

Original Article

Entrepreneurship Education as a Moderator of Entrepreneurial Self-Efficacy and Business Intention among Business Administration Graduates

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Abstract. Despite the growing emphasis on entrepreneurship education in higher education institutions, limited evidence exists regarding its moderating role in the relationship between entrepreneurial self-efficacy and business intention among Business Administration graduates in the Davao Region. This study examined the moderating effect of entrepreneurship education on the relationship between entrepreneurial self-efficacy and business intention. Specifically, it determined the levels of entrepreneurial self-efficacy, business intention, and entrepreneurship education and investigated whether entrepreneurship education significantly moderates the relationship between entrepreneurial self-efficacy and business intention. A quantitative cross-sectional descriptive-correlational research design with moderation analysis was employed. Data were collected from 200 Business Administration graduates in the Davao Region using a structured survey questionnaire. Respondents were selected through a combination of snowball and convenience sampling techniques. Data were analyzed using descriptive statistics, Pearson product-moment correlation, and moderation analysis through Hayes' PROCESS Macro (Model 1). The findings revealed that the respondents reported a high level of entrepreneurial self-efficacy ($M = 3.89$), a very high level of business intention ($M = 4.23$), and a high level of entrepreneurship education ($M = 4.16$). A strong positive relationship was found between entrepreneurial self-efficacy and business intention ($r = 0.66$, $p < .001$). Moderation analysis further revealed that entrepreneurship education significantly moderated the relationship between entrepreneurial self-efficacy and business intention, as indicated by a significant negative interaction effect ($B = -0.08$, $p = 0.03$). Although entrepreneurial self-efficacy remained a significant positive predictor of business intention across all examined levels of entrepreneurship education, the strength of this relationship decreased as entrepreneurship education increased. The findings suggest that entrepreneurship education modifies, rather than strengthens, the relationship between entrepreneurial self-efficacy and business intention. These results contribute to the understanding of how entrepreneurship education and entrepreneurial self-efficacy jointly relate to business intention and may provide useful insights for the design and enhancement of entrepreneurship education programs.

Keywords: *Business intention; Entrepreneurial self-efficacy; Entrepreneurship education; Moderation analysis.*

Entrepreneurship is widely recognized as a key driver of economic growth, innovation, job creation, and sustainable development. In both developed and developing economies, entrepreneurial activities contribute significantly to economic resilience by creating jobs, fostering innovation, and enhancing national competitiveness. Consequently, governments and higher education institutions increasingly regard entrepreneurship as a strategic response to unemployment and economic challenges. As a result, entrepreneurship education has become an integral component of business-related programs, aiming to equip students with entrepreneurial knowledge, skills, and competencies necessary for venture creation. Beyond knowledge acquisition, entrepreneurship education seeks to cultivate entrepreneurial mindsets, strengthen entrepreneurial self-efficacy, and encourage graduates to pursue business opportunities. Despite these efforts, many graduates still prefer traditional employment over entrepreneurial careers. This persistent trend raises important questions regarding the extent to which entrepreneurship education effectively transforms entrepreneurial confidence into business intention.

Globally, entrepreneurship education has consistently been associated with positive entrepreneurial outcomes. Nabi et al. (2017) reported that entrepreneurship education enhances entrepreneurial self-efficacy and promotes students' business intention by improving entrepreneurial competencies and confidence. Likewise, Fayolle and Gailly (2015) found that participation in entrepreneurship courses positively influences students' entrepreneurial career aspirations. Muller (2016) further demonstrated that entrepreneurship education contributes to stronger entrepreneurial self-efficacy and greater willingness to engage in entrepreneurial activities. More recently, Graciano et al. (2023) observed that structured entrepreneurship programs cultivate entrepreneurial confidence and risk-taking behavior, thereby encouraging business intention. Similarly, Kremel (2025) concluded that entrepreneurship education enhances problem-solving abilities and entrepreneurial competencies that support graduates' intentions to establish businesses. Nevertheless, contrasting evidence exists. Albatran and Atikbay (2025) argued that entrepreneurship education does not always translate into stronger business intention because contextual factors beyond education also influence entrepreneurial decisions. Previous studies have shown that access to financial resources (Magasi, 2022), market opportunities (Hameed & Irfan, 2019), and cultural expectations favoring stable employment (Fleck et al., 2021) may limit graduates' willingness to pursue entrepreneurial careers. These contrasting findings suggest that entrepreneurship education alone may be insufficient to foster business intention unless supported by favorable psychological and environmental conditions.

Across Asia, entrepreneurship education has likewise become a major strategy for promoting innovation, enterprise development, and graduate employability. Ferdousi et al. (2025) reported that structured entrepreneurship education significantly improves entrepreneurial competencies and motivation among university students in Bangladesh. Likewise, Kurniawan et al. (2018) found that entrepreneurship education enhances entrepreneurial knowledge, creativity, and risk-taking behavior among engineering students in Indonesia. In Vietnam, Pham et al. (2023) demonstrated that entrepreneurship education strengthens entrepreneurial self-efficacy and encourages students to pursue business opportunities. Similarly, Soomro et al. (2021) emphasized that entrepreneurship education develops entrepreneurial confidence and innovation capabilities among students in Thailand. Hou et al. (2025) further found that entrepreneurship education positively influences entrepreneurial attitudes, competencies, and business intention among Chinese university students. Collectively, these studies demonstrate the important role of entrepreneurship education in shaping graduates' entrepreneurial capabilities and business intention across diverse educational and cultural contexts.

In the Philippines, entrepreneurship education has been institutionalized as a key component of higher education to promote innovation, self-employment, and entrepreneurial development. The Commission on Higher Education (CHED), through Commission on Higher Education Memorandum Order (CMO) No. 18, Series of 2017, or the Policies, Standards, and Guidelines for the Bachelor of Science in Business Administration (BSBA), mandates the integration of entrepreneurship principles, experiential learning, and business development competencies into the BSBA curriculum to prepare graduates for entrepreneurial careers. Consistent with this policy, empirical studies have demonstrated the positive contribution of entrepreneurship education to entrepreneurial outcomes. Sarreal and Reyes (2019) found that entrepreneurial self-efficacy significantly predicts business intention among Filipino students and graduates, while Islam (2024) reported that entrepreneurship education strengthens entrepreneurial competencies necessary for venture creation. Similarly, Saoula (2025) observed that entrepreneurship education enhances business intention through improved opportunity recognition and risk management capabilities, and Caña (2025) concluded that entrepreneurship programs

increase entrepreneurial confidence and graduates' readiness to establish business ventures. Collectively, these findings suggest that entrepreneurship education plays a crucial role in developing entrepreneurial competencies, strengthening entrepreneurial self-efficacy, and fostering business intention among Filipino graduates.

Within the Davao Region, higher education institutions have actively implemented entrepreneurship education through business simulations, experiential learning, business planning activities, mentoring, and other practical entrepreneurial experiences intended to strengthen graduates' entrepreneurial competencies. Despite these initiatives, many Business Administration graduates still pursue salaried employment rather than starting their own businesses. Previous studies suggest that this situation may be explained by structural barriers such as limited access to financial resources, weak entrepreneurial ecosystems, limited market opportunities, and cultural preferences for stable employment, which may constrain graduates from translating entrepreneurial confidence into actual business intention. Consequently, business intention appears to be influenced not only by individual psychological characteristics such as entrepreneurial self-efficacy but also by contextual conditions that either facilitate or inhibit entrepreneurial behavior.

Although previous studies have consistently established the positive effects of entrepreneurial self-efficacy and entrepreneurship education on business intention, important research gaps remain. Most existing studies have examined entrepreneurship education as a direct predictor of business intention rather than investigating its role as a moderating variable. Consequently, empirical evidence remains limited on whether entrepreneurship education changes the relationship between entrepreneurial self-efficacy and business intention. Furthermore, relatively few studies have focused specifically on Business Administration graduates in the Davao Region, despite the region's continuing efforts to promote entrepreneurship through higher education. Existing literature also presents inconsistent findings regarding the effectiveness of entrepreneurship education, suggesting that educational interventions may not produce similar outcomes across different educational and cultural contexts. Addressing this gap matters because understanding the moderating role of entrepreneurship education may offer valuable insights for improving entrepreneurship curricula and designing educational interventions that more effectively promote business intention among graduates.

The present study is anchored primarily on the Theory of Planned Behavior (TPB) developed by Ajzen (1991), supported by Social Cognitive Theory (SCT) proposed by Bandura (1986). These theories are integrated to explain how entrepreneurial self-efficacy influences business intention and how entrepreneurship education affects this relationship. Within the TPB framework, entrepreneurial self-efficacy represents perceived behavioral control because it reflects an individual's confidence in performing entrepreneurial tasks and successfully establishing a business. Individuals with greater entrepreneurial self-efficacy are therefore expected to exhibit stronger business intention. Complementing this perspective, Social Cognitive Theory explains that entrepreneurial self-efficacy develops through mastery experiences, observational learning, social persuasion, and environmental influences. Entrepreneurship education provides these learning experiences by developing entrepreneurial knowledge, practical competencies, opportunity recognition, and business management skills that influence graduates' confidence and entrepreneurial decision-making.

Unlike previous studies that primarily viewed entrepreneurship education as an independent predictor of business intention, the present study conceptualizes entrepreneurship education as a moderating variable. Rather than if entrepreneurship education always strengthens entrepreneurial outcomes, this study proposes that it may alter the relationship between entrepreneurial self-efficacy and business intention by influencing how entrepreneurial confidence translates into entrepreneurial decision-making. Through experiential learning, mentoring, business simulations, and practical entrepreneurial exposure, entrepreneurship education may change how strongly entrepreneurial self-efficacy contributes to graduates' business intention. Integrating the Theory of Planned Behavior and Social Cognitive Theory provides a comprehensive theoretical explanation of how entrepreneurial self-efficacy influences business intention and how entrepreneurship education may modify this relationship among Business Administration graduates in the Davao Region.

Guided by the identified research gap, this study aimed to (1) determine the levels of entrepreneurial self-efficacy, business intention, and entrepreneurship education among Business Administration graduates in the Davao Region; (2) determine the significant relationship between entrepreneurial self-efficacy and business intention; and (3) determine whether entrepreneurship education significantly moderates the relationship between entrepreneurial self-efficacy and business intention.

Methodology

Research Design

This study employed a cross-sectional descriptive-correlational research design with moderation analysis to examine the relationships among entrepreneurial self-efficacy, business intention, and entrepreneurship education among Business Administration graduates. The cross-sectional design involved collecting data from respondents at a single point in time to examine the study variables within their existing context. The descriptive component used appropriate descriptive statistics to determine and describe the levels of entrepreneurial self-efficacy, business intention, and entrepreneurship education, providing a comprehensive profile of the respondents (Siedlecki, 2020). The correlational component examined the relationship between entrepreneurial self-efficacy and business intention without implying causality. Regression analysis was subsequently employed to assess the extent to which entrepreneurial self-efficacy was associated with business intention (Sarstedt et al., 2019). In addition, moderation analysis was conducted to determine whether entrepreneurship education significantly moderated the relationship between entrepreneurial self-efficacy and business intention by examining whether the strength or direction of their association varied across different levels of entrepreneurship education (Memon et al., 2019). This research design was appropriate because it enabled the researcher to describe the study variables, examine their associations, and evaluate the moderating role of entrepreneurship education within a cross-sectional framework.

Participants and Sampling Technique

The respondents in this study were 200 Business Administration graduates from five public and private higher education institutions in the Davao Region who completed their undergraduate degree between 2019 and 2023. Eligible participants were required to (1) have earned a Bachelor of Science in Business Administration from one of the participating institutions, (2) have graduated within the specified period, (3) be at least 18 years old, and (4) voluntarily consent to participate in the study. The study excluded graduates from programs other than Business Administration, those who graduated outside the specified period, and respondents who submitted incomplete questionnaires. Participants were recruited from November 1 to November 30, 2025, using a combination of snowball and convenience sampling techniques. Snowball sampling enabled the researcher to recruit eligible graduates through referrals from business faculty members, alumni associations, and initial respondents, while convenience sampling facilitated access to readily available participants through institutional alumni groups and social media platforms (Raifman et al., 2022). We invited 220 graduates to participate; 200 completed the survey, for a response rate of 90.9%. Prior to analysis, all returned questionnaires were screened for completeness and compliance with the inclusion criteria, and only complete responses were retained for statistical analysis. Because snowball and convenience sampling are non-probability sampling techniques, interpret the findings as representative of the study participants and similar populations rather than generalizing to all Business Administration graduates in the Davao Region. We conducted an a priori power analysis using G*Power 3.1 (Faul et al., 2009) for multiple linear regression with an interaction (moderation) term. Assuming a medium effect size ($f^2 = 0.15$), a significance level of $\alpha = .05$, statistical power of 0.80, and three predictors (entrepreneurial self-efficacy, entrepreneurship education, and the interaction term), the analysis indicated a minimum required sample size of 77 participants. Therefore, the final sample of 200 respondents exceeded the required sample size, providing adequate statistical power to detect the hypothesized moderation effect.

Research Instrument

This study utilized an adapted and modified survey questionnaire as the primary data-gathering instrument to measure entrepreneurial self-efficacy, business intention, and entrepreneurship education among Business Administration graduates in the Davao Region. The questionnaire consisted of four sections and employed a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The first section gathered demographic information, including respondents' year of graduation, institution, and other relevant characteristics to verify their eligibility to participate in the study. The second section measured entrepreneurial self-efficacy and was adapted from McGee et al. (2009), consisting of twenty (20) items distributed across four dimensions: searching opportunities, business planning, marshaling resources, and implementing business. The third section measured business intention using a researcher-developed instrument with twenty (20) items across four dimensions: attitude toward entrepreneurship, self-prediction, personal goals and commitment, and perceived behavioral control. The researcher-developed business intention items were constructed based on the Theory of Planned Behavior (Ajzen, 1991) and relevant entrepreneurship literature to measure the respondents' intentions to establish and engage in business activities. The fourth section measured entrepreneurship education and was adapted from

Elmuti et al. (2012) and consisted of fifteen (15) items covering technical skills, business management skills, and personal skills. Minor modifications were made to the adapted instruments to better suit the present study. Specifically, selected words and phrases were simplified to enhance clarity, the wording of several items was revised to improve readability, and contextual references were adapted to reflect the experiences of Business Administration graduates in the Philippine setting. These modifications were limited to language and contextual adaptation and did not alter the conceptual meaning, dimensions, or measurement structure of the original instruments. The final questionnaire therefore consisted of 55 measurement items, excluding the demographic profile section.

To establish the instrument's content validity, the adapted questionnaire and the researcher-developed business intention scale were evaluated by three validators with expertise in education, business research, and entrepreneurship. The validators included the Dean of the College of Special Programs, who holds a Doctorate Degree in Education; a Director from the Research and Publication Office, who holds a Doctorate Degree in Education; and the Program Head of the Bachelor of Science in Business Administration program, who holds a Master's Degree in Business Administration. The validators evaluated the instrument based on clarity of language, presentation and organization of topics, suitability of items, adequacy of purpose, attainment of purpose, and objectivity. The researcher-developed business intention items were also reviewed to ensure alignment with the Theory of Planned Behavior and the study objectives. The researcher incorporated validators' suggestions and recommendations to improve the wording, clarity, contextual relevance, and overall quality of the questionnaire before pilot testing. The validation results revealed excellent ratings across all evaluation criteria, with an overall mean score of 4.84. Table 1 presents the detailed results of the content validation process, confirming that the instrument was valid and appropriate for measuring entrepreneurial self-efficacy, business intention, and entrepreneurship education.

Table 1. *Instrument's Content Validity*

Area	Overall Mean Score	Interpretation
Clarity of Language	5.00	Excellent
Presentation/Organization of Topics	5.00	Excellent
Suitability of Items	4.67	Excellent
Adequacy of Purpose	4.67	Excellent
Attainment of Purpose	4.67	Excellent
Objectivity	5.00	Excellent
Overall Mean Score	4.84	Excellent

Table 2. *Instrument Reliability*

Indicator	Cronbach's Alpha	k	Interpretation
Entrepreneurial Self-efficacy	0.85	20	Reliable
Searching opportunities	0.84	5	Reliable
Business planning	0.83	5	Reliable
Marshalling resources	0.87	5	Reliable
Implementing Business	0.84	5	Reliable
Business Intention	0.86	20	Reliable
Attitude towards entrepreneurship	0.88	5	Reliable
Self-prediction	0.86	5	Reliable
Personal goals and commitment	0.82	5	Reliable
Perceived behavioral control	0.90	5	Reliable
Entrepreneurship Education	0.84	15	Reliable
Technical skills	0.89	5	Reliable
Business management skills	0.85	5	Reliable
Personal skills	0.77	5	Reliable

To determine the instrument's reliability, a pilot test was conducted with respondents who had characteristics like the target population but were excluded from the actual study. Feedback from the pilot testing phase was used to refine the questionnaire and improve its clarity, relevance, and comprehensiveness. The responses were analyzed using Cronbach's alpha to determine the internal consistency of both the overall constructs and their respective dimensions. The results showed that the overall entrepreneurial self-efficacy scale obtained a Cronbach's alpha coefficient of 0.85, business intention obtained 0.86, and entrepreneurship education obtained 0.86, indicating acceptable to excellent internal consistency. Likewise, the reliability coefficients for the individual dimensions

ranged from 0.77 to 0.90, all exceeding the recommended minimum threshold of 0.70. These findings demonstrate that the instrument possesses satisfactory reliability and is appropriate for measuring entrepreneurial self-efficacy, business intention, and entrepreneurship education among Business Administration graduates in the Davao Region. Table 2 presents the complete results of the reliability analysis.

Data Gathering Procedure

This study followed a systematic data-gathering procedure to ensure the research's validity, reliability, and ethical conduct. After obtaining the necessary endorsements and approvals from the concerned authorities, the researchers submitted the survey questionnaire to three experts in education, business research, and entrepreneurship for content validation. The validators evaluated the instrument for clarity of language, presentation and organization of topics, suitability of items, adequacy of purpose, attainment of purpose, and objectivity. The researchers incorporated their comments and recommendations to improve the questionnaire's clarity, relevance, and contextual appropriateness. Following content validation, a pilot test was conducted with 30 Business Administration graduates who shared characteristics with the target population but were excluded from the study. The pilot test responses were analyzed using Cronbach's alpha to determine the instrument's internal consistency, and minor revisions were made to improve the wording and readability of selected items before administering the final questionnaire to the actual respondents.

Data collection was conducted from November 1 to November 30, 2025, using both printed questionnaires and Google Forms. To ensure measurement equivalence, both modes included identical questionnaire items, response options, instructions, informed consent statements, and a five-point response scale. A total of 121 respondents completed the printed questionnaire, while 79 respondents completed the online questionnaire, resulting in a final sample of 200 Business Administration graduates. Before participation, respondents were informed of the study's purpose, the voluntary nature of their participation, their right to withdraw at any time without penalty, and the confidentiality of their responses through an informed consent form. After retrieving the completed questionnaires, the researchers manually screened all responses from both survey modes for completeness, compliance with the inclusion criteria, and potential duplicate submissions by comparing respondent demographic information and response patterns. The team excluded any incomplete or duplicate questionnaires from the final dataset. Only complete and eligible responses were encoded, tabulated, and analyzed using the appropriate statistical techniques, after which the findings were interpreted and discussed in relation to the objectives of the study.

Data Analysis Procedure

Upon completion of the data collection, all valid responses were encoded, tabulated, screened, and analyzed using the Statistical Package for the Social Sciences (SPSS) Version [insert version] with the assistance of a statistician. Questionnaires with incomplete responses were excluded from the analysis; therefore, no missing-data imputation was performed. We used descriptive and inferential statistical techniques and tested all hypotheses at the 0.05 level of significance. The mean was used to determine the levels of entrepreneurial self-efficacy, business intention, and entrepreneurship education among Business Administration graduates, while the Pearson Product-Moment Correlation was employed to determine the strength and direction of the relationship between entrepreneurial self-efficacy and business intention (Gravetter & Wallnau, 2016). To examine the moderating role of entrepreneurship education, moderation analysis was performed using the PROCESS Macro Version 5.0 (Hayes, 2023), specifically Model 1, with 5,000 bootstrap samples and 95% confidence intervals. Prior to the moderation analysis, the assumptions of multiple linear regression, including linearity, normality of residuals, homoscedasticity, independence of errors, influential observations, and multicollinearity, were examined to verify the suitability of the data for regression analysis. The significance of the interaction term and the corresponding change in the coefficient of determination (ΔR^2) were evaluated to determine whether entrepreneurship education explained additional variance in business intention beyond the main effects of entrepreneurial self-efficacy and entrepreneurship education. These statistical procedures enabled the researcher to determine the levels of the study variables, examine the relationship between entrepreneurial self-efficacy and business intention, and evaluate the moderating role of entrepreneurship education among Business Administration graduates.

Ethical Considerations

Throughout the study, the researchers adhered to established ethical principles to safeguard the rights, welfare, and dignity of all respondents. Before data collection, the researchers obtained ethical clearance from the Cor Jesu College Ethics Committee. All respondents received an informed consent form that clearly explained the study's

purpose, research procedures, expected benefits, and participants' rights, ensuring participation was voluntary and based on informed decision-making. Because participants were recruited through institutional networks and snowball sampling, the researchers implemented strict measures to ensure respondents' confidentiality and the anonymity of their survey responses. No personally identifiable information, such as names, addresses, email addresses, or contact numbers, was collected as part of the questionnaire, and all responses were used solely for research purposes, securely stored, and reported only in aggregated form to prevent the identification of individual participants, consistent with ethical standards for the protection of research data and participant privacy. These procedures helped safeguard the rights, privacy, and well-being of all respondents throughout the research process (Kang & Hwang, 2021). Furthermore, the researchers used artificial intelligence (AI) tools, including Grammarly and ChatGPT, solely for language enhancement, grammar checking, and manuscript organization during manuscript preparation (Van Dis et al., 2023). The researchers carefully reviewed, evaluated, and revised all AI-generated suggestions to preserve the originality and integrity of the work. Moreover, the researchers did not use AI tools for data collection, coding, analysis, interpretation, or reporting, and they remained solely responsible for the study's accuracy, integrity, and originality.

Results and Discussion

Entrepreneurial Self-efficacy among Business Administration Graduates

This study aimed to assess the level of entrepreneurial self-efficacy among Business Administration graduates in relation to their intention to pursue entrepreneurship. It focused on four key indicators: searching for opportunities, business planning, marshaling resources, and implementing a business. The study systematically gathered data from respondents and analyzed them using descriptive statistics. The mean, standard deviation (SD), and 95% confidence interval (CI) described respondents' self-reported perceptions of entrepreneurial self-efficacy. Table 3 presents the respondents' level of entrepreneurial self-efficacy based on these indicators. It outlines how graduates perceive their confidence in identifying business opportunities, creating business plans, mobilizing resources, and managing business operations. Each indicator includes a descriptive rating and interpretation to clarify respondents' self-assessed entrepreneurial self-efficacy.

Table 3. *Descriptive Result for the Level of Entrepreneurial Self-efficacy*

Indicator	Mean	SD	95% CI	Descriptive Rating	Interpretation
Searching Opportunities	3.96	0.74	3.86–4.06	Agree	High
Business Planning	3.84	0.75	3.74–3.94	Agree	High
Marshalling Resources	3.77	0.78	3.66–3.88	Agree	High
Implementing Business	3.98	0.74	3.87–4.08	Agree	High
Overall	3.89	0.69	3.79–3.98	Agree	High

The overall mean score of 3.89 (SD = 0.69, 95% CI = 3.79–3.98), categorized as Agree and interpreted as High, indicates that Business Administration graduates in the Davao Region reported a high level of entrepreneurial self-efficacy across the dimensions of searching for opportunities, business planning, marshaling resources, and implementing business strategies. This result is supported by Costin et al. (2022), who emphasized that entrepreneurial self-efficacy in business planning is a key indicator of an individual's confidence in outlining and organizing the steps needed to start and grow a business. Similarly, Marshall et al. (2020) emphasized the importance of entrepreneurial self-efficacy in mobilizing resources, noting that individuals with strong entrepreneurial self-efficacy are more likely to take initiative in business endeavors. The findings suggest that the respondents perceived themselves as confident in identifying viable opportunities, preparing strategic business plans, gathering necessary resources, and implementing business ideas. These findings represent the respondents' self-reported perceptions of entrepreneurial self-efficacy rather than demonstrated entrepreneurial competence.

Among the four dimensions, implementing business recorded the highest mean score of 3.98 (SD = 0.74, 95% CI = 3.87–4.08), categorized as Agree and interpreted as High, reflecting respondents' self-reported confidence in starting and running a business, managing financial resources, addressing customer needs, sustaining operations, and adopting new technologies. This finding is supported by Bachmann et al. (2021), who described implementing business as a crucial aspect of entrepreneurial self-efficacy, referring to an individual's belief in their ability to carry out the operational aspects of launching and managing a business. Similarly, Adeniyi et al. (2022) emphasized that high entrepreneurial self-efficacy in implementing business is associated with greater confidence in handling business execution. The findings indicate that respondents generally perceived themselves as

confident in carrying out operational business activities; however, these results reflect self-reported perceptions and should not be interpreted as evidence of actual business performance.

Conversely, marshaling resources recorded the lowest mean score of 3.77 (SD = 0.78, 95% CI = 3.66–3.88), categorized as Agree and interpreted as High, suggesting that respondents reported comparatively lower confidence in influencing others, raising funds, and securing support for business ventures. This finding is supported by Maitlo et al. (2020), who noted that marshaling resources as a dimension of entrepreneurial self-efficacy involves the perceived ability to gather and organize the necessary human, financial, and material resources to start and grow a business. Donaldson et al. (2024) further emphasized that individuals often find this dimension more challenging because of the interpersonal and financial complexities involved in persuading others and securing support. Although this dimension received the lowest mean score, it remained within the High interpretation, indicating that respondents generally perceived themselves as confident in this area while recognizing greater challenges than in the other dimensions.

Business Intentions among Business Administration Graduates

Another objective of this study was to examine the level of business intentions among Business Administration graduates, focusing on four key dimensions: attitude toward entrepreneurship, self-prediction, personal goals and commitment, and perceived behavioral control. Together, these dimensions provided a comprehensive understanding of graduates' motivation and intention to pursue entrepreneurial ventures. To address this research problem, data were systematically collected and analyzed using the mean, standard deviation (SD), and 95% confidence interval (CI), ensuring that the findings accurately reflected the respondents' self-reported intentions regarding entrepreneurship. This analysis aimed to provide insights into the graduates' entrepreneurial intentions while identifying areas that may benefit from further development.

Table 4. *Descriptive Results for the Level of Business Intentions*

Indicator	Mean	SD	95% CI	Descriptive Rating	Interpretation
Attitude toward Entrepreneurship	4.33	0.71	4.23–4.43	Strongly Agree	Very High
Self-Prediction	4.28	0.71	4.19–4.38	Strongly Agree	Very High
Personal Goals and Commitment	4.22	0.78	4.12–4.33	Strongly Agree	Very High
Perceived Behavioral Control	4.09	0.74	3.99–4.19	Agree	High
Overall	4.23	0.68	4.14–4.33	Strongly Agree	Very High

The overall mean score of 4.23 (SD = 0.68, 95% CI = 4.14–4.33), categorized as Strongly Agree and interpreted as Very High, indicates that Business Administration graduates in the Davao Region reported a very high level of business intention in terms of attitude toward entrepreneurship, self-prediction, personal goals and commitment, and perceived behavioral control. This finding is supported by Botsaris and Vamvaka (2016), who emphasized that business intention strongly predicts entrepreneurial behavior, particularly when individuals have a favorable attitude toward entrepreneurship. Likewise, Dinc and Budic (2016) highlighted that perceived behavioral control significantly shapes business intention, as it reflects an individual's confidence in managing the demands of starting and sustaining a business. The findings suggest that the respondents expressed strong entrepreneurial intentions and positive perceptions toward entrepreneurship. However, these findings reflect self-reported intentions and should not be interpreted as evidence that the respondents will necessarily engage in entrepreneurial activities in the future.

Among the indicators, attitude toward entrepreneurship recorded the highest mean score of 4.33 (SD = 0.71, 95% CI = 4.23–4.43), categorized as Strongly Agree and interpreted as Very High, reflecting respondents' positive perceptions of entrepreneurship as a desirable career path, a source of personal fulfillment, a way to contribute to society, a means of individual freedom, and a path to long-term career satisfaction. This finding is supported by Soomro and Shah (2015), who argued that attitude toward entrepreneurship strongly predicts business intention, as individuals who view entrepreneurship positively are more likely to pursue it. Similarly, Nowiński and Haddoud (2019) emphasized that a favorable attitude toward entrepreneurship significantly strengthens business intention by linking personal meaning and societal contribution to entrepreneurial aspirations. The findings suggest that respondents generally expressed positive attitudes toward entrepreneurship, which are reflected in their self-reported business intentions.

Meanwhile, perceived behavioral control obtained the lowest mean score of 4.09 (SD = 0.74, 95% CI = 3.99–4.19), categorized as Agree and interpreted as High, suggesting that respondents reported comparatively lower

confidence in managing businesses and overcoming entrepreneurial challenges than in the other dimensions. This finding aligns with Vamvaka et al. (2020), who defined perceived behavioral control as an individual's belief in their capacity to perform a behavior, which directly influences the strength of business intention. In addition, Akkaya et al. (2024) found that while individuals may have strong entrepreneurial aspirations, lower perceived behavioral control may reduce confidence in handling uncertainties and barriers during the entrepreneurial process. Although this dimension obtained the lowest mean score, it remained within the High interpretation, indicating that respondents generally perceived themselves as capable of managing entrepreneurial challenges while recognizing some uncertainty in this area.

Entrepreneurship Education among Business Administration Graduates

Another key objective of this study was to assess the level of entrepreneurship education among Business Administration graduates by examining three critical skill dimensions: technical skills, business management skills, and personal skills. These skill sets are essential in shaping graduates' entrepreneurial development. To effectively address this research problem, data were systematically collected and analyzed using the mean, standard deviation (SD), and 95% confidence interval (CI) to provide a comprehensive understanding of the respondents' self-reported perceptions of entrepreneurship education.

Table 5. *Descriptive Results for the Level of Entrepreneurship Education*

Indicator	Mean	SD	95% CI	Descriptive Rating	Interpretation
Technical Skills	4.10	0.67	4.01–4.20	Agree	High
Business Management Skills	4.24	0.71	4.14–4.34	Strongly Agree	Very High
Personal Skills	4.13	0.68	4.04–4.23	Agree	High
Overall	4.16	0.65	4.07–4.25	Agree	High

The overall mean score of 4.16 (SD = 0.65, 95% CI = 4.07–4.25), categorized as Agree and interpreted as High, indicates that Business Administration graduates in the Davao Region reported a high level of entrepreneurship education in terms of personal skills, business management skills, and technical skills. This result is supported by Olanrewaju (2024), who emphasized that entrepreneurship education significantly enhances business management skills by equipping students with practical knowledge and decision-making abilities essential for entrepreneurial success. Similarly, Bernadó (2024) highlighted that entrepreneurship education fosters personal skills such as creativity, self-awareness, and adaptability, which are fundamental to entrepreneurial development. The findings suggest that respondents generally perceived their entrepreneurship education positively and believed that it contributed to the development of entrepreneurial knowledge and skills. However, these findings represent self-reported perceptions rather than objective evidence of entrepreneurial competence or capability.

Among the indicators, business management skills recorded the highest mean score of 4.24 (SD = 0.71, 95% CI = 4.14–4.34), categorized as Strongly Agree and interpreted as Very High, suggesting that respondents perceived themselves as highly confident in making timely decisions, managing financial records, setting realistic goals, and taking responsibility for business-related decisions. This finding is supported by Igwe et al. (2021), which emphasized that entrepreneurship education plays a vital role in developing business management skills, enabling graduates to make informed decisions and manage business operations effectively. Additionally, Bauman and Lucy (2021) highlighted that entrepreneurship education focusing on real-life business contexts enhances planning, financial management, and accountability. The findings indicate that respondents perceived business management skills as one of the strongest outcomes of their entrepreneurship education.

Meanwhile, technical skills obtained the lowest mean score of 4.10 (SD = 0.67, 95% CI = 4.01–4.20), categorized as Agree and interpreted as High, indicating that respondents generally perceived themselves as having positive technical skills, although these were rated slightly lower than the other dimensions. This observation is supported by the study of Rosienkiewicz et al. (2024), who noted that while entrepreneurship education often strengthens general competencies, technical skills, particularly those involving analytical and written communication, require more focused and continuous development. Similarly, Prokopenko et al. (2024) emphasized that technical skills are critical but are often underemphasized within entrepreneurship education. Although this dimension obtained the lowest mean score, it remained within the High interpretation, suggesting that respondents viewed their technical skills positively while recognizing opportunities for further improvement.

Relationship between Entrepreneurial Self-efficacy and Business Intention

The subsequent objective of this study was to investigate whether a significant relationship exists between entrepreneurial self-efficacy and business intention among Business Administration graduates. This objective aimed to explore the extent to which graduates' confidence in their entrepreneurial abilities is associated with their intention to pursue entrepreneurial ventures. To address this research question, data were collected and analyzed using the Pearson Product-Moment Correlation, a statistical tool designed to measure the strength and direction of the linear relationship between the two variables.

Table 6. *Relationship Between Entrepreneurial Self-efficacy and Business Intention*

Entrepreneurial Self-efficacy	Business Intention				
	r	Degree	p-value	Remarks	Decision
	0.66	Strong	<.001	Significant	Reject

The results presented in Table 6 indicate a strong, positive, and statistically significant relationship between entrepreneurial self-efficacy and business intention among Business Administration graduates in the Davao Region. The Pearson correlation analysis revealed a significant positive correlation, $r(198) = 0.66$, $p < .001$, indicating that respondents who reported higher entrepreneurial self-efficacy also tended to report higher business intention. Therefore, the null hypothesis stating that no significant relationship exists between entrepreneurial self-efficacy and business intention is rejected. These findings suggest that higher self-reported entrepreneurial self-efficacy is associated with stronger self-reported business intention among respondents.

The strong relationship found between entrepreneurial self-efficacy and business intention among Business Administration graduates in the Davao Region is reinforced by extensive research affirming that individuals with higher entrepreneurial self-confidence are more likely to report stronger entrepreneurial intentions. Nabi et al. (2017) and Fayolle and Gailly (2015) emphasized that entrepreneurial self-efficacy enhances an individual's confidence in initiating and committing to entrepreneurial activities. Ahmad et al. (2018) and Renko et al. (2021) similarly found that individuals with higher entrepreneurial self-efficacy tend to demonstrate stronger entrepreneurial motivation and proactive behavior. Hsu et al. (2019) further confirmed that entrepreneurial self-efficacy is one of the most consistent predictors of entrepreneurial intention, as individuals who are confident in their entrepreneurial capabilities are more likely to express stronger entrepreneurial intentions. Kah et al. (2022) likewise highlighted that higher entrepreneurial confidence is positively associated with entrepreneurial motivation despite external challenges. These collective findings support the present study's results, demonstrating that entrepreneurial self-efficacy is strongly associated with business intention among aspiring entrepreneurs.

The study's findings can be explained through Bandura's Self-Efficacy Theory, which posits that an individual's belief in their ability to perform specific tasks influences motivation, persistence, and behavioral intentions. In the entrepreneurial context, the graduates' higher levels of entrepreneurial self-efficacy suggest they perceive themselves as capable of navigating the challenges of starting and managing a business. This perception is reflected in their stronger self-reported intention to start a business. The strong positive correlation found in this study supports Bandura's proposition that self-efficacy beliefs are closely associated with behavioral intentions. However, because this study employed a correlational design, the findings indicate an association between entrepreneurial self-efficacy and business intention rather than evidence of actual venture creation, business engagement, or causal effects. Consequently, the results support the importance of entrepreneurial self-efficacy as a factor associated with business intention among Business Administration graduates.

Moderating Effect of Entrepreneurship Education on the Relationship between Entrepreneurial Self-efficacy and Business Intention

The main objective of this study was to examine the role of entrepreneurship education as a moderating factor in the relationship between entrepreneurial self-efficacy and business intention among Business Administration graduates. Specifically, the study aimed to determine whether entrepreneurship education influences the strength or direction of this relationship. To achieve this objective, the study collected data from respondents and analyzed them using moderation analysis with Hayes' PROCESS Macro (Model 1).

Table 7. Model Summary

r	R²	MSE	F	df1	df2	p	ΔR²	ΔF	Interaction p
.84	.70	.14	153.25	3	196	< .001	.007	4.77	.03

The model summary revealed a strong relationship among the variables ($r = .84$). The regression model explained 70.11% of the variance in business intention ($R^2 = .70$, indicating that entrepreneurial self-efficacy, entrepreneurship education, and their interaction jointly accounted for a substantial proportion of the variation in business intention. The overall regression model was statistically significant, $F(3, 196) = 153.25$, $p < .001$, indicating that the model adequately explained the observed variation in business intention. The inclusion of the interaction term resulted in a statistically significant increase in the model's explanatory power ($\Delta R^2 = .007$, $\Delta F(1, 196) = 4.77$, $p = .03$). Although the interaction explained an additional 0.73% of the variance in business intention, the increase was statistically significant, indicating that entrepreneurship education significantly moderated the relationship between entrepreneurial self-efficacy and business intention.

Table 8. Unstandardized Regression Coefficients for the Moderation Model

	coeff	se	t	p	LLCI	ULCI
Constant	-0.57	0.51	-1.3	.26	-1.57	0.43
efficacy	0.55	0.17	3.24	.001	0.22	0.89
education	0.97	0.12	7.78	.000	0.72	1.21
efficacy* education	-0.08	0.04	-2.18	.030	-0.16	-0.008

The regression coefficients showed that entrepreneurial self-efficacy had a significant positive effect on business intention ($B = 0.55$, $SE = 0.17$, $t = 3.24$, $p = .001$), indicating that respondents who reported higher entrepreneurial self-efficacy also tended to report higher business intention. Likewise, entrepreneurship education demonstrated a significant positive main effect on business intention ($B = 0.97$, $SE = 0.12$, $t = 7.78$, $p < .001$), suggesting that respondents with higher levels of entrepreneurship education also reported stronger business intention. More importantly, the interaction between entrepreneurial self-efficacy and entrepreneurship education was negative and statistically significant ($B = -0.08$, $SE = 0.04$, $t = -2.18$, $p = 0.03$, 95% CI $[-0.16, -0.008]$). This finding indicates that entrepreneurship education attenuates, rather than strengthens, the positive relationship between entrepreneurial self-efficacy and business intention. Thus, entrepreneurial self-efficacy remained positively associated with business intention; however, the strength of this relationship became weaker as the level of entrepreneurship education increased.

Table 9. Conditional Effects of Entrepreneurial Self-efficacy at Values of Entrepreneurship Education

Education	Effect	se	t	p	LLCI	ULCI
3.60	0.26	0.06	4.43	0.00	0.14	0.37
4.27	0.20	0.05	3.93	0.0001	0.1	0.30
4.73	0.16	0.05	3.04	0.003	0.06	0.27

The conditional effects analysis further clarified the moderating role of entrepreneurship education. At a relatively low level of entrepreneurship education (3.60), entrepreneurial self-efficacy exhibited the strongest positive relationship with business intention (Effect = .26, $p < 0.001$). At the mean level of entrepreneurship education (4.27), the positive relationship remained significant but declined (Effect = 0.20, $p = .0001$). At a high level of entrepreneurship education (4.73), entrepreneurial self-efficacy continued to significantly predict business intention, although the magnitude of the relationship further decreased (Effect = 0.16, $p = .003$). These results indicate that entrepreneurial self-efficacy remained a significant positive predictor of business intention across all examined levels of entrepreneurship education. However, the strength of this positive relationship gradually decreased as entrepreneurship education increased. The moderator values represent the low, mean, and high levels of entrepreneurship education automatically generated by the PROCESS macro for the conditional effects analysis.

The findings are generally consistent with previous studies emphasizing the importance of entrepreneurship education in shaping business intention. Liu et al. (2019) showed that entrepreneurship education strengthens entrepreneurial intention by improving entrepreneurial competencies and self-efficacy. Similarly, Botha and Bignotti (2016) reported that structured entrepreneurship programs enhance entrepreneurial knowledge, practical skills, and confidence, while Daniel (2016) found that entrepreneurship education contributes to developing entrepreneurial mindsets and intentions. Consistent with these studies, the present findings indicate that entrepreneurship education has a significant positive direct effect on business intention.

However, the moderation analysis demonstrates that entrepreneurship education does not strengthen the relationship between entrepreneurial self-efficacy and business intention. Instead, the significant negative interaction indicates that entrepreneurship education weakens the positive relationship between entrepreneurial self-efficacy and business intention. This finding aligns with Homayoun and Henriksen (2018), who argued that as individuals gain more entrepreneurial knowledge through formal education, they rely less exclusively on personal confidence when developing entrepreneurial intentions. Likewise, Long et al. (2021) suggested that formal entrepreneurship education increasingly influences entrepreneurial intentions through acquired knowledge and competencies rather than relying solely on entrepreneurial self-efficacy. The present findings support this perspective by demonstrating that entrepreneurial self-efficacy remained positively associated with business intention at all examined levels of entrepreneurship education, although its influence became progressively smaller as entrepreneurship education increased.

These findings also help explain previous contrasting results. Brüne and Lutz (2020) argued that the effectiveness of entrepreneurship education depends on curriculum quality and practical exposure, while Mwiya (2014) reported that entrepreneurship education may provide limited additional influence among individuals who already possess high entrepreneurial self-efficacy. Fayolle (2018) likewise emphasized that the effects of entrepreneurship education vary with learners' motivation and prior experience. These findings align with these perspectives by showing that entrepreneurship education has a strong positive direct effect on business intention while reducing the relative influence of entrepreneurial self-efficacy.

Finally, the findings are supported by the Theory of Planned Behavior, which proposes that behavioral intention is influenced by perceived behavioral control, attitudes, and subjective norms. In this study, entrepreneurial self-efficacy represents perceived behavioral control, whereas entrepreneurship education provides knowledge, practical skills, and experiential learning that contribute to entrepreneurial decision-making. The significant negative interaction suggests that as entrepreneurship education increases, respondents rely less on their confidence and more on the knowledge and competencies gained through formal entrepreneurial education when forming business intentions. Thus, entrepreneurship education modifies the relationship between entrepreneurial self-efficacy and business intention rather than strengthening that relationship. This finding supports the Theory of Planned Behavior by demonstrating that entrepreneurial intentions are shaped by the combined influence of individuals' perceived capabilities and the knowledge gained through entrepreneurship education.

Conclusion

Based on the study's findings, Business Administration graduates in the Davao Region reported a high level of entrepreneurial self-efficacy, a very high level of business intention, and a high level of entrepreneurship education. The respondents reported confidence in identifying business opportunities, developing business plans, mobilizing resources, and implementing entrepreneurial activities, as well as favorable attitudes toward entrepreneurship, strong self-prediction, clear personal goals and commitment, and high perceived behavioral control. Business management skills obtained the highest mean rating among the dimensions of entrepreneurship education. The study also found a strong, statistically significant positive relationship between entrepreneurial self-efficacy and business intention, indicating that respondents with higher entrepreneurial self-efficacy tended to report stronger business intention. Likewise, entrepreneurship education showed a significant positive association with business intention, suggesting that respondents with higher levels of entrepreneurship education also tended to report stronger business intention.

Furthermore, entrepreneurship education significantly moderated the relationship between entrepreneurial self-efficacy and business intention. Although the positive relationship between entrepreneurial self-efficacy and business intention remained statistically significant across all examined levels of entrepreneurship education, it weakened as reported entrepreneurship education increased. This pattern may suggest a compensatory or substitution effect, whereby entrepreneurship education reduces the extent to which business intention depends on entrepreneurial self-efficacy alone; however, this interpretation should be made cautiously because the study employed a cross-sectional, correlational design and cannot establish causal mechanisms. Moreover, interpret the findings in light of the limitations of self-reported measures, the possibility of common-method bias, the use of nonprobability sampling, the study's focus on Business Administration graduates in the Davao Region, and the operationalization of entrepreneurship education through respondents' perceived technical, business

management, and personal skills.

Based on the study's findings and limitations, higher education institutions are encouraged to strengthen entrepreneurship education by expanding experiential learning opportunities, business incubation programs, industry collaborations, mentoring initiatives, and other practice-oriented learning experiences. Curriculum developers and policymakers should likewise continue refining entrepreneurship programs by incorporating contextual factors, such as family support, entrepreneurial networks, institutional support, and access to entrepreneurial resources, to provide students with more comprehensive entrepreneurial learning experiences. These initiatives may support the development of entrepreneurial knowledge, competencies, and confidence among students.

Future researchers are encouraged to strengthen the methodological rigor of similar studies by employing probability sampling techniques, expanding the investigation to different higher education institutions and geographic locations, and including participants from more diverse demographic backgrounds. Recruitment through alumni databases, institutional records, and other formal channels is likewise recommended to reduce self-selection bias. Future studies may also examine additional variables, such as entrepreneurial mindset, entrepreneurial resilience, innovation capability, institutional support, entrepreneurial experience, family support, and access to financial resources, and utilize longitudinal or mixed-methods research designs to further examine entrepreneurial intention over time. Finally, studies using moderation analysis are encouraged to include additional PROCESS macro-outputs, particularly the Johnson–Neyman analysis and the simple-slopes interaction graph, to provide a more comprehensive interpretation of moderation effects and improve the transparency, rigor, and reproducibility of future entrepreneurship research.

Contributions of Authors

Michael P. Aquino: Conceptualization, data gathering, data analysis, manuscript writing, and editing.

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Conflict of Interests

The authors declare that there are no conflicts of interest related to the conduct, authorship, or publication of this study.

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References

- A Caña, D. (2025). The entrepreneurial skills of senior high school students in Monreal national high school and their experiences in managing small-scale businesses. *International Journal of Innovative Science and Research Technology*, 10(4), 589-618. <https://doi.org/10.38124/ijisrt%2F25apr281>
- Adeniyi, A. O., Derera, E., & Gamede, V. (2022). Entrepreneurial self-efficacy for entrepreneurial readiness in a developing context: A survey of exit level students at TVET Institutions in Nigeria. *Sage Open*, 12(2), 21582440221095059. <https://doi.org/10.1177/2158244022109505>
- Ahmad, N. H., Suseno, Y., Seet, P. S., Susomrith, P., & Rashid, Z. (2018). Entrepreneurial competencies and firm performance in emerging economies: A study of women entrepreneurs in Malaysia. *Knowledge, learning and innovation: Research insights on cross-sector collaborations*, 5-26. https://link.springer.com/chapter/10.1007/978-3-319-59282-4_2
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Akkaya, B., Popescu, C., & Üstgörl, S. (2024). How can we remove psychological entrepreneurship barriers on entrepreneurship intention for health organizations in the future?. *Sustainability*, 16(8), 3503. <https://doi.org/10.3390/su16083503>
- Albatran, A. A., & Atikbay, T. (2025). Entrepreneurship Education in Fragile Contexts: Bridging the Intention–Action Gap Through Psychological and Contextual Pathways. *Sustainability*, 17(16), 7447. DOI:10.3390/su17167447
- Bachmann, A. K., Maran, T., Furtner, M., Brem, A., & Welte, M. (2021). Improving entrepreneurial self-efficacy and the attitude towards starting a business venture. *Review of Managerial Science*, 15, 1707-1727. <https://tinyurl.com/mu9nykpw>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Bauman, A., & Lucy, C. (2021). Enhancing entrepreneurial education: Developing competencies for success. *The International Journal of Management Education*, 19(1), 100293. <https://doi.org/10.1016/j.ijme.2019.03.005>
- Bernadó, E. (2024). Towards responsible entrepreneurship: Embracing humanities and social sciences skills into entrepreneurship education for the digital era. In *Entrepreneurship and Digital Humanities* (pp. 38-54). Edward Elgar Publishing. <https://doi.org/10.4337/9781035331864.00012>
- Biray, E. T. (2022). Gauging the institution's potential towards an entrepreneurial University: The case of a Philippine State University. *International Journal of Educational Management and Development Studies*, 3(1), 1-22. DOI: <https://doi.org/10.53378/352860>
- Botha, M., & Bignotti, A. (2016). Internships enhancing entrepreneurial intent and self-efficacy: Investigating tertiary-level entrepreneurship education programmes. *The Southern African Journal of Entrepreneurship and Small Business Management*, 8(1), 1-15. <https://hdl.handle.net/10520/EJC196435>

- Botsaris, C., & Vamvaka, V. (2016). Attitude toward entrepreneurship: Structure, prediction from behavioral beliefs, and relation to entrepreneurial intention. *Journal of the knowledge Economy*, 7, 433-460. <https://tinyurl.com/yek9ezpz>
- Brüne, N., & Lutz, E. (2020). The effect of entrepreneurship education in schools on entrepreneurial outcomes: a systematic review. *Management Review Quarterly*, 70(2), 275-305. DOI: 10.1007/s11301-019-00168-3
- Costin, Y., O'Brien, M. P., & Hynes, B. (2022). Entrepreneurial education: Maker or breaker in developing students' entrepreneurial confidence, aptitude and self-efficacy?. *Industry and Higher Education*, 36(3), 267-278. <https://doi.org/10.1177/095042221104066>
- Daniel, A. D. (2016). Fostering an entrepreneurial mindset by using a design thinking approach in entrepreneurship education. *Industry and Higher Education*, 30(3), 215- 223. <https://doi.org/10.1177/0950422216653195>
- Dinc, M. S., & Budic, S. (2016). The impact of personal attitude, subjective norm, and perceived behavioral control on entrepreneurial intentions of women. *Eurasian Journal of Business and Economics*, 9(17), 23-35. <https://tinyurl.com/yr2kpi78>
- Donaldson, C., Villagrasa, J., & Neck, H. (2024). The Impact of an entrepreneurial ecosystem on student entrepreneurship financing: A signaling perspective. *Venture Capital*, 26(4), 431-466. <https://tinyurl.com/4xp24btz>
- Elmuti D, Khoury G, Omran O (2012) Does entrepreneurship education have a role in developing entrepreneurial skills and ventures' effectiveness? *J Entrep Educ* 15:83- 104. <https://fada.birzeit.edu/handle/20.500.11889/2670>
- Fayolle, A. (2018). Personal views on the future of entrepreneurship education. In *A research agenda for entrepreneurship education* (pp. 127-138). Edward Elgar Publishing. <https://doi.org/10.4337/9781786432919.00013>
- Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of small business management*, 53(1), 75-93. <https://www.tandfonline.com/doi/abs/10.1111/jsbm.12065>
- Ferdousi, F., Rahman, M. Z., & Qamruzzaman, M. (2025). The role of business education in shaping entrepreneurial intentions: Examining psychological and contextual determinants among university students in Bangladesh. In *Frontiers in Education* (Vol. 10, p. 1536604). Frontiers Media SA. <https://doi.org/10.3389/feduc.2025.1536604>
- Fleck, E., Kakouris, A., & Winkel, D. (2021). Cultural traits of entrepreneurship education: a cross-national study. *Journal of Entrepreneurship in Emerging Economies*, 13(5), 838-863. DOI:10.1108/JEEE-02-2020-0030
- Graciano, P., Lermen, F. H., Reichert, F. M., & Padula, A. D. (2023). The impact of risk-taking and creativity stimuli in education towards innovation: A systematic review and research agenda. *Thinking Skills and Creativity*, 47, 101220. <https://doi.org/10.1016/j.tsc.2022.101220>
- Gravetter, F. J., & Wallnau, L. B. (2016). *Statistics for the behavioral sciences* (9th ed.). Cengage Learning. <https://tinyurl.com/kxakjknx>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long range planning*, 46(1-2), 1-12. SSRN: <https://ssrn.com/abstract=2233795>
- Hameed, I., & Irfan, Z. (2019). Entrepreneurship education: a review of challenges, characteristics and opportunities. *Entrepreneurship Education*, 2(3), 135-148. DOI:10.1007/s41959-019-00018-z
- Hayes, A. F. (2023). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Press. ISBN 9781462549030
- Homayoun, S., & Henriksen, D. (2018). Creativity in business education: A review of creative self-belief theories and arts-based methods. *Journal of Open Innovation: Technology, Market, and Complexity*, 4(4), 55. <https://doi.org/10.3390/joitmc4040055>
- Hou, Y., Zhou, H., Liu, X., & Yin, B. (2025). The influence of career planning education on college students' entrepreneurial intention: An Analysis of Mediating and Moderating Effects. *J. COMBIN. MATH. COMBIN. COMPUT.*, 127, 1895-1908. DOI: 10.61091/jcmcc127b-106
- Hsu, D. K., Burmeister-Lamp, K., Simmons, S. A., Foo, M. D., Hong, M. C., & Pipes, J. D. (2019). "I know I can, but I don't fit": Perceived fit, self-efficacy, and entrepreneurial intention. *Journal of business venturing*, 34(2), 311-326. <https://doi.org/10.1016/j.jbusvent.2018.08.004>
- Hurley, J., & Tenny, G. (2022). *Introduction to statistical analysis: Concepts and applications* (2nd ed.). Wiley. <https://tinyurl.com/3s9yyvh9k>
- Igwe, P. A., Okolie, U. C., & Nwoko, C. V. (2021). Towards a Responsible Entrepreneurship Education and the Future of the Workforce. *The International Journal of Management Education*, 19(1), 100300. <https://doi.org/10.1016/j.ijme.2019.05.001>
- Islam, N. (2024). Reducing rural poverty in Asia: Challenges and opportunities for microenterprises and public employment schemes. <https://tinyurl.com/52dbvfhz>
- Kah, S., O'Brien, S., Kok, S., & Gallagher, E. (2022). Entrepreneurial motivations, opportunities, and challenges: An international perspective. *Journal of African Business*, 23(2), 380-399. <https://doi.org/10.1080/15228916.2020.1838835>
- Kang, E., & Hwang, H. J. (2021). Ethical conducts in qualitative research methodology: Participant observation and interview process. *Journal of Research and Publication Ethics*, 2(2), 5-10. <https://doi.org/10.15722/jrpe.2.2.202109.5>
- Kremel, A., & Dyrvik, M. (2025). Addressing the integration of key competencies for sustainability: A Case study of design thinking in entrepreneurship education in Sweden. In *Entrepreneurship, Sustainability and Social Responsibility: The Importance of Agenda 2030* (pp. 87-101). Cham: Springer Nature Switzerland. <https://tinyurl.com/jcex6e6k>
- Kurniawan, H., Murwani, F. D., & Indrawati, A. (2018). Factor that impacts entrepreneurial intention among engineering students: Evidence from Indonesia. *Współczesna Gospodarka*, 9(4) (31), 71-86. <https://doi.org/10.26881/wg.2018.4.07>
- Linan, F., & Rodríguez-Cohard, J. C. (2015). Assessing the stability of graduates' entrepreneurial intention and exploring its predictive capacity. *Academia Revista Latinoamericana de Administración*, 28(1), 77-98. ISSN: 1012-8255
- Liu, X., Lin, C., Zhao, G., & Zhao, D. (2019). Research on the effects of entrepreneurial education and entrepreneurial self-efficacy on college students' entrepreneurial intention. *Frontiers in psychology*, 10, 869. <https://doi.org/10.3389/fpsyg.2019.00869>
- Long, Z., Zhao, G., Wang, J., Zhang, M., Zhou, S., Zhang, L., & Huang, Z. (2021). Research on the drivers of entrepreneurship education performance of medical students in the digital age. *Frontiers in Psychology*, 12, 733301. <https://doi.org/10.3389/fpsyg.2021.733301>
- Lyons, K. (2015). Does your sample size matter? Lipman Hearne Inc.
- Magasi, C. (2022). The influence of entrepreneurship education on entrepreneurial intentions: Perception of higher business education graduates. *International Journal of Research in Business and Social Science*, 11(2), 371-380. DOI: <https://doi.org/10.20525/ijrbs.v11i2.1701>
- Maitlo, Q., Pacho, F. T., Liu, J., Bhutto, T. A., & Xuhui, W. (2020). The role of entrepreneurial self-efficacy in resources acquisition in a new venture: the mediating role of effectuation. *Sage Open*, 10(4), 2158244020963571. <https://doi.org/10.1177/2158244020963571>
- McGee, J. E., Peterson, M., Mueller, S. L., & Sequeira, J. M. (2009). Entrepreneurial self-efficacy: Refining the measure. *Entrepreneurship theory and Practice*, 33(4), 965-988. <https://doi.org/10.1111/j.1540-6520.2009.00304.x>
- Memon, M. A., Cheah, J. H., Ramayah, T., Ting, H., Chuah, F., & Cham, T. H. (2019). Moderation analysis: Issues and guidelines. *Journal of Applied Structural Equation Modeling*, 3(1), 1-11. eISSN: 2590-4221
- Muller, S. (2016). A progress review of entrepreneurship and regional development: What are the remaining gaps?. *European Planning Studies*, 24(6), 1133-1158. <https://doi.org/10.1080/09654313.2016.1154506>
- Mwiya, B. M. K. (2014). The impact of entrepreneurship education on the relationships between institutional and individual factors and entrepreneurial intention of university graduates: Evidence from Zambia. <https://tinyurl.com/4auvsyds>
- Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277-299. <https://doi.org/10.5465/amle.2015.0026>
- Nowiński, W., & Haddoud, M. Y. (2019). The Role of inspiring role models in enhancing entrepreneurial intention. *Journal of Business Research*, 96, 183-193. <https://doi.org/10.1016/j.jbusres.2018.11.005>
- Olanrewaju, M. (2024). The Impact of entrepreneurship education on improving small and medium-size enterprises (SMEs) performance in Kwara and Oyo States, Nigeria. Theseus. <https://tinyurl.com/bddp3zci>
- Pham, M., Lam, B. Q., & Le, V. P. T. (2023). The e-entrepreneurial intention of students: The role of self-efficacy and education. *Entrepreneurial Business and Economics Review*, 11(1), 127-143. DOI:10.15678/EBER.2023.110107
- Prokopenko, O., Jarvis, M., Bielialov, T., Omelyanenko, V., & Malheiro, T. (2024). The future of entrepreneurship: Bridging the innovation skills gap through digital learning. In *International Conference Innovation in Engineering* (pp. 206-230). Cham: Springer Nature Switzerland. <https://tinyurl.com/29ue7fp3>
- Raifman, S., DeVost, M. A., Digitale, J. C., Chen, Y. H., & Morris, M. D. (2022). Respondent-driven sampling: A sampling method for hard-to-reach populations and beyond. *Current Epidemiology Reports*, 9(1), 38-47. <https://tinyurl.com/2ym42y4>
- Renko, M., Bullough, A., & Saeed, S. (2021). How do resilience and self-efficacy relate to entrepreneurial intentions in countries with varying degrees of fragility? A six-country study. *International Small Business Journal*, 39(2), 130-156. <https://doi.org/10.1177/026624262096045>
- Rosienkiewicz, M., Helman, J., Cholewa, M., Molasy, M., Görecka, A., Kohen-Vacs, D., & Benis, A. (2024). Enhancing technology-focused entrepreneurship in higher education institutions ecosystem: Implementing innovation models in international projects. *Education Sciences*, 14(7), 797. <https://doi.org/10.3390/educsci14070797>
- Samson, L. S. R. (2024). The moderating effect of entrepreneurial ecosystem on the relationship between entrepreneurial skill and entrepreneurial success among microfinance enterprises in Region XI. DOI: <https://doi.org/10.53378/meir.01244>
- Saoula, O., Abid, M. F., Ahmad, M. J., & Shamim, A. (2025). What drives entrepreneurial intentions? Interplay between entrepreneurial education, financial support, role models and attitude towards entrepreneurship. *Asia Pacific Journal of Innovation and Entrepreneurship*, 19(2), 128-148. ISSN: 2398-7812
- Sarreal, E. R., & Reyes, J. C. (2019). Exploring the entrepreneurial and innovation orientation of Central Luzon entrepreneurs using the global entrepreneurship monitor data. *DLSU Business & Economics Review*, 28(3), 21-33. https://animorepository.dlsu.edu.ph/faculty_research/2858
- Sarstedt, M., Mooi, E., Sarstedt, M., & Mooi, E. (2019). Regression analysis. A concise guide to market research: The process, data, and methods using IBM SPSS Statistics, 209-256. <https://tinyurl.com/44x4zudm>
- Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, 34(1), 8-12. DOI: 10.1097/NUR.0000000000000493

- Soomro, B. A., & Shah, N. (2015). Developing attitudes and intentions among potential entrepreneurs. *Journal of Enterprise Information Management*, 28(2), 304-322. <https://tinyurl.com/mpe64uev>
- Vamvaka, V., Stoforos, C., Palaskas, T., & Botsaris, C. (2020). Attitude toward entrepreneurship, perceived behavioral control, and entrepreneurial intention: Dimensionality, structural relationships, and gender differences. *Journal of Innovation and Entrepreneurship*, 9, 1-26. <https://tinyurl.com/bdd6f8za>
- Van Dis, E. A., Bollen, J., Zuidema, W., Van Rooij, R., & Bockting, C. L. (2023). ChatGPT: five priorities for research. *Nature*, 614(7947), 224-226. <https://www.nature.com/articles/d41586-023-00288-7>