

Breaking the PSYCHcle: Impact of Psychoeducation on the Attitudes Towards Mental Illness of Two Barangays in Bataan, Philippines

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Date received: May 12, 2024

Date revised: May 25, 2024

Date accepted: May 31, 2024

Originality: 91%

Grammarly Score: 99%

Similarity: 9%

Recommended citation:

Turla, V.H.J., Fernando, A.J., Macatangay, P.G., Bayhon, M.R., Corona, A.I., Soldevilla, K.L., & Villazor, J. (2024). Breaking the PSYCHcle: Impact of Psychoeducation on the Attitudes Towards Mental Illness of Two Barangays in Bataan, Philippines. *Journal of Interdisciplinary Perspectives*, 2(7), 518-525.
<https://doi.org/10.69569/jip.2024.0201>

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 an 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.

6.0 Funding

This work received no specific grant from any funding agency.

7.0 Conflict of Interests

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

8.0 Acknowledgment

The researcher would like to express profound gratitude to the Almighty Father, the source of all wisdom and strength, who made this study possible. Sincere thanks are also extended to Dr. Jayvie Villazor for his invaluable expertise, guidance, and suggestions throughout all stages of this research, which have significantly contributed to its enhancement. Appreciation is also due to the Sangguniang Kabataan of Barangay Balon Anito and the Barangay Council of Barangay Gugo for their warm hospitality and permission to conduct research within their communities.

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