency for passenger satisfaction levels to also increase, and vice versa. This highlights the critical role of clear and effective communication in shaping positive passenger experiences and overall satisfaction levels in the aviation industry (O et al., 2020).

The importance of communication in enhancing passenger satisfaction is supported by existing literature. For instance, a study on passenger satisfaction at Murtala Muhammed Airport (MMA2) found that the sample size of respondents was adequate for factor analysis, emphasizing the significance of effective communication in delivering satisfactory airport services (O et al., 2020; Wojuade & Onatade, 2020). Similarly, research on factors affecting travel satisfaction of airport parent-child groups found that communication management is a key

determinant of customer satisfaction. Moreover, a study on communication management strategies for measuring hotel performance in Port Harcourt, Nigeria, revealed that of respondents were very satisfied with the communication strategy used by hotel proprietors, underscoring the crucial role of communication in shaping customer satisfaction in the hospitality industry.

The findings of this study underscore the need for airport operators and airline representatives to prioritize effective communication as a means of enhancing passenger satisfaction. By fostering clear, empathetic, and responsive communication, airports and airlines can cultivate a positive customer experience, which can lead to increased passenger satisfaction and loyalty. Furthermore, the study emphasizes the importance of training and development programs for airport and airline personnel to enhance their communication skills and customer service abilities. In conclusion, the study's findings highlight the significant relationship between the level of communication and passenger satisfaction at Godofredo P. Ramos Airport, underscoring the critical role of effective communication in driving positive passenger experiences in the aviation industry.

Further, the current study's findings support the conclusions of Yu-Lim SUNG and Hye-Yoon PARK's (2021) study, which examined the relationship between international airlines' communication competence, customer happiness, and reuse intention. An empirical investigation of the relationship between airline service quality, customer happiness, and desire to re-use can propose the following findings based on the language and nonverbal communication abilities of Korean staff working for international airlines. Communication between Korean personnel working for international airlines has an impact on airline service quality, customer happiness, and reuse intention. In addition, Prentice and Kadan (2019) find a significant positive relationship between service quality and passenger intentions to reuse airports.

3.7 Passenger Service Satisfaction Framework

Ground handlers or airline representatives play a crucial role in ensuring the smooth functioning of airlines. To ensure that flights operate smoothly, safely, and with exceptional customer service, a significant amount of work is done behind the scenes. Consequently, passengers receive outstanding treatment, and the airline's interests are well-represented throughout the aviation industry. To ensure passenger satisfaction, ground handlers or airline staff must react quickly and interact with other passengers in a friendly manner.

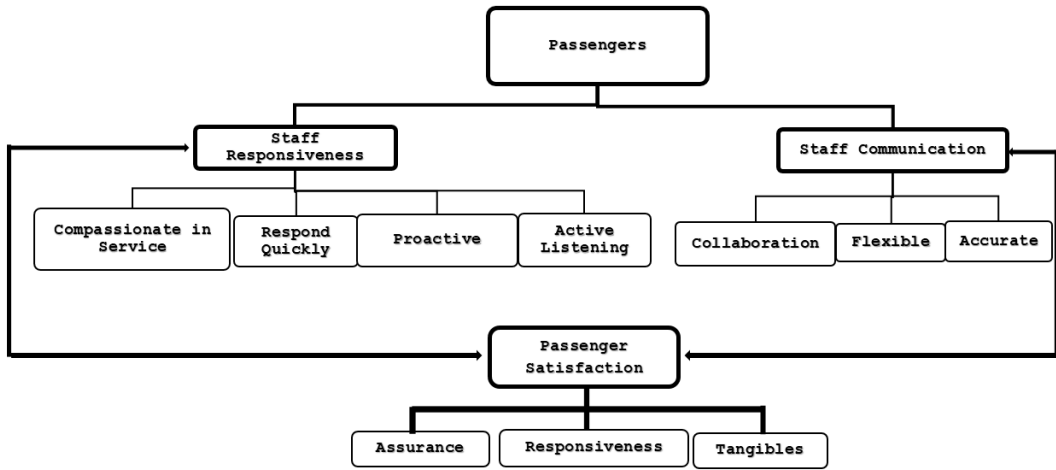


Figure 1. Passenger Service Satisfaction Framework

Regarding staff responsiveness, the discussion underscores its importance in passenger satisfaction within the aviation industry. It specifies that staff must be compassionate, quick to respond, proactive, and attentive listeners. Compassionate staff members or airline representatives should be willing to assist and guide passengers, demonstrating accountability and dedication to helping them. Responsive staff must swiftly respond to passenger requests or questions, adapt to fulfill travelers' unique needs, and promptly address passenger problems and concerns.

Being proactive entails identifying and addressing potential issues before they escalate. Active listening involves interacting with criticism, making necessary adjustments, and taking the time to understand and respond to passengers' specific needs. Passengers are more likely to be satisfied when ground handlers or airline staff exhibit compassionate service, promptly address customers' needs, and take initiative in their interactions, which are key indicators for enhancing responsiveness and contributing to a positive passenger experience.

Effective communication by airline representatives is essential for ensuring customer satisfaction, managing crises, building trust and loyalty, optimizing operations, enhancing safety and security, maintaining a positive brand reputation, and meeting legal requirements. The discussion highlights the importance of staff communication in passenger satisfaction within the aviation industry, emphasizing that staff must be collaborative, flexible, and accurate.

Collaborative airport personnel must communicate and cooperate during interruptions like flight delays or cancellations, providing a feedback system for passengers to share their thoughts on communication quality and support received. Flexible airline representatives should enable clients to provide feedback on the quality of assistance and outreach they experienced, assisting passengers in multiple languages to serve a diverse range of travelers. Accurate personnel or airline representatives must present public announcements clearly.

Prioritizing collaborative, flexible, and accurate communication among ground handlers or airline representatives ensures a more seamless and positive experience for passengers, ultimately enhancing their satisfaction and loyalty to the service. Emphasizing active listening, empathy, and responsiveness fosters stronger relationships and enhances overall customer satisfaction, leading to increased loyalty, positive word-of-mouth referrals, and sustained success in the competitive aviation industry.

Passenger satisfaction is crucial for airlines as it drives customer loyalty, generates positive word-of-mouth recommendations, provides a competitive advantage, increases revenue, enhances brand reputation, improves customer retention, boosts operational efficiency, and ensures regulatory compliance. Airlines must prioritize passenger satisfaction by delivering exceptional passenger experiences at every touchpoint throughout the travel journey.

Passengers are more likely to feel assured when they perceive sincerity and patience from staff in resolving their problems, along with staff demonstrating knowledge and skills in providing services and instilling safety and confidence. In terms of responsiveness, ground handlers or airline representatives make passengers feel appreciated and supported throughout their travel, resulting in higher levels of satisfaction when staff are ready to assist promptly, attend to passengers' requests or grievances, and communicate changes and services effectively.

Finally, when passengers believe the tangibles of the service are of good quality, they are more likely to enjoy their trip and have a positive image of the transportation provider. Ensuring staff or airline representatives are neatly clothed and physically appealing, with modern and clean onboard facilities, along with a selection of current periodicals, newspapers, and videos, contributes to passenger satisfaction.

Prioritizing passenger satisfaction is paramount for airlines as it not only drives business success but also enhances customer relations, brand reputation, and operational effectiveness. By consistently delivering exceptional experiences and addressing key drivers of satisfaction, airlines can cultivate loyal customers and thrive in a competitive industry landscape. Concentrating on these factors allows ground handlers or airline staff to provide passengers with a more gratifying and delightful experience, potentially resulting in increased customer loyalty, favorable word-of-mouth referrals, and commercial success.

4.0 Conclusion

Based on the findings of the study, the following conclusions were drawn:

- a) The surveyed travelers, mostly young adults, take 2-3 trips yearly, balancing travel desires with time and budget constraints, favoring domestic or regional exploration. Financial stability allows for multiple trips,

indicating a middle-income group with disposable income. Yet, prudent budgeting and planning remain essential.

- b) Although there were instances of responsiveness, it was not consistently up to par. Ground handling and airline staff at the airport require improvement in responsiveness. Implementing strategies like improving communication, training employees, and streamlining processes can better meet passenger needs. Responsive service enhances the overall customer experience, promoting loyalty and positive feedback, which benefits both the airport and the airlines. These enhancements significantly contribute to the long-term success and reputation of the airport.
- c) Survey participants placed great importance on exceptional communication abilities, highlighting the significance of clarity, efficacy, and responsiveness. Effective communication aids in comprehension, prompt resolution of issues, and provision of essential details, resulting in heightened satisfaction and loyalty. Demonstrating professionalism and efficiency in communication underscores the proficiency of ground handlers or airline representatives, positively impacting the overall customer experience and fostering trust among passengers.
- d) Passengers at Godofredo P. Ramos Airport express high satisfaction, indicating the airport exceeds expectations in navigation, cleanliness, service, staff friendliness, and overall atmosphere. This positive reputation reflects the airport's commitment to fulfilling passenger needs, fostering sustained success.
- e) The significant correlation between ground handlers' promptness and passenger contentment underscores the essential role of customer service in shaping the airport journey. Enhancing responsiveness and service benchmarks can cultivate a favorable atmosphere, guaranteeing sustained success and competitiveness within the aviation sector.
- f) The robust connection between ground handlers' communication and passenger contentment emphasizes the critical significance of effective communication in shaping enjoyable airport experiences. Giving priority to efficient communication methods can establish a gratifying atmosphere, securing enduring success and competitiveness in the aviation sector.
- g) The results offer an advancement of the field not only descriptive insights but also prescriptive advice on enhancing airport service. By revealing the importance of staff responsiveness and communication, the study informs practices that could potentially lead to increased passenger satisfaction.
- h) Further, the study has advanced understanding of young adult travel habits, emphasizing the impact of economic stability and planning on travel decisions. It underscores the critical role of responsive customer service and clear communication from airline staff in increasing satisfaction and fostering loyalty. By setting a standard for satisfying airport experiences, the research offers practical guidance for the travel industry to improve service quality and enhance the overall passenger experience.
- i) Finally, further investigations into passenger satisfaction across transportation centers can inform industry benchmarks and reveal service quality's influence on traveler loyalty. Studies focusing on cultural differences, digital technology integration, and staff training effectiveness could provide valuable strategies for personalizing and improving passenger experiences.

5.0 Contributions of Authors

The sole author initiated and completed this study.

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7.0 Conflict of Interests

The author declares no conflict of interest.

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Users' Access, Utilization, and Satisfaction with Library Resources, Services, and Facilities in a Selected Academic Library

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Abstract. The study sought to evaluate the status of access, utilization, and satisfaction with the library resources, services, and facilities. Likewise, it ascertained if utilization has a significant relationship with satisfaction. A sample size of 351, representing 20% of the population, was selected through random sampling. The respondents were the 31 faculty members and 320 students who have visited the library. An online survey using a Google Form questionnaire was used. Data were analyzed using frequency, percentage, mean score, and Pearson's *r*. The study results showed that almost all faculty and student respondents have accessed the library's resources, services, and facilities. This effort resulted in a very high utilization and satisfaction level. Notedly, faculty members visit the library, avail varied services, and utilize resources in various formats as their primary tool, particularly in developing their course outline, preparing lectures, searching a topic for giving assignments/projects, preparing handouts for students, looking for supplementary reading material and knowing the variety of material available in the library to guide students. The library's high utilization and satisfaction rating create an excellent reputation attributed to its good service philosophy, relevant and appropriate physical set-up, and sufficient collection in quantity, depth, diversity, format, and currency to support the research and teaching mission of the institution.

Keywords: Access; Utilization; Satisfaction; Resources; Services; Facilities.

1.0 Introduction

The academic library has been described as the "heart" of the institution or learning community, providing a place for students, faculty, and other library users to research and advance their knowledge. It is vital to the educational process because it supports curricula, teaches information literacy, and fosters critical thinking skills. According to Singh & Arora (2015), a library must have appropriate resources like information resources, staff, space, etc., to successfully play its role in the institution. Its purpose is to enable users to access and use its resources (Agyeiku & Agyeiku, 2021). Likewise, its essential function is to develop and provide effective services and modern facilities to meet the users' diverse expectations and needs (Marjaei et al., 2022). It is a must for every academic library to meet its users' information needs and provide them with the right and quality information resources and services. Boakye (2018) stated that the extent of user satisfaction with the resources and services provided by academic libraries justifies their existence.

CHMSC-FT Library is a learning center under the umbrella of academic libraries that primarily aims to provide its academic community with essential and appropriate services, required facilities, and a balanced collection of materials and resources necessary to meet the current and future needs of school programs and user's informational, instructional, and personal requirements. It assumes a pivotal role in institutional development through its commitment to achieving success and efficient delivery of services in various aspects of institutional

instruction, research, and public service (Library Operational Manual, 2019). To fulfill this goal, CHMSC-FT Library continuously enhances its collection to provide clientele with print, non-print, and electronic materials. It provides various services to facilitate maximum utilization of the developed collection.

Moreover, there is a need to conduct a research study to prove that librarians are on the right track in offering programs and providing services and environments parallel to the academic community. According to Ezeala and Yusuff (2019), "It is natural for humans to evaluate things, events, and other people around them. Libraries are also included in this practice. Hence, the results of this evaluation could help the management determine its strengths and weaknesses. By identifying its weaknesses, it can recommend ways to improve its services to satisfy the users' information needs.

This study aimed to assess the CHMSU-FT Library in terms of user's access to resources, services, and facilities, the extent of utilization, and their overall satisfaction. Likewise, it will determine if significant relationship exist between utilization and satisfaction.

2.0 Methodology

2.1 Research Design

The study employed the descriptive-relational method. The descriptive design was used to measure the status of access, extent of utilization, and level of satisfaction of students and faculty members who use the onsite library services. Likewise, correlation was used to ascertain if a significant relationship occurs between the utilization and satisfaction of library users.

2.2 Research Locale

The study was carried out at a state university in Bacolod City.

2.3 Research Participants

The research participants were 31 faculty members and 320 second to fourth-year students of Carlos Hilado Memorial State University-Fortune Towne Campus. Stratified random sampling using an online random number generator was considered.

2.4 Research Instrument

This study used a researcher-made survey questionnaire. The instrument was subjected to validation by five (5) experts in the fields of research and library and information science using the Good and Scates Validity Instrument. Moreover, reliability testing of the instrument was conducted on thirty (30) library users of the Alijis Campus. The Cronbach's alpha (α) result is 0.951, indicating a high-reliability coefficient.

2.5 Data Gathering Procedure

The researchers formally sent a request letter to the College Dean of the campus seeking approval to conduct the study. Likewise, the letter was sent to the Registrar to request the enrolment data to determine the sample size. Using Google form, the researcher-made survey questionnaire was conducted on 31 faculty members and 320 second-year to fourth-year students of Carlos Hilado Memorial State University – Fortune Towne Campus. Stratified random sampling using an online random number generator was considered. All completed surveys were collected, consolidated, and tabulated. Data collected were analyzed using appropriate statistical tools such as frequency, percentage, Mean, and Pearson r. Statistical findings were presented, interpreted, and analyzed in tabular form.

2.6 Ethical Considerations

Ethics in research were considered by asking for approval on the study's conduct, seeking the participants' consent during the survey, and discarding the data after completion of the study.

3.0 Results and Discussion

3.1 Access to Library Resources, Services, and Facilities

Table 1 presents the respondents' status of access to the resources, services, and facilities of the library. In terms of resources, 89.3% of the faculty and 94.1% of student respondents have accessed books on professional subjects.

Data also shows that 29% of the faculty and 97.8% of students accessed books on general education. The low percentage of faculty access is attributed to only six (6) respondents from the General Education department. Notably, both users (faculty = 96.8%; students = 97.2%) have accessed other references such as dictionaries, encyclopedias, and atlases. Fiction books were also accessed by 87.1% of faculty and 92.2% of student respondents. In terms of periodicals, all (100%) faculty members accessed the journals, magazines, and newspapers available in the library. Data further shows that student respondents have access to journals (92.2%), magazines (95.9%), and newspapers (91.3%), respectively. With regards to e-resources, nine in every ten faculty members (95.5%) and students (91.6%) accessed the e-journals subscription. Additionally, eight in every ten users accessed e-books (faculty = 87.1%; students = 88.8%) and other educational resources, with 80.6% for faculty and students.

The percentage of varied resources accessed by faculty members and students implies that the library has adequate materials in quantity, quality, depth, formats, and currency for their educational needs. The availability of these materials triggers the users to access them, appreciate their value, and use them to satisfy their information needs. The result affirms Aldrich (2018) and Soulen et al. (2020) that the library shall maintain a point of accessible resources that promotes equity so that everyone has a chance to acquire critical thinking and problem-solving skills.

Moreover, as to services, it is found that all or 100% of faculty respondents could access the circulation and internet services. In comparison, only 3 (9.7%) and 2 (6.5%) had yet to access the online public access catalog and mobile learning services, respectively. In the case of students, 98.8% had accessed the circulation services, 98.4% on the printing services, and 98.1% on the photocopy services. In the case of student respondents, almost all accessed the circulation services (98.8%), printing services (98.4%), and photocopy services (98.1%). Nevertheless, though the number is negligible, it is noted that there are 26, or 8.1%, who did not access the Online Public Access Catalog (OPAC), 17, or 5.3%, on mobile learning services, and 10, or 3.1% on library instruction like orientation or the information literacy program, InfoFEED. The findings imply that almost all faculty and students have access to the services offered in the library. This variety of services aids the academic community in their teaching-learning process.

The high result is that library management successfully establishes a service culture where library personnel effectively and efficiently provide relevant services to advance the library's mission. As Lance and Kachel (2018) asserted, student achievement is boosted when schools have high-quality library programs and librarians who share their expertise with the entire community. Also, the finding confirms the statement of the American Association of School Librarians (AASL) (2018) that by ensuring continuous access to library services, members of the academic community that have access to it meet a variety of needs and interests, enabling lifelong learning.

As to facilities, data shows that all (100%) faculty respondents have accessed the circulation section/area. The table shows that nine out of every ten faculty members have accessed the Reserve Section and General Reference Section with 96.8% and the Filipiniana Section, Graduate School Library, Computer Units, and tablet with 93.5%. As to carrels, one of the amenities found in the library lobby, eight in every ten faculty have access to it. Considering the student respondents, data shows that nine in every 10 of them have access to computer units (97.8%), Circulation Section (95.0%), General Reference Section (94.7%), Filipiniana Section (94.1%), Reserve Section (93.4%) and tablet with 93.1%. Just like with faculty respondents, 8 in every 10 of the students have accessed the carrels area.

The result implies that the library provides a physical set-up and environment with different areas or sections to facilitate learning and the creation of new knowledge. It further indicates that the library has logically designed each area with corresponding value and use that accommodates diverse users and information needs. Access to a library with a user-friendly set-up conducive to study benefits the academic community by stimulating an interest in visiting, staying, and using the available resources and services (Wood et al., 2020).

Table 1. Descriptive statistics of the access to library resources, services, and facilities by type of users

	Faculty (n=31)				Students (n=320)			
	Accessed		Not Accessed		Accessed		Not Accessed	
	f	%	f	%	f	%	f	%
I. Resources								
<i>A. Books</i>								
1. Professional subjects	26	83.9	5	16.0	301	94.1	19	5.9
2. General Education subjects	9	29.0	22	71.0	313	97.8	7	2.2
3. Other references (encyclopedias, dictionaries, etc.)	30	96.8	1	3.2	311	97.2	9	2.8
4. Fiction	27	87.1	4	12.9	295	92.2	25	7.8
<i>B. Periodicals</i>								
1. Journals	31	100	0	0	295	92.2	25	7.8
2. Magazines	31	100	0	0	307	95.9	13	4.1
3. Newspapers	31	100	0	0	292	91.3	28	8.8
<i>C. E-resources</i>								
1. E-books	27	87.1	4	12.9	284	88.8	36	11.3
2. E-journals	29	93.5	2	6.5	293	91.6	27	9.4
3. OERs (STARBOOKS, DOAJ, etc.)	25	80.6	6	19.4	258	80.6	62	19.4
II. Services								
A. Circulation Services	31	100	0	0	316	98.8	4	1.3
B. Online Public Access Catalog	28	90.3	3	9.7	294	91.9	26	8.1
C. Photocopy Services	30	96.8	1	3.2	314	98.1	6	1.9
D. Printing Services	30	96.8	1	3.2	315	98.4	5	1.6
E. Internet Services	31	100	0	0	313	97.8	7	2.2
F. Mobile (Tablet) Learning Services	29	93.5	2	6.5	303	94.7	17	5.3
G. Library Instruction (Orientation, InfoFEED, etc.)	30	96.8	1	3.2	310	96.9	10	3.1
III. Facilities								
A. Circulation Section	31	100	0	0	304	95	16	5
B. Reserve Section	30	96.8	1	3.2	299	93.4	21	6.6
C. Filipiniana Section	29	93.5	2	6.5	301	94.1	19	5.9
D. General Reference Section	30	96.8	1	3.2	303	94.7	17	5.3
E. Graduate School Library	29	93.5	2	6.5	286	89.4	34	10.6
F. Carrels	26	83.9	5	16.0	282	88.1	38	11.9
G. Computer Units	29	93.5	2	6.5	313	97.8	7	2.2
H. Tablet	29	93.5	2	6.5	298	93.1	22	6.9

3.2 Utilization of the Library Resources, Services, and Facilities

Table 2 presents the extent of the faculty's utilization of library resources, services, and facilities. As to resources, 48.4% of them have utilized professional books to a very high level. It was followed by other references such as encyclopedias, dictionaries, atlases, and among others (35.5%). Also, most fiction books (41.9%) are moderately utilized by the faculty. The result further shows that twenty-two (22) or 70.7 percent of the faculty respondents have very low utilization of books on general education subjects. This may be because most of them teach core or professional subjects, thus utilizing books along their specialization. As to periodicals, 48.4% of the faculty have a very high utilization of newspapers, a high (35.5%) of journals, and 64.6% have moderate to high utilization of magazines. Likewise, as to e-resources, data shows that 54.9%, 54.8%, and 35.5% have high to very high utilization of e-journals, e-books, and open educational resources, respectively.

Data on utilization of various services show that faculty respondents' extent of utilization varies. It shows that more than forty percent have utilized the circulation services (45.2%) to a very high level, followed by internet services (35.5%) with a high utilization level. Notedly, twelve to fifteen of the faculty have a moderate utilization of photocopy, printing, mobile learning, library instruction, and internet services.

In terms of the usage of facilities, more than 40 percent utilized the Circulation Section (41.9%). The combined mean scores of those with high to very high utilization levels manifest that faculty respondents have favorably used the Reserve, Filipiniana, General Reference, and Graduate School sections. Also, the least utilized facilities by the faculty are the carrels.

The high utilization result implies that faculty use the library resources, services, and facilities from a high to a very high extent. Notedly, they visit the library, avail varied services, and utilize resources in various formats as

their primary tool, particularly in developing their course outline, preparing lectures, searching a topic for giving assignments/projects, preparing handouts for students, looking for supplementary reading material and knowing a variety of material available in the library to guide students. The moderate use of photocopy, printing, mobile learning, and the least use of internet services is because the faculty lounge is equipped with Wi-Fi, a photocopier machine, and a printer. Likewise, they have laptops or cell phones to use when searching for information.

Table 2. Descriptive statistics of the utilization of the library resources, services, and facilities by the faculty

	UTILIZATION									
	Always		Often		Sometimes		Seldom		Never	
	f	%	f	%	f	%	f	%	f	%
I. Resources										
<i>A. Books</i>										
1. Professional subjects	15	48.4	7	22.6	4	12.9	0	0	5	16.1
2. General Education subjects	3	9.7	2	6.5	3	9.7	2	3.4	22	70.7
3. Other references (encyclopedias, dictionaries, atlases, etc.)	11	35.5	4	12.9	9	29	6	19.4	1	3.2
4. Fiction	7	22.6	3	9.7	13	41.9	4	12.9	4	12.9
<i>B. Periodicals</i>										
1. Journals	8	25.8	11	35.5	9	29	3	9.7	0	0
2. Magazines	6	19.4	10	32.3	10	32.3	5	16	0	0
3. Newspapers	15	48.4	7	22.6	4	12.9	5	16.1	0	0
<i>C. E-resources</i>										
1. E-books	10	32.3	7	22.5	6	19.4	4	12.9	4	12.9
2. E-journals	7	22.6	10	32.3	7	22.6	5	16	2	6.5
3. OERs (i.e., STARBOOKS, DOAJ, etc.)	7	22.6	4	12.9	8	25.7	6	19.4	6	19.4
II. Services										
A. Circulation Services (borrowing and returning of books)	14	45.2	12	38.7	4	12.9	1	3.2	0	0
B. Online Public Access Catalog (OPAC)	7	22.6	11	35.5	7	22.6	3	9.7	3	9.7
C. Photocopy Services	7	22.6	4	12.9	15	48.4	4	12.9	1	3.2
D. Printing Services	6	19.4	4	12.9	15	48.4	5	16.1	1	3.2
E. Internet Services	11	35.5	6	19.4	11	35.4	3	9.7	0	0
F. Mobile (Tablet) Learning Services	3	9.7	5	16.1	11	35.4	10	32.3	2	6.5
G. Library Instruction (Orientation, ask a librarian, etc)	8	25.8	7	22.6	12	38.7	3	9.7	1	3.2
III. Facilities										
A. Circulation Section	13	41.9	7	22.6	7	22.6	4	12.9	0	0
B. Reserve Section	10	32.3	11	35.5	5	16.1	4	12.9	1	3.2
C. Filipiniana Section	8	25.8	7	22.6	8	25.8	6	19.3	2	6.5
D. General Reference Section	8	25.8	10	32.3	8	25.8	4	12.9	1	3.2
E. Graduate School Library	6	19.3	7	22.6	10	32.3	6	19.4	2	6.5
F. Carrels	2	6.5	4	12.9	14	45.2	6	19.4	5	16.0
G. Computer Units	5	16.1	4	12.9	12	38.7	8	25.8	2	6.5
H. Tablet	4	12.9	3	9.7	12	38.7	10	32.3	2	6.5

Mean Range: 4.50 - 5.00 (Very High), 3.50 - 4.40 (High), 2.50 - 3.49 (Moderate), 1.50 - 2.49 (Low), 1.00 - 1.49 (Very Low)

Table 3 presents the extent of student utilization of library resources, services, and facilities. As to resources, 32.2% of them have utilized professional books to a very high level, 33.8% to a high level, and 20.3% to a moderate level. In the case of general education books, 33.5% utilized it to a very high level and 29.4% to a high level. The result further shows that 28.8% used other references such as encyclopedias, dictionaries, and atlases to a very high level, while 32.2% used a moderate level. Regarding fiction books, 31.9% of the students utilized this resource moderately, while 26.3% used it at a very high level. As to periodicals, 33.1% of the students highly utilize the journals, while 34.4% have a moderate level. For magazines, 35.9% used it at a moderate level, 30.3% at a high level, and 14.7% at a very high level. For newspapers, 28.1% of the students used them at a very high level, 26.6% at a high level, and 32.2% at a moderate level. Likewise, as to e-resources, data shows that 39.7% used e-books at a high level and 24.4% at a moderate level. For e-journals, 34.1% utilized it at a high level, while 28.1% utilized it at a moderate level. For open educational resources, 40% utilized it at a moderate level, while 19.4% used it at a high and very low level.

Data on utilization of various services show that student respondents' extent of utilization mainly falls at high to very high levels. On the contrary, OPAC and Library Instruction services have moderate to high utilization levels. Specifically, data shows that students have utilized the circulation services from a high (41.3%) to a very high

(19.4%) level. They also utilized the online public access catalog from moderate (32.5%) to high (33.1%). For photocopy services, most of them utilized it in very high (42.8%) and high (34.4%) levels. For the printing services, 36.9% have used it at a high level, while 35.6% have used it at a very high level. With regards to internet services, they have utilized them in a very high (43.1%) and high (35%) manner. For mobile learning services, 33.1% of the students have utilized it to a high while 29.4% to a moderate extent. Lastly, for the library instruction services, 32.8% utilized it to a high extent, while 31.6% and 27.5% utilized it at moderate and very high levels, respectively.

In terms of the usage of facilities, it is noted that students have very highly (33.1%) and highly (32.4% utilized the Circulation Section. For the Reserve Section, 28.8% of the students have a very high, and 35.6% have high utilization. As to the Filipiniana Section, 20.6% have a very high level, and 32.8% of students have a high extent of utilization.

Table 3. Descriptive statistics of the utilization of the library resources, services, and facilities by the students

	Extent of Utilization									
	Very High		High		Moderate		Low		Very Low	
	f	%	f	%	f	%	f	%	f	%
I. Resources										
<i>A. Books</i>										
1. Professional subjects	103	32.2	108	33.8	65	20.3	25	7.8	19	5.9
2. General Education subjects	107	33.5	94	29.4	75	23.4	37	11.6	7	2.2
3. Other references (encyclopedias, dictionaries, etc.)	92	28.8	83	25.9	103	32.2	33	10.3	9	2.8
4. Fiction	84	26.3	102	31.9	57	17.8	52	16.3	25	7.8
<i>B. Periodicals</i>										
1. Journals	48	15	106	33.1	110	34.4	31	9.7	25	7.8
2. Magazines	47	14.7	97	30.3	115	35.9	48	15.0	13	4.1
3. Newspapers	90	28.1	85	26.6	103	32.2	33	10.3	9	2.8
<i>C. E-resources</i>										
1. E-books	47	14.7	127	39.7	78	24.4	32	10.0	36	11.3
2. E-journals	44	13.8	109	34.1	90	28.1	50	15.6	27	9.4
3. OERs (STARBOOKS, DOAJ)	35	10.9	62	19.4	128	40	33	10.3	62	19.4
II. Services										
A. Circulation Services	80	25	132	41.3	80	25	24	7.5	4	1.3
B. Online Public Access Catalog	62	19.4	106	33.1	104	32.5	22	6.9	26	8.1
C. Photocopy Services	137	42.8	110	34.4	58	18.1	9	2.8	6	1.9
D. Printing Services	114	35.6	118	36.9	68	21.3	15	4.7	5	1.6
E. Internet Services	138	43.1	112	35	57	17.8	6	1.9	7	2.2
F. Mobile Learning Services	80	25	106	33.1	94	29.4	23	7.2	17	5.3
G. Library Instruction (Orientation, InfoFEED)	88	27.5	105	32.8	101	31.6	16	5.0	10	3.1
III. Facilities										
A. Circulation Section	106	33.1	104	32.5	78	24.4	16	5.0	16	5.0
B. Reserve Section	92	28.8	114	35.6	63	19.7	30	9.4	21	6.6
C. Filipiniana Section	66	20.6	105	32.8	79	24.7	51	15.9	19	5.9
D. General Reference Section	96	30	99	30.9	87	27.2	21	6.6	17	5.3
E. Graduate School Library	56	17.5	97	30.3	78	24.4	55	17.2	34	10.6
F. Carrels	110	34.4	74	23.1	55	17.2	43	13.4	38	11.9
G. Computer Units	139	43.4	107	31.6	54	16.9	7	2.2	0	0.0
H. Tablet	100	31.3	92	28.8	77	24.1	29	9.1	22	6.9
Mean Range: 4.50 - 5.00 (Very High), 3.50 - 4.40 (High), 2.50 - 3.49 (Moderate), 1.50 - 2.49 (Low), 1.00 - 1.49 (Very Low)										

The result implies that students are avid visitors and users of the library, as indicated in the percentage allocation on high to very high extent of utilization. The findings affirmed Puertos, J. (2022) on higher utilization of library materials as evidence to the claim that students highly use academic libraries to improve their understanding and critical thinking ability. Oluwatola and Judah. (2022) pointed out that students use tangible resources (i.e., printed resources) and intangible (i.e., electronic resources) formats. Also, Ani et al. (2022) correctly say that students use the library mainly to consult books and reference materials. Moreover, Okiki (2013) posits that the library is a vital facility for enhancing learning, teaching, and research, and he affirmed that it is the hub of all academic activities established to prove intellectual excellence. Singh and Kuri (2017) emphasized that the effectiveness of library resources and services is evaluated by the level to which they are utilized. Ayiah & Tamakloe (2023) added that to ensure the maximum utilization of its resources, library management, stakeholders, and the government should exert conscious effort to put measures in place to arrest the challenges to the barest minimum.

3.4 Satisfaction with Library Resources, Services, and Facilities

Data in Table 4 presents the faculty members' satisfaction level with library resources, services, and facilities. The result shows that as to resources, they are high to very highly satisfied with books, periodicals, and e-resources. Specifically, 64.5% are very highly satisfied with books on professional subjects, while 38.7% are on general education and other references like encyclopedias, dictionaries, and the like. It is also well-taken that 45.2% are moderately satisfied with the fiction collection. For the periodicals, faculty are very highly satisfied with journals (41.9%), magazines (38.7%), and newspapers (32.3%). As to e-resources, it is noted that the majority of them are highly satisfied with e-books (38.7%), e-journals (45.2%), and open educational resources (35.5%).

Table 4. Descriptive statistics of the satisfaction with library resources, services, and facilities by the faculty

	Level of Satisfaction (n=31)					
	Very Highly Satisfied		Highly Satisfied		Moderately Satisfied	
	f	%	f	%	f	%
I. Resources						
<i>A. Books</i>						
1. Professional subjects	20	64.5	8	25.8	3	9.7
2. General Education subjects	12	38.7	9	29.0	10	32.3
3. Other references (encyclopedias, dictionaries, etc.)	12	38.7	9	29.0	10	32.3
4. Fiction	9	29.0	8	25.8	14	45.2
<i>B. Periodicals</i>						
1. Journals	13	41.9	12	38.7	6	19.4
2. Magazines	12	38.7	12	38.7	7	22.6
3. Newspapers	10	32.3	13	41.9	8	25.8
<i>C. E-resources</i>						
1. E-books	12	38.7	12	38.7	7	22.6
2. E-journals	10	32.3	14	45.2	7	22.6
3. OERs (STARBOOKS, DOAJ)	9	29.0	11	35.5	11	35.5
II. Services						
A. Circulation Services	20	64.5	10	32.3	1	3.2
B. Online Public Access Catalog	11	35.5	11	35.5	9	29
C. Photocopy Services	11	35.5	13	41.9	7	22.6
D. Printing Services	9	29.0	13	41.9	9	29.0
E. Internet Services	13	41.9	11	35.5	7	22.6
F. Mobile Learning Services	7	22.6	10	32.3	14	45.2
G. Library Instruction (Orientation, InfoFEED, etc)	10	32.3	11	35.5	10	32.3
III. Facilities						
A. Circulation Section	16	51.6	11	35.5	4	12.9
B. Reserve Section	15	48.4	13	41.9	3	9.7
C. Filipiniana Section	13	41.9	13	41.9	5	16.1
D. General Reference Section	15	48.4	10	32.3	6	19.4
E. Graduate School Library	18	51.8	11	35.5	2	6.5
F. Carrels	17	54.8	12	38.7	2	6.5
G. Computer Units	15	48.4	12	38.7	4	12.9
H. Tablet	16	51.6	11	35.5	4	12.9

As to services, six in every ten faculty members were very highly satisfied with circulation services. Also, seventy percent were high to very highly satisfied with the Online Public Access Catalog. Moreover, more than forty percent of faculty respondents are very highly satisfied with the internet services (41.9%) and highly satisfied with photocopy (41.9%) and printing services (41.9%). Data shows that 35.5% of faculty members are highly satisfied with library instruction services. It is noted that 45.2% were moderately satisfied with mobile learning services. The result implies that faculty respondents are happy with the library's various services. The findings entail that those services provided or offered are relevant and responsive to their needs. The moderate level of satisfaction with mobile learning services is understandable because each faculty member-owned a smartphone and laptop unit, which is used as a tool for their teaching.

As to facilities, the result shows that more than half of the faculty respondents were very highly satisfied with the Carrels (54.8%), Circulation Section (51.6%), and Tablets (51.6%). Computer Units (48.4%), Reserve Section (48.4%),

General Reference Section (48.4%), and Filipiniana Section (41.9%). The very high satisfaction result entails that all the library's service areas are functional and serve their purpose.

The findings align with Tukur and Kannan (2020) that faculty appreciate the library because journals, books, newspapers, and e-books dominate the available information resources, assisting them in meeting their teaching, learning, and research tasks. Maina et al. (2017) noted that the generous provisions for space and a pleasant atmosphere result in a high satisfaction rating. Correspondingly, Abraham and Sabu (2022) pointed out that library resources, services, and facilities are the deciding factors of users' satisfaction.

Data in Table 5 presents the student respondents' satisfaction level with library resources, services, and facilities. The result shows that as to resources, they are high to very highly satisfied with books, periodicals, and e-resources. Specifically, 39.4% are very highly satisfied with books on professional subjects, while 41.3% are on general education, 39.4% on other references like encyclopedias, dictionaries, and the like, and 35% are on fiction. For the periodicals, students are very highly satisfied with journals (38.4%), magazines (40.3%), and newspapers (54.4%). As to e-resources, data shows that most are highly satisfied with e-books (35.9%) and e-journals (35.6%). It is noted that 36.9% of the respondents were moderately satisfied with open educational resources.

Table 5. Descriptive statistics of the satisfaction with library resources, services, and facilities by the students

	Level of Satisfaction (n=320)							
	Very Highly Satisfied		Highly Satisfied		Moderately Satisfied		Less Satisfied	
	f	%	f	%	f	%	f	%
I. Resources								
<i>A. Books</i>								
1. Professional subjects	126	39.4	117	36.6	73	22.8	4	1.3
2. General Education subjects	132	41.3	116	36.3	69	21.6	3	0.9
3. Other references (encyclopedias, dictionaries, etc.)	126	39.4	111	34.7	80	25.0	3	0.9
4. Fiction	112	35.0	104	32.5	101	31.6	3	0.9
<i>B. Periodicals</i>								
1. Journals	103	32.2	123	38.4	90	28.1	4	1.3
2. Magazines	96	30.0	129	40.3	93	29.1	2	0.6
3. Newspapers	87	27.2	174	54.4	53	16.6	6	1.9
<i>C. E-resources</i>								
1. E-books	115	35.9	101	31.6	96	30.0	8	2.5
2. E-journals	114	35.6	102	31.9	97	30.3	6	1.9
3. OERs (STARBOOKS, DOAJ)	84	26.3	107	33.4	118	36.9	11	3.4
II. Services								
A. Circulation Services	163	50.9	95	29.7	58	18.1	4	1.3
B. Online Public Access Catalog	132	41.3	106	33.1	76	23.8	6	1.9
C. Photocopy Services	167	52.2	93	29.1	54	16.9	6	1.9
D. Printing Services	162	50.6	93	29.1	61	19.1	4	1.3
E. Internet Services	145	45.3	100	31.3	69	21.6	6	1.9
F. Mobile Learning Services	159	48.8	94	29.4	65	20.3	5	1.6
G. Library Instruction (Orientation, InfoFEED)	116	36.3	100	31.3	96	30.0	8	2.5
III. Facilities								
A. Circulation Section	171	53.4	94	29.4	51	15.9	4	1.3
B. Reserve Section	179	55.9	86	26.9	53	16.6	2	0.3
C. Filipiniana Section	174	54.4	87	27.2	53	16.6	6	1.9
D. General Reference Section	179	55.9	86	26.9	48	15.0	7	2.2
E. Graduate School Library	186	58.1	88	27.5	44	13.8	2	0.6
F. Carrels	103	32.2	123	38.4	90	28.1	4	1.3
G. Computer Units	126	39.4	117	36.6	74	23.1	3	0.9
H. Tablet	132	41.3	117	36.6	69	21.6	2	0.6

As to services, forty-fifty percent of the student respondents were very highly satisfied with Photocopy Services (52.2%), Circulation Services (50.9%), Printing Services (50.6%), Mobile Learning Services (48.8%), Internet Services (45.3%), Online Public Access Catalog (41.3%). Also, more than thirty percent were highly (31.3%) to very highly (36.3%) satisfied with the Library Instruction Services.

As to facilities, the result shows that more than half of the student respondents were very highly satisfied with the Graduate School Library (58.1%), General Reference Section (55.9%), Filipiniana Section (54.4%), and Circulation Services (53.4%). The result also shows that three in every 10 are very highly satisfied with carrels and computer units, while four in every 10 were very highly satisfied with tablets.

The students' high to very high satisfaction with the resources, services, and facilities indicate that the library is doing well and that what is being offered is favorable to their research needs. Thus, the library successfully aims to provide its academic community with essential and appropriate services, facilities, and a balanced collection of materials and resources necessary to meet the current and future needs of programs and users' informational, instructional, and personal requirements.

The finding supports Abraham and Sabu (2022), who state that the success of any library is based on the satisfaction of the information demands of its users. Most users of different IITs are satisfied with diverse library services such as lending of books, internet service, reference service, journals/periodicals circulations, E-journals, online database services, and reservation service. However, it contradicts the findings of Ayiah & Tamakloe (2023) on the users' negative satisfaction towards the available resources in the University of Education, Winneba Library. The availability of proper resources decides the satisfaction level of library users (Abraham & Sabu, 2022). In addition, Anmol, Khan, & Muahmmad (2021) study found that most of the faculty were satisfied from general infrastructural facilities. However, there was an observation of dissatisfaction with services except circulation. Therefore, the library was recommended to provide the necessary services and facilities to obtain user satisfaction. Omeiza and Oluwabunmi (2021) also added that equipping the library with necessary resources and facilities can satisfy the users' information needs.

3.5 Relationship between Utilization and Satisfaction

Table 6. Analysis for the relationship between utilization and satisfaction with library resources, services, and facilities

Variables	r-value	p-value	Conclusion
Extent of Utilization and Level of Satisfaction	0.682	0.000	Significant

** Correlation is significant at the 0.01 level (2-tailed).

Table 6 presents the test of the relationship between utilization and satisfaction. The data result shows that Pearson's r of 0.682 and the p -value of .000 indicates that it is statistically significant at alpha 0.01. Hence, it fails to reject the null hypothesis, stating that there is no significant relationship between the extent of utilization and the level of satisfaction. Furthermore, the strength of the relationship was moderate. This means that the extent of utilization positively or influenced their level of satisfaction. It implies that if their extent of utilization increases, their level of satisfaction also increases. The findings align with Veeramallu et al. (2021) that when faculty members are offered quality services and adequate resources and benefit from staying at the library, there will be an increase in the library usage frequency and more users.

4.0 Conclusion

Empirically, the library resources, services, and facilities are accessible. Users can identify and use resources and learning materials that are available and acquired to aid them in their quest for knowledge acquisition and creation. The library's high utilization and satisfaction rating create an excellent reputation attributed to its good service philosophy, relevant and appropriate physical set-up, and sufficient collection in quantity, depth, diversity, format, and currency to support the research and teaching mission of the institution. Hence, for continuous improvement, the library management should conduct a gap analysis on the resources, services, and facilities that were not accessed and with moderate utilization and satisfaction. They should regularly examine each component so that corrective actions will be taken. They should likewise work hand in hand with the different colleges so that students and faculty members alike know what is inside the library. On the other hand, university teachers should engage the students with assignments that will make them use the library more and be familiar with other information resources.

5.0 Contributions of Authors

The authors confirm the equal contribution in each part of this work. All authors reviewed and approved the final version of this work.

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7.0 Conflict of Interests

The authors confirmed no conflicts of interest regarding this study.

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Competitiveness of Potential Ecotourism Destination in Libertad, Antique: Input for a Comprehensive Action Plan

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Abstract. This descriptive-correlational study aimed to determine the level of competitiveness of potential ecotourism destination in terms of core resources and attractors, support factors and resources, and qualifying and amplifying determinants in Libertad, Antique. It also sought to find out if there is any significant difference among the statuses of core resources and attractors, support factors and resources, and qualifying and amplifying determinants of ecotourism destination operations. The status of potential ecotourism destination scientific ability results from two hundred (200) respondents. The instrument used was an adopted questionnaire. The study revealed that there is no significant difference in the status of core resources and attractors, support factors and resources, and qualifying and amplifying determinants.

Keywords: Ecotourism; Tourism industry; Antique.

1.0 Introduction

In the tourism sector, the destination holds significant sway over tourist motivations and preferences. Its qualities, traits, shapes, and kinds all play a role in tourist decision-making. Tourism also contributes to the development of character and personality within domestic and international tourist industries, as well as in the economy, social, and environmental sectors. Consumer demands, expectations, and anticipated advantages vary from one destination to another. To stay competitive in the modern tourism industry, every location must strategically develop or improve through positioning decisions. Tourism strategy promotes tourist growth (UNWTO, 2019).

The Philippines, a nation of islands blessed with mesmerizing natural beauty and diverse wildlife, holds immense potential for ecotourism, natural resources, cultural and community attributes, infrastructure and services, community engagement, and sustainability. Libertad, a municipality in the province of Antique, Philippines, is renowned for its natural beauty and rich cultural heritage. Located in the northern part of the province, the town boasts several potential ecotourism destinations, including Maaghit Cave, Bungan-bungan in Barangay Union, Marine Sanctuary Pucio Point in Barangay Pucio, Parigus it Pari, and Baluon Pool in Barangay San Roque.

Despite the potential, there is a dearth of research on the competitiveness of potential ecotourism destinations in the Philippines, particularly in Libertad, Antique. This study aims to assess the competitiveness of potential ecotourism destinations in Libertad, Antique, utilizing the Crouch and Ritchie Conceptual Model of Competitiveness as a framework to identify key contributing factors.

This model evaluates the potential of ecotourism sites by considering core resources, attractors, support factors, resources, infrastructure, services, laws, and regulations. Qualifying factors ascertain if a place meets fundamental standards, while amplifying determinants enhance the attraction and success of an ecotourism destination. This

method helps determine the competitiveness of ecotourism sites. This study assessed the viability of ecotourism destinations in Libertad, Antique, using the Crouch and Ritchie model as a guideline. The identified elements can be leveraged to enhance the competitiveness of these destinations, leading to the formulation of an action plan aimed at improvement.

2.0 Methodology

2.1 Research Design

This descriptive-comparative research was used in the study to assess the competitiveness of Libertad, Antique as a potential ecotourism destination. The study will compare ecotourism destination to identify its strengths, weaknesses, opportunities, and threats. This aims to describe the differences between groups in a population without manipulating the independent variable (Cantrell, 2011). This approach was utilized in this study to describe the current status of ecotourism in Libertad across various aspects. To quantify the availability and quality of core resources and attractors, metrics such as physiology and climate, culture and history, ecotourism activities available, and special events were employed. Analysis of the presence and adequacy of support factors and resources included data on infrastructure, facilitating resources, and the spirit of hospitality. Additionally, evaluating the influence of qualifying and amplifying determinants involved factors such as safety and security, and cost value.

2.2 Research Participants

The respondents of this study were divided into three categories: ecotourism operators, residents, and tourists at selected ecotourism destination sites in the municipality of Libertad, Antique. Among them, there were 100 tourists (50%), 40 tourism operators (20%), and 60 residents (30%). A non-probability sampling approach was employed in this study, where units were selected based on expertise and professional judgment, as proposed by the panel. The focus was on specific characteristics of the population of interest, such as tourists, tourism operators, and residents, who are considered major stakeholders in the tourism industry. This approach was chosen because the population is difficult to access due to its transient nature, and the required sample size was relatively small. The selected samples represented a diverse range of perspectives within the targeted groups of tourists, tourism operators, and locals, totaling 200 samples.

2.3 Research Instrument

The instrument used in this study was an adapted questionnaire (Marasigan & Borbon, 2021). The instrument item test was categorized into three parts. The first part is about the Core Resources and Attractors, consisting of four sub-variables: Physiology and Climate, Culture and History, Mix Activities, and Special Events, totaling twenty-four items. The second part is about Support Factors and Resources, comprising three sub-variables: Facilitating Resources, and Spirit of Hospitality, totaling nineteen items. The third part is about the Qualifying and Amplifying Determinants, consisting of two sub-variables: Safety and Security, and Cost Value, totaling nine items. The instrument's validity was ensured through content validation by five expert panels, including the Libertad Tourism Officer, three research experts, a language expert, and the advisor, who provided corrections to ensure accuracy and clarity in the final instrument.

2.4 Data Gathering Procedure

The survey questionnaires were personally distributed by the researcher to each ecotourism operator, resident, and tourist. This distribution took place at the locations of Maanghit Cave and Bungan-bungan in Union, Pucio Point Marine Sanctuary in Pucio, and Parigusan it Pari and Baluon Pool in San Roque, where the ecotourism operators, residents, and tourists were present. During the administration of the research instrument, the respondents were provided with instructions on how to complete it. Additionally, the researcher collected the completed questionnaires upon completion.

2.5 Data Analysis

The gathered data was analyzed using the Statistical Package for Social Sciences (SPSS), employing descriptive data analysis techniques. Frequency and percentage were utilized to determine the distribution of respondents across each potential ecotourism destination in Libertad, Antique. Mean and standard deviation calculations were employed to assess the status of each potential ecotourism destination. To determine if there were significant differences among the statuses of core resources and attractors, support factors and resources, and qualifying and

amplifying determinants, the Kruskal-Wallis test was utilized. This test was conducted at a significance level of .05, indicating that the null hypothesis is rejected if the obtained p-value is .05 or less.

2.6 Ethical Considerations

The researcher considered several significant issues in conducting the study, with a primary focus on securing the privacy of the respondents. Consent and confidentiality were particularly emphasized due to the sensitive nature of the matters involved. To maintain confidentiality, the researcher ensured that the names or personal information of the respondents were not disclosed in the study. Only relevant details about them were included, with a strict adherence to privacy protocols. Additionally, obtaining consent from the respondents prior to their participation in the study was paramount, ensuring that they were fully informed about the purpose and procedures involved. This approach respected the autonomy of the respondents and upheld ethical standards throughout the research process.

3.0 Results and Discussion

3.1 Ecotourism Destination Operations

Table 1. Profile of ecotourism destination in Libertad, Antique

CATEGORY	FREQUENCY	PERCENTAGE
Destination Type		
Natural Park	151	75.50
Marine Reserve	49	24.50
Cultural Heritage	0	0.0
Rural and Agricultural	0	0.0
Geographical Location		
Coastal	50	25.50
Mountainous	149	74.50
Price Point		
Affordable	185	92.50
Moderate	15	7.50
Expensive	0	
Accessibility		
By Motorcycle	154	77.00
By Tricycle	38	19.00
By car	8	4.00

Table 1 illustrates the profile of ecotourism destinations in Libertad, Antique, focusing on destination type, geographical location, price point, and accessibility. Natural parks dominate the destination types, comprising 75.5% of the total, followed by marine reserves. Geographically, 25.5% of destinations are coastal, while the majority, 74.5%, are mountainous. In terms of affordability, 92.5% of destinations are considered affordable. Access to these destinations primarily relies on motorcycles, accounting for 77% of transportation methods.

Libertad offers a robust foundation for ecotourism, emphasizing natural parks, affordability, and motorcycle accessibility, which aligns community-based conservation initiatives like Integrated Conservation Development Projects (ICDPs) and Community-Based Natural Resource Management (CBNRM), which engage local communities in sustainable wildlife resource management and promote ecotourism for rural development. Local ecotourism committees demonstrate a proactive approach to resource management, fostering sustainable practices and equitable benefits for community members (K. Masungi & C. Mudzingi, 2023).

3.2 Status of Core Resources and Attractors of Ecotourism Destination Operations

Physiology and Climate

Table 2 presents the status of core resources and attractors of ecotourism destination operations in Libertad, Antique, specifically in terms of physiology and climate. The table displays the mean scores and standard deviations for each item, along with corresponding descriptions based on the questionnaire responses. According to the results, respondents rated good weather conditions ($M=3.44$, $SD=.58$), unspoiled nature/green areas ($M=3.40$, $SD=.60$), cleanliness of the destination ($M=3.39$, $SD=.63$), pleasant built environment ($M=3.35$, $SD=.64$), lively urban atmosphere ($M=3.33$, $SD=.72$), and quality of natural scenery and landscape/environment ($M=3.35$, $SD=.66$).

Table 2. Descriptive statistics of the status of core resources and attractors of ecotourism destination operations in terms of physiology and climate

INDICATORS	MEAN	SD	INTERPRETATION
Good weather conditions.	3.44	0.58	Highly Competitive
Unspoiled nature/ green areas.	3.40	0.60	Highly Competitive
Cleanliness of the destination.	3.39	0.63	Highly Competitive
Pleasant built environment.	3.35	0.64	Highly Competitive
Lively urban atmosphere.	3.33	0.72	Highly Competitive
Quality of natural scenery and landscape/ environment.	3.35	0.66	Highly Competitive
Mean	3.38	0.41	Highly Competitive

Legend: 1.00-1.74 – Not Competitive; 1.75-2.49 – Less Competitive; 2.50-3.24 – Competitive; 3.25-4.00 – Highly Competitive

Overall, the status of core resources and attractors of ecotourism destination operations in Libertad, Antique, in terms of physiology and climate, was rated as highly competitive ($M=3.38$; $SD=.41$). The standard deviation indicates that respondents' assessments are closely aligned. These findings align with the study's model, which emphasizes core resources and attractors fundamental to a destination's appeal, along with supporting resources that enhance this appeal. Additionally, it considers destination policy, planning, development, management, and qualifying and amplifying determinants that define destination potential (Ritche & Crouch, 2003).

Culture and History

Table 3. Descriptive statistics of the status of core resources and attractors of ecotourism destination operations in terms of culture and history

INDICATORS	MEAN	SD	INTERPRETATION
Diversity of cultural/historical attractions.	2.96	0.73	Competitive
Opportunity to experience local life.	3.06	0.72	Competitive
Desire to learn about other cultures, their ways of life, and heritage.	2.89	0.78	Competitive
Opportunities to experience traditional ways of living.	2.98	0.74	Competitive
Promotion of cultural or religious events.	2.78	0.70	Competitive
Opportunities for learning and experiencing cultural attractions.	2.92	0.79	Competitive
Mean	2.93	0.52	Competitive

Table 3 presents the status of core resources and attractors in ecotourism operations in Libertad, Antique, focusing on Culture and History. The table includes mean scores and standard deviations (SD) for this aspect, as assessed during the questionnaire administration. According to the results, respondents perceived several factors as competitive: Opportunity to experience local life ($M=3.06$, $SD=.72$), Opportunities to experience traditional ways of living ($M=2.98$, $SD=.74$), Diversity of cultural/historical attractions ($M=2.96$, $SD=.73$), Opportunities for learning and experiencing cultural attractions ($M=2.92$, $SD=.79$), Desire to learn about other cultures, their ways of life, and heritage ($M=2.89$, $SD=.78$), and Promotion of cultural or religious events ($M=2.78$, $SD=.70$).

Overall, respondents rated the status of Core Resources and Attractors of Ecotourism Destination operations in Libertad, Antique, in terms of Culture and History as competitive ($M=2.93$; $SD=.52$). The standard deviation indicates that respondents' assessments are closely clustered. These findings support the study's conclusion that cultural and historical assets play a crucial role in the identity and authenticity of ecotourism destinations. These assets provide visitors with opportunities to engage with local traditions, customs, and lifestyles, facilitating cross-cultural exchange. Additionally, cultural attractions contribute to sustainable tourism development by offering insights into the region's past (Scheyvens & Biddulp, 2020; Hall & Lew, 2019).

Mix Activities

Table 4. Descriptive statistics of the status of core resources and attractors of ecotourism destination operations in terms of mixed activities

INDICATORS	MEAN	SD	INTERPRETATION
Variety of adventurous, challenging, and exciting outdoor trips.	3.02	0.73	Competitive
Opportunity to be close to nature.	3.22	0.84	Competitive
Opportunity to join recreational activities.	3.06	0.79	Competitive
Opportunity to participate in religious activities.	2.65	0.74	Competitive
Opportunities for nature adventure/ cultural activities.	3.06	0.74	Competitive
Diversity of athletic or water sports activities.	2.85	0.79	Competitive
Offers leisure activities.	2.79	0.84	Competitive
Mean	2.95	0.51	Competitive

Table 4 illustrates the status of core resources and attractions for ecotourism destinations in Libertad, Antique, particularly focusing on mixed activities. It presents mean scores and standard deviations (SD) indicating the competitiveness of these destinations, as assessed during the questionnaire administration. According to the results, respondents perceived several aspects as "competitive," including the opportunity to experience nature closely (M=3.22, SD=.84), engage in recreational activities (M=3.06, SD=.79), and participate in nature adventure/cultural activities (M=3.06, SD=.74). Additionally, they found the diversity of adventurous outdoor trips (M=3.02, SD=.73), athletic or water sports activities (M=2.85, SD=.79), leisure activities (M=2.79, SD=.84), and religious activities (M=2.65, SD=.74).

Overall, the status of core resources and attractions for ecotourism destinations in Libertad, Antique, regarding mixed activities was perceived as "competitive" (M=2.95, SD=.51). The standard deviation indicates that respondents' assessments were relatively consistent across different aspects. These findings align with previous research, indicating that core resources often encompass biodiversity hotspots, protected areas, indigenous cultures, historical landmarks, and traditional livelihoods. Attractors, meanwhile, encompass specific features or experiences within ecotourism destinations that attract visitors and enhance their overall satisfaction and enjoyment (Dolnicar & Leisch, 2019). These can include iconic landmarks, wildlife viewing opportunities, adventure activities, and cultural festivals.

Special Events

Table 5. Descriptive statistics of the status of core resources and attractors of ecotourism destination operations in terms of special events

INDICATORS	MEAN	SD	INTERPRETATION
Organize more recreational offerings, concerts, and stage plays.	2.48	0.87	Less Competitive
Organize sports tournaments.	2.44	0.87	Less Competitive
Availability of cultural and other events.	2.59	0.94	Competitive
Evening entertainment and nightlife.	2.33	0.91	Less Competitive
Conduct cultural festivals.	2.73	1.01	Competitive
Mean	2.51	0.71	Competitive

Table 5 displays the status of core resources and attractions in ecotourism operations in Libertad, Antique, specifically focusing on special events. The table presents mean scores, standard deviations (SD), and corresponding descriptions. According to the findings, respondents viewed the organization of cultural festivals (M=2.73, SD=1.01) and the availability of cultural and other events (M=2.59, SD=0.94) as "competitive." However, they considered the organization of recreational offerings, concerts, and stage plays (M=2.48, SD=0.87), as well as sports tournaments (M=2.44, SD=0.87), and evening entertainment and nightlife (M=2.33, SD=0.91).

Overall, respondents rated the status of core resources and attractions in ecotourism operations in Libertad, Antique, regarding special events as "competitive" (M=2.51, SD=0.71). The standard deviation indicates that respondents' assessments are relatively consistent. These findings suggest a "competitive" status of core resources and attractions in ecotourism operations in Libertad, Antique, concerning special events. This aligns with previous research indicating that festivals, rituals, and performing arts showcase the cultural diversity of ecotourism destinations, attracting visitors seeking immersive travel experiences (Goodwin, 2011).

3.3 Support Factors and Resources of Ecotourism Destination Operations

Infrastructure

Table 6. Descriptive statistics of the status of support factors and resources of ecotourism destination operations in terms of infrastructure

INDICATORS	MEAN	SD	INTERPRETATION
Old/ historic but visually appealing.	2.95	0.76	Competitive
Modern and visually appealing.	2.94	0.72	Competitive
Maintained sidewalks, pathways, and hallways.	3.00	0.79	Competitive
Provide more amenities with campgrounds.	2.73	0.80	Competitive
Accessible/high-speed communication system.	2.93	0.79	Competitive
Convenience and accessibility of local transportation.	2.95	0.78	Competitive
Accessible road facilities with proper signage.	3.08	0.84	Competitive
Accessibility of facilities for disabled persons.	2.61	0.97	Competitive
Mean	2.90	0.52	Competitive

Table 6 displays the Status of Support Factors and Resources for Ecotourism Destination Operations in Libertad, Antique, focusing on Infrastructure. It presents mean scores, standard deviation (SD), and corresponding descriptions from the questionnaire responses. Respondents rated various aspects as competitive, including accessible road facilities with proper signage (M=3.08, SD=.97), maintained sidewalks, pathways, and hallways (M=3.00, SD=.79), and old/historic but visually appealing sites (M=2.95, SD=.76). Additionally, convenience of local transportation (M=2.95, SD=.78), modern facilities (M=2.94, SD=.76), and accessibility of high-speed communication systems (M=2.93, SD=.79) were also considered competitive. Amenities such as campgrounds (M=2.73, SD=.80) and facilities for disabled persons (M=2.61, SD=.97).

Overall, respondents rated the status of support factors and resources in terms of infrastructure as "competitive" (M=2.90: SD=.522). The standard deviation indicates close agreement among respondents. These findings align with research suggesting that ecotourism benefits the environment, society, culture, and economy of attraction areas and local communities (Osman et al., 2018). Infrastructure, institutional support, financial resources, human capital, and stakeholder collaboration are cited as crucial factors for ecotourism development (Dolnicar & Leisch, 2019).

Facilitating Resources

Table 7. Descriptive statistics of the status of support factors and resources of ecotourism destination operations in terms of facilitating resources

INDICATORS	MEAN	SD	INTERPRETATION
Visitor Information Center/Tourist Information Center.	3.11	0.92	Competitive
Availability of money changer.	2.09	0.95	Less Competitive
Pasalubong center and souvenir shop	2.20	0.88	Less Competitive
Destination links with major origin markets.	2.64	0.89	Competitive
Accessibility of destination.	3.14	0.82	Competitive
Mean	2.63	0.61	Competitive

Table 7 illustrates the status of support factors and resources for ecotourism destinations in Libertad, Antique, specifically focusing on Facilitating Resources. Mean scores and standard deviations (SD) are provided, offering insights into the status of these factors during the questionnaire administration. According to the findings, respondents viewed destination accessibility (M=3.14, SD=.82) and the presence of visitor information centers (M=3.11, SD=.92) as competitive. Similarly, the assessment of destination links with major origin markets received a competitive rating (M=2.64, SD=.89). However, respondents perceived Pasalubong centers and souvenir shops (M=2.20, SD=.88) and the availability of money changers (M=2.09, SD=.95).

Overall, respondents rated the status of support factors and resources for ecotourism destinations in Libertad, Antique, concerning facilitating resources as "competitive" (M=2.63, SD=.61). Additionally, the standard deviation indicates that respondents' assessments were closely aligned. These findings underscore the competitive nature of support factors and resources for ecotourism destinations in Libertad, Antique. This aligns with ecotourism's focus on nature-oriented activities that benefit the environment, community, and local economy. Sustainable tourism practices, supported by financial resources, play a pivotal role in promoting conservation efforts, product development, and community engagement (Fennell, 2008a; Aas, Ladkin, & Fletcher, 2019).

Spirit of Hospitality

Table 8. Descriptive statistics of the status of support factors and resources of ecotourism destination operations in terms of spirit of hospitality

INDICATORS	MEAN	SD	INTERPRETATION
Friendly, high-spirited, and hospitable local people.	3.40	0.66	Highly Competitive
Can communicate well with the tourist.	3.25	0.71	Highly Competitive
Get people to stay longer.	3.11	0.71	Competitive
Tourist-oriented local people.	3.19	0.69	Competitive
Delivers quality guest service.	3.15	0.73	Competitive
Can provide pleasure and satisfaction.	3.24	0.69	Competitive
Mean	3.22	0.51	Competitive

Table 8 displays the Status of Support Factors and Resources for ecotourism operations in Libertad, Antique, focusing on the spirit of hospitality. It presents mean scores and standard deviations, along with corresponding

descriptions derived from questionnaire responses. Respondents rated Friendly, high-spirited, and hospitable local people as highly competitive ($M=3.40$, $SD=0.66$), along with the ability to effectively communicate with tourists ($M=3.25$, $SD=0.71$). Additionally, providing pleasure and satisfaction was deemed competitive ($M=3.24$, $SD=0.69$), along with being tourist-oriented ($M=3.19$, $SD=0.69$), delivering quality guest service ($M=3.15$, $SD=0.73$), and encouraging longer stays ($M=3.11$, $SD=0.71$).

Overall, respondents assessed the status of Support Factors and Resources for ecotourism in Libertad, Antique, regarding the Spirit of Hospitality as "competitive" ($M=3.22$, $SD=0.51$). The standard deviation indicates close agreement among respondents. These findings support the study's conclusion of a "competitive" status of support factors and resources for ecotourism operations in Libertad, Antique, concerning the Spirit of Hospitality. The spirit of hospitality is characterized by a sincere desire to serve others and create memorable experiences, encompassing qualities like empathy, attentiveness, flexibility, and responsiveness to guests' needs and preferences (Lashley, 2000; Brotherton & Wood, 2008).

3.4 Status of Qualifying and Amplifying Determinants of Ecotourism Destination Operations *Safety and Security*

Table 9. Descriptive statistics of the status of qualifying and amplifying determinants of ecotourism destination operations in terms of safety and security

INDICATORS	MEAN	SD	INTERPRETATION
Security personnel are visible and always available for assistance.	2.83	0.92	Competitive
Security equipment is visible (CCTV cameras, Fire extinguishers, etc.).	2.39	0.90	Less Competitive
Helpful police services around the area.	2.95	0.98	Competitive
Availability of fire extinguishers and other safety equipment.	2.66	0.99	Competitive
Maintain or secure guest privacy.	2.99	0.93	Competitive
Mean	2.76	0.75	Competitive

Table 9 presents the Status of Qualifying and Amplifying Determinants of Ecotourism Destination Operations in Libertad, Antique, focusing on safety and security. It includes mean scores and standard deviations (SD) for these determinants, along with corresponding descriptions based on questionnaire responses. The results indicate that respondents viewed certain aspects as competitive in maintaining or securing guest privacy ($M=2.99$, $SD=.93$), availability of helpful police services ($M=2.95$, $SD=.98$), visibility and availability of security personnel ($M=2.83$, $SD=.92$), and availability of safety equipment ($M=2.66$, $SD=.99$). However, respondents perceived Security equipment visibility (CCTV cameras, fire extinguishers, etc.) as less competitive ($M=2.39$, $SD=.90$).

Overall, respondents rated the status of Qualifying and Amplifying Determinants of Ecotourism Destination Operations in Libertad, Antique, concerning Safety and Security as competitive ($M=2.76$; $SD=.75$). The close standard deviation values indicate consistency among respondents' perceptions. The results suggest a competitive status of support factors and resources for ecotourism destination operations in Libertad, Antique, regarding safety and security. This aligns with the theory of the hierarchy of needs, which emphasizes safety and security as crucial factors for tourists. Ensuring tourists feel safe is vital, considering factors like natural disasters, crime, and health concerns, which significantly impact destination competitiveness (L. Manrai, A. Manrai, and S. Friedeborn, 2020).

Cost Value

Table 10. Descriptive statistics of the status of qualifying and amplifying determinants of ecotourism destination operations in terms of cost value

INDICATORS	MEAN	SD	INTERPRETATION
Reasonable fees (environmental fees, entrance fees, etc.).	3.30	0.72	Highly Competitive
Value for money.	3.15	0.75	Competitive
No hidden charges.	3.14	0.81	Competitive
Appropriate prices for the services received.	3.25	0.77	Highly Competitive
Promotes energy consumption	3.16	0.76	Competitive
Mean	3.20	0.63	Competitive

Table 10 displays the status of qualifying and amplifying determinants of ecotourism destination operations in Libertad, Antique, focusing on cost value. It presents mean scores, standard deviation (SD), and corresponding descriptions derived from the questionnaire. The respondents rated reasonable fees (e.g., environmental, entrance

fees) as highly competitive ($M=3.30$, $SD=.72$). Similarly, they viewed appropriate prices for services received as competitive ($M=3.25$, $SD=.77$). However, the promotion of energy consumption was perceived as competitive ($M=3.16$, $SD=.76$), along with value for money ($M=3.15$, $SD=.75$) and the absence of hidden charges ($M=3.14$, $SD=.81$).

Overall, respondents rated the status of qualifying and amplifying determinants of ecotourism destination operations in Libertad, Antique as competitive ($M=3.20$, $SD=.63$), with standard deviation indicating consistency among responses. These findings align with efforts to understand destination competitiveness, including price competitiveness, and emphasize destination management's role in sustainability (Ritchie and Crouch, 2003). However, while destination management is crucial for sustainability and attracting repeat tourists, it may not fully capture the breadth of destination competitiveness.

3.5 Difference among the Status of Core Resources and Attractors, Support Factors and Resources, and Qualifying and Amplifying Determinants

Table 11. Kruskal Wallis test result

VARIABLE	P-VALUE	DECISION
Core Resources and Attractors	0.387***	Accept Null Hypothesis
Support Factors and Resources		
Qualifying and Amplifying Determinants		

*Highly significant at .01 level of significance

**Significant at .05 level of significance

***Not Significant at .05 level of significance

Table 11 displays the test of difference among the status of core resources and attractors, support factors and resources, and qualifying and amplifying determinants. The Kruskal-Wallis test yielded a p-value of .387, indicating that the p-value exceeds the .05 level of significance. Therefore, there is no significant difference in the status of core resources and attractors, support factors and resources, and qualifying and amplifying determinants. Consequently, the null hypothesis is accepted.

This model offers a comprehensive understanding of destination competitiveness, incorporating various factors contributing to its success. These factors include the macro environment, reflecting global trends shaping world tourism, and the competitive microenvironment, involving location and the tourism system. Additionally, the model considers core resources and attractors fundamental to the destination's appeal, along with supporting resources enhancing this appeal. It further examines destination policy, planning, and development, destination management, and qualifying and amplifying determinants contributing to determining destination potential. Finally, the destination audit serves as a means of operationalizing the model. Overall, this model serves as a valuable tool for assessing and enhancing destination competitiveness in both business and academic contexts (Ritchie and Crouch, 2003).

4.0 Conclusion

Based on the study's findings, Libertad, Antique, possesses significant potential as an ecotourism destination. Its abundance of natural parks, budget-friendly options, and accessibility via motorcycle appeal to tourists seeking nature-based experiences. While weather conditions and infrastructure are competitive, there's room for improvement in cultural and religious event promotion, as well as facilities for disabled persons and money changers. Maintaining safety and security, along with transparent pricing and a focus on guest privacy, enhances Libertad's appeal to visitors. Moreover, the study's conclusion that there's no significant difference in various determinants underscores the consistency of assessments across different aspects. Moving forward, implementing the proposed ecotourism action plan can provide a detailed road map for achieving ecotourism's potential. It emphasizes ethical conduct in order to attain a balance of environmental, economic, and social well-being. Libertad can position itself as a premier ecotourism destination by carefully monitoring and evaluating this strategy, so contributing to a more sustainable future.

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The author initiated and completed this study.

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7.0 Conflict of Interests

The author declares no conflict of interest.

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The Vocabulary-Reading Link in Grade 7 Students

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Abstract. Vocabulary mastery plays a critical role in language development. This study examined the relationship between vocabulary mastery and reading competence among Grade 7 students. A descriptive-correlational research design was utilized, with data collected through a survey questionnaire. Systematic sampling was employed to select 180 students from three secondary schools in District 10 of the Bayawan City Division. The study assessed vocabulary mastery in terms of meaning, grammar, spelling, and pronunciation, while reading competence was evaluated through word recognition level assessments. The results indicated significant variability in vocabulary mastery. Comprehension was the most challenging area, with most students categorized as "Did Not Meet Expectations." Conversely, pronunciation was the strongest skill, with the majority achieving "Satisfactory" results. Grammar and spelling scores were categorized as "Fairly Satisfactory." Additionally, a substantial portion of students demonstrated frustration-level reading competence. Crucially, the study found a strong correlation between vocabulary mastery and reading competence, underscoring their interdependence. These findings suggest that targeted interventions focusing on vocabulary development can significantly enhance the reading skills of Grade 7 students, ultimately leading to greater language proficiency and academic achievement. The results also highlight the importance of early implementation of vocabulary development programs to potentially prevent reading difficulties by Grade 7.

Keywords: Vocabulary mastery; Reading competence; Reading ability; Word reading level.

1.0 Introduction

Strong vocabulary mastery plays a vital role in language development, fostering not only reading comprehension but also effective communication (Andriani & Sriwahyuningsih, 2019). However, there is a growing concern on the decline in reading proficiency among Filipino students (Librea et al., 2023). Aside from this, the onset of the COVID-19 pandemic has further exacerbated this issue, with researches highlighting its different disruptions to learning and its negative impacts on the students' reading skills (Kuhfeld et al., 2022; Domingue et al., 2021).

The Philippines is not alone in facing this challenge. Studies suggest a link between the students' reading performance and in-person learning (Goza, 2023). Lagarto's (2021) study, using the Philippine Informal Reading Inventory (Phil-IRI), found a significant number of Grade 7 students struggling with word recognition both in English and Filipino. In response to this, the Department of Education (DepEd) has implemented various initiatives to address this. Hence, the implementation of the "Every Child is a Reader" program and the "Catch-Up Fridays", with its "Drop Everything and Read" (DEAR) flagship activity, aimed to cultivate the students' reading and appreciation skills (Llego, 2018).

Despite these efforts, many students still continue to face reading difficulties. This study examines the vocabulary mastery and reading competence of Filipino students in the post-pandemic "new normal" setting. It focuses on vocabulary knowledge encompassing meaning, grammar, spelling, and pronunciation which are all crucial aspects that influence reading competence.

While numerous studies have investigated reading proficiency in the post-pandemic era (e.g., Librea et al., 2023), there remains the need of a research that explores effective strategies to improve vocabulary and reading skills in this new educational landscape. This study addresses this gap by examining the relationship between vocabulary mastery and reading competence among Grade 7 students in the Philippines.

2.0 Methodology

This study employed a descriptive-correlational design to investigate the relationship between vocabulary mastery and reading competence among Grade 7 students. The study was conducted in the three junior high schools belonging to District 10 of Bayawan City. The respondents of the study were the 180 randomly selected Grade 7 learners from a total population of 296 coming from the three junior high schools of District 10 in the Division of Bayawan City. The Philippine Informal Reading Inventory (Phil-IRI) was used to assess the word reading level. A researcher-developed questionnaire was employed to measure vocabulary mastery. The following scales are used to describe the students' vocabulary mastery:

The research process commenced by conducting a dry run involving 30 students. This happened after the researcher had obtained the approval from the schools and the informed consent from the participants. Data were gathered through the administration of the research instruments. To uphold the research's integrity, all amassed data were diligently forwarded to the statistician for a comprehensive data treatment and analysis. Ethical considerations were upheld all throughout the study. Informed consent was obtained from the participants and the confidentiality of data was maintained.

3.0 Results and Discussion

3.1 Vocabulary Mastery of the Students

Based on the findings presented in Table 1 below, the mastery of meaning emerges as the most significant challenge among the four components. The majority of the students (68.33%) fall into the "Did Not Meet Expectations" category. This indicates substantial difficulties in understanding word meanings. It is noticeable that this percentage is notably higher as compared to the other components. Thereby, the results indicate that most of them struggled to understand word meanings, with over two-thirds falling below satisfactory levels. Finally, only a few students achieved higher ratings, suggesting a widespread difficulty in mastering this aspect of language learning.

Table 1. Descriptive statistics of the vocabulary mastery of the students (n = 180)

Rating	Meaning		Grammar		Spelling		Pronunciation	
	f	%	f	%	f	%	f	%
90 – 100	2	1.11	32	17.78	20	11.11	61	33.89
85 – 89	8	4.44	10	5.56	14	7.78	29	16.11
80 – 84	21	11.67	42	23.33	33	18.33	27	15.00
75 – 79	26	14.44	29	16.11	29	16.11	11	6.11
≤74	123	68.33	67	37.22	84	46.67	52	28.89
Mean	72.86 (DNME)		78.68 (FS)		76.92 (FS)		82.52 (S)	
SD	6.54		8.87		8.35		11.61	

A similar finding was manifested in the study of Andriani and Sriwahyuningsih (2019). They found that some students continue to struggle with understanding the meanings of new vocabulary words which indicates ongoing difficulties in mastering vocabulary. They found it challenging to define unfamiliar words and had trouble matching words with their synonyms, even though this is typically considered as a relatively straightforward activity for recognizing word meanings.

Also, Vu and Peters (2021) showed that a very small proportion of the students are considered to have mastered vocabulary meanings. Additionally, the study found that students from the rural areas have much less vocabulary knowledge as compared to those from the urban areas. This difference could be due to various factors such as how much they are exposed to English, the kind of support they got from their parents, their personal goals and motivation for learning English, and the type of resources available to them.

In the same manner, the study of Nurchurifiani et al., (2021) showed that a significant number of students had a low performance in word meaning. These difficulties stemmed from their limited vocabulary. They struggled to

understand the meaning of the text they were reading because they did not know enough words. This aligns with the findings of Fatima (2020), which general word meaning test results showed the students performing in the below average level. In fact, only 10% of students passed that particular test which highlights the need for improved vocabulary development strategies.

Meanwhile, the vocabulary mastery of the students across the different components shows that in grammar mastery, the mean is 78.68, which means it falls within the "Fairly Satisfactory" range. This indicates that, on the average, the students have a decent grasp of grammar concepts. The data further reveal that only a small proportion achieved the rating of "Satisfactory" which is 23.33% and above. This is in line with the results of the study of Amelia et al. (2019), which revealed that most of the students were poor in grammar mastery. It also showed that only a small percentage of the students demonstrated excellent proficiency in grammar.

In addition, Muhamad et al. (2023) claimed that there was not a single student in the seventh grade who passed. Students always found and considered English too difficult, both when asked to read assigned texts provided by their teachers and during active teaching and learning sessions. However, these results contradicted those of Andriani et al. (2019), which pointed out that the students' performances in grammar mastery varies. Thus, some students had demonstrated adequate proficiency in grammar, while there is also evidence that suggested that a portion of the student population experienced difficulties in mastering grammar concepts.

A considerable number of students (46.67%) did not meet expectations in spelling. Spelling proficiency among students appears to be a significant area of concern as nearly half of the students fall into the "Did Not Meet Expectations" category. This suggests a widespread challenge in accurately spelling words. The overall distribution indicates the need for targeted interventions to improve spelling skills across the student population.

This result is affirmed by Totto and Ramos (2021), who stated that many students continue to make spelling mistakes in their written works. This was due to the students' insufficient exposure to the vocabulary terms. Insufficient exposure to various words and their correct spellings may hinder the students' ability to accurately recall and use them in their writing. Andriani and Sriwahyuningsih (2019) further stated that students often struggle with vocabulary because they have difficulty with spelling. This becomes evident when students are asked to spell words from jumbled letters. Spelling English words can be tricky because their pronunciations do not always match their spellings. This mismatch makes it challenging for students to spell unfamiliar words correctly, especially when they hear them for the first time.

Based on the results, pronunciation stands out with a mean score of 82.52%, which falls within the "Satisfactory" range. This indicates that students, on the average, demonstrate good pronunciation skills and understanding, showing relative strength compared with the other components. This finding is parallel to the result of the study of Omar et al. (2022), which emphasized that a significant number of students struggled with reading English words correctly before receiving oral reading intervention. Some students were identified as very poor readers, requiring extra help and practice to improve their pronunciation skills. However, only a small percentage of learners were already proficient readers before the intervention. This highlights the importance of English teachers closely addressing the needs of all learners to ensure that they develop strong reading skills.

In addition, Mella (2020) stated that in Filipino language learning, some sounds from other languages can be difficult for learners to pronounce correctly. The respondents often struggle with sounds like /v/, /b/, /p/, /f/, /θ/, and /ð/, as well as vowels like /æ/, /i/, /ɪ/, and /ε/. These difficulties stemmed from the fact that these sounds are not present in the ABAKADA alphabet, which is the traditional Filipino alphabet. Among these sounds, the "th" sounds (/θ/ and /ð/) are particularly challenging because they involve sounds called diphthongs which are sounds created by joining two vowel sounds in a single syllable.

Diphthongs are distinct from sounds like "th" because they involve vowels, whereas "th" is a consonant sound. The "th" sound itself is not present in Tagalog, which is the main language spoken in the Philippines, and thus the ABAKADA alphabet does not include a letter to represent it. In addition, students tend to have more trouble with consonants than vowels because they might not correctly produce the sounds if they are not aware of how they

should sound. This difficulty arises, especially when they fail to properly aspirate, or breath out the sounds, during pronunciation.

Furthermore, Meldi's (2024) study indicated that certain words pose challenges in pronunciation and learning, particularly those containing sounds unfamiliar to specific groups of students. These words, termed potentially difficult, typically feature sounds that may not be commonly encountered in the student's native language. As a result, individuals might find it more challenging to correctly articulate and memorize such words. The presence of unfamiliar sounds can significantly hinder the learning process, particularly for individuals who are not accustomed to encountering or reproducing those specific phonetic elements. Thus, words with unique or uncommon sounds represent problems that should be hurdled by the learners.

3.2 Reading Competence of the Students

The reading competence of the students was measured through their word reading miscues and reading time. To identify the reading competence of the students, the researcher used the Word Reading Level tool in the Phil-IRI.

Table 2. Descriptive statistics of the reading competence based on the Phil-IRI of the students (n = 180)

Rating	Reading Competence	Frequency	%
97 - 100	Independent	33	18.33
90 - 96	Instructional	51	28.33
89 and below	Frustration	96	52.34
	Total	180	100.00
	Mean	83.67 (Frustration)	
	SD	14.67	

The data in Table 2 indicate that a large proportion of students (52.34%) fall under the frustration level in reading competence, whereas smaller percentages of them are classified as either Independent (18.33%) or Instructional (28.33%) readers. The mean reading competence score falling within the Frustration category underscores the general difficulty that students faced in reading a text. This suggests a need for targeted interventions and support to improve the students' reading skills. Additionally, the relatively high standard deviation implies that there is a considerable variability in reading competence among the students, highlighting the diverse needs and challenges within the group that should be addressed through tailored approaches to instruction and support.

A similar finding was also manifested in the work of Romey and Zabala (2023). The data from the said study indicated that students, regardless of whether they attend big schools or small schools, predominantly exhibited frustration reading levels, with a few at the instructional level and almost none at the independent level. The percentages for independent, instructional, and frustration reading levels are quite similar between big and small schools. This suggests that the school size does not significantly impact the reading proficiency of students.

Likewise, Dela Cruz and Recillo's (2021) study showed that the oral reading ability of the Grade 7 students in English indicated that their overall ability is at the frustration level. Almost all students, or 99.3%, fell into this category and only one student fell within the instructional level. This suggests that most students read slowly, often stopping and struggling to decode words. Their oral reading was halted from time to time because they could hardly decode the words and this caused an extension in their reading time. Misanes and Pascual (2023) also agreed with this claim, asserting that 98.7% of the student respondents fell under the "Frustration" level. In the Phil-IRI, the Frustration level is the lowest level, qualitatively described as the level at which readers find reading materials so difficult that they cannot successfully respond to them.

Considering these findings, the current study contradicts the results of the research conducted by Cadiz-Gabejan and Quirino (2021). Their study showed that a large portion of students fell under the "instructional" category, indicating that they likely understood the material well. However, another group was classified as experiencing "frustration," suggesting they found the material difficult. The rest were labeled as "independent", implying they could handle tasks on their own. This breakdown provides an overview of the different performance levels among the students surveyed. Moreover, Arca (2024) strengthens the claim of his study by concluding that students in the schools of the Subic district tend to understand and use words effectively (recognition fluency), comprehend what they read, and have a good grasp of vocabulary. Therefore, on the average, the students in these schools are doing well in these areas of language learning.

In addition to what the previous studies revealed, Fabella and Abaoag (2023) also disclosed that students recognized words when they read. It was discovered that most students were at a level where they could recognize most of the words they encountered. Another group struggled a bit more, recognizing fewer words correctly. A smaller subset of students excelled, recognizing almost all the words they read accurately. In essence, while most students could recognize most words, some had more difficulty, and only a few were exceptionally skilled at word recognition.

3.3 Relationship Between Variables

Table 3 reveals the data for identifying the relationship between the students' vocabulary mastery and their reading competence as measured by the PHIL-IRI tool used. Since the data are non-normal, Spearman's Rank Order Correlation is applied. As shown, all p-values are less than the level of significance. This means that a significant relationship (all p-values <.001) exists between the reading competence of the students and the following areas covered in vocabulary mastery: grammar, meaning, spelling, and pronunciation.

Table 3. Analysis for the relationship between the students' vocabulary mastery and the students' reading competence (n = 180)

Reading Competence and...	r_s	p-value	Decision	Remark
Meaning	0.480	<.001	Reject H_0	Significant
Grammar	0.726	<.001	Reject H_0	Significant
Spelling	0.673	<.001	Reject H_0	Significant
Pronunciation	0.747	<.001	Reject H_0	Significant

Concerning meaning, a moderate ($r_s = 0.480$) and significant relationship was identified. This result is in line with what Lawrence et al., (2022) said, that skilled readers tend to have a better grasp of word meanings than struggling readers, regardless of the specific characteristics of the academic words. Words with multiple meanings were generally easier for all students. The connection between word frequency and item difficulty was stronger among better readers, whereas the relationship between word complexity and item difficulty was stronger among less proficient readers.

Fadi (2019) demonstrated a clear link between the extent of vocabulary knowledge and reading proficiency. A larger vocabulary is identified as a significant predictor of one's capability to effectively engage with written texts, highlighting a strong connection between vocabulary size and reading skills. Also, as emphasized by Arita and Zubaidah (2019), the more words a student knows, the better he or she is at reading. The relationship between knowing words and reading well is very strong, which means that they go hand in hand. Therefore, if a student has a good grasp of vocabulary meaning, he or she is likely to be a good reader, too. Furthermore, a limited understanding of word meaning can discourage students from enjoying reading because of the challenges they face in understanding the content of the reading materials.

In the area of grammar, a strong ($r_s = 0.726$) and significant relationship is revealed. This finding is parallel to the results of the study of Amelia et al. (2019), which showed that there is a strong link between how well students know grammar and how well they speak. This means that when students have a good grasp of grammar, it tends to positively impact their speaking abilities. Additionally, Utama (2024) stated that grammar mastery is crucial for creating sentences that others can easily understand, whether in writing or speaking. This means understanding how words fit together in sentences and following the rules of grammar. Just as grammar mastery is essential for comprehensible expressions in writing, it also plays a significant role in speaking clearly. Hence, whether it is reading ability or speaking ability, understanding grammar well is key to effectively communicate one's thoughts and ideas.

Furthermore, Mildan et al., (2021) highlighted a challenge faced by students regarding grammar and reading skills. Students seem to struggle with reading texts accurately because of difficulties with grammar. This means that there is a connection between how well students can communicate verbally and how well they have mastered the rules and principles of grammar. In other words, students who are proficient in oral communication tend to have a good understanding of grammar, and those who have a strong grasp of grammar are more likely to communicate effectively in spoken language.

On the contrary, however, Khairanis et al., (2023) suggested that proficiency in grammar does not necessarily lead to improved reading skills in a particular group of students. Hence, the way grammar is taught or emphasized in the curriculum might not effectively support the development of reading skills.

Considering the area of spelling, a strong ($r_s = 0.673$) and significant relationship is unveiled. This finding supports what Kim (2022) found in his study which said that reading ability and spelling ability are strongly connected due to the shared reliance on phonological, orthographic, and morphological skills. In word reading, individuals decode written words by recognizing the letters or letter combinations and associating them with their corresponding sounds. This process also relies on phonological awareness and orthographic awareness, which involves understanding the relationship between letters and sounds, recognizing spelling patterns, and applying spelling rules.

The same conclusion is also attested in the study by Andrews et al., (2020). The correlation between reading and spelling is described as moderately to strongly positive. This means that there is a relatively robust relationship between reading and spelling abilities. Thus, individuals who perform well in reading also tend to perform well in spelling, and vice versa. Moreover, Ruan et al. (2023) found a reciprocal relationship between word reading and spelling. This means that improvements in word reading ability were associated with improvements in spelling ability and vice versa. In this context, progress in word reading had an observable impact on spelling, and progress in spelling similarly affected word reading ability over time. Khan et al. (2020) added that many learners have reading inability simply because they are not efficient in indicating or producing accurate spelling.

Lastly, the table points out that pronunciation is strongly ($r_s = 0.747$) and significantly related to the students' reading competence. This finding backs up the results of Tiwari's (2024) study which revealed that the connection between the lack of reading skills and poor pronunciation is a widely acknowledged challenge in secondary-level education, as highlighted by the consensus among respondents. When students struggle with reading, they often encounter difficulties in accurately pronouncing words.

This conclusion matches the study of Murathoti et al. (2024). It said that there is a connection between pronunciation and reading problems, emphasizing the need to address both in education. When students struggle with pronunciation, it can hinder their overall reading ability and comprehension. Moreover, the study showed that many people have trouble with both pronunciation and reading. Some find it hard to say words correctly, while others struggle with understanding written words.

The same findings were also discussed by Khan et al., (2020). They revealed that a substantial portion of learners struggled with pronunciation, demonstrating a significant portion grappling with pronunciation challenges. These findings emphasize the prevalence of pronunciation challenges among students, which significantly affect their reading abilities.

4.0 Conclusion

The results indicated significant variability in vocabulary mastery. Comprehension was the most challenging area, with most students categorized as "Did Not Meet Expectations." Conversely, pronunciation was the strongest skill, with the majority achieving "Satisfactory" results. Grammar and spelling scores were categorized as "Fairly Satisfactory." Additionally, a substantial portion of students demonstrated frustration-level reading competence. Crucially, the study found a strong correlation between vocabulary mastery and reading competence, underscoring their interdependence. These findings suggest that targeted interventions focusing on vocabulary development can significantly enhance the reading skills of Grade 7 students, ultimately leading to greater language proficiency and academic achievement. The results also highlight the importance of early implementation of vocabulary development programs to potentially prevent reading difficulties by Grade 7.

5.0 Contributions of Authors

This study is a collaborative effort between two authors. Author 1 took the lead in writing the initial draft and editing it throughout the process. Author 2, who served as Author 1's advisor, provided valuable support by reviewing the work thoroughly, suggesting edits, and supervising the overall direction of the writing.

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