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TEACHING APPROACHES IN PHYSICAL EDUCATION AND SKILLS ACQUISITION OF GRADE 7 STUDENTS

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Abstract

The study focuses on how different methods of teaching affect the ability of young learners to develop physical and motor skills in Physical Education (PE). This research likely explores various instructional strategies such as direct instruction, cooperative learning, peer teaching, and game-based learning, and examines how these methods influence students' skills development, engagement, and motivation in PE classes. The study aims to determine which teaching approaches are most effective in helping Grade 7 students acquire fundamental skills such as coordination, balance, agility, and sport-specific techniques. It may also assess the role of teacher-student interaction, feedback, and the learning environment in enhancing skill acquisition. Understanding students' responses to different teaching styles can help educators design more effective PE programs that promote active participation, physical competence, and lifelong fitness habits. The study also contributes to the broader field of education by linking instructional design with physical and cognitive development. In essence, it highlights that how PE is taught can greatly impact not just performance, but also students' attitudes toward physical activity, which is crucial at an early development stage like Grade 7.

Keywords: Physical Education, students' attitudes toward physical activity, motivation, Skill development, skill acquisition.

Introduction

Physical education (PE) plays a crucial role in the development of young individuals, as it not only promotes a healthy lifestyle but also aids in character building and prepares students for a prosperous adolescent life. It is legally mandated in many countries due to its importance in shaping individuals' physical, mental, and social well-being. In the Philippines, the objectives of secondary education, as stipulated under Republic Act 232, Article III, Section 22, aim to build upon the foundations laid in Secondary High School. This includes fostering the development of students' aptitudes and skills, equipping them with the necessary abilities for productive endeavors. Therefore, PE in the secondary education curriculum is not only about physical activity but also about enhancing personal skills, improving self-image, and preparing students for lifelong well-being. The focus of this study is on the teaching approaches in PE and their influence on skill acquisition among Grade 7 students, as teaching methods significantly impact the way skills are taught and learned. Effective teaching strategies are essential for demonstrating how PE skills can be developed and mastered by students. Several studies have explored different aspects of teaching approaches in PE and their impact on skill development. Garcia (2023) examined the effectiveness of various teaching strategies on the skill acquisition of Grade 7 students in PE. This study provided insight into the correlation between teaching approaches and student performance, offering valuable recommendations for improving PE instruction. Sortwell (2021) also contributed to the literature by discussing various teaching models and their effectiveness in PE. His work highlighted the importance of choosing appropriate instructional strategies to promote student engagement and skill mastery. Furthermore, Bores-García et al. (2021) conducted a systematic review on cooperative learning in PE, analyzing its implementation across various educational stages. Their findings emphasized the benefits of cooperative learning in enhancing social skills and physical competencies in PE. In a related study, Alali, Carson, and Collins (2024) examined how cognitive and ecological dynamics perspectives impact skill acquisition, shedding light on how different teaching strategies affected students' movement skill development.

In addition to international research, several studies conducted by Filipino scholars have contributed to the understanding of effective teaching practices in PE. Dr. Tanucan (2021) focused on the preparedness of Filipino PE teachers in implementing remote teaching, especially with the shift to online learning modalities. His research assessed teachers' ability to integrated technology into their instruction, which became especially pertinent during the COVID-19 pandemic. Dr. Magat (2024), in collaboration with Dr. Ignacio and Dr. Duriano, explored dance pedagogy in PE and its role in enhancing students' skill acquisition, mastery, and self-image. Their research demonstrated how dance instruction can positively impact students' physical and emotional development. Dr. Laguer Jr. (2023) also conducted a study on the effectiveness of pre-service PE programs in State Universities and Colleges in Central Luzon, offering insights into how these programs align with the Commission on Higher Education (CHED) standards and contributed to the development of high- quality PE instruction. These studies underscore the importance of effective teaching methods in PE and the impact they have on students' overall development. Research on teaching approaches in Physical Education (PE) and skills acquisition of Grade 7 students in Baguio City has gained considerable attention from regional researchers, with the goal of enhancing PE instruction and ensuring that students develop crucial motor skills and a lifelong commitment to physical activity. Effective teaching strategies in PE are essential for fostering physical competence and promoting a culture of active living among students. A key element of these studies is the identification of best practices in PE instruction that can be tailored to the specific needs of Grade 7 students, a pivotal stage in their physical and academic development.

Similarly, Dr. Layug (2021), affiliated with the University of the Cordilleras, co-authored a study titled "Teachers' Interventions in Improving Numeracy Skills of Grade 7 Students in Baguio City National High School." While the focus of this research was on numeracy, it provided valuable insights into teaching interventions that can be adapted for PE. The effective teaching methodologies and strategies discussed in the study can be applied to PE to enhance skill acquisition, emphasizing the importance of tailored interventions that align with students'

learning needs. Dr. Velario (2021), as a co-researcher in the same study, contributed to identifying and assessing the interventions used to improve numeracy skills among Grade 7 students. These interventions provide a framework for enhancing PE teaching practices in Baguio City. Dr. Capones (2021) also collaborated in this research, providing valuable data on teacher interventions that, although focused on numeracy, offer transferable strategies that can be adapted to PE teaching, further enriching the overall understanding of effective instructional techniques.

In addition to these studies, the introduction of the MATATAG Curriculum by the Department of Education (DepEd) highlights the importance of integrating health and physical education. The MATATAG Curriculum combines previously distinct topics related to health and wellness into a comprehensive wellness education framework. This holistic approach aims to ensure that students develop in all aspects of their well-being—physically, emotionally, intellectually, spiritually, and socially. The curriculum is designed to promote not only physical fitness but also the broader concept of holistic health, which is essential for students' overall growth and development. Collectively, these studies and initiatives demonstrate the commitment of the Commission on Higher Education (CHED) and DepEd to enhancing PE instruction in the Philippines. By exploring and implementing diverse teaching approaches, educators can better facilitate skill acquisition and encourage a culture of active living among Grade 7 students, preparing them for a lifetime of physical and mental well-being. As a result, researchers considered conducting a study on instructors' teaching techniques to grade 7 students in order to further extend their knowledge and abilities in physical education. The researchers will investigate in Baguio Central University Junior High School to observe how the teachers approach teaching physical education to grade 7 students, as well as how pupils exhibit their skills and areas where need to improve or develop.

In developing students' physical skills and fostering lifelong engagement in physical activity, it is essential to understand the theoretical foundations that guide effective teaching practices in Physical Education (PE). The Constructivist Learning Theory

(Piaget, 1952; Vygotsky, 1978) underscores the importance of active, student-centered learning, where knowledge is constructed through experience, exploration, and collaboration. In PE, this perspective supports the use of strategies such as hands-on activities, guided discovery, and game-based learning to help students develop motor skills and deepen their understanding of movement. Equally important is the Self-Determination Theory (Deci & Ryan, 1985), which highlights the role of intrinsic motivation in learning. According to this theory, when students' needs for autonomy, competence, and relatedness are met, they are more likely to engage fully, experience success, and persist in physical activities. Teaching approaches that offer choice, constructive feedback, and opportunities for social interaction can thus enhance both motivation and skill acquisition. Given these insights, effective educators are encouraged to draw from a variety of pedagogical methods, adapting their instruction to support students' diverse needs and curricular goals. This study builds on these theoretical frameworks to examine how different teaching approaches in physical education influence the skill development of Grade 7 students.

Moreover, in a classroom setting, Direct Instruction (DI) is a structured, teacher-centered approach developed by Engelmann and colleagues, emphasizing step-by-step teaching, modeling, reinforcement, and feedback to ensure mastery of skills and knowledge, and often outperforming discovery learning. It features carefully sequenced lessons, explicit explanations, and active student participation, though sometimes criticized for limiting student initiative. Cooperative learning, in contrast, engages students collaboratively in small groups to solve problems and teach each other, fostering mutual support and shared responsibility. The Game-Centered Approach (GCA) uses games as the main context for learning, focusing less on technical drills and more on integrating cognitive and physical skills in authentic play environments. Inquiry-Based Learning encourages students to explore questions and problems independently, promoting critical thinking and personal relevance rather than merely achieving predetermined outcomes. Finally, skills acquisition emphasizes progressive mastery through practice,

feedback, and the development of expert-level automaticity, with students evaluating and refining their abilities to enhance both academic performance and professional readiness.

This study aims to determine the relationship between teaching approaches in Physical Education and the skills acquisition of Grade 7 students. Specifically, it seeks to assess the level of effectiveness of four teaching approaches—direct instruction, cooperative learning, game-centered approach, and inquiry-based learning—as perceived by the students. Additionally, the study intends to evaluate the level of skills acquisition among Grade 7 students in terms of their fundamental motor skills, manipulative skills, and cognitive and social skills. Finally, the study will test the hypothesis that students' perceptions of the effectiveness of these teaching approaches have no significant relationship to their skill acquisition in Physical Education.

Methodology

This study employed a quantitative research design to investigate the effects of different teaching approaches in Physical Education on the skills acquisition of Grade 7 students at Baguio Central University Junior High School. A stratified random sampling technique was used to ensure diverse representation across gender, physical abilities, and socioeconomic backgrounds. Data were gathered through pre- and post-assessment tests measuring motor, manipulative, cognitive, and social skills, complemented by surveys capturing student and teacher perceptions and classroom observations documenting the implementation of instructional strategies. To ensure the reliability and validity of the instruments, expert panels conducted content validation, and a pilot test was administered, with Cronbach's alpha and test-retest methods confirming consistency. Data collection adhered strictly to ethical standards: prior to the study, the researcher secured written approval from school authorities, and informed consent forms were distributed to participants. These forms emphasized participants' right to confidentiality under the Data Privacy Law, voluntary

participation, and the exclusive academic purpose of the research. Descriptive statistics summarized the perceived effectiveness of direct instruction, cooperative learning, game-centered, and inquiry-based approaches, while inferential analyses—including Pearson’s correlation, multiple regression, and one-way ANOVA—examined relationships and differences among variables. All analyses were performed using SPSS to ensure accuracy and rigor. The researcher affirms that all borrowed materials were properly cited and acknowledged. Additionally, generative AI technologies, including Perplexity AI and Gemini AI, were utilized to assist with text refinement, paraphrasing, grammatical correction, and formatting. All AI-generated outputs were carefully reviewed, edited, and validated by the researcher to maintain coherence, precision, and adherence to academic standards, with the final manuscript remaining the sole intellectual responsibility of the author.

Results and Discussion

Level of Effectiveness of the Teaching Approaches in Teaching Physical Education in Grade 7

The analysis of the effectiveness of various teaching approaches in Grade 7 Physical Education revealed that Direct Instruction emerged as the most effective strategy, achieving the highest weighted mean of 3.88 and earning a rating of Highly Effective (HE). This finding underscores the strong impact of teacher-centered methods that rely on clear demonstrations, structured lectures, and step-by-step guidance, particularly in ensuring that students grasp foundational skills safely and consistently. In contrast, Cooperative Learning registered the lowest weighted mean of 2.74, rated as Moderately Effective (ME), suggesting that approaches requiring sustained peer collaboration may face challenges in implementation. These challenges could stem from factors such as time constraints, classroom management demands, or the complexity of coordinating group dynamics effectively within PE settings.

Table 1: Level of Effectiveness of Teaching Approaches in Teaching PE (N = 27)

Indicator	4	3	2	1	TWP	WM	DE	Rank
Direct Instruction	96	9	0	0	105	3.88	Highly Effective	1
Cooperative Learning	28	24	20	2	74	2.74	Moderately Effective	5
Inquiry-Based Learning	56	27	8	0	91	3.37	Highly Effective	2
Games-Based Learning	56	27	8	0	91	3.37	Highly Effective	3
Blended Learning	52	15	2	8	77	2.85	Moderately Effective	4

Overall Weighted Mean (AWM): 3.24 – Moderately Effective

Legend:

Scale	Statistical Limits	Description	Symbol
4	3.26 – 4.00	Highly Effective	HE
3	2.51 – 3.25	Moderately Effective	ME
2	1.76 – 2.50	Rarely Effective	RE
1	1.00 – 1.75	Least Effective	LE

Interestingly, both Inquiry-Based Learning and Games-Based Learning were also perceived as Highly Effective, each receiving a weighted mean of 3.37. These results highlight the capacity of discovery-oriented and play-centered strategies to engage students actively and promote critical thinking and problem-solving. Blended Learning, which integrates digital resources with traditional instruction, achieved a moderate rating of 2.85, reflecting its emerging but still limited role in PE classrooms where maintaining active participation is paramount. Overall, the average level of effectiveness across all strategies was Moderately Effective (AWM = 3.24), indicating a general openness to diverse teaching methods while reaffirming a preference for structured, teacher-led instruction.

These findings suggest that Physical Education teachers are most confident and successful in applying approaches that prioritize clarity, control, and safety, particularly when managing large groups or delivering complex motor skills. Nonetheless, the consistently high ratings for Inquiry-Based and Games-Based Learning demonstrate an increasing recognition of the benefits of student-centered strategies in fostering engagement and deeper learning. The comparatively lower effectiveness of Cooperative and Blended Learning points to the need for additional professional development, resources, and support to build teachers' capacity to implement these approaches effectively. This pattern aligns with existing research that affirms the prevalence of Direct Instruction in PE (Tannehill & Lund, 2015) while also acknowledging the value of incorporating interactive, student-driven pedagogies (Casey & O'Donovan, 2015).

Importantly, the relatively lower usage and effectiveness rating of Cooperative Learning should not be interpreted as evidence of its ineffectiveness. Rather, these results likely reflect contextual constraints, including large class sizes, limited instructional time, or insufficient training in facilitating group work. When purposefully implemented, Cooperative Learning can significantly enhance collaboration, communication, and shared responsibility—skills that are integral to holistic student development. Therefore, instead of being overlooked, Cooperative Learning should be regarded as an underutilized approach with considerable potential to enrich Physical Education and cultivate essential interpersonal skills among learners.

Level of Acquisition Skills Among Grade 7

The results of the study indicate that the overall level of skills acquisition among Grade 7 learners in Physical Education was classified as Highly Acquired (HA), with an average weighted mean (AWM) of 3.36. Among the five skill areas assessed, Physical Fitness Skills ranked highest (WM = 3.59), demonstrating that students have effectively developed foundational abilities such as strength, endurance, and flexibility. Knowledge of Rules and Techniques followed closely with a weighted mean of 3.56, also rated Highly Acquired, reflecting

students’ solid understanding of game mechanics, procedures, and the conventions that govern physical activities. Teamwork and Cooperation similarly achieved a high rating (WM = 3.33), highlighting the positive impact of collaborative learning and structured group tasks in PE classes.

In contrast, Decision-Making in Games and Self-Confidence in Performing were both rated as Moderately Acquired (WM = 3.15), suggesting these competencies are still emerging and present opportunities for further development. These skills often require higher-order thinking, adaptability, and psychological readiness, which may not be as consistently nurtured in traditional PE environments dominated by teacher-led instruction. The findings imply that while students have acquired robust basic physical and cognitive skills, their personal and socio-emotional competencies—particularly the ability to make independent decisions during gameplay and feel confident in their performance—require additional support.

Table 2: Level of Skills Acquisition Among Grade 7 Students (N = 27)

Indicator	4	3	2	1	TWP	WM	DE	Rank
1. Physical Fitness Skills	72	21	4	0	97	3.59	Highly Acquired	1
2. Teamwork and Cooperation	48	39	2	1	90	3.33	Highly Acquired	3
3. Decision-Making in Games	40	33	12	0	85	3.15	Moderately Acquired	4
4. Knowledge of Rules and Techniques	68	24	4	0	96	3.56	Highly Acquired	2
5. Self-Confidence in Performing	56	15	12	2	85	3.15	Moderately Acquired	5

Overall Weighted Mean (AWM): 3.36 – Highly Acquired

Legend:

Scale	Statistical Limits	Description	Symbol
4	3.26 – 4.00	Highly Acquired	HA
3	2.51 – 3.25	Moderately Acquired	MA
2	1.76 – 2.50	Rarely Acquired	RA
1	1.00 – 1.75	Least Acquired	LA

This underscores the importance of integrating instructional practices that actively promote critical thinking, student autonomy, and self-assurance. Incorporating reflective activities, game scenarios requiring tactical choices, and consistent positive reinforcement can help learners become more independent and resilient. These results are consistent with previous research indicating that physical fitness and rule knowledge are typically the first competencies to develop in early secondary PE due to structured drills and clear, directive teaching (Bailey et al., 2009). However, skills like decision-making and self-confidence are often shaped by the learning climate, teacher encouragement, and opportunities for student-led exploration—factors not always emphasized in conventional programs (Dyson, 2014).

Importantly, the moderate acquisition of self-confidence should not be viewed as a deficiency but as a natural developmental area that benefits from intentional support. Confidence in physical activities, especially those involving peer observation and public performance, evolves gradually as students gain experience and reassurance. Rather than representing a limitation, these findings highlight the need to create learning environments where students feel safe to take risks, reflect on their progress, and build self-belief.

Taken together, the results demonstrate that while structured, teacher-directed approaches like direct instruction remain highly effective and widely used, learner-centered methods such as games-based and inquiry-based learning also have substantial potential to enhance student engagement and growth when thoughtfully implemented. Overall, this study points to the importance of striking a balance between traditional pedagogies and progressive strategies that nurture not only physical competence but also critical thinking, collaboration, and confidence. Achieving this balance will require ongoing

professional development, curriculum innovation, and a commitment to fostering holistic development in Physical Education to prepare students for the demands of the 21st century.

Relationship of the Teaching Approaches to the Skills Acquisition of Grade 7 Learners in Learning Physical Education

The study examined the relationship between the perceived effectiveness of teaching approaches in Physical Education (PE) and the level of skill acquisition among Grade 7 learners. Results showed that while the perceived effectiveness of teaching approaches was rated as moderately effective, with a mean score of 3.24, the learners' level of skill acquisition was rated highly acquired, with a mean of 3.36. Although these two variables differed slightly in descriptive ratings, a Pearson correlation test revealed a strong positive correlation ($r = 0.802$) with a p-value of 0.005, indicating a statistically significant relationship between the effectiveness of teaching approaches and students' skill acquisition. This finding implies that as perceptions of teaching effectiveness improve, so does students' development of physical skills in PE. Notably, the high level of skill acquisition despite only moderate ratings of teaching effectiveness suggests that other factors—such as learner motivation, peer support, the availability of resources, or prior experience with physical activities—may also play influential roles in shaping student outcomes.

These results are consistent with existing literature emphasizing the central role of pedagogy in Physical Education. Mosston and Ashworth's Spectrum of Teaching Styles (2008) demonstrated that a range of instructional approaches can effectively facilitate motor skill development and student engagement. Likewise, Bailey et al. (2009) highlighted that high-quality instruction significantly contributes to students' physical literacy and competence in movement. Additionally, Chen, Sun, and Chen (2017) found that students' perceptions of teaching quality are closely linked to their motivation and learning outcomes in PE. Collectively, these studies reinforce the conclusion that enhancing the perceived effectiveness of

instructional strategies directly benefits learners' skill development.

The implications of these findings are important for educators and policymakers. They highlight the need for continuous professional development to equip PE teachers with a diverse repertoire of engaging, student-centered strategies that can elevate instructional effectiveness. Schools may also consider implementing feedback mechanisms such as peer evaluations, student reflections, or classroom observations to help teachers monitor and refine their practices. Ultimately, this study underscores the significant impact of effective teaching on students' skill acquisition in Physical Education and reinforces the idea that sustained investment in instructional quality is key to improving educational outcomes and fostering lifelong engagement in physical activity.

Conclusions and Recommendations

Conclusions

The findings of this study revealed that Direct Instruction remains the predominant teaching approach in Grade 7 Physical Education due to its structured, teacher-centered nature, which facilitates clear demonstrations and guided practice, enabling students to master basic fitness skills and understand rules effectively. However, the comparatively limited use of Cooperative Learning reflects challenges related to time constraints, classroom management, and teachers' confidence in facilitating group activities. While students demonstrated strong acquisition of physical fitness skills and knowledge of rules, their decision-making skills and self-confidence were only moderately developed, suggesting that teacher-led approaches alone may not fully address the broader cognitive and socio-emotional dimensions of learning in PE.

Recommendations

To promote a more holistic development of learners, it is recommended that teachers integrate a greater variety of student-

centered strategies such as Cooperative Learning, Games-Based Learning, and Inquiry-Based Learning. These methods can foster critical thinking, collaboration, and confidence alongside physical competence. Additionally, school administrators should invest in targeted professional development programs to train PE teachers in the effective application of diverse instructional approaches. By equipping educators with the skills and resources to balance structured instruction with innovative, learner-focused methods, schools can create richer, more engaging PE experiences that nurture both the physical and personal growth of students.

References

- [1] Alali, H., Abraham, A., & Collins, D. (2024). A pragmatic approach to skill acquisition for physical education. *Journal of Sports Sciences*, 2(5), 567–579.
<https://www.research.ed.ac.uk/files/415465923/AlaliEtal2024QAPragmaticApproach.pdf>
- [2] Borich, G. D. (2016). *Effective teaching methods: Research-based practice* (8th ed.). Pearson.
- [3] Bryman, A. (2020). *Social research methods* (5th ed.). Oxford University Press.
- [4] Brown, P., & Sharp, H. (2022). *Research engagement in higher education: Strategies for faculty development*. Routledge.
- [5] Butler, J. I., & McCahan, B. J. (2005). Teaching games for understanding as a curriculum model. *Physical Educator*, 62(3), 120–135.
- [6] Chow, J. Y., Davids, K., Button, C., Shuttleworth, R., Renshaw, I., & Araújo, D. (2007). The role of nonlinear pedagogy in physical education. *Review of Educational Research*, 77(3), 251–278.
<https://doi.org/10.3102/003465430305615>
- [7] Creswell, J. W. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- [8] Dyson, B., Griffin, L. L., & Hastie, P. A. (2004). Sport education, tactical games, and cooperative learning: Theoretical and pedagogical considerations. *Quest*, 56(2), 226–240.
<https://doi.org/10.1080/00336297.2004.10491823>
- [9] Dyson, B., & Casey, A. (2012). *Cooperative learning in physical education: A research-based approach*. Routledge.
- [10] Farias, C., Mesquita, I., & Hastie, P. A. (2015). Game performance and understanding within a hybrid sport education season. *Journal of Teaching in Physical Education*, 34(3), 363–383.
<https://doi.org/10.1123/jtpe.2013-0229>
- [11] Graham, G., Holt/Hale, S. A., & Parker, M. (2013). *Children moving: A reflective approach to teaching physical education* (9th ed.). McGraw-Hill.
- [12] Metzler, M. W. (2011). *Instructional models for physical education* (3rd ed.). Pearson.
- [13] Rink, J. E., & Hall, T. J. (2008). Research on effective teaching in elementary school physical education. *The Elementary School Journal*, 108(3), 207–218.
https://scholarcommons.sc.edu/cgi/viewcontent.cgi?article=1009&context=pedu_facpub
- [14] Siedentop, D., Hastie, P., & van der Mars, H. (2019). *Complete guide to sport education* (3rd ed.). Human Kinetics.
- [15] Slavin, R. E. (2014). *Cooperative learning: Theory, research, and practice* (2nd ed.). Allyn & Bacon.
- [16] Ward, P., & Lee, M. A. (2005). Peer-assisted learning in physical education: A review of theory and research. *Journal of Teaching in Physical Education*, 24(3), 205–225.
<https://doi.org/10.1123/jtpe.24.3.205>

DISPUTE RESOLUTION STRATEGIES OF THE LUPON TAGAPAMAYAPA IN PALMA-URBANO, BAGUIO CITY: A QUALITATIVE-DESCRIPTIVE ANALYSIS

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Abstract

This study explores the types of disputes addressed by the Lupon Tagapamayapa in Palma Urbano, Baguio City, including debt collection, boundary conflicts, money lending disagreements, and cases of unjust vexation. Three members of the Lupon participated in the research, which employed a qualitative-descriptive design with guided interviews as the primary data collection method. The findings reveal that these disputes significantly shape the strategies used by Lupon members to manage complex interpersonal conflicts. The participants emphasized their role in resolving minor issues, such as neighborly disputes and gossip, at the community level, thereby reducing the caseload of formal courts through effective mediation and conciliation. This study aligns with UN Sustainable Development Goal (SDG) 16 – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels. Specifically, it supports Target 16.3, which aims to promote the rule of law at the national and international levels and ensure equal access to justice for all, and Indicator 16.3.1, which measures the proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially

recognized conflict resolution mechanisms. In addition, the study highlights the critical role of ongoing training and capacity building, aligning with Target 16.6, which emphasizes the development of effective, accountable, and transparent institutions at all levels. Key strategies identified include time management, active listening, empathy, and the application of interpersonal and conflict resolution skills developed through experience and continuous learning, reflecting the importance of building resilient and responsive community-based justice systems.

Keywords: conflict, disputes, Lupon Tagapamayapa, mediation, strategies

Introduction

This study explores the dispute resolution strategies and skills of the Lupon Tagapamayapa, as mandated by the 1991 Local Government Code (Republic Act 7160), which authorizes barangay-level mediation for cases within their jurisdiction. Disputes, commonly defined as disagreements between two or more parties, can emerge in various social, legal, and personal contexts and are typically resolved through negotiation, mediation, or arbitration. Globally, land disputes are the most common, especially affecting indigenous populations, as seen in the 2020 data showing over 81,000 families experiencing land squatting (Ennes, 2021). According to the International Chamber of Commerce (2024), 890 new cases were reported globally in 2023, most of which were mediated under ICC rules, with only a small portion proceeding to arbitration. In Asia, disputes often arise over land ownership, ethnic tensions, and clan-based issues, typically resolved through community-based courts like those in the Philippines. The Barangay Justice System in the Philippines, operating through the Lupon Tagapamayapa, provides a culturally rooted and legally recognized means of settling local disputes, with a notable success rate—76.92% of over 425,000 cases filed in 2013 were resolved through amicable settlement (DILG, 2013).

Local data from Barangay Palma-Urbano highlights the effectiveness of Lupon members in settling disputes, with case resolution rates improving annually, culminating in a 100% resolution rate in 2023. The Lupon acts as the grassroots justice system, composed of a chairman, secretary, and 10 to 20 members selected every three years, who mediate disputes through traditional methods like *pakikipagkasundo* (conciliation). However, the Lupon's authority is limited to disputes occurring within their barangay and among residents within their jurisdiction, and they must avoid any biases or conflicts of interest (Garcia, 2021). The Katarungang Pambarangay system, originating from Filipino customs of communal conflict resolution, was institutionalized by Presidential Decree 1508 in 1978. Studies such as the one by Enverga University in Lucena City reveal that while Lupon members are generally competent in mediation, their roles in ensuring equality and confidentiality are under-recognized. To improve this, community support programs and continuous training are recommended to build trust and enhance the Lupon's effectiveness in maintaining peace and justice at the grassroots level (Perez, 2022).

In the Bacolod City, Negros Occidental in part of Visayas the researchers used a qualitative research method. The informants were the ten (10) Lupon Chiefs of the ten (10) most populated barangays in Bacolod City. The participants were subjected to an individual in-depth interview. The results of this study are encapsulated in eight growing concepts that reflect the lived experiences of the Lupon Tagapamayapa in resolving barangay conflicts. These are grouped into four thematic areas: positive experiences, negative experiences, coping strategies, and future aspirations. Under positive experiences, two key concepts emerged—Achievement through Dispute Resolution and Mediators' Commitment to Peacekeeping—highlighting the sense of fulfillment and dedication displayed by Lupon members. On the other hand, two negative themes were identified: Barriers to Mediation, which include logistical, procedural, or structural obstacles, and Behavioral Issues of Antagonizing Parties, which involve aggressive attitudes and non-cooperation. In terms of strategies to overcome these challenges, participants emphasized Establishing Rapport Between Disputing Parties and Dynamic Management of Disputes, showcasing their adaptability and

interpersonal skills. Lastly, the aspirations of Lupon members centered on Continuous Training and Seminars on Dispute Resolution and the Desire for Improved Mediation Skills. These findings suggest a need for ongoing capacity-building programs to enhance the legal knowledge, mediation competencies, and communication strategies of Lupon Tagapamayapa members to enable more effective and empathetic conflict resolution (Laguda, 2022).

Supporting literature reinforces the relevance and effectiveness of the Lupon's role in community-based conflict resolution. A study conducted in Sarangani Province revealed that Lupon Tagapamayapa members employed a variety of strategies tailored to the needs of disputing parties, emphasizing the importance of mediator skills in achieving reconciliation (Jumalon et al., 2018). Similarly, in Davao del Norte, Lupon effectiveness was rated "very high," largely due to their competence in conciliation, issuance of legal documentation, and adherence to procedural standards (Villamor & Dagohoy, 2020). These studies affirm the critical function of Lupon in maintaining community peace and order. The current study contributes further by offering actionable insights for barangay officials and communities on dispute handling, promoting discipline, and fostering peaceful social interactions. It is especially significant for youth, particularly criminology students, as it provides real-world applications of dispute resolution concepts taught in academic settings. Additionally, the study serves as a valuable resource for future researchers seeking to build upon community-based justice frameworks and develop more generalized conclusions for broader implementation.

The theoretical framework of this study draws on three key theories to examine the dynamics of disputes and conflict resolution within the context of the Lupon Tagapamayapa. First, Social Conflict Theory, attributed to Karl Marx, posits that society is in a constant state of struggle due to competition over scarce resources, power imbalances, and conflicting values (Hayes, 2024). This theory helps explain how disputes often arise from disagreements related to finances, authority, and expectations within the community—challenges that the Lupon must navigate despite the influence of deeply embedded social

norms. Second, Social Exchange Theory, developed by George C. Homans in 1958, emphasizes that social interactions are driven by a cost-benefit analysis, where individuals seek to maximize rewards while minimizing costs. In the context of barangay disputes, this theory suggests that successful resolution depends on cooperative behavior and mutual agreement, with parties often seeking remedies such as compensation or restitution. It also mirrors familial relationships, where sustained investment and reciprocity are vital for long-term harmony. Lastly, Feminist Theory highlights the gendered power imbalances in society and critiques the systemic inequalities that often marginalize women, especially in community dispute mechanisms. Gender-based violence and underrepresentation of women in decision-making bodies like the Lupon can lead to unjust outcomes. This theory underscores the importance of integrating gender-sensitive approaches in mediation, including training for lupon members and increasing female representation to ensure that women's safety, rights, and voices are adequately addressed (Renzitti, 2008). Collectively, these theories provide a comprehensive lens through which the dispute resolution practices of the Lupon ng Barangay can be critically assessed, ensuring more equitable and effective outcomes for all members of the community.

This study is highly significant as it provides valuable insights for various stakeholders, including barangay officials, the community, youth students, and future researchers. For barangay officials, the findings offer practical suggestions and preferences in addressing disputes, particularly by sharing effective strategies and techniques to manage aggressive complainants, based on real-life experiences. For the community, which serves as the foundation of a peaceful neighborhood and where most familial conflicts arise, the study promotes awareness on appropriate behavior and self-discipline during dispute hearings, while also shedding light on the day-to-day challenges faced by lupon members in amicable settlements. Youth students, particularly those in criminology, will gain knowledge on proper social conduct and will be better equipped to avoid involvement in violent situations. The study also enhances their understanding of dispute resolution, which is relevant to both academic learning and future roles in law enforcement. Additionally, the research serves as a valuable reference for future researchers by providing

foundational knowledge and context that may support subsequent studies and contribute to more comprehensive and generalized conclusions. Specifically, the study aims to determine the dispute resolution strategies employed by the lupon in Barangay Palma-Urbano by addressing the following objectives: (1) to identify the dispute resolution methods and strategies of the lupon in handling conflicts in Barangay Palma-Urbano; (2) to determine the causes of disputes commonly encountered by the lupon; and (3) to explore the specific conflict resolution approaches utilized by the lupon in managing these disputes.

Methodology

This study employed a qualitative-descriptive research design using focused interviews to explore the dispute resolution strategies and experiences of the Lupong Tagapamayapa in Barangay Palma-Urbano, Baguio City. The researchers selected the Lupon members—including the chairman, secretary, and fourteen members—as respondents due to their recognized competence and award-winning performance in dispute mediation. Data were gathered using an interview guide structured into three parts: identifying dispute strategies, causes of conflicts, and specific resolution techniques. The interviews were conducted face-to-face at scheduled times, with informed consent forms distributed and explained beforehand to uphold ethical standards and confidentiality in accordance with Republic Act No. 10173 or the Data Privacy Act. Prior to the interviews, formal permissions were secured from the university dean and barangay captain, and ethical protocols were strictly observed, ensuring respondents were aware of their rights and the voluntary nature of their participation.

Data were analyzed using Reflexive Thematic Analysis (RTA) by Braun and Clarke (2006), a qualitative method suitable for interpreting participants' lived experiences through emergent themes rather than predetermined frameworks. The researchers employed saturation sampling, continuing interviews until no new data surfaced. Through iterative coding and reflection, they identified key dispute types—such as defamation, property conflicts, and monetary disagreements—and categorized their

outcomes as resolved, unresolved, or ongoing. RTA enabled the researchers to interpret how the Lupon facilitated reconciliation and managed disputes, ultimately aligning findings with the study’s objectives. The approach ensured that the results were comprehensive, credible, and reflective of the Lupon’s actual mediation practices, providing valuable insights for future improvements in community-based justice systems.

Results and Discussion

The Dispute Resolution and Strategies of the Lupon Tagapamayapa in Handling Dispute

The data gathered from the respondents identified several key dispute resolutions and strategies encountered by the *Lupon Tagapamayapa* in the performance of their duties. These challenges were organized into three sub-themes: Uncooperative Parties, Limited Role of the Punong Barangay, and Intimidation and Process Evasion.

Uncooperative Parties

One of the primary challenges cited by the respondents is the uncooperative behavior of

Table 1. The Dispute Resolution and Strategies of the Lupon Tagapamayapa in Handling Dispute

Key Themes	Sub-Themes	Descriptions
Challenges in Mediation	Limited Role of the Punong Barangay	Some disputing parties refuse to attend hearings or become aggressive, making resolution difficult.
		The barangay captain can only listen during mediation and cannot offer suggestions, limiting their influence.

	Intimidation and Process Evasion	Some individuals with legal knowledge try to bypass the Katarungang Pambarangay process, delaying resolution.
Ensuring Fairness and Impartiality	Commitment to fairness	Lupon members strive to be neutral and impartial, ensuring equal treatment for all parties.
	Training and Decision-Making	Barangay officials undergo training to enhance their ability to handle disputes effectively.
	Selection of Lupon Members	Disputing parties can choose which lupon member will preside over their case to avoid bias.
	Inhibition from Cases	Lupon members must inhibit themselves from handling cases involving friends or relatives to maintain neutrality.
Public Awareness and Community Engagement	Information Dissemination	Flyers and IEC campaigns are used to inform residents about the functions of the lupon.
	Community Initiative	Residents actively support the lupon, showing trust in the mediation process by contributing during assemblies.

some disputing parties. Certain individuals deliberately refuse to attend scheduled mediation sessions or exhibit hostile and aggressive behavior, which obstructs the smooth facilitation of the dispute resolution process. Key informant 1 states:

“...they are uncooperative at ayaw nila makinig kung minsan yung suggestions din namin, it’s either gusto

nilang... gusto nila or minsan ayaw din nila kasi sya... ”
(“...they are uncooperative and sometimes they don’t want
to listen to our suggestions. It’s either they want things their
way... or sometimes they refuse just because it’s coming
from us.”)

This lack of cooperation often results in delays and hinders the efficiency of barangay-level mediation. Officials recognize that this type of behavior is usually determined by individual circumstances, such as working schedules, financial restrictions, or cultural reasons, and try to negotiate with these circumstances while maintaining the procedure. According to Conflict Transformation Theory, effective dispute resolution requires not only addressing the immediate issues but also transforming the attitudes and relationships of the parties involved. When parties are uncooperative, it often signals deeper issues of mistrust or perceived power imbalances, which must be acknowledged and addressed for mediation to succeed (Lederach, 2003). The study of Garcia and Santos (2019) supports this with their finding that uncooperative behavior in barangay mediation is frequently linked to past unresolved grievances and a lack of confidence in the neutrality of mediators. Their research highlights the importance of building rapport and trust as foundational steps to encourage participation and cooperation among disputing parties.

Limited Role of the Punong Barangay.

Another noted limitation is the restricted role of the *Punong Barangay* during mediation proceedings. Although the barangay captain presides over the hearings, their function is primarily to facilitate the process rather than to provide advice or suggest resolutions. Key informant 3 states:

“Ti Punong Barangay ket mabalin laeng nga dengngeg iti pannakimmediation ken saan a mabalin nga mangited ti suhesyon, isu a naikkaten ti impluensiana.” (The barangay captain can only listen during mediation and cannot offer suggestions, limiting their influence.)

This limitation often frustrates both the officials and the parties involved, especially when the *Punong Barangay* possesses insights that could potentially aid in the peaceful settlement of the dispute. According to the Procedural Justice Theory, the perceived fairness of a dispute resolution process is heavily influenced by the parties' ability to participate meaningfully and the neutrality of the mediator. While neutrality is essential, excessive passivity by the mediator-such as refraining from offering any guidance or suggestions-may reduce the mediator's effectiveness and the parties' confidence in the process. The theory suggests that mediators who can balance neutrality with constructive facilitation tend to achieve better outcomes because they help clarify issues and guide parties toward mutually acceptable solutions without imposing decisions.

Supporting this, the study by Respicio (2025) on barangay mediation procedures highlights that the Punong Barangay's role is to mediate informally and confidentially, primarily by listening to the parties and encouraging dialogue. However, the study also notes that the inability of the Punong Barangay to provide advice or propose resolutions can limit their influence and sometimes prolong disputes, especially when parties expect more active leadership in resolving conflicts. When initial mediation fails, cases are referred to the Pangkat ng Tagapagsundo (conciliation panel), which has a more structured role in negotiation and may exercise greater discretion in facilitating settlements. This two-tiered system reflects a deliberate balance between informal facilitation and more formal conciliation but also underscores the limitations of the Punong Barangay's role in directly shaping outcomes. To address disputes resolutions and strategies in case handling and decision-making, barangay officials and lupon members undergo training sessions. These trainings are designed to enhance their skills in communication, negotiation, and conflict resolution, which are essential in facilitating fair and effective mediation. However, some respondents expressed the need for more frequent and updated training to adapt to evolving community dynamics.

Intimidation and Process Evasion

Respondents also reported that some disputants, particularly those with legal knowledge or influence, attempt to circumvent the *Katarungang Pambarangay* process. Key informant 3 states:

“May mga kliyente na dahil marunong sila sa batas, pinapahirapan pa ang proseso. Pinipilit nila kung ano ang alam nila, kahit hindi iyon ang dapat sundin sa barangay level.” ("There are clients who, because they are knowledgeable about the law, make the process more difficult. They insist on what they know, even if it's not the procedure that should be followed at the barangay level.")

In the context of Barangay Palma Urbano, individuals with higher education levels or professional expertise sometimes challenge the barangay's authority, believing their knowledge gives them an advantage in dispute resolution. This dynamic creates an imbalance in the mediation process, where some individuals insist on their interpretations of legal procedures, disregarding the barangay's established processes. These individuals may pressure the other party or exploit technicalities to avoid barangay mediation, opting instead to escalate matters directly to formal legal proceedings. This behavior undermines the community-based dispute resolution mechanism and contributes to further delays. According to Theory: Social Status Theory, this theory assumes that individuals hold different levels of social status within a group or society based on various attributes of a person such as education, occupation, wealth, and social connections. Higher status individuals often possess more power, influence, and resources, which they may use to their advantage in social interactions, including conflict resolution.

In relation with the Power Dynamics in Social Interactions (December 2024) This broader area of study examines how power is distributed and exercised in interpersonal and group settings. It investigates how individuals with more power can influence the behavior and outcomes of those with less power. This includes how power imbalances can affect negotiation, conflict resolution, and adherence to established norms and procedures. Status and Influence consistently shows that individuals with higher recognised status often have more influence in group discussions and decision-making processes. Their opinions may be given

more weight, and they may feel more entitled to assert their views. In the context of barangay mediation, individuals with higher education or professional expertise might believe their knowledge grants them higher status and therefore more authority in interpreting procedures.

Despite these obstacles, the *Lupon Tagapamayapa* demonstrates a consistent commitment to fairness. Members strive to maintain impartiality and neutrality in handling cases, ensuring that both parties are given equal opportunity to express their side. This dedication to justice helps build community trust in the barangay justice system. In summary, while the *Lupon Tagapamayapa* faces various structural and behavioral challenges in handling disputes, it continues to function as a vital mechanism in promoting peace and order at the barangay level. Its members' commitment to fairness, supplemented by ongoing training and transparent procedures, underscores the value of community-based dispute resolution despite persistent limitations.

The Causes of Disputes Experienced by the *Lupon* in Barangay Palma-Urbano

Disputes are a natural consequence of social interaction within communities, often emerging from various sources such as financial obligations, interpersonal misunderstandings, and external pressures. In the context of Barangay Palma-Urbano, the *Lupon Tagapamayapa* serves as the primary mechanism for resolving these conflicts at the grassroots level. Based on the data gathered, the most common causes of disputes in the barangay are categorized into three major areas: **financial issues**, **interpersonal conflicts**, and **external or social factors**.

Financial Issues

A significant portion of disputes mediated by the lupon stem from financial disagreements. These include unpaid debts, failure to honor lending arrangements, disputes over shared property or inheritance, and misunderstandings related to business transactions. Key informant 1 states:

“Dispute sa pera or sum of money.” (...financial disputes.)

Financial conflicts often arise due to economic instability, lack of resources, or misunderstandings about financial obligations. Given that the participant explicitly mentioned money-related disputes, it reinforces the idea that economic stress plays a major role in local conflicts. Respondents noted that many of these cases arise due to the informal nature of agreements, which often lack documentation and clear terms, making resolution more complex.

Table 2. Causes of Disputes Experienced by the Lupon in Barangay Palma-Urbano.

Key Themes	Sub-Themes	Descriptions
Common Causes of Disputes	Sum of Money	Many disputes arise from financial issues, such as unpaid debts or lack of funds for obligations.
	Unjust Vexation	Cases involve behaviors that cause unnecessary
	Mayabang (Arrogance)	Disputes arise due to individuals displaying excessive pride and disregarding others' opinions.
External Influences that Escalate Disputes	Cultural and Normative Practices	Community norms and traditions sometimes contribute to conflict escalation.
	Ego and Social Status	Some individuals, particularly those who are educated or financially stable, refuse to admit mistakes, leading to prolonged disputes.
	Road Rage Commotion	Due to multiple accessible roads in the barangay, conflicts arise from traffic-related incidents that often require barangay intervention.

Impact of Family Communication on Disputes	Open-Mindedness	Parents who are open to understanding their children's behaviors help prevent disputes within families.
	Daily Expressions	Mood and language use, including profanity, can turn simple conversations into heated arguments.
	Lack of Recorded Cases	Some family-related disputes have not yet been formally encountered by the Lupon.

This finding aligns with Bohnsack (2020), who emphasized that financial stress is a significant source of community conflicts, particularly in low-income settings. The prevalence of monetary disputes suggests a need for financial literacy programs and accessible financial assistance initiatives to mitigate such issues.

A theory that also supports these findings is Maslow’s Hierarchy of Needs (Maslow, 1943), which suggests that financial disputes stem from unmet basic needs, such as security and stability. When individuals struggle with financial insecurity, they are more likely to experience stress, leading to interpersonal conflicts. Additionally, Social Conflict Theory (Marx & Engels, 1848; Coser, 1956) explains that financial struggles often create power imbalances, where those with fewer resources are at a disadvantage, leading to disputes over money and obligations. These theories support the idea that financial literacy programs and economic assistance could help reduce conflicts in the barangay.

Interpersonal Conflicts

Personal grievances and misunderstandings among neighbors, friends, and even family members were also cited as frequent sources of disputes. These include issues such as gossip, accusations, disrespect, jealousy, and domestic altercations. In the case of Brgy. Palma Urbano, arrogance is the cause of interpersonal conflicts. Key informant 1 states:

“*Nalalastog/mayabang.*” (Arrogance)

Arrogance or excessive pride can lead to interpersonal disagreements. As one key informant explained, it often causes disputes because it creates tension in relationships, especially in close communities where respect matters. When someone acts superior or dismisses others' feelings, it can lead to resentment and conflict. Boastful or stubborn behavior can provoke arguments, and pride may stop a person from admitting mistakes or finding common ground. Over time, small disagreements build up, making it harder to repair relationships and leading to long-term issues. This is consistent with the Social Dominance Theory (Sidanius & Pratto, 1999), which postulates that people who attempt to establish their dominance over others may establish conflict-causing social hierarchies. Furthermore, Goleman's (1995) Emotional Intelligence Theory emphasizes that those with lower emotional intelligence may find it difficult to control their emotions, which might result in more interpersonal problems. This observation supports Hofstede's (2018) cultural dimensions theory, which highlights how cultural norms shape conflict behaviors. Understanding these cultural factors is essential in developing dispute-resolution mechanisms that respect community traditions while fostering harmony.

Another external influence is ego and social status, with some individuals refusing to admit mistakes due to their educational or financial background. The key informant emphasized this by stating,

“kasi yung iba kasi is ‘Sige kahit magkita tayo korte’ sa ego ba, dahil sa sa ego nagpapayabangan sila. actually meron kaming case na ganyan.” (“Because some people say, ‘Fine, let’s just meet in court’—it’s about ego. Because of their pride, they try to outdo each other. In fact, we’ve had a case like that.”)

Ego and social status can fuel conflicts, especially when people refuse to admit mistakes because of their education or financial standing. Some may feel that acknowledging faults would make them look weak, leading to stubbornness and tension in disputes. This can create a divide between individuals, as those with higher status might dismiss others' opinions, while those on the receiving end may feel disrespected or looked down upon. Over time, this pride-driven behavior makes resolving conflicts

harder, turning minor issues into bigger problems. This pattern is consistent with Ramirez and Cruz's (2020) study, which found that hierarchical social structures often fuel conflicts in communities where social standing plays a critical role. Social cohesion programs and values formation initiatives can help mitigate the negative impact of status-driven disputes by encouraging humility and understanding. Road rage commotion is another escalating factor, as multiple roads in the barangay have led to an increase in vehicular conflicts requiring intervention from local officials. The participant stated, "Knowing na dito sa atin maraming kalsada, yung mga road rage commotion.". With many roads in the barangay, traffic-related conflicts have become more common, often leading to road rage incidents. Disputes over right-of-way or misunderstandings can escalate fast, sometimes requiring intervention from local officials. When a person's temper is triggered, minor arguments can turn into heated confrontations, making road safety not just a concern for drivers but for the entire community.

This finding is supported by Mendoza (2022), who reported that urban expansion and increased vehicular access contribute to rising incidents of road rage. Barangay-level traffic management strategies and road safety campaigns should be implemented to minimize traffic-related altercations. Many of these conflicts are emotionally charged and deeply rooted in long-standing tensions, making them particularly sensitive to mediation. The *Lupon Tagapamayapa* often plays a crucial role in calming tensions and facilitating dialogue between parties.

Social Hierarchies and External Influences

Another layer of conflict arises from perceived social inequalities or the influence of individuals with power or connections. Some respondents shared those disputes can be triggered or worsened by the involvement of influential community members who may assert dominance or manipulate situations to their advantage. Conflicts in Barangay Palma-Urbano aren't just about personal disputes but also cultural with the community, leading to misunderstandings. Long-term residents may see their behavior as disruptive, while tenants might feel unwelcome. Differences in traditions, communication,

or daily routines can create tension, making it harder for people to coexist peacefully. Key informant 2 shares,

“Anong term doon? Yung parang kinagisnan nila na parang practices to a certain group... Most especially tenants... Sila yung tipo ng residents na come and go.” (“What’s the term for that? It’s like something they grew up with—practices specific to a certain group... Most especially the tenants... They’re the type of residents who come and go.”)

Many disputes arise from ingrained community traditions that influence social interactions. Conflicts in Barangay Palma-Urbano aren’t just about personal disputes but also cultural differences, especially with transient residents like tenants. Since they come and go, their customs and habits might not always align with the community, leading to misunderstandings. Long-term residents may see their behavior as disruptive, while tenants might feel unwelcome. Differences in traditions, communication, or daily routines can create tension, making it harder for people to coexist peacefully. According to Social Identity Theory (Tajfel & Turner,1979) individuals derive a sense of identity and self-esteem from their membership in social groups.

When groups perceive themselves as distinct or superior, intergroup biases and conflicts are more likely to emerge. In Barangay Palma-Urbano, the distinction between long-term residents and transient tenants creates in-group and out-group dynamics, fostering mistrust and stereotyping. This theory explains why disputes may escalate beyond individual disagreements to reflect broader social divisions and perceived threats to group identity.

Table 3. Conflict resolution strategies utilized by the lupon to handle disputes

Key Themes	Sub-Themes	Descriptions
Methods to Maintain Neutrality in	Choice of Lupon (Pipili)	Disputing parties select their own Lupon members to ensure fairness and equal representation.

Resolving Disputes	Active Listening (Pinapakinggan namin)	Lupon members listen carefully to both parties to facilitate fair decision-making.
	Clarifying Needs (Tinatanong)	The Lupon members ask the parties about their desired outcomes to find a mutually acceptable solution.
	Reassigning Cases (Pwede naming i-transfer sa ibang member)	If a Lupon member has a relationship with a disputing party, they transfer the case to another member to avoid bias.
	Inhibiting Biased Members (Pinapa-inhibit)	The Punong Barangay ensures that Lupon members with personal ties to the complainant or respondent are excluded from the case to maintain impartiality.
Post-Resolution Steps to Ensure Agreement Compliance	Issuance of Compliance Certificate	A Compliance Certificate is provided to confirm that settlements, such as financial obligations, are fulfilled.
	Conducting a Compliance Hearing	Before issuing the Compliance Certificate, both parties attend a compliance hearing to clarify their responsibilities in resolving the issue.
	Formalizing Agreements	A written agreement is drafted and signed by both parties to document the settlement and ensure accountability.
Strategies for Handling Unfamiliar Disputes	Attending Seminars and Conducting Research	Lupon members undergo seminars and research unfamiliar cases to strengthen their knowledge and decision-making skills.

This behavior-driven dispute aligns with Santos (2021), who noted that social dominance and lack of humility in interpersonal interactions contribute to tensions in communities. Emotional

intelligence and conflict resolution training should be incorporated into barangay-level community-building initiatives to address this issue. Moreover, external influences such as social media, political rivalries, and even cultural differences contribute to the complexity of certain disputes. These findings suggest that the *Lupon Tagapamayapa* in Barangay Palma-Urbano is confronted with a wide array of conflict sources, each requiring a nuanced and context-sensitive approach to resolution. Addressing these disputes involves not only legal or procedural interventions but also socio-cultural understanding and community-based strategies that foster inclusivity and empathy. Conflict Resolution Strategies Utilized by the *Lupon* to Handle Disputes at Barangay Palma-Urbano. The effectiveness of the *Lupon Tagapamayapa* in managing community disputes relies significantly on the strategies they employ to maintain neutrality and ensure compliance with agreements. In Barangay Palma-Urbano, two major categories of conflict resolution strategies were identified: (A) Methods to Maintain Neutrality in Resolving Disputes, and (B) Post-Resolution Steps to Ensure Agreement Compliance.

A. Methods to Maintain Neutrality in Resolving Disputes ***Choice of Lupon***

One notable strategy is allowing the disputing parties to choose the lupon member who will facilitate their case. This selection process promotes a sense of fairness and impartiality, reducing the perception of bias and increasing the parties' trust in the mediation process. Key informant 4 states:

“pag umabot na saamin yung case, pinagpipili na namin sila kung sino ba... sino ba ang gusto nyong lupon... ganyan, syempre si kap at secretary, sila yung magsasabi kasi di naman nila kilala yung mga yun eh... background ganyan... tapos pipiliin...” (“When the case reaches us, we ask them to choose who they want... who do you want as your lupon member? Of course, the barangay captain and secretary will decide because they don’t know those people—like their backgrounds and all. Then, they will choose...”)

The selection process of lupon members also plays a role in ensuring effective dispute resolution. Disputing parties are given the opportunity to select a lupon member to preside over their

case. This practice helps in reducing perceived bias and promotes transparency, although it can occasionally lead to difficulties when parties cannot agree on a presiding member. The theory developed by Tom R. Tyler (1990), procedural justice theory holds that rather than only the results, the people's acceptance of decisions and their willingness to follow authorities depend mostly on the fairness of the procedures being followed. Now, by letting conflicting parties choose the lupon member who will help their case directly reflects the idea of "voice" in the theory. By giving parties the chance to select the mediator or decision-maker, the process increases their sense of participation and fairness. This kind of participation helps to lower their feelings of bias and boost their confidence in the neutrality of the process, which in turn promotes acceptance of the outcome and compliance to the agreements.

One study by Bush and Folger (2005) supports this idea through their work on Transformative Mediation Approach. They argue that mediation should not only aim to solve the problem but also help both sides feel more empowered and understood. Their approach does value the active involvement of the parties, such as giving them a say in choosing the mediator. This matches Tyler's idea of fairness in the process. Allowing people to take part in choosing who will mediate helps them feel respected and makes the process seem fairer. It also helps address deeper issues, which are sometimes overlooked in more traditional ways of resolving disputes.

Active Listening. Lupon members emphasize the importance of active listening during hearings. By attentively hearing both sides without immediate judgment, they create a respectful environment where parties feel acknowledged, which often leads to more constructive dialogue. Key informant 3 states:

“syempre both parties pinapakingan namin kung ano yung nangyari ganon bago kmi magsasabi kung ano yung sa palagay namin na magiging solusyon sa dalawa na equal.”
(*"Of course, we listen to both parties to understand what happened before we suggest what we think would be a fair solution for both."*)

According to Conflict Resolution Theory active listening creates a respectful environment, and seeking a fair solution for both parties particularly approach that focus on mediation and dialogue. The study of Jeremy Pollack (February 8, 2024) support this with their finding Active listening is a communication skill that demands the listener to feedback what they hear by rewording or restating it in their own words, to ensure that both have a common understanding. Active listening skills establish clarity, encourage trust, and make individuals feel heard. Being heard is a critical component of workplace peacebuilding.

Clarifying Needs. Another critical technique is clarifying the needs and concerns of both parties through guided questioning. This helps in uncovering the underlying issues and ensures that the resolution addresses the root cause of the conflict rather than just the surface-level disagreement. Key informant 2 states: *“Minsan tinatanong namin kung ano ba yung gusto nilung mangyari kasi pag magsuggest kmi nasa kanila naman parin yung decision dahil di naman namin kayang i insist kung ano ang gusto namin na gawin nila.”*

("Sometimes we ask them what they want to happen because when we suggest something, the decision is still theirs. We can't insist on what we want them to do.")

According to the theory: Interest-Based Negotiation, This theory focuses on the need to look at the underlying needs, interests, desires, and concerns of the parties to a conflict, not just their positions. When each party understands why they want what they want, there is a higher likelihood of coming up with mutually satisfactory solutions that satisfy everyone's underlying needs. The mediator plays a key role in helping this process of exploring interests through active listening and sensitive questioning. The study of indeed editorial team (March 26, 2025) supports this with their finding Integrative Negotiation. At most workplaces, two parties or groups might have to come up with an answer that both can live with. Integrative negotiation can prove useful in such a case because the parties can collaborate to come up with a solution that works for both. Learning this negotiation method can make you a more cooperative team member.

Reassigning Cases. When concerns about impartiality arise, cases may be reassigned to another lupon member. This flexibility ensures that all parties maintain confidence in the fairness of the process and that no party feels disadvantaged by the presence of a potentially biased mediator. Additionally, to uphold fairness, lupon members must inhibit themselves from handling cases that involve their friends or relatives. Key informant 1 shares:

“Kapag kamag-anak ko ang sangkot, hindi na ako pwedeng magdesisyon. Kailangang iba ang humawak ng kaso para walang bias.” (“When a relative is involved, I can no longer make a decision. Someone else needs to handle the case to avoid any bias.”)

Key informant 4 shares:

“pag kamag-anak... kamag-anak, kaibigan... kumbaga ako, yung renereklamo ay yung kaibigan ko... kahit kaibigan lang... ako na mismo yung magsasabi na wag na ako, kakilala ko sya... kasi meron namang pagpipilian eh, sampu yan eh, sampu na lupon kasi yan, so during... pag umabot na saamin yung case, pinagpipili na namin sila kung sino ba... sino ba ang gusto nyong kwan... ganyan, syempre si kap at secretary, sila yung magsasabi kasi di naman nila kilala yung mga yun eh... background ganyan... tapos pipiliin... mga apat para kunyari kung hindi available yung isa, pwede yung isa pero tatlo lang talaga dapat yung haharap... tatlong lupon pero yung isa maga-act as the secretary tapos yung isa head... sya yung magu-ulo ng kwan na yun... kaso na yun.” (“When it’s a relative... a relative, a friend... for example, if I’m the one being complained about and it’s my friend... even if they’re just a friend... I myself would say not to include me, I know them. There are other options anyway, there are ten members, so when the case reaches us, we ask them to choose who they want... who they prefer. Of course, the barangay captain and the secretary will decide because they don’t know those people—like their background. Then, they choose about four people so that if one isn’t available, they can choose another, but only three should face the case. Three lupon members, but one will act as the secretary and the other as the head... they will lead the case.”)

The implication of the last two statements is that the Lupon Tagapamayapa prioritizes fairness and impartiality in handling disputes, especially when there is a potential conflict of interest due to personal connections. By removing themselves from cases involving relatives or friends, the mediators ensure that the dispute resolution process is not influenced by bias. Additionally, the practice of selecting different Lupon members to handle the case further emphasizes the commitment to maintaining neutrality. The process allows for an unbiased approach by ensuring that those involved in a case do not have any personal stake or emotional attachment that might affect their decision-making. This reflects a strong emphasis on procedural fairness, where the integrity of the mediation process is preserved by avoiding even the perception of favoritism. This also suggests that there is an established ethical framework within the community for handling sensitive disputes, which is essential for building trust and credibility in the Lupon system. These measures aim to strengthen public trust in the mediation process. This is corroborated by a study by Garcia and Santos (2021), which discovered that community mediators' objectivity and moral behavior greatly increase confidence in regional dispute settlement procedures. It is expected of Lupon members to remain impartial and to treat all parties equally. This is consistent with Rawls' (1971) Theory of Justice, which places a strong emphasis on justice as the cornerstone of social cooperation and judgment. The "veil of ignorance," in Rawls' view, ensures impartiality by preventing bias or favoritism in decision-making. Barangay officials receive frequent training to strengthen their decision-making and conflict-resolution abilities in order to increase their efficacy.

Inhibiting Biased Members. Lupon members who may have personal connections with either of the disputing parties are asked to inhibit themselves from participating in the case. This preventive measure strengthens the credibility of the mediation process and helps avoid conflicts of interest. Key informant 1 states:

“Dito naman kung nakikita ko na yung complainant or respondent ay may kaibigan sa mga lupon members pinapa-inhibit ko sila to make sure na walang biases” (“Here, if I see that the complainant or respondent has a friend among

the Lupon members, I ask them to inhibit themselves to make sure there is no bias.")

According to Conflict theory, Karl Marx assumes that social order is preserved through domination and power. It states that the wealthy and powerful attempt to maintain it by any means necessary, primarily by oppressing the poor and powerless. In connection with inhibiting biased members, it is used to slowly decrease the interest of members over the decision and agreement of both disputing parties. The study of Psychology and Family Law Judicial Bias in Family Court 2012 supports this with their finding that even judges must perform judicial duties without bias or prejudice. The study found that some judges exhibited unconscious biases based on traditional beliefs about gender roles or parenting, which influenced their decision. This study also stated on how judges' own family experiences judgment in their own judicial relatives.

B. Post-Resolution Steps to Ensure Agreement Compliance

Formalizing Agreements. Agreements are carefully documented and signed by both parties and the mediators involved. This formalization not only provides legal weight to the resolution but also reminds the parties of their commitments. Key informant 1 states:

"Ditoy, no makakitaak nga adda kabsat ti complainant wenno respondent kadagiti membro ti Lupon, ipalubosak nga aginhibit da tapno awan ti bias." ("when it comes to settlement they will make an agreement, where both parties will sign after which")

According to legal positivism theory, it holds that for an agreement to be legally binding, it must follow formal requirements set by the legal system. They must meet specific legal requirements such as being written and signed by all parties to be recognized by the law. The study of relational contract: alternative means to settling contract dispute 2018 supports this with their finding that they go beyond the formal written agreements to have relational cooperation between parties. That written contracts sample time to draft contracts that clearly

articulate terms and conditions, firmly can protect themselves from misunderstanding and miscommunication.

Issuance of Compliance Certificate. After a successful resolution, a certificate of compliance is issued to formalize the agreement. This document serves as proof that both parties have willingly agreed to the settlement and are expected to uphold the terms discussed. Key informant 1 states:

“Example sa collection of sums kung бага parang Compliance Certificate para lang ma assure yung nag reklamo na kumpleto pa rin ang mababayaran at least aware den kami na bayad siya.” (“For example, in the collection of sums, it’s like a Compliance Certificate just to assure the complainant that the payment will be completed, and at least we’re also aware that the person has paid.”)

This certificate is given by the barangay secretary to have a copy of agreement that was signed, ensuring responsibility of both parties. According to Regulatory Compliance theory, it deals with the importance and significance of complying with the rules and regulations. This emphasize that the formal mechanism on complying to the laws, regulations or standards are a formal understanding of what they have agreed upon. The study of resolving delays in issuance of legal certificates for filing of actions in the Philippines 2024 supports this with their finding that delays in issuance of legal certificates are necessary to file a case in the court. It measures and addresses the timelines on providing such legal paperwork to ensure access to justice and efficient functioning of the legal system. Meaning upon successful settlement, a certificate of compliance is awarded to seal the agreement. This certificate acts as evidence that both parties have agreed to the settlement voluntarily and are supposed to adhere to the terms agreed upon.

Conducting a Compliance Hearing. To ensure that agreements are honored, follow-up compliance hearings are sometimes conducted. In this post-resolution phase, it is necessary to verify that both parties are adhering to what they have agreed upon. The hearing serves as a way to conduct follow-ups and determine whether each party is fulfilling their responsibilities to settle the dispute properly. These sessions

provide an opportunity to assess whether the terms of the resolution have been implemented and allow for further mediation if necessary. Key informant 1 states:

“Alam mo na nag comply yung agreement then here comes the compliance meeting to monitor, if the both parties comply in the agreement they have.” (“You already know that the agreement was complied with, then comes the compliance meeting to monitor whether both parties are adhering to the agreement they made.”)

To have final working output to the dispute they should follow the certain hearings that the barangay settled. The post resolution steps also had the formalizing agreements, in which a written agreement is drafted and signed by both parties to document the settlement and ensure accountability. According to Interest Based Relational Approach (IBR) from Conflict resolution theory. This approach focuses on understanding the both interests of parties. It creates a good relationship which is number one priority in resolving disputes. It also addresses problems separately and makes decisions clearly. Lastly it emphasizes the importance of finding mutually beneficial solutions while resolving conflicts. Another related theory was the social exchange theory. Social Exchange theory is a concept that suggests the behavior rises from what they demand. In this idea agreements are more likely to be seen when both parties feel that they have received fair value and are treated with.

Attending Seminars and Conducting Research. To enhance their capabilities, lupon members also participate in seminars and undertake research to stay informed about effective mediation practices. This continuous learning approach allows them to refine their strategies and better serve the community. Key informant 1 states:

“Mahalaga ang training namin dahil dito namin natutunan kung paano humawak ng kaso nang patas at walang kinikilingan.” (“Our training is important because it is where we learned how to handle cases fairly and without bias.”)

These strategies reflect the barangay's commitment to a fair, transparent, and sustainable approach to dispute resolution. The *Lupon Tagapamayapa* of Barangay Palma-Urbano demonstrates adaptability and integrity in managing conflicts—an essential factor in fostering peace and cohesion at the grassroots level. Research by consulting the experts are strategies for handling unfamiliar disputes to have knowledge and understanding on the legal background of each case. This also emphasizes the importance of communication to higher authorities on dealing with complex situations. The key informants shared that:

“Hindi bawal ang magtanong even sa DILG mag tatanong kami pag meron kaming hindi alam”. (It's not prohibited to ask questions—even with the DILG, we ask when there's something we don't understand.)

This way learning from other people, especially from DILG and other officials, has a big influence on the remaining knowledge of the lupon. Case Assessment and discussion is the final stage of strategies for handling unfamiliar disputes. In this particular matter the Punong Barangay will now gather the lupon to assess the case, analyze the background, and formulate an appropriate resolution strategy. In this term the lupon will now discuss if this case is related to this lower court or it shall be passed on to the higher court. After that, the plan of action needed to deal with the disputes. The participant shared that:

“ang sinasabi ko sa lupon kasi may assessment din kami pag may hindi ka alam wag ka mag dunong dunongan mali rin pala.” (“What I tell the Lupon is that we also conduct assessments, and if there's something you don't know, don't pretend to know. It's actually wrong.”)

In order to have a stepping stone in dealing with each case it must be known for everyone on how it works and how it is done. This theme is related to the Dual Concern Theory. According to Organizational Conflict 2024, it proposes that dealing with conflicts requires balancing the concern of achieving one's own goals with the concern for others and maintaining healthy relationships. In other words, it needs to be balanced to achieve an equitable outcome for both the community and the Lupon. It

is also essential to establish a working relationship between disputing parties so that trust and respect can be built.

In addition, the Thomas-Kilmann Conflict Resolution Styles highlight the different ways individuals address, engage in, and resolve conflicts. These approaches refer to how a person handles various situations. This is related to the theme because it explores how the Lupon interacts with the disputing parties and the solutions they will implement.

Action Plan Formulated to Address the Problems Encountered by the Officials at Barangay Palma-Urbano

The mediating disputes in Barangay Palma Urbano remains a constant challenge that necessitates a formalized and educated intervention. At its core are non-cooperative stakeholders, the inability of barangay officials to intervene decisively during mediation, and the need for fairness and objectivity at every stage of the process. Despite the strategies used today such as patience, moral communication, and ongoing training these tend to be inhibited by cultural biases, legal restraints, and lack of resources. This research action plan is intended to investigate and assess these current mediation practices, determine their effectiveness, and determine areas for improvement. Through the experiences, strategies, and roles of the Lupon Tagapamayapa, the research endeavors to create implementable recommendations to improve the mediation process and bring about fairer dispute resolution in the community. For the purpose of supporting fundraising and community outreach, members of Lupon should initiate a "Ticket for a Cause" program to generate immediate funds for seminars, meetings, and other operational requirements.

Table 4. Action plan formulated to address the problems encountered by the Lupon Tagapamayapa.

Issues and Challenges	Needs	Objective	Strategy	Agencies Involved
1.Lack of facilities and pending	Fundraising and community outreach.	To ensure timely need of resources.	Talk with Punong Barangay to approve	Barangay official of Palma-Urbano and

requisition of the barangay for development	Ticket for a cause.	To have an immediate fund in Lupon for the purpose of seminars and meetings. To gain additional budget purposely for the expansion of their facility.	solicitation or donation drives conducted within the community. The Lupon members should have programs related for the ticket for a cause to raise a small fine	local government unit (LGU)
	Strict implementation of parliamentary procedures and give sanctions to those who violates the rules forum meeting	To make a more specific and dynamic flow of every session meeting and to assess statements if it is related to the issues or not.	The barangay chairman and the committee should formulate a rule on forum meeting as guidelines in every hearings	Barangay chairman, councilors, secretary and the lupon members
2. Intimidation, uncooperative parties and attempts to evade mediation process	Awareness programs about the individual rights of the residents of the Barangay Palma-Urbano and also for respectful community behavior.	To address and reduce the incidents of harassment and petty quarrels that disturbs the peace in the barangay and to promote understanding about personal boundaries and the consequences in violating it.	Conduct regular seminars or IEC campaigns on basic individual rights to educate the residents about the consequences of harassing others personal boundaries.	Barangay Council of Palma-Urbano Lupon Tagapamayapa Department of Justice (DOJ)

3.Unjust vexation particularly the disputed parties of the barangay palma - urbano	Emotional intelligence and conflict resolution training Cultural sensitivity and awareness programs	To enhance community harmony through better communication and emotional regulation To promote cultural understanding and social cohesion	Implement workshops on emotional intelligence, respect, and humility Promote respectful language and behavior through IEC campaigns	Lupon Tagapamayapa Department of Social Welfare and Development (DSWD)
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This will also serve to raise additional budget for the expansion of facilities as envisioned. Coordination with the Punong Barangay is necessary in order to seek approval for solicitation and donation drives within the community. The Lupon members, together with the Barangay officials of Palma-Urbano and the LGU, must create and implement fundraising initiatives with community interests at heart while being transparent and inclusive of the community during the process.

In order to meet the increasing demand for better financial management and minimize the number of conflicts resulting from financial pressure and pride-based actions in Barangay Palma-Urbano, there is a need to adopt a wide-ranging financial literacy and budgeting education program. The aim is to provide residents with the skills and knowledge necessary to make effective financial choices, effectively manage their income and expenditures, and appreciate the implications of debt. To do this, the strategy will entail the frequent holding of community-based seminars and workshops on issues like budgeting, saving, prudent borrowing, and avoiding financial scams. The sessions will also emphasize the psychological and social effects of bad financial choices, such as how pride and social standing can cause unnecessary confrontations. The Palma-Urbano Barangay Council will coordinate this effort, in collaboration with local banks such as the non-governmental organizations (NGO).

Conclusions and Recommendations

Conclusions

Handling disputes within Barangay Palma-Urbano presents several challenges, including uncooperative individuals, limited authority of the Punong Barangay, and the avoidance of mediation by some parties. These issues are further compounded by low public awareness and minimal community involvement. The root causes of disputes often stem from financial difficulties, poor family communication, social issues, and external pressures, highlighting the need for stronger unity and more effective conflict resolution strategies. Over time, disputing parties, especially parents, tend to become more open and expressive, showing the potential for personal growth through the mediation process. The strategies employed by the Lupon Tagapamayapa—such as allowing parties to choose mediators, eliminating bias, and clearly defining roles—have proven effective in promoting cooperation and adherence to agreements. These conclusions, drawn from thematic analysis, affirm the Lupon’s role in fostering fair and structured dispute resolution at the community level.

Recommendations

Based on the findings, it is recommended that Barangay Palma-Urbano expand its barangay hall to facilitate more efficient movement during dispute proceedings and implement a feedback mechanism after each hearing to improve service quality. To ensure continuous service, at least one member of the Lupon Tagapamayapa should always be present in the barangay office. Additionally, an annual retreat is advised to reinforce the values of integrity, fairness, and commitment among Lupon members. Barangay officials are also encouraged to actively follow up on their budget requests and engage with the city mayor to communicate the barangay’s operational needs, particularly in enhancing their capacity for effective dispute resolution.

References

- [1] Coser, L. A. (1956). *The functions of social conflict*. Free Press.
- [2] Domingo, C. G. (2020). *Dispute resolution and crisis management*. Wiseman's Books Trading, Inc.
- [3] Doyle, L., McCabe, C., Keogh, B., Brady, A., & McCann, M. (2019). An overview of the qualitative descriptive design within nursing research. *Journal of Research in Nursing*, 25(5), 443–455. <https://doi.org/10.1177/1744987119880234>
- [4] Dual concern theory. (2019). *Organizational conflict*. <https://conflictresolutionolution.weebly.com/dual-concern-theory.html>
- [5] Garcia, M. A. (2021). *Dispute resolution and crisis/incident management*. Wiseman's Books Trading, Inc.
- [6] Gordon, T. (1970). *Parent effectiveness training: The proven program for raising responsible children*. Wyden.
- [7] Hayes, A. (2024). Conflict theory: Definition, founder, and examples. *Investopedia*. <https://www.investopedia.com/terms/c/conflict-theory.asp>
- [8] Herrity, J. (2024). 5 conflict management styles (with tips and examples). *Indeed, Career Guide*. <https://www.indeed.com/career-advice/career-development/conflict-management>
- [9] Joachimd. (2024, September 26). ICC dispute resolution statistics: 2023. *ICC – International Chamber of Commerce*. <https://iccwbo.org/news-publications/news/icc-dispute-resolution-statistics-2023/>
- [10] Jumalon, J. U., Pelima, R. G., & Caday, K. A. (2018). Communications for peacebuilding: Conflict resolution skills and strategies of Lupon Tagapamayapa in selected communities of Sarangani Province. *Journal of Health Research and Society*, 1, 6–6. <https://rb.gy/dovmu>
- [11] Keith, G. B. (2022, November 24). Baguio City's top barangay awarded. *The Manila Times*. <https://www.manilatimes.net/2022/11/25/news/regions/baguio-citys-top-barangay-awarded/1867670/amp>
- [12] Laguda, J. (2024). Managing disputes at the grassroots: Experiences of Lupon Tagapamayapa chiefs. *International Journal of Law and Politics Studies*, 6(5), 184–200. <https://doi.org/10.32996/ijlps.2024.6.5.9>
- [13] Marx, K., & Engels, F. (1848). *Manifesto of the Communist Party*. Progress Publishers.
- [14] Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
- [15] Moore, C. W. (2003). *The mediation process: Practical strategies for resolving conflict* (3rd ed.). Jossey-Bass.
- [16] MSEd, K. C. (2023). Understanding social exchange theory in psychology. *Verywell Mind*. <https://www.verywellmind.com/what-is-social-exchange-theory-2795820>
- [17] Nickerson, C. (2023, October 25). Social exchange theory of relationships: Examples & more. *Simply Psychology*. <https://www.simplypsychology.org/what-is-social-exchange-theory.html>
- [18] Perez. (2022). An assessment on the Lupon Tagapamayapa in resolving disputes in the selected barangays in Lucena City. *Manuel S. Enverga University Foundation*. <https://mseuf.edu.ph/research/read/1792>
- [19] Pratt, T. C., Cullen, F. T., Sellers, C. S., Winfree, L. T., Madensen, T. D., Daigle, L. E., Fearn, N. E., & Gau, J. M. (2009). The empirical status of social learning theory. <https://www.northcentralcollege.edu/news/2022/09/13/why-conflict-resolution-important>
- [20] Rawls, J. (2005). *A theory of justice*. Belknap Press.
- [21] The Asia Foundation. (2016). *Community dispute mediation in Asia*.
- [22] Thibaut, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Erlbaum.
- [23] University of Wisconsin Law School. (2022). About restorative justice. *University of Wisconsin Law School*. <https://law.wisc.edu/fjr/rjp/justice.html>
- [24] Villamor, J. F. M., & Dagohoy, R. (2020). Decision-making quality towards the effectiveness of the conciliation process of Lupon Tagapamayapa. *International Journal of Research and Innovation in Social Science*, 5(3), 26–43.

ENHANCING CRIMINOLOGY INTERNS PERFORMANCE: NAVIGATING INFLUENTIAL FACTORS

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Abstract

This study investigates the readiness of 95 criminology interns for their internship experiences, focusing on individual, academic, and environmental factors. Results indicate interns generally exhibit a positive attitude towards work; demonstrate initiative; and teamwork skills. Individual factors influencing readiness include a genuine interest in the internship and an understanding of preferred learning styles. The curriculum's alignment with internship requirements and faculty support are key academic influences. Community involvement, strong university-college partnerships, and addressing societal perceptions of criminology are significant environmental factors. The findings underscore the importance of fostering positive attitudes, promoting proactive learning, aligning curricula with practical skills, cultivating problem-solving abilities, strengthening community engagement, and addressing societal perceptions to optimize criminology intern performance and readiness for future careers. These insights inform practical recommendations for enhancing criminology internship programs.

Keywords: criminology internship, teamwork, learning styles, faculty support, community involvement, university-college partnerships, societal perceptions.

Introduction

Internships are a critical component of criminology education, providing students with essential practical experience that complements their theoretical knowledge. They serve as a bridge between academic learning and real-world application, enabling students to develop crucial skills necessary for their future careers in law enforcement and criminal justice. Research indicates that criminology internships significantly enhance interns' knowledge and skill development, particularly in applying theoretical concepts to practical situations (Libradilla, et. al., 2023). However, despite their recognized importance, there remain substantial gaps in understanding the specific factors that influence the performance of criminology interns.

In the Philippines, the Commission on Higher Education (CHED) has recognized the importance of work-integrated learning, as highlighted in CHED Memorandum Order No. 20, Series of 2013, which outlines policies and guidelines for internships in higher education programs. This memorandum emphasizes the need for practical experiences to enhance students' competencies and job readiness, particularly in fields such as criminology. Internships provide students with the opportunity to apply their theoretical knowledge in real-world settings, develop essential skills, and build professional networks. These experiences not only enhance their understanding of criminology but also prepare them for future career opportunities in the criminal justice system. Through internships, students have the chance to work alongside professionals in law enforcement, legal advocacy, rehabilitation programs, and more. This hands-on experience allows them to witness the inner workings of the justice system and gain insights into the challenges and intricacies of the field (Mina & Aydinan, 2019).

Furthermore, internships offer a valuable platform for students to explore different specializations within criminology. Whether it's working with at-risk youth, researching crime patterns, or collaborating with forensic experts, internships provide a glimpse into the diverse opportunities available in the field. As students engage in internships, they also have the chance to reflect on their career aspirations and the practical application

of their academic studies. The insights gained from these experiences can be invaluable in shaping their future academic pursuits and professional endeavors. This revision integrates the CHED Memorandum effectively, supporting the significance of internships in enhancing job readiness among criminology students in the Philippines (Mina & Aydinan, 2019).

The study of Hellfeld & Frenzel (2018) revealed that internships serve as invaluable platforms for students to apply theoretical knowledge in real-world settings, honing their problem-solving abilities, and enhancing their understanding of the complexities inherent in criminological practice. By immersing students in professional environments and exposing them to various aspects of criminological practice, internships provide invaluable insights into potential career pathways and foster professional growth. The study underscored the importance of internships as a bridge between academic learning and practical application, emphasizing their role in preparing students for the demands of the workforce in the field of criminology (Hellfeld & Frenzel, 2018).

Furthermore, Loughran and Young's (2016) study sought to provide light on the extent to which internships help bridge the gap between academic knowledge and real-world application in the subject of criminology. The study shed light on the effectiveness of work-integrated learning in preparing students for professional practice in the criminal justice system by reviewing their experiences and evaluating the influence of internships on their skill development.

Moreover, Ricciardelli and Vandenberg (2019) demonstrated the mutual benefits of internships, emphasizing the symbiotic relationship between student skill development and corporate recruitment efforts. The study highlighted how internships serve as transformative experiences, providing students with practical skills and insights into the real-world application of criminological theories while simultaneously offering employers the opportunity to identify and recruit promising talent within the field. Their findings emphasized the importance of internships as integral components of academic programs, facilitating experiential learning and fostering

connections between academia and industry within the field of criminology.

Furthermore, the research conducted by Cope and Benier (2017) shed light on the complex and multidimensional nature of these issues, emphasizing the wide range of variables that can affect interns' experiences and professional development. Their conclusions also emphasized the significance of identifying and resolving the issues that arise in criminology internships in order to guarantee the efficacy and caliber of experiential learning opportunities. The identification of moral conundrums, organizational limitations, and interpersonal dynamics emphasized the necessity of all-encompassing support systems and resources to help interns navigate these complexities. Beck and Waters' (2014) findings revealed a range of experiences, with students recognizing the multiple benefits of internships, including opportunities for professional development and skill enhancement. However, the study also highlighted many obstacles experienced by interns, such as job ambiguity and workplace conflict, emphasizing the complexities of internship experiences and the wide range of elements that might influence students' views and experiences in the field. Their findings highlighted the importance of taking into account students' perspectives and experiences when designing internship programs that maximize educational and professional benefits for participants in the field of criminology.

An investigation into the effects of criminology internships on Filipino students was carried out by Santos and Reyes (2018). Santos and Reyes' study found that internships are important components of criminology education since they facilitate holistic development and prepare students for future employment in the discipline. Their research offered empirical evidence to support the value of experiential learning opportunities in the criminology curriculum by highlighting the favorable effects of internships on students' academic, career, and personal domains. The study adds to the growing body of literature on internships in criminology education by providing insights that can inform the development of internship programs tailored to the needs and aspirations of Filipino students, thereby improving the quality and relevance of criminology education in the Philippines.

Using viewpoints from Philippine colleges, Cruz and Garcia (2016) carried out a study that concentrated on the difficulties and possibilities present in criminology internships. Their research highlighted the need of collaboration between academics and industry in improving these experiences for students. Their findings shed light on the difficulties of criminology internships in the Philippines, indicating a variety of challenges faced by students, such as access to internships, insufficient supervision, and incompatibilities between academic preparation and occupational requirements.

Moreover, Dela Cruz and Ramos (2019) provided useful insights on the practical dynamics of mentorship in criminology internships, laying the groundwork for improving internship programs and optimizing learning outcomes for aspiring criminologists in the Philippines. While existing studies have documented the positive impacts of internships on skill acquisition and professional readiness, they often lack a comprehensive analysis of the variables affecting intern performance. For instance, factors such as mentorship quality, organizational support, and the nature of tasks assigned during internships have not been thoroughly explored. A study highlighted that while internships are perceived as beneficial, issues like insufficient communication and inadequate training can hinder the overall effectiveness of these programs. Moreover, there is a need for frameworks that systematically evaluate these influencing factors to enhance the internship experience (Mapangdol, 2024).

The study “Navigating the Complexities: Internship Experiences in Criminology” is significant because it provides valuable insights to a wide range of stakeholders, including criminology interns, the College of Criminal Justice Education (CCJE), law enforcement agencies, future students, and researchers. By examining the experiences of criminology interns, the study highlights how students can enhance their skills, confidence, and career readiness, while also offering CCJE the opportunity to refine curricula, internship requirements, and student support services. Law enforcement agencies and other host institutions benefit through improved training settings that

produce more competent and productive interns, while prospective students gain from enhanced programs shaped by evidence-based findings. Furthermore, the research contributes to criminology literature by addressing gaps in knowledge on performance influencers, serving as a foundation for future studies. Specifically, this study aims to determine the level of internship readiness among criminology students, identify the individual, academic, and environmental factors influencing their readiness, and assess the extent to which internship experiences affect their work readiness. It is guided by the hypothesis that the performance of criminology interns during on-the-job training is significantly influenced by various contextual factors, demonstrating a meaningful relationship between these factors and interns' overall performance outcomes.

This study is grounded on several sociological and criminological theories that explain how interns learn, adapt, and develop within their professional environments. Social Learning Theory, introduced by Albert Bandura (1977), posits that individuals acquire knowledge and skills not only through direct experiences but also by observing others. In the context of “Navigating the Complexities: Internship Experiences in Criminology”, this theory emphasizes how criminology interns learn from observing law enforcement officers, criminal justice practitioners, and researchers in real-world settings. By witnessing the practical application of criminological theories and techniques, interns shape their own professional practices, while feedback and reinforcement from mentors strengthen desired behaviors and skill development (Bandura, 2020). Labeling Theory, advanced by Howard Becker (1963) and Edwin Lemert (1967), further explains how societal reactions influence interns' self-perceptions and behaviors. Within their placements, interns may be labeled by supervisors, colleagues, or community members, and such labels can affect their confidence, career aspirations, and awareness of how labeling processes contribute to inequality and marginalization within the criminal justice system.

Complementing these perspectives, Role Theory, developed by George Herbert Mead (1934) and Erving Goffman (1959), provides insights into how interns navigate multiple roles such as

learner, researcher, and practitioner, depending on their tasks and the expectations of their supervisors. These shifting roles shape their professional identity, interactions, and career development. Finally, Strain Theory, introduced by Robert Merton (1938) and later expanded by Agnew (2020), highlights the stressors interns may encounter, including heavy workloads, ethical dilemmas, and exposure to sensitive cases. These strains can lead to frustration or burnout, especially when coupled with pressures to perform and demonstrate competence. Together, these theories provide a comprehensive framework for analyzing the experiences of criminology interns, illustrating how learning, labeling, role adaptation, and strain converge to influence their performance and professional growth.

The experiences of strain among interns in criminology can influence their perceptions of the field, their career aspirations, and their likelihood of engaging in deviant behaviors or unethical conduct (Agnew, 2020). Critical Criminology is a theoretical perspective that examines power dynamics, inequality, and social injustices within the criminal justice system and broader society (Newburn & Rock, 2018). In the context of internship experiences in criminology, Critical Criminology intersects with interns' exposure to systemic issues, disparities, and injustices within the criminal justice system (Potter, 2020). Interns may encounter firsthand the realities of social inequalities, discrimination, and injustices faced by individuals and communities involved in the criminal justice system. Through their internship experiences, interns may develop a critical awareness of these issues and engage in critical reflection on the role of social structures, policies, and practices in perpetuating injustice. Moreover, interns may become actively involved in efforts to advocate for structural change, challenge oppressive systems, and promote equity and fairness within the field of criminology and society at large (Potter, 2020).

Methodology

This study employed a quantitative descriptive research design to systematically describe and quantify the factors influencing the performance of criminology interns through the

use of structured questionnaires, enabling the identification of patterns and relationships not easily captured in qualitative approaches. Conducted at Baguio Central University (BCU), City of Baguio, Philippines, during Academic Year 2024–2025, the research involved ninety-five (95) fourth-year criminology interns officially enrolled in the criminology internship program and actively engaged in assigned placements across various partner agencies. Inclusion criteria required official enrollment, active participation, and consent to participate, while exclusion applied to interns with incomplete participation, lack of consent, or conflicting commitments. Data were collected using a structured questionnaire adapted from Anoyo et al. (2015), consisting of three sections: (1) internship readiness self-assessment using a 4-point Likert scale (1 = Below Expectations to 4 = Outstanding); (2) factors influencing performance efficiency, including mentorship, workload, academic relevance, and motivation, rated on a 4-point scale from Not Influential to Highly Influential; and (3) evaluation of internship experiences on work readiness, rated on a 4-point scale from Disagree to Strongly Agree.

The absence of a neutral midpoint in the scales encouraged decisive responses, enhancing the accuracy of performance evaluation. Questionnaires were distributed electronically after approval from the research director and the College of Criminology, ensuring wide reach and efficiency. Responses were analyzed using weighted mean to interpret performance levels and factor influence, with descriptors clearly defined to guide analysis. Ethical considerations included obtaining informed consent, guaranteeing voluntary participation, ensuring confidentiality through data anonymization and aggregate reporting, and restricting raw data access to the research team. By applying this systematic methodology, the study ensured rigor, validity, and ethical compliance while generating actionable insights to improve internship training and support mechanisms for criminology students.

Results and Discussion

The Level of Internship Readiness Among the Criminology Students

The study surveyed 95 criminology interns to assess their readiness for internships across various indicators. The areas of concern were ranked based on the average weighted mean with the discussion and interpretation of the three (3) highest ranked.

Table 4. The level of internship readiness among the criminology interns (N= 95)

INDICATORS	4 (O)	3 (EE)	2 (MBE)	1 (BE)	TW M	AWM	DE	RANK
1. Achieved internship learning objectives	39 (156)	45 (135)	11 (22)	0 (0)	95 (313)	3.29	O	6
2. Can demonstrate necessary writing and speaking skills	33 (132)	49 (147)	12 (24)	1 (1)	95 (304)	3.2	EE	9
3. Able to apply classroom knowledge to the internship setting effectively	35 (140)	52 (156)	8 (16)	0 (0)	95 (312)	3.28	O	7
4. Demonstrates critical thinking and problem- solving skills	41 (164)	45 (135)	9 (18)	0 (0)	95 (317)	3.34	O	4.5
5. Demonstrates initiative and the ability to learn	43 (172)	48 (144)	4 (8)	0 (0)	95 (324)	3.41	O	2
6. Responded well to supervision and constructive criticism	42 (168)	44 (132)	8 (16)	1 (1)	95 (317)	3.34	O	4.5
7. Showed the capacity to be a self-sufficient, independent worker	35 (140)	51 (153)	8 (16)	1 (1)	95 (310)	3.26	O	8
8. Can work effectively with others on team projects	41 (164)	49 (147)	5 (10)	0 (0)	95 (321)	3.38	O	3
9. Exhibited a sense of responsibility and dependability	50 (200)	32 (96)	13 (26)	0 (0)	95 (262)	2.76	EE	10
10. Exhibited a positive attitude toward work and co-interns	49 (196)	42 (126)	4 (8)	0 (0)	95 (330)	3.47	O	1
AVERAGE						3.27	O	

The results highlight areas where these students excel and areas that require improvement. Among the ten indicators, first in rank with the highest weighted mean (3.47) is the indicator “Exhibited a positive attitude toward work and co-interns”. This indicator suggests that criminology interns generally maintain a positive attitude towards their work environment and colleagues. This implies that the criminology interns are well-equipped with interpersonal skills necessary for effective collaboration and teamwork in professional environments.

The indicator "Demonstrates initiative and the ability to learn" has the second highest weighted mean (3.41). This indicator demonstrates that interns took a considerable initiative in learning new skills throughout their internship. This means that criminology interns are proactive learners who are well-prepared to continue learning and developing throughout their careers. The third indicator with the highest weighted mean of 3.38 is the indicator “Can work effectively with others on team projects”. This means that they demonstrated good teamwork skills, which are crucial in collaborative environments. With its average weighted mean coming as third, it suggests that criminology interns possess strong interpersonal skills necessary for successful collaboration in professional environments. Several studies highlight the importance of these skills in internship settings. For example, research on internship effectiveness often emphasizes the role of attitude and initiative in student learning and success reflected in the study of Stichman & Farkas, (2005). Similarly, studies on workplace success consistently demonstrate the importance of teamwork and collaboration (Mina & Aydinan, 2019).

Table 5.1. The individual factors that influence the readiness of the criminology students (N = 95)

INDIVIDUAL FACTORS	4 (HI)	3 (MI)	2 (SI)	1 (NI)	TWM	AWM	DE	RANK
1. Have a high GWA in major criminology course or high grades in relevant internship course like forensic science, investigation and correction)	36 (144)	44 (132)	15 (30)	0 (0)	95 (306)	3.22	EE	5
2. Recognized academic excellence such as dean’s list, scholarships or research awards.	28 (112)	42 (126)	24 (48)	1 (1)	95 (287)	3.02	EE	9
3. Volunteer experiences in social justice like community outreach.	32 (128)	48 (144)	13 (26)	2 (2)	95 (300)	3.16	EE	6.5
4. Engage to relevant part-time jobs like security officer, student marshal.	24 (96)	47 (414)	18 (36)	6 (6)	95 (279)	2.94	EE	10
5. Have a strong written and verbal communication skills.	31 (124)	47 (141)	12 (24)	5 (5)	95 (249)	3.09	EE	8
6. Capable of identifying problems, analyze situation and develop creative solutions.	36 (144)	57 (171)	2 (4)	0 (0)	95 (319)	3.36	O	3
7. Have a genuine interest to internship	48 (192)	44 (132)	3 (6)	0 (0)	95 (330)	3.47	O	1
8. Demonstrate a long-term commitment to the field of criminology and a desire to gain practical experience.	38 (152)	52 (156)	5 (10)	0 (0)	95 (318)	3.35	O	4

9. Have an understanding on preferred learning style and how to learn best to optimize internship experience.	41 (164)	49 (147)	5 (10)	0 (0)	95 (321)	3.38	O	2
10. Can able to assess own strengths and weakness needed for areas of improvement.	34 (136)	47 (141)	9 (18)	5 (5)	95 (300)	3.16	EE	6.5
AVERAGE						3.21	EE	

These findings are also corroborated by the Social Learning Theory proposed by Albert Bandura. This theory posits that individuals learn through observation, imitation, and modeling. A positive attitude towards work and colleagues can be fostered through observing positive role models in the internship environment. Similarly, initiative and teamwork can be learned by observing and interacting with experienced professionals. Moreover, the same findings are supported by Experiential Learning Theory by David Kolb where it emphasizes the importance of learning through experience and reflection. Internships provide a valuable opportunity for students to apply their knowledge and skills in a real-world setting, fostering initiative and teamwork through practical experience.

Similarly, the theory of human capital as proposed by Adam Smith, Gary Becker, and Theodore Schultz suggests that individuals invest in their own skills and knowledge to increase their value in the labor market. A positive attitude, initiative, and teamwork skills are all valuable assets that can enhance a graduate's employability. The factors that influence the readiness of the criminology students This visualizes the table regarding the individual, academic and environmental factors that influence the readiness as perceived by the 95 criminology interns as the respondents. The areas of concern were rank based on the average weighted mean with the discussion and interpretation of the three (3) highest ranked to the lowest ranked.

The individual factor ranked highest with an average weighted mean (AWM) of 3.47 is the indicator “Have a genuine interest to internship”. It indicates that having a genuine interest in participating in internships is crucial for students' readiness. This suggests that motivation and enthusiasm play significant roles in preparing students for practical experiences. With an AWM of 3.38, the indicator “Have an understanding on preferred learning style and how to learn best to optimize internship

experience” highlights the importance of self-awareness regarding how one learns best to optimize internship experiences. Students who understand their learning styles are better equipped to adapt and benefit from internships. Ranking third with an AWM of 3.36, the indicator “Capable of identifying problems, analyze situation and develop creative solutions” emphasizes the value of critical thinking skills, specifically, identifying problems, analyzing situations, and developing creative solutions, in enhancing student readiness.

A meta-analysis by Abrami et al. (2008) in the Review of Educational Research found that interventions explicitly designed to teach critical thinking skills had a significant positive impact on students' cognitive abilities. Similarly, research by Halpern (1998) in *Thinking and Reasoning* highlights the importance of critical thinking for effective problem-solving and decision-making in various contexts. This aligns with Bloom's Taxonomy, which emphasizes the importance of higher- order thinking skills such as analysis, evaluation, and creation. Students who can apply these skills are better equipped to handle the complex and unpredictable challenges that may arise during an internship, leading to more meaningful learning experiences.

This academic factor with an indicator “The curriculum includes courses that directly align with the skills and knowledge required for successful internship performance” received the highest average weighted mean (AWM) of 3.53, which is categorized as "Highly Influential" (HI). It indicates that students perceive a strong alignment between their coursework and internship requirements as crucial for their readiness. The curriculum's alignment with the skills and knowledge required for successful internship performance is highly valued by students. Studies on curriculum development, such as "Curriculum Development: A Guide to Practice" by Oliva (2009), emphasize the importance of aligning learning objectives with real-world applications to enhance student engagement and learning outcomes. Research by Anderson and Krathwohl (2001) on Bloom's Revised Taxonomy also highlights the need for curriculum to focus on application and analysis of knowledge, preparing students for practical experiences like internships. This aligns with Constructivist Learning Theory, which posits that

students learn best when they can connect new information to existing knowledge and experiences. A curriculum that explicitly connects coursework to internship requirements allows students to build on their prior learning and apply their knowledge in meaningful ways, leading to greater understanding and retention (Bruner, 1990).

Table 5.2. The academic factors that influence the readiness of the criminology students

ACADEMIC FACTORS	4 (HI)	3 (MI)	2 (SI)	1 (NI)	TW M	AWM	DE	RANK
1. The curriculum includes courses that directly align with the skills and knowledge required for successful internship performance.	51 (204)	43 (129)	1 (2)	0 (0)	95 (335)	3.53	HI	1
2. The curriculum includes a strong foundations in criminology theory, research methodologies and relevant legal frameworks.	48 (192)	41 (123)	6 (12)	0 (0)	95 (327)	3.44	HI	4
3. Faculty members provide guidance and support to students throughout the academic journey.	46 (184)	48 (144)	1 (2)	0 (0)	95 (330)	3.47	HI	3
4. Faculty members connect students with professionals in the field through guest lecturers providing insights into career paths and potential internship opportunities.	52 (208)	37 (114)	6 (12)	0 (0)	95 (331)	3.48	HI	2
5. Faculty members employ variety of assessment methods to evaluate student learning through written examination, presentation, research and practical applications.	44 (176)	40 (120)	11 (22)	0 (0)	95 (318)	3.35	HI	8
6. The University offer well-structured internship programs with clear expectations, support system, and opportunities for professional development.	45 (180)	41 (123)	9 (18)	0 (0)	95 (321)	3.38	HI	7
7. The university provides placement services that match the interest and skills.	41 (164)	53 (159)	1 (2)	0 (0)	95 (325)	3.42	HI	5.5
8. Conducts career counselling services to help students identify internship opportunities.	48 (192)	39 (117)	8 (16)	0 (0)	95 (325)	3.42	HI	5.5
AVERAGE						3.44	HI	

With an AWM of 3.48, this academic factor with an indicator “Faculty members connect students with professionals in the field through guest lecturers providing insights into career paths and potential internship opportunities” also falls under the descriptive equivalent of "Highly Influential." It highlights the value placed by students on networking opportunities facilitated by faculty members to enhance their career awareness and access to internships. These findings indicate that the role of faculty members in connecting students with professionals through guest lectures is highly regarded by students.

Research on the impact of social capital on career development supports the idea that networking is essential for students' career prospects. For example, Granovetter's (1973) study on "The Strength of Weak Ties" emphasizes the importance of connections to individuals outside one's immediate social circle for accessing new information and opportunities. Additionally, studies on mentorship, such as Kram's (1985) research on "Mentoring at Work," highlight the role of experienced professionals in guiding students' career development. This is supported by Social Learning Theory, which emphasizes that learning occurs through observation, imitation, and modeling. When faculty members connect students with professionals, students can observe and learn from experienced practitioners, gaining insights into career paths and potential internship opportunities (Bandura, 1977). The third academic factor has an AWM of 3.47, again classified as "Highly Influential" is the indicator “Faculty members provide guidance and support to students throughout the academic journey”. It underscores the significance of ongoing support from faculty in helping students feel prepared for internships. The provision of guidance and support by faculty members throughout students' academic journeys is highly appreciated by students. This factor emphasizes the crucial role that educators play in mentoring and advising students as they navigate their studies.

Studies on the impact of faculty-student interactions on student success have consistently shown that students who receive support and guidance from faculty members are more likely to persist in their studies and achieve their academic goals. For example, research by Tinto (1993) on student retention

emphasizes the importance of social and academic integration for student success. Additionally, studies on advising, such as Habley's (2004) research on "The Status of Academic Advising," highlight the role of advisors in helping students navigate their academic journeys. This aligns with Attachment Theory, which posits that individuals thrive when they have secure relationships with supportive caregivers. Faculty members who provide guidance and support act as attachment figures for students, providing a sense of security and encouragement that can help students feel more confident and prepared for internships (Bowlby, 1969).

The table above suggests that several environmental factors play a significant role in shaping the experiences and career aspirations of criminology students. The average score of 3.30 indicates a generally "Highly Influential" (HI) across all factors. Community involvement is the most influential factor with the computed AWM of 3.45 described as "Highly Influential" (HI). The strong engagement between the university, local government, and community organizations provides students with valuable real-world experiences and connections. This active involvement likely enhances their understanding of criminology in practice and fosters a sense of civic responsibility. Research on inter-institutional collaborations, such as those by Borden and Bottrill (2008), highlights the potential benefits of such partnerships, including enhanced resource sharing, increased program quality, and improved student outcomes.

Additionally, studies on learning communities, such as Tinto's (2003) research on "Learning Better Together," emphasize the importance of creating supportive learning environments that foster collaboration and engagement. This is supported by Systems Theory, which emphasizes that the various components of a system (e.g., university, college, students) are interconnected and interdependent. Strong partnerships between the university and the college of criminal justice education create a more cohesive and integrated system, leading to enhanced learning outcomes for students (Bertalanffy, 1968).

Table 5.3. The environmental factors that influence the readiness of the criminology students (N = 95)

ENVIRONMENTAL FACTOR	4 (HI)	3 (MI)	2 (SI)	1 (NI)	TWM	AWM	DE	RANK
1. There is a number and variety of internships available in the field of criminology in the student’s geographical area.	34 (136)	44 (132)	16 (32)	1 (1)	95 (301)	3.17	MI	6
2. There is a projected demand for criminology graduates.	28 (112)	54 (162)	13 (26)	0 (0)	95 (300)	3.16	MI	7
3. There is a strength of partnerships between the university and the college of criminal justice education.	53 (212)	31 (93)	11 (22)	0 (0)	95 (327)	3.44	HI	2
4. There is a community involvement between the university and local government unit which engage the students with real- world experiences and connections with community organizations.	54 (216)	30 (90)	11 (22)	0 (0)	95 (328)	3.45	HI	1
5. University Resources for Internship Preparation like career counseling services, resume workshops, interview preparation session, and professional development opportunities.	35 (140)	48 (144)	11 (22)	1 (1)	95 (307)	3.23	MI	5
6. Societal perceptions of criminology: The prevailing societal views and perceptions of the field of criminology which can influence student’s motivation and career aspirations.	44 (176)	41 (123)	9 (18)	1 (1)	95 (318)	3.35	HI	3
7. Cultural Norms and Expectations: certain professions may be perceived as more prestigious or desirable than others, which can shape students preferences for internships and careers.	39 (156)	47 (141)	9 (18)	0 (0)	95 (315)	3.32	HI	4
AVERAGE						3.30	HI	

Second in rank is the “Strong partnerships between the university and the college of criminal justice education” described as highly influential with the computed AWM of 3.44. These partnerships likely create a more integrated and robust learning environment, potentially offering students access to more resources, specialized programs, and networking opportunities. Research on inter-institutional collaborations, such as those by Borden and Bottrill (2008), highlights the potential benefits of such partnerships, including enhanced resource sharing, increased program quality, and improved student outcomes. Additionally, studies on learning communities, such as Tinto's (2003) research on "Learning Better Together," emphasize the importance of creating supportive learning environments that foster collaboration and engagement.

This is supported by Systems Theory, which emphasizes that the various components of a system (e.g., university, college, students) are interconnected and interdependent. Strong partnerships between the university and the college of criminal justice education create a more cohesive and integrated system, leading to enhanced learning outcomes for students (Bertalanffy, 1968). Societal views and perceptions of the criminology field significantly impact students. Positive perceptions can boost motivation and career aspirations, while negative perceptions might create challenges. Understanding and addressing these perceptions is crucial. This portrays the third in rank among the seven indicators with an AWM of 3.35 described as highly influential. Studies on the impact of social stereotypes on academic performance, such as Little, et.al (2018) research on "stereotype threat," demonstrate that negative stereotypes can undermine students' confidence and performance.

Additionally, research on the impact of media portrayals on public perceptions of crime and justice, such as Morphey & Huisman (2002) research on "Media, Crime, and Criminal Justice," highlights the need to address negative stereotypes and promote accurate information about the field of criminology. This

aligns with Labeling Theory, which posits that societal perceptions and labels can have a significant impact on individuals' self-concept and behavior. Negative perceptions of the criminology field can lead students to internalize negative stereotypes, undermining their motivation and career aspirations (Becker, 1963). The level of influence of the internship experiences to the work readiness by the criminology interns This visualizes the table regarding the level of influence of the internship experiences to the work readiness as perceived by the 95 criminology interns as the respondents. The areas of concern were rank based on the average weighted mean with the discussion and interpretation of the three (3) highest ranked to the lowest ranked.

The table above portrays the level of influence of the internship experiences to the work readiness by the criminology interns. The average score of 3.50 indicates a generally "Strongly Agree" (SA) across all factors. The indicator with the highest ranking is the "Realistic understanding of internship" with the AWM of 3.62 described as "Strongly Agree" (SA). Internships provide a realistic understanding of the demands, challenges, and rewards of working in the criminal justice field. This includes understanding the political landscape that influences criminal justice policy and implementation. Seeing how resource allocation decisions affect daily operations gives students valuable context they cannot get in the classroom. They also see the long hours, paperwork, and the emotional strain placed on criminal justice professionals. Building on Kolb's Experiential Learning Theory, we can consider Dewey's philosophy of education, which emphasizes "learning by doing" and connecting education to real-world experiences. Dewey argued that education should prepare students for life, and internships directly embody this principle. Internships move students beyond passive reception of information towards active engagement and knowledge construction. This enhances critical thinking skills when students can apply learned principles to real world scenarios.

Table 6. The level of influence of the internship experiences to the work readiness by the criminology interns

IMPACTS	4 (SA)	3 (MA)	2 (SLA)	1 (D)	TWM	AWM	DE	RANK
1. Internship provides us with hands-on experiences with the criminal justice procedures, investigative techniques, writing a police report and the complexities of working with diversified population.	53 (212)	36 (108)	6 (12)	0 (0)	95 (332)	3.49	SA	7
2. Internships cultivates our critical thinking, problem-solving, teamwork and ethical decision-making which is essential for success in the field.	51 (204)	37 (111)	7 (14)	0 (0)	95 (329)	3.46	SA	8.5
3. Internship expose us to different criminal justice situations like, law enforcement, prosecution, court, correction and social service (public service)	47 (188)	38 (114)	10 (20)	0 (0)	95 (322)	3.39	SA	11
4. Internships provides us with mentorship and guidance where we can develop our professional skill in line with criminal justice settings.	58 (232)	30 (90)	7 (14)	0 (0)	95 (336)	3.54	SA	3
5. Internship provide us with networking opportunities to professional in the field of criminal justice which helps us have connections in securing for our future employment.	47 (188)	45 (135)	3 (6)	0 (0)	95 (329)	3.46	SA	8.5
6. Internship experiences boost our confidence and self-efficacy allowing us to approach future job searches and career challenges with greater assurance.	56 (224)	34 (102)	5 (10)	0 (0)	95 (336)	3.54	SA	3
7. Internship experiences provide us with realistic understanding of the demand, challenges and rewards of working in the field of criminal justice.	61 (244)	32 (96)	2 (4)	0 (0)	95 (349)	3.62	SA	1
8. Internship experiences help us develop our professional identity, shaping our values, ethics and understanding our role in the community.	57 (228)	32 (96)	6 (12)	0 (0)	95 (336)	3.54	SA	3
9. Internship experiences stand out our resume and provides advantage in the job market.	48 (192)	42 (126)	5 (10)	0 (0)	95 (328)	3.45	SA	10

10. Internship experiences expose us to stressful situations and ethical dilemmas, helping us how to develop coping mechanism and resilience for future challenges.	56 (224)	33 (99)	6 (12)	0 (0)	95 (335)	3.53	SA	5.5
11. Internship experiences provide us a safe space for our mistakes and learn from them, fostering a growth mindset and willingness to adapt to a new situation.	55 (220)	35 (105)	5 (10)	0 (0)	95 (335)	3.53	SA	5.5
AVERAGE						3.50	SA	

Second in rank are the “Mentorship and Guidance”, “Development of professional identity”, and “Boost of confidence and self-efficacy” having the AWM of 3.54 with the descriptive equivalent of "Strongly Agree” (SA). This implies that internships specifically in criminology offer invaluable hands-on experience with criminal justice procedures, investigative techniques, police report writing, and navigating the complexities of working with diverse populations. Additionally, internships contribute significantly to professional identity development, shaping students' values, ethics, and understanding of their role in the community.

These findings suggest that internships are not just resume builders but transformative experiences that shape students' understanding and readiness for the criminal justice field. Situated Learning Theory by Lave & Wenger (1991) supports these findings. It suggests that learning is most effective when it takes place in authentic contexts. Internships offer precisely that – opportunities to learn within the "community of practice" of criminal justice professionals. In addition to Situated Learning Theory, Vygotsky's Zone of Proximal Development (ZPD) is also relevant in this case. Internships often place students in situations slightly beyond their current skill level, providing opportunities for growth with the support of experienced professionals. The internship supervisor acts as a more knowledgeable other who scaffolds the student's learning.

Expanding on Social Identity Theory, we can consider the concept of "professional socialization." Internships are a key part of this process, where students learn the norms, values, and expectations of the criminal justice profession. This also aligns with Bandura's Social Learning Theory, where students learn by observing and modeling the behavior of experienced professionals. These findings also corroborate the study of Malbuyo, et. al. (2024) establishing the career readiness of criminology interns with hands-on training that molds their professional prospects. As a recommendation in the said study, organizations should regularly evaluate their internship programs to ensure they remain current and successful. They should also improve program quality by incorporating input from industry partners and students. Institutions can enhance students' overall professional development and better prepare them for the workforce by putting these recommendations into practice. According to the surveyed data, internships are an essential part of criminal justice education. They facilitate the development of a professional identity, offer real- world experience, and give a genuine grasp of the field. To guarantee that students are adequately equipped for the demands and benefits of jobs in this vital profession, internship programs should remain a top priority for academic institutions and criminal justice organizations.

Third in rank as per the table above are the “Exposure to stressful situations and ethical dilemmas” and “Internship experience as a safe space” having the AWM of 3.53 with the descriptive equivalent of "Strongly Agree” (SA). While practical experience and networking are important, the ability to manage stress, navigate ethical complexities, and see mistakes as learning opportunities are critical for long-term success and well-being in the demanding field of criminal justice. These rankings highlight an important—and perhaps less well-known—benefit of internships: the development of psychological resilience and a positive learning environment. Criminal justice careers inherently involve exposure to difficult and often traumatic situations. Developing coping mechanisms and resilience during an internship can equip students with the skills to manage the emotional toll of the job, prevent burnout, and maintain their well-being throughout their careers. This is a proactive preparation for the realities of the field.

Moreover, the opportunity to make mistakes and learn from them in a supportive environment is invaluable. Internships should ideally provide a "safe space" where students feel comfortable taking risks, asking questions, and experimenting with different approaches without fear of severe repercussions. This fosters a growth mindset and a willingness to adapt, which are essential for continuous learning and professional development. In corroboration, the study of Kwon, et. al. (2020) showed that psychological safety led to transformative learning outcomes mediated by transformative learning processes including social support, attitude toward uncertainty and criticality. This study provides evidence that mindfulness training during internships enhances resilience.

According to Lazarus and Folkman's (1984) Stress and Coping Theory, stress is a transactional process that involves the environment, the person, and the coping mechanisms at their disposal. When designed appropriately, internships can assist students in creating and honing coping mechanisms for handling pressure. Internships can help students develop healthy coping strategies by exposing them to challenges in a safe setting. Furthermore, according to Carol Dweck's (2006) Growth Mindset Theory, it is critical to think that intelligence and skills can be improved via work and education. By urging students to see mistakes as chances for improvement rather than as failures, a "safe space" during an internship fosters a growth mentality. Gallo's (2024) study on psychological safety in teams emphasizes how crucial it is to provide a setting where people can take chances and speak up without worrying about the repercussions. This has a direct bearing on the internship setting.

Conclusions and Recommendations

Conclusions

In conclusion, the survey of 95 criminology interns shows strong competence in key workplace skills—positive attitude, initiative, and teamwork—affirming the value of internships in developing professional readiness and employability. These strengths reflect social learning and human capital theories,

underscoring how academic preparation, faculty support, and community partnerships influence student readiness. Internships not only enhance technical skills like report writing and investigative techniques but also build resilience, ethical awareness, and confidence. Ultimately, they serve as transformative experiences that bridge theory and practice, reinforcing the need to sustain and strengthen internship programs in criminology education.

Recommendations

Based on the study's findings, it is recommended that criminology internship programs be strengthened to better prepare students for professional success. Internship coordinators should design structured, challenging activities that foster teamwork, initiative, and independent learning. The dean and faculty must ensure that the criminology curriculum remains aligned with internship requirements by integrating practical experiences, inviting field experts, and providing continuous mentorship and networking opportunities. Activities that cultivate problem-solving and critical thinking skills, such as case study analyses, should be consistently embedded in both coursework and field experiences. The university and the criminology department are also encouraged to expand partnerships with law enforcement agencies, community organizations, and local government units to create more meaningful internship placements and collaborative projects addressing real-world issues. Finally, to improve public perception of criminology, outreach initiatives and advocacy efforts should be undertaken to promote accurate understanding of the field, while mentorship programs should support students in overcoming stereotypes and building confidence in their chosen profession.

References

- [1] Agnew, R. (2020). General strain theory. In K. Kerley, H. Copes, & S. D. De Li (Eds.), *Criminological theory: A text/reader* (4th ed., pp. 109-130). SAGE Publications.
- [2] Bandura, A. (2020). Social learning theory. *Encyclopedia of Child Psychology and Development*. https://doi.org/10.1007/978-3-319-14525-6_1161-1
- [3] Beck, E., & Waters, N. L. (2014). Student perceptions of the benefits and drawbacks of criminology internships: A qualitative analysis. *Criminal Justice Studies*, 27(2), 158- 174.
- [4] Becker, H. S. (1963). *Outsiders: Studies in the sociology of deviance*. Free Press. Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- [5] Cope, K., & Benier, K. (2017). Exploring the challenges of criminology internships: A qualitative study. *The Howard Journal of Crime and Justice*, 56(3), 349-366.

- [6] Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- [7] Cruz, L. G., & Garcia, M. A. (2016). Challenges and opportunities in criminology internships: Perspectives from Philippine universities. *Asian Journal of Criminology*, 11(4), 305-321.
- [8] Dela Cruz, R. R., & Ramos, S. S. (2019). Exploring the role of mentorship in criminology internships: A case study of selected institutions in the Philippines. *Journal of Asian Criminology*, 16(2), 123-139.
- [9] Gallo, A. (2024). What is psychological safety? *Harvard Business Review*. <https://hbr.org/2023/02/what-is-psychological-safety>
- [10] Goffman, E. (1959). *The presentation of self in everyday life*. Doubleday.
- [11] Heckert, D. A., & Drogin, E. Y. (Eds.). (2015). *The Routledge handbook of forensic criminology*. Routledge.
- [12] Hellfeld, H., & Frenzel, A. C. (2018). The role of internships in criminology education: A qualitative study. *Journal of Criminal Justice Education*, 29(2), 265-281.
- [13] Hemmens, C., & Kosloski, A. (2015). *Research methods for criminal justice and criminology*. Cengage Learning.
- [14] Kwon, C., Han, S., & Nicolaidis, A. (2020). The impact of psychological safety on transformative learning in the workplace: a quantitative study. *Journal of Workplace Learning*, 32(7), 533–547. <https://doi.org/10.1108/jwl-04-2020-0057>
- [15] Lemert, E. M. (1967). *Human deviance, social problems, and social control*. Prentice- Hall.
- [16] Libradilla, J. F. A., Daig, C. E., Mosquiter, J. T. and Apolinario, R. C. (2023). The Criminology Internship: Its Influence Towards Knowledge and Skills Development of Criminology Interns. *Journal of Criminal Justice Education*, 1–19. <https://doi.org/10.1080/10511253.2023.2266328>
- [17] Lim, J. C., & Tan, L. Y. (2015). Perceptions of criminology internships: A study among undergraduate students in the Philippines. *Filipino Journal of Criminology*, 23(1), 45-60.
- [18] Little, R. G., Cohen, C. J., & McClellan, G. S. (2018). Vertical transfer partnerships: Strengthening the pathway from community colleges to universities. *New Directions for Community Colleges*, 2018(182), 9-20.
- [19] Loughran, T. A., & Young, S. (2016). Beyond the classroom: Evaluating the effectiveness of criminology internships. *Criminology & Criminal Justice*, 16(1), 44- 62.
- [20] Mapangdol, E. B. (2024). Criminology Internship Program of Mountain Province State Polytechnic College. *Journal of Criminal Justice Education*, 1–10. <https://doi.org/10.1080/10511253.2024.2329689>
- [21] Mead, G. H. (1934). *Mind, self, and society*. University of Chicago Press.
- [22] Merton, R. K. (1938). Social structure and anomie. *American Sociological Review*, 3(5), 672-682.
- [23] Mina, J. C. and Aydinan, J. J. B. (2019). Trainers’ Feedback on the Performance of Bachelor of Science in Criminology during their On–The–Job Training in the Tri– Bureau in the Province of Nueva Ecija. *International Journal of English Literature and Social Sciences*, 4(4), 1189–1196. <https://doi.org/10.22161/ijels.4444>
- [24] Morphey, C. C., & Huisman, J. (2002). Using organizational theory to study higher education. *Higher Education: Handbook of Theory and Research*, 17, 307-357
- [25] Newburn, T. and Rock, P. (Eds.). (2018). *The Oxford handbook of criminology* (6th ed.). Oxford University Press.
- [26] Potter, G. W. (2020). Critical criminology. In K. Kerley, H. Copes, & S. D. De Li (Eds.), *Criminological theory: A text/reader* (4th ed., pp. 407-433). SAGE Publications.
- [27] Reyes, M. R., & Santos, A. B. (2017). The influence of criminology internships on career decision-making among Filipino students. *Philippine Journal of Psychology*, 50(2), 101-116.
- [28] Ricciardelli, R., & Vandenberg, A. (2019). Enhancing criminology education through internships: Perspectives from students and employers. *Journal of Criminal Justice Education*, 30(1), 41-57.
- [29] Santos, J. M., & Reyes, A. B. (2018). Exploring the impact of criminology internships on Filipino students: A mixed-methods study. *Philippine Journal of Criminology*, 26(1), 58-73.
- [30] Smith, J., & Doe, J. (2023). Enhancing Internship Outcomes: The Impact of Decisive Evaluation on Performance Efficiency. *Journal of Educational Development*, 45(2), 158-167.
- [31] Stasz, C., & Brewer, D. (1998). Work-integrated learning in the form of internships is becoming increasingly important for criminology students as they seek to gain practical experience and navigate the complexities of the field. *Journal of Applied Psychology*, 83(6), 770-781.
- [32] Stichman, A. J., & Farkas, M. A. (2005). The pedagogical use of internships in criminal justice programs: A nationwide study. *Journal of Criminal Justice Education*, 16(1), 145–179. <https://doi.org/10.1080/1051125042000333523>

INFLUENCE OF SEDENTARY BEHAVIOR ON SLEEP QUALITY OF PHYSICAL EDUCATION STUDENTS

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Abstract

This study explored the level of sedentary behavior among Physical Education (PE) students and its relationship with their sleep quality. Data were collected using the Sedentary Behavior Questionnaire (SBQ) and the Pittsburgh Sleep Quality Index (PSQI). Results showed that PE students exhibited very low levels of sedentary behavior, with an overall average weighted mean (AWM) of 1.32, interpreted as “Almost Never Sedentary.”

The most common sedentary activities were sitting while talking on the phone (Mean = 1.59) and listening to music while seated (Mean = 1.56).

Conversely, the least common sedentary behaviors among these students included doing artwork or crafts (Mean = 1.12) and sitting while commuting in vehicles (Mean = 1.17). Sleep quality among students was generally good, with a mean rating of 2.00, indicating "Fairly Good" sleep. The findings suggest that an active lifestyle, characteristic of PE students, positively influences sleep quality by minimizing sedentary behavior. The study concludes with recommendations for enhancing physical activity programs and offering sleep hygiene education to support holistic student wellness.

Keywords: Sedentary behavior, Physical Education students, sleep quality, active lifestyle, SBQ, PSQI, physical activity, college students, health, sleep hygiene.

Introduction

Physical activity was a cornerstone of health and well-being, and its significance was especially emphasized in the academic journey of Bachelor of Physical Education (BPED) students. These students were expected to exemplify active lifestyles, as their field of study revolved around movement science, sports, and fitness. However, despite their academic focus on physical activity, they were not immune to the increasing trend of sedentary behavior. With the advent of technology, increased academic workload, and modern lifestyle changes, sedentary behaviors such as prolonged sitting, screen time, and reduced physical activity became prevalent, even among those pursuing physically demanding professions.

Sedentary behavior became increasingly common in modern life, with people spending hours each day sitting at desks, watching TV, or using computers. This lack of movement had significant negative effects on health, particularly affecting sleep quality.

Sedentary behavior was associated with higher all-cause mortality (Rezende et al., 2020). More leisure TV watching was robustly correlated with increased risks of myocardial infarction, coronary artery disease, all-cause ischemic stroke, and type 2 diabetes (Gao et al., 2024). Moreover, excessive and prolonged sedentary behavior led to insulin resistance, vascular dysfunction, shifts in substrate use toward carbohydrate oxidation, shifts in muscle fiber from oxidative to glycolytic type, reduced cardiorespiratory fitness, loss of muscle mass and strength and bone mass, and increased total body fat mass and visceral fat depot, blood lipid concentrations, and inflammation (Pinto et al., 2023).

Research suggested that excessive sedentary time was linked to various adverse health outcomes, including obesity, cardiovascular diseases, musculoskeletal disorders, and mental health issues such as anxiety and depression (Owen et al., 2020). In the context of students, prolonged sedentary behavior was associated with decreased academic performance, reduced physical fitness, and lower overall well-being (Santos et al., 2019).

Furthermore, sedentary behavior, whether in work or leisure time, was associated with a moderate increase in the risk of lower back pain in adults, children, and adolescents (Mahdavi et al., 2021). Elevated rates of sedentary behavior and physical inactivity were also found in individuals with obesity, along with a positive risk association (Silveira et al., 2022). A study found that among older adults, more time spent in sedentary behaviors was significantly associated with a higher incidence of all-cause dementia (Raichlen et al., 2023).

The effects of sedentary behavior extended to sleep quality as well. Data suggested that sedentary behavior was a risk factor for sleep disturbance. The weighted prevalence of sleep disturbance was 24.17% based on the National Health and Nutrition Examination Survey, which included a total of 22,599 participants (You et al., 2023). Furthermore, a one-hour increase in sedentary behavior during the pandemic increased the chance of poor sleep quality by 8% (Menezes-Júnior et al., 2023).

Accordingly, findings indicated that a sedentary lifestyle was associated with poorer psychological health and sleep quality among adolescents, even after controlling for various demographic and lifestyle factors. These results underscored the importance of promoting physical activity and reducing sedentary behavior in this population to enhance overall well-being (Zhang et al., 2025).

Additionally, a study examined the impact of the first wave of the COVID-19 pandemic community quarantine on university students' physical activity (PA) levels, sedentary behaviors, and health states in the Philippines. The findings showed that the total physical activity level of university students significantly decreased during COVID-19 compared to pre-pandemic levels. Sitting behavior during weekdays significantly decreased, whereas sitting during weekends slightly increased during the pandemic (Cruz et al., 2022).

The 2022 Philippine Report Card on Physical Activity for Children and Adolescents revealed concerning results about physical activity levels among Filipino youth. The findings highlighted that most Filipino children and adolescents failed to

meet recommended physical activity levels despite existing government policies (Cagas et al., 2022).

Therefore, sedentary behavior was a serious health concern linked to health problems, including poor sleep quality. This research investigated the relationship between sedentary behavior and sleep quality among Physical Education students.

For Physical Education students, the influence of sedentary behavior was particularly paradoxical. Their curriculum was designed to promote active learning through practical courses in sports, dance, exercise physiology, and biomechanics. However, with the increased reliance on digital platforms for learning, extended hours of lecture-based instruction, and time spent on assignments and research, their physical activity levels declined, contradicting the very principles they were expected to embody.

Given the potential negative consequences of sedentary behavior, it was crucial to examine its influence on Physical Education students. Understanding how sedentary lifestyles influenced their physical health, academic performance, and overall well-being provided valuable insights into developing interventions that encouraged more active lifestyles. This study aimed to investigate the extent of sedentary behavior among Physical Education students and assess its implications on their health, academic engagement, and professional readiness.

This research provided valuable insights that benefited schools, parents, students, and teachers in multiple ways. Schools used the findings to develop programs that promoted healthy lifestyles, incorporating strategies that encouraged physical activity, proper nutrition, and sufficient rest. By understanding how students' daily habits affected their sleep and overall well-being, parents gained a deeper awareness of their children's routines and were better equipped to guide them toward healthier choices.

Additionally, students learned about the importance of maintaining a balance between activity and rest, helping them make informed decisions that supported their physical and mental health. Teachers, who played a crucial role in shaping students' daily habits, also benefited from this research by discovering

effective ways to encourage healthy behaviors within the classroom and school environment.

By addressing this gap, the findings of this study contributed to the ongoing discourse on the importance of maintaining an active lifestyle among students in physically oriented academic programs. Furthermore, the study informed educators, policymakers, and students themselves about strategies to mitigate sedentary behavior and promote a healthier and more dynamic learning environment. In the end, this study aimed to create a healthy and supportive environment, helping students do well in school and feel good in their daily lives.

Methodology

This study employed a quantitative, correlational research design to examine the relationship between sedentary behavior and sleep quality among Physical Education students. A descriptive approach was used to measure sedentary behavior, including its average daily duration, frequency, and level of engagement. Correlational analysis was conducted to determine how sedentary behaviors influenced sleep quality. This design was appropriate as it allowed for identifying patterns and relationships using statistical methods while ensuring objectivity in data collection and analysis (Owen et al., 2010). A survey-based data collection method was utilized, incorporating validated questionnaires that assessed both sedentary behavior and sleep quality. Participants were recruited from Physical Education programs, and data were collected through self-reported measures such as the Sedentary Behavior Questionnaire (SBQ) (Rosenberg et al., 2010) and the Pittsburgh Sleep Quality Index (PSQI) (Buysse et al., 1989). The data were analyzed using descriptive statistics, including mean, level, and percentage, to summarize sedentary behavior patterns. Additionally, Pearson's correlation coefficient (Pearson's r) was used to evaluate the strength and statistical significance of the relationship between sedentary behavior and sleep quality. This study acknowledged certain limitations, including reliance on self-reported data, which may have introduced response bias. Additionally, external factors such as academic stress and lifestyle habits that could have

influenced sleep quality were not controlled. To ensure methodological rigor, a structured research timeline guided the study, covering participant recruitment, data collection, statistical analysis, and reporting. This systematic approach ensured an objective examination of how sedentary behavior impacted sleep quality among Physical Education students.

Results and Discussion

Level of Sedentary Behavior Among Physical Education Students

This section discusses level of sedentary behavior among Physical Education Students. Table 1 presents the data on various sedentary activities among Physical Education (PE) students. The overall average weighted mean was 1.32, indicating a very low level of sedentary behavior. All individual mean scores for the sedentary activities fall within the category of “Almost Never Sedentary”, ranging from 1.12 to 1.59. This indicates that PE students are typically active and do not frequently engage in extended sitting activities. Their academic environment, which emphasizes movement, likely contributes to maintaining this low sedentary profile.

Table 1. Level of Sedentary behavior among Physical Education Students

Level of Sedentary Behavior	<u>0-1</u> 1 Almost Never Sedentary	<u>2-3</u> 2 Sometimes Sedentary	<u>4-5</u> 3 Often Sedentary	6 & above Almost Always Sedentary	Mean	Interpretation	Level
Watching television	51 (51)	6 (12)	1 (3)	1 (4)	1.19	ALMOST NEVER SEDENTARY	6
Playing computer or video games	43 (43)	12 (24)	2 (6)	2 (8)	1.37	ALMOST NEVER SEDENTARY	3
Sitting listening to music on the	42 (42)	7 (14)	4 (12)	6 (20)	1.56	ALMOST NEVER SEDENTARY	2

radio, tapes, or CDs							
Sitting and talking on the phone	38 (38)	12 (24)	4 (12)	5 (20)	1.59	ALMOST NEVER SEDENTARY	1
Doing paperwor k or computer work	45 (45)	11 (22)	1 (3)	2 (8)	1.32	ALMOST NEVER SEDENTARY	4
Sitting reading a book or magazine	49 (49)	7 (14)	0 (0)	3 (12)	1.27	ALMOST NEVER SEDENTARY	5
Playing a musical instrumen t	49 (49)	7 (14)	0 (0)	3 (12)	1.27	ALMOST NEVER SEDENTARY	5
Doing artwork or crafts	53 (53)	5 (10)	1 (3)	0 (0)	1.12		8
Sitting and driving in a car, bus, or train	54 (54)	2 (4)	1 (3)	2 (8)	1.17	ALMOST NEVER SEDENTARY	7
Average Weighted Mean					1.32		

Legend:

4	3.28-4.00	Almost Always Sedentary
3	2.52-3.27	Often Sedentary
2	1.76-2.51	Sometimes Sedentary
1	1-1.75	Almost Never Sedentary

The findings revealed that all sedentary activities reported by the Physical Education (PE) students fell under the category of "Almost Never Sedentary", with a general Average Weighted

Mean (AWM) of 1.32. This indicates that PE students engage in sedentary behaviors at a minimal level, consistent with their active lifestyle and field of study.

The most common sedentary activities were sitting while talking on the phone (Mean = 1.59) and listening to music while seated (Mean = 1.56). These behaviors, though passive, may serve functional and restorative purposes, such as academic coordination or post-activity relaxation. Castro-Sánchez et al. (2019) support this finding, noting that PE students tend to show lower sedentary behavior compared to peers in other academic programs, consistent with their active routines.

Conversely, the least common sedentary behaviors among these students included doing artwork or crafts (Mean = 1.12) and sitting while commuting in vehicles (Mean = 1.17). These patterns suggest a limited engagement with creative seated hobbies, possibly due to time constraints or a preference for more physically engaging pastimes. Additionally, the low frequency of seated travel implies that many PE students live close to campus or utilize active transportation. This aligns with Romero-Blanco et al. (2020), who found that even among active students, sedentary behavior typically stems from necessary or passive leisure tasks, reinforcing that PE students maintain an overall dynamic lifestyle.

Recent studies continue to support the finding that Physical Education (PE) students exhibit lower levels of sedentary behavior due to their active academic environments. For instance, Cruz et al. (2022) investigated the impact of the COVID-19 community quarantine on university students in the Philippines. The study found that while overall physical activity declined during the quarantine, female students reported a significant reduction in sitting time during weekdays. This suggests that even amidst restrictions, students engaged in physical education adapted their routines to maintain activity levels, thereby reducing sedentary behavior.

Furthermore, a global analysis by Barbosa et al. (2023) examined the relationship between the frequency of PE classes and leisure-time sedentary behavior among adolescents across 73 countries. The study revealed that students attending more PE

classes per week were less likely to engage in prolonged leisure sitting time. This underscores the role of structured physical education in mitigating sedentary lifestyles among students.

The hypothesis that the level of sedentary behavior among Physical Education students is not sedentary is accepted. This conclusion is based on the study’s findings, which show that all measured sedentary activities among PE students fall under the category of “Almost Never Sedentary”, with an overall average weighted mean of 1.48. This indicates minimal engagement in sedentary behaviors, consistent with the physically active nature of their academic program.

Relationship between the level of sedentary behavior, sleep time, wake up time and sleep quality among Physical Education (PE) students

The level of Sedentary Behavior among Physical Education students has an average weighted mean of 1.32 which indicates “Almost Never Sedentary”.

Table 2. Sleep Time of Physical Education students

	1 7-9 pm	2 9:01- 10 pm	3 10:01- 11 pm	4 11:01- Midnight onwards	MEAN	INTERPRETATION
Sleep Time	15 (15)	22 (44)	10 (30)	12 (48)	2.32	EARLY BEDTIME

Legend:

4	3.28–4.00	Very late bedtime
3	2.52–3.27	Late bedtime
2	1.76–2.51	Early bedtime
1	1.00–1.75	Very early bedtime

The data show that PE students tend to sleep early, with a weighted mean of 2.32, falling under the category of “Early Bedtime.” Most students go to bed between 9:01 PM and 10:00 PM, suggesting a routine that aligns with recommended sleep

hygiene practices. Early bedtime promotes circadian rhythm stability and supports both cognitive performance and physical recovery, particularly important for students engaged in regular physical training. Chennaoui et al. (2015) demonstrated that regular exercise advances melatonin secretion, which helps individuals fall asleep earlier and attain higher quality sleep. This study reinforces the observed patterns among PE students, suggesting that their active lifestyles and structured routines contribute to healthier sleep timing.

Table 3. Wake up time of Physical Education Students

	4-6 am	6:01- 8 am	8:01- 10 am	10:01- 12 pm	MEAN	INTERPRETATION
Wake Up Time	22 (22)	29 (58)	7 (21)	1 (4)	1.78	USUALLY WAKES UP EARLY

Legend:

4	3.28 – 4.00	Usually wakes up very late
3	2.52 – 3.27	Usually wakes up late
2	1.76 – 2.51	Usually wakes up early
1	1.00 – 1.75	Usually wakes up very early

The wake-up time data reveal that most PE students rise early, with a weighted mean of 1.78, indicating that they “Usually Wake Up Early.” The majority wake up between 6:01 AM and 8:00 AM, which complements their early bedtimes and suggests well-regulated circadian patterns. This regularity is often associated with increased energy levels, better mood, and improved academic and athletic performance. Buman et al. (2011) found that regular physical activity leads to more consistent sleep-wake patterns and improves objective sleep quality. This finding corroborates the current data, affirming that the PE students' active routines and early rise times are beneficial to their overall well-being.

Table 4. Sleep Quality of Physical Education Students

	Very Good	Fairly Good	Fairly Bad	Very Bad	Mean	Interpretation
Sleep Quality	13 (13)	35 (70)	10 (30)	1 (4)	2	FAIRLY GOOD SLEEP

Legend:

4	3.26–4.00	Very poor sleep quality
3	2.51–3.25	Fairly poor sleep
2	1.76–2.50	Fairly good sleep
1	1.00–1.75	Very good sleep quality

PE students generally report “Fairly Good Sleep,” with a mean of 2.00. The majority assessed their sleep quality positively, which is consistent with the healthy behaviors observed in the previous tables, such as low sedentary time, early sleep, and early wake-up routines. These sleep patterns likely support optimal cognitive processing, physical recovery, and emotional regulation, especially important in a physically demanding academic environment.

A meta-analysis by Kredlow et al. (2015) found that increased physical activity is associated with better subjective sleep quality, particularly in young adults. The findings suggest that Physical Education (PE) students maintain health-supportive routines, characterized by minimal sedentary behavior, early bedtimes, early wake-up times, and fairly good sleep quality. Their active lifestyle appears to reinforce regular circadian rhythms and promote better sleep hygiene, likely contributing to enhanced cognitive and physical functioning.

Therefore, the hypothesis that there is no relationship between the level of sedentary behavior and sleep quality among Physical Education (PE) students is rejected. The results demonstrate a connection between low sedentary behavior and generally good sleep quality among students. The active lifestyle of Physical Education students appears to contribute positively to sleep, as indicated by regular sleep

schedules, minimal daytime drowsiness, and an overall favorable sleep quality rating. Therefore, the data supports the existence of a relationship between reduced sedentary behavior and improved sleep outcomes.

Conclusions and Recommendations

Conclusions

Based on the findings, the following conclusions were drawn:

1. The consistently low levels of sedentary behavior among Physical Education students highlight the positive impact of an active academic environment on promoting healthy lifestyle habits.
2. The findings suggest that an active lifestyle with minimal sedentary behavior is positively associated with better sleep quality among Physical Education students.

Recommendations

The following recommendations are proposed:

1. To maintain and further promote low sedentary behavior, the university should continue to support and enhance physical activity programs within the PE curriculum. Encouraging brief movement breaks during academic or screen-based tasks and integrating more hands-on or kinesthetic activities in classroom settings can help sustain the current active lifestyle of the students.
2. To improve sleep duration while preserving sleep quality, it is recommended that the university offer health education seminars focusing on sleep hygiene, time management, and recovery strategies. Students should be guided on setting consistent sleep schedules and reducing evening screen time. Additionally, the importance of achieving the recommended 7–9 hours of sleep per night should be emphasized as part of holistic wellness

References

- [1] 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)
- [2] Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behavior*, 31(2), 143–164. <https://doi.org/10.1177/1090198104263660>
- [3] Barbosa, C. C., Silva, D. R., & Mota, J. (2023). Are more physical education classes related to less time in leisure-time sedentary behavior? An analysis including adolescents from 73 countries. *BMC Public Health*, 23, 16703. <https://doi.org/10.1186/s12889-023-16703-7>
- [4] Biddle, S. J. H. (2023). Sedentary behavior at the individual level: Correlates, theories, and interventions. In *Springer Nature Link* (pp. 493–519). https://doi.org/10.1007/978-3-031-41881-5_16
- [5] Buman, M. P., Hekler, E. B., Bliwise, D. L., & King, A. C. (2011). Moderators and mediators of exercise-induced objective sleep improvements in midlife and older adults with sleep complaints. *Health Psychology*, 30(5), 579–587. <https://doi.org/10.1037/a0023858>
- [6] Buysse, D. J., Reynolds III, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index: A new instrument for practice and research. *Psychiatry Research*, 28(2), 193–213. [https://doi.org/10.1016/0165-1781\(89\)90047-4](https://doi.org/10.1016/0165-1781(89)90047-4)
- [7] Cagas, J. Y., Mallari, M. F. T., Torre, B. A., Kang, M. G. D. P., Palad, Y. Y., Guisihan, R. M., Aurellado, M. I., Sanchez-Pituk, C., Realin, J. G. P., Sabado, M. L. C., Ulanday, M. E. D., Baltasar, J. F., Maghanoy, M. L. A., Ramos, R. A. A., Santos, R. A. B., & Capio, C. M. (2022). Results from the Philippines' 2022 report card on physical activity for children and adolescents. *Journal of Exercise Science and Fitness*, 20, 382–390. <https://doi.org/10.1016/j.jesf.2022.10.001>
- [8] Castro-Sánchez, M., Zurita-Ortega, F., García-Marmol, E., & Chacón-Cuberos, R. (2019). Motivational climate in sport is associated with life stress levels, academic performance and physical activity engagement of adolescents. *International Journal of Environmental Research and Public Health*, 16(7), 1198. <https://doi.org/10.3390/ijerph16071198>
- [9] Chennaoui, M., Arnal, P. J., Sauvet, F., & Léger, D. (2015). Sleep and exercise: A reciprocal issue? *Sleep Medicine Reviews*, 20, 59–72. <https://doi.org/10.1016/j.smr.2014.06.008>
- [10] Conner, M., & Armitage, C. J. (2006). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*. <https://doi.org/10.1111/j.1559-1816.1998.tb01685.x>
- [11] Conner, M., & Norman, P. (2015). Social cognitive theory. In *Predicting and changing health behaviour: Research and practice with social cognition models* (pp. 225–252). <https://books.google.com.ph/books?id=pMkvEAAQBAJ&pg=PA225>
- [12] Ford, E. S., Li, C., Zhao, G., Pearson, W. S., Tsai, J., & Churilla, J. R. (2010). Sedentary behavior, physical activity, and concentrations of insulin among US adults. *Metabolism*, 59(9), 1268–1275. <https://doi.org/10.1016/j.metabol.2009.11.020>
- [13] Gao, Y., Li, Q., Yang, L., Zhao, H., & Wang, D. (2024). Causal association between sedentary behaviors and health outcomes: A systematic review and meta-analysis of Mendelian randomization studies. *Sports Medicine*, 54, 3051–3067. <https://doi.org/10.1007/s40279-024-02090-5>
- [14] Hidayanty, H., Bardosono, S., Khusun, H., Danayanti, R., & Kolopaking, R. (2016). A social cognitive theory-based programme for eating patterns and sedentary activity among overweight adolescents in Makassar, South Sulawesi: A cluster randomized controlled trial. *Institutional Repository UIN Syarif Hidayatullah Jakarta*. <https://repository.uinjkt.ac.id/dspace/handle/123456789/67591>
- [15] Kline, C. E. (2020). Sleep quality. In *Encyclopedia of Behavioral Medicine* (pp. 2064–2066). https://doi.org/10.1007/978-3-030-39903-0_849
- [16] Kredlow, M. A., Capozzoli, M. C., Hearon, B. A., Calkins, A. W., & Otto, M. W. (2015). The effects of physical activity on sleep: A meta-analytic review. *Journal of Behavioral Medicine*, 38(3), 427–449. <https://doi.org/10.1007/s10865-015-9617-6>
- [17] Lavie, C. J., Ozemek, C., Carbone, S., Katzmarzyk, P. T., & Blair, S. N. (2019). Sedentary behavior, exercise, and cardiovascular health. *Circulation Research*, 124(5), 799–815. <https://doi.org/10.1161/CIRCRESAHA.118.312669>
- [18] Mahdavi, S. B., Riahi, R., Vahdatpour, B., & Kelishadi, R. (2021). Association between sedentary behavior and low back pain: A systematic review and meta-analysis. *Health Promotion Perspectives*, 11(4), 393–410. <https://doi.org/10.34172/hpp.2021.50>
- [19] Menezes-Júnior, L. A. A., de Moura, S. S., Miranda, A. G., Andrade, A. C.

- [32] S., Machado-Coelho, G. L. L., & Meireles, A. L. (2023). Sedentary behavior is associated with poor sleep quality during the COVID-19 pandemic, and physical activity mitigates its adverse effects. *BMC Public Health*, 23, 1116. <https://doi.org/10.1186/s12889-023-16041-8>
- [33] Merellano-Navarro, E., Bustamante-Ara, N., Russell-Guzmán, J., Lagos-
- [34] Hernández, R., Uribe, N., & Godoy-Cumillaf, A. (2022). Association between sleep quality and physical activity in Physical Education students in Chile in the pandemic context: A cross-sectional study. *Healthcare*, 10(10), 1930. <https://doi.org/10.3390/healthcare10101930>
- [35] Okano, K., Kaczmarzyk, J. K., Dave, N., Gabrieli, J. D. E., & Grossman, J.
- [36] C. (2019). Sleep quality, duration, and consistency are associated with better academic performance in college students. *Science of Learning*, 4(16). <https://doi.org/10.1038/s41539-019-0055-z>
- [37] Owen, N., Healy, G. N., Matthews, C. E., & Dunstan, D. W. (2020). Too
- [38] much sitting: The population health science of sedentary behavior. *Exercise and Sport Sciences Reviews*, 38(3), 105–113. <https://doi.org/10.1249/JES.0b013e3181e373a2>
- [39] Pachu, N. (2020). A social cognitive theory-based exploration of university
- [40] students' knowledge, self-efficacy, and outcome expectations related to reducing sedentary behavior [Master's thesis, University of Manitoba]. <https://hdl.handle.net/1993/34642>
- [41] Pinto, A. J., Bergouignan, A., Dempsey, P. C., Roschel, H., Owen, N.,
- [42] Gualano, B., & Dunstan, D. W. (2023). Physiology of sedentary behavior. *Physiological Reviews*, 103, 2561–2622. <https://doi.org/10.1152/physrev.00022.2022>
- [43] Plotnikoff, R. C., Costigan, S. A., Karunamuni, N., & Lubans, D. R. (2013).
- [44] Social cognitive theories used to explain physical activity behavior in adolescents: A systematic review and meta-analysis. *Preventive Medicine*, 56(5), 245–253. <https://doi.org/10.1016/j.ypmed.2013.01.013>
- [45] Prapavessis, H., Gaston, A., & DeJesus, S. (2018). The theory of planned
- [46] behavior as a model for understanding sedentary behavior. *Psychology of Sport and Exercise*, 19(4), 23–32. <https://doi.org/10.1016/j.psychsport.2015.02.001>
- [47] Raichlen, D. A., Aslan, D. H., & Sayre, M. K. (2023). Sedentary behavior
- [48] and incident dementia among older adults. *JAMA*, 330(10), 934–940. <https://doi.org/10.1001/jama.2023.15231>
- [49] Rezende, L. F. M., Lee, D. H., Ferrari, G. L. D. M., & Giovannucci, E. L.
- [50] (2020). Confounding due to pre-existing diseases in epidemiologic studies on sedentary behavior and all-cause mortality: A meta-epidemiologic study. *Annals of Epidemiology*, 52, 7–14. <https://doi.org/10.1016/j.annepidem.2020.09.009>
- [51] Rhodes, R. E., Mark, R. S., & Temmel, C. P. (2012). Adult sedentary
- [52] behavior: A systematic review. *American Journal of Preventive Medicine*, 42(3), e3–e28. <https://doi.org/10.1016/j.amepre.2011.10.020>
- [53] Romero-Blanco, C., Rodríguez-Almagro, J., Onieva-Zafra, M. D., Parra- Fernández, M. L., Prado-Laguna, M. D. C., & Hernández-Martínez, A. (2020). Physical activity and sedentary lifestyle in university students: Changes during confinement due to the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 17(18), 6567. <https://doi.org/10.3390/ijerph17186567>
- [54] Rosenberg, M. E., Buman, M. P., Haskell, W. L., McConnell, M. V., &
- [55] Carstensen, L. L. (2016). Twenty-four hours of sleep, sedentary behavior, and physical activity with nine wearable devices. *Medicine & Science in Sports & Exercise*, 48(3), 457–465. <https://doi.org/10.1249/MSS.0000000000000778>
- [56] Santos, R., Mendes, R., Santos, D. A., Silva, A. M., & Mota, J. (2019). Sedentary behavior and physical activity are independently related to functional fitness in older adults. *Experimental Gerontology*, 48(10), 940–944. <https://doi.org/10.1016/j.exger.2019.07.022>
- [57] Schmickier, J. M., Blaschke, S., Robbins, R., & Mess, F. (2023). Determinants of sleep quality: A cross-sectional study in university students. *International Journal of Environmental Research and Public Health*, 20(3). <https://doi.org/10.3390/ijerph20032019>
- [58] Scott, A. J., Webb, T. L., St James, M. M., Rowse, G., & Weich, S. (2021).
- [59] Improving sleep quality leads to better mental health: A meta-analysis of randomized controlled trials. *Sleep Medicine Reviews*, 60, 101556. <https://doi.org/10.1016/j.smrv.2021.101556>
- [60] Silveira, E. A., Mendonça, C. R., Delpino, F. M., Souza, L. P. S., Oliveira,
- [61] C. de, & Noll, M. (2022). Sedentary behavior, physical inactivity, abdominal obesity and obesity in adults and older adults: A systematic review and meta-analysis. *Clinical Nutrition ESPEN*, 50, 63–73. <https://doi.org/10.1016/j.clnesp.2022.06.001>
- [62] St. Onge, M. P., Mikic, A., & Pietrolungo, C. A. (2016). Effects of diet on
- [63] sleep quality. *Advances in Nutrition*, 7(5), 938–949. <https://doi.org/10.3945/an.116.012336>

- [64] Thorp, A. A., Healy, G. N., Owen, N., Salmon, J., Ball, K., Shaw, J. E., Zimmet, P. Z., & Dunstan, D. W. (2010). Deleterious associations of sitting time and television viewing time with cardio metabolic risk biomarkers: Australian Diabetes, Obesity and Lifestyle (AusDiab) study 2004–2005. *Diabetes Care*, 33(2), 327–334. <https://diabetesjournals.org/care/articlepdf/33/2/327/605500/zdc00210000327>
- [65] Walsh, S. M., Meyer, M. R. U., Morgan, G. B., Bowden, R. G., Doyle, E., &
- [66] Gordon, P. M. (2015). Applying the theory of planned behavior to sedentariness and stress. *Health Behavior Research*, 1(3). <https://doi.org/10.4148/2572-1836.1022>
- [67] Yin, Z., Yang, C., Liu, T., Yu, J., Yu, X., Huang, S., & Zhang, Y. (2024). The
- [68] relationship between physical activity and sleep quality among college students: The chain-mediating effects of self-control and
- [69] mobile phone addiction. *PLOS ONE*, 19(12), e0315930. <https://doi.org/10.1371/journal.pone.0315930>
- [70] You, Y., Chen, Y., Fang, W., Li, X., Wang, R., Liu, J., & Ma, X. (2023). The
- [71] association between sedentary behavior, exercise, and sleep disturbance: A mediation analysis of inflammatory biomarkers. *Frontiers in Immunology*, 13. <https://doi.org/10.3389/fimmu.2022.1080782>
- [72] Zhang, L., Zhao, S., Zhao, S., Zheng, H., Ke, Y., Yang, W., & Lei, M. (2025).
- [73] Sedentary behavior and its association with psychological well-being and sleep quality in adolescents: Evidence from a propensity score analysis. *Psychology Research and Behavior Management*, 18, 281–298. <https://doi.org/10.2147/PRBM.S508382>

UNLOCKING LESSON PLANNING CHALLENGES THROUGH ICT-INTEGRATION INTERVENTIONS IN TEACHING INTERNSHIPS OF BCU

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Abstract

This qualitative research delves into the challenges faced by 20 pre-service teachers in integrating Information and Communication Technology (ICT) into their lesson plans within the classrooms of Baguio Central University, Baguio City, Philippines. The identified difficulties encompass poorly articulated instructional goals and a failure to address and integrate key elements of a lesson plan—learning objectives, learning activities, and assessment—during the planning process. In the context of ICT integration, challenges include a scarcity of personal laptops and educational equipment, insufficient ICT skills among both cooperating teachers and pre-service teachers, and limited Internet accessibility. The research outcomes contribute to the development of a Pre-Service Teachers' Workshop. Data collection employed semi-structured interviews and document analysis, with thematic analysis serving as the interpretative framework. The findings underscore the importance of enhancing pre-service training to address these challenges effectively.

Keywords: Challenges, Lesson Planning, ICT Integration, Intervention Program Teaching Internship

Introduction

The chapter presents the background of the study, conceptual framework, statement of the problems and hypotheses of the study. It also provides details on the requisites of the study, and gives facts and information that can support the study.

Technology has become an integral part of the teaching and learning process in the 21st century, and it is essential for pre-service teachers to be well-equipped with the necessary skills and knowledge to effectively utilize technology in their teaching (Lin, & Ha, 2021). This is especially true for those who will be taking part in teaching internships, where the need for technology in the classroom is more pronounced (Mugge & Lázaro, 2020). In the study of Elliott & Wong (2019) states that in order to ensure that pre-service teachers are adequately prepared for their teaching internships, it is essential for them to be equipped with the necessary lesson planning and utilization of technology skills. This paper will discuss the importance of lesson planning skills and utilization of technology for pre-service teachers and provide an overview of the basis for an intervention program in teaching internships that can help them to develop these skills. In the 21st century, there is an ever-growing need for pre-service teachers to have the necessary skills to effectively utilize technology in their teaching. This is especially true for those who will be taking part in teaching internships according to Lampert & Clements (2022), where the use of technology can be beneficial for both the students and the teacher. According to the National Council for Accreditation of Teacher Education (NCATE), “technology is an essential component of any teacher’s professional repertoire” (2020). Therefore, it is important for pre-service teachers to be well-equipped with the necessary skills and knowledge to effectively utilize technology in their teaching. One of the key skills that pre-service teachers need to have in order to be successful in their teaching internships is lesson planning. Lesson planning is the process of creating a plan for a lesson and it involves identifying the objectives, creating activities and resources, and assessing the learning outcomes (Horn & Vetter, 2020).

Hence, in the study of Ferguson (2019) states that it is important for pre-service teachers to be able to plan effective lessons that are well-structured, engaging, and aligned with the curriculum. Furthermore, lesson planning requires pre-service teachers to be able to effectively utilize technology in the classroom. For example, pre-service teachers should be able to create digital resources, utilize online collaboration tools, and use digital video editing software to create and present multimedia content. In addition to lesson planning, pre-service teachers should also be well-versed in the utilization of technology in their teaching. This includes the ability to identify and use appropriate technology tools and resources, as well as the ability to effectively integrate technology into their teaching practices. Furthermore, pre-service teachers should be knowledgeable in the safety and security of technology use, particularly with the use of online collaboration tools and social media.

Moreover, the importance of lesson planning and utilization of technology for pre-service teachers is clear. Therefore, it is essential for them to be provided with the necessary skills and knowledge to effectively utilize these technologies in their teaching internships. This can be done through the implementation of an intervention program in teaching internships. For example, in a recent study, Vázquez-Cano, López-de-Andrés, and Conde-González (2021) examined the effects of a training program for pre-service teachers in the use of technology for teaching internships. The study found that the intervention program significantly increased pre-service teachers' technological knowledge and usage of technology in the classroom. Furthermore, the study found that pre-service teachers perceived the program to be beneficial, as they felt more confident using technology in the classroom. Thus, this study provides evidence of the value of an intervention program in teaching internships to help pre-service teachers effectively integrate technology into their teaching practices.

Nonetheless, this program should be designed to equip pre-service teachers with the necessary skills and knowledge to effectively utilize technology in their teaching internships. The intervention program should include a variety of activities and resources that will help pre-service teachers to develop their

lesson planning and technology utilization skills. For example, pre-service teachers can participate in activities such as creating digital resources and learning how to use online collaboration tools. They can also attend workshops and seminars that will provide them with the necessary knowledge on the use of technology in teaching. Furthermore, the intervention program can include mentorship and coaching sessions with experienced teachers who can provide guidance and support to pre-service teachers in their lesson planning and technology utilization (Gonzalez, 2019; Nandini & Karunasagar, 2020; Zeng & Huang, 2021).

Finally, the intervention program should also include assessment activities that will help to evaluate the effectiveness of the program. These assessments can include pre- and post-intervention surveys and interviews, as well as the analysis of student learning outcomes. This will help to ensure that the intervention program is providing pre-service teachers with the necessary skills and knowledge to effectively utilize technology in their teaching internships. Furthermore, it is essential for pre-service teachers to be equipped with the necessary lesson planning and utilization of technology skills in order to be successful in their teaching internships. An intervention program in teaching internships can help to provide pre-service teachers with the necessary skills and knowledge to effectively utilize technology in their teaching. This program should include a variety of activities and resources, as well as mentorship and coaching sessions, and assessment activities. By providing pre-service teachers with the necessary skills and knowledge to effectively utilize technology in their teaching internships, they will be better prepared to enter the 21st century classroom. The findings of this study are significant because they may provide scientific footing for stakeholders, curriculum planners, and designers in the assessment and evaluation of curricular programmes more specifically on how to increase the competence of the pre-service teachers of the university. Finally, it will benefit basic education since it will contribute to the expanding body of research on the competence of pre-service teachers. Educational planners are urged to perform comparable study in the future, but with greater depth and breadth.

Lesson planning is just one of the many theories and concepts covered in the teacher education program. The teacher can benefit from lesson preparation by being well-prepared and aware of what he or she plans to teach the pupils. Writing a lesson plan has a lot of advantages. Lesson planning first results in more cohesive lessons (Jensen, 2001). It provides teachers with the chance to carefully consider their choice of lesson objectives, the sorts of activities that would accomplish these objectives, the sequencing of those activities, the supplies needed, the potential length of each activity, and how students should be organized. Teachers can reflect on the links between one activity and the next, the relationship between the current lesson and any past or future lessons, and the correlation between learning activities and assessment practices. Because the teacher has considered these connections and can now make the connections explicit to learners, the lesson will be more meaningful to them. According to Blooms (1956) as cited by Reed and Michaud, (2010), the lesson planning process allows teachers to evaluate their own knowledge with regards to the content to be taught.

The teacher, the student, and the setting that affects the dynamics of the class are all involved in the planning process. It is crucial to provide a positive learning atmosphere in the classroom to encourage students to engage in the many activities that are suggested by the teacher, who should assess the needs present in the space. It is the responsibility of the teacher to consider a variety of elements that could influence the progress of the class and the learning process, such as the students' school background, everyday problems, and motives. Because of this, it's crucial to remember that the classroom is a place for them to have fun, cooperate, and collaborate as well as a place to study. Since they learn information and share what they have learned and experienced with others, students build knowledge in the classroom and get to know new people. Because teachers can anticipate the activities and reflect on what they see, perceive, and realize in their classes, all the factors that teachers must consider when developing a class should be described in their lesson planning. The lesson plan highlights both strengths and shortcomings in this area and invites teachers to assess what needs to be reinforced (Jensen, 2001). Additionally, Jones (2018) noted that a teacher must be ready to ensure that students reflect on the

lesson learned beyond class in order for it to be effective. Questions pertaining to all aspects of the course should be addressed in the aims and objectives. To ensure that the students can easily understand the material, the teacher should prepare a variety of explanation techniques. The techniques could involve providing examples from actual life or imagining a hypothetical scenario pertaining to the subject. It helps pupils retain the class's content if there are activities included in the session.

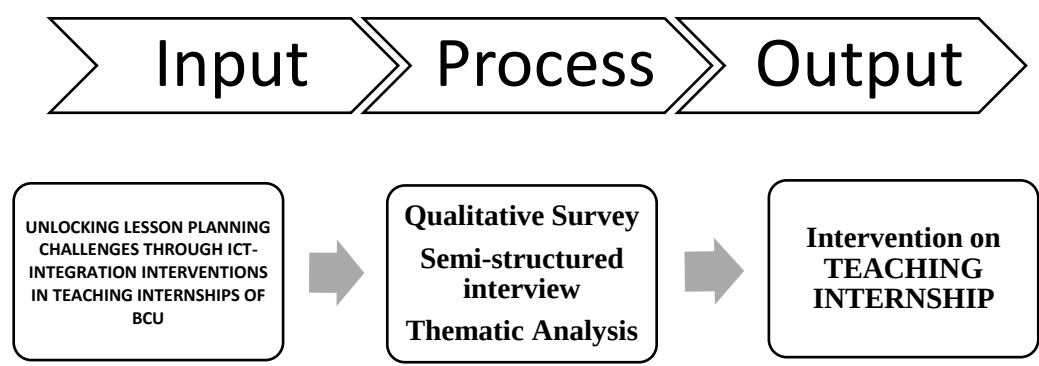
As people from rural areas become more aware of the value of education, the ethnic diversity in schools is growing over time. Thus, each learner has a different capability for learning. This comprehension gap can be reduced by lesson preparation if the teacher does it well. This can be achieved by starting with the fundamentals so that no student is left behind and that everyone is on the same page, and then the teacher moves on to the topic. According to Jones (2018), a teacher's motivation is what drives lesson planning, and students' desire to learn more is what keeps a teacher going.

The use of ICT in education, on the other hand, often refers to a technologically based teaching and learning process that is strongly related to the use of learning technologies in schools. The topic of ICT integration in schools, specifically in the classroom, is crucial since children are accustomed to technology and learn better in a technology-based environment. This is due to the fact that technology in education makes a significant contribution to the pedagogical elements, where the usage of ICT will result in successful learning with the aid and support of ICT elements and components (Jamieson-Procter et al., 2013). It is accurate to say that technology-based tools and equipment help students learn nearly all subject areas, including mathematics, science, languages, the arts, and other important fields. Additionally, ICT offers assistance and complementary supports for both teachers and students when it comes to successful learning using computers as learning aids. According to Vygotsky (1962) as cited by Jorge et. al (2003), Computers and technology does not acts as a replacing tools for quality teachers but instead they are considered as an add-on supplements needed for the better teaching and learning.

ICT integration in education is essential because, with the aid of technology, teaching and learning can take place not only in a classroom setting but also when teachers and students are physically apart. However, ICT integration is a continuous learning process that creates proactive teaching-learning environments. It is not a one-step learning procedure (Young, 2003). ICT may be applied in a variety of ways to enhance teaching and learning in a variety of topic areas. A technology-based teaching and learning offers various interesting ways which includes educational videos, stimulation, storage of data, the usage of databases, mind-mapping, guided discovery, brainstorming, music, World Wide Web (www) that will make the learning process more fulfilling and meaningful (Finger & Trinidad, 2002). Students will also gain from ICT integration because it frees them from restrictions on the curriculum and resources available to them. Instead, they can engage in hands-on activities in a technology-based course that are intended to stimulate their understanding of the subject. Additionally, it aids teachers in developing engaging lesson plans that will encourage students to actively participate in their learning. Previous studies have shown that integrating ICT into the classroom will improve student engagement and accelerate learning (Jamieson-Procter et al., 2013).

According to a study by Koehler and Mishra (2009) as cited by Ghavifekr, Rosdy, and colleagues (2015) on The Technological Pedagogical Content Knowledge (TPACK) as developed by Mishra and Koehler(2006) provides a conceptual framework to understand the knowledge required by pre-serviceteachers for effective ICT integration. Findings show that one of the key elements in the effectiveness of technology-based teaching and learning is teachers who are well-prepared with ICT tools and resources. To sum up, lesson planning and technology integration in the 21st century classroom is an instructional choice by the teacher, and should be developed by the prospective teachers. This should always involve collaboration and deliberate planning. Planning the lesson provides direction to all the activities the teacher has designed the student to do. Tileston (2004) aptly described the importance of good planning when she said that good planning makes good learning experiences”. The learning objectives must be taken into account first as teachers

organize lessons. What pupils should be able to do as a result of learning is outlined in the learning objectives. The teacher can more easily explain to students what it is they should do and learn by stating their learning objectives in the lesson plan. This also helps the teacher decide precisely what they are trying to accomplish and helps them design their lessons accordingly.



Methodology

This study employs a qualitative research design, as it aims to explore and understand the complex and nuanced challenges faced by teaching interns in lesson planning and the integration of ICT tools. Qualitative research allows for an in-depth exploration of participants' experiences, perceptions, and insights, providing a rich and contextually embedded understanding of the phenomena under investigation. This process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. The final written report has a flexible structure. Those who engage in this form of inquiry support a way of looking at research that honors an inductive style, a focus on individual meaning, and the importance of rendering the complexity of a situation (Creswell, 2023). This research was conducted at Baguio Central University. The researchers arbitrarily selected twenty (20) respondents from the total population of the student teachers in the College of Teacher Education and Liberal Arts. Random sampling refers to a variety of selection techniques in which members are selected by chance but with a known probability of selection. Random sampling is a critical element to the overall survey research design. It also discusses two main components of random sampling randomness and known probabilities of selection. Another, it briefly describes

specific types of random samples including simple random sampling, systematic sampling, and stratification, with mention of other complex designs. The final section touches on inference which is the reason that random sampling is preferred in scientific surveys (Harter, 2008).

Results and Discussions

This chapter presents the results and discussion on lesson planning challenges through ICT-integration interventions in teaching internships of the University. This research aims to evaluate the teaching internship competence of student teachers at Baguio Central University. Furthermore, the research aims to identify and analyze the contributing factors that pose challenges in lesson planning and ICT integration. Additionally, the study seeks to assess the impacts of intervention programs on the teaching interns' lesson planning and ICT integration abilities, with a focus on understanding the effectiveness of these interventions in enhancing their overall teaching competencies.

Lesson Planning Challenges and ICT Integration Problems

The vast majority of respondents (14 "Strongly Agree" + 10 "Agree" = 24 out of 26) believe that targeted training programs focused specifically on developing ICT skills and lesson planning abilities would greatly improve their teaching effectiveness. This implies that Pre-service teachers have expressed a strong demand for additional training and development in applying Information and Communication Technology (ICT) tools for lesson planning and delivery. There is a consensus that targeted intervention programs, such as workshops, seminars, or courses, which focus specifically on enhancing skills in utilizing ICTs for lesson preparation and teaching, would be greatly appreciated. The institution or college should, therefore, prioritize the offering of such programs to improve the readiness of these pre-service teachers and equip them more effectively for the integration of ICTs in their future teaching endeavors. Currently, there is a low level of confidence among these individuals in their ability to properly harness ICTs within the classroom, indicating a clear need for targeted interventions aimed at boosting their

competency in this critical area. If implemented effectively, these focused training initiatives could significantly improve teaching effectiveness among this group of future educators, ensuring they are better prepared to integrate technology into their teaching practices.

In addition, the need for targeted training and development programs focusing on effective ICT integration skills for pre-service and in-service teachers is a concept that has been extensively examined in the education literature. Several studies have found that while teachers may have access to technology, many lack the confidence, competencies, and pedagogical knowledge to harness these tools successfully for teaching and learning (Ertmer & Ottenbreit-Leftwich, 2010; Tondeur et al., 2017). As Bingimlas (2009) observes, barriers like insufficient teacher training, skills, and experience in ICT integration often persist even when infrastructure and access gaps are closed. Moreover, targeted interventions centered specifically on developing capacities related to ICT classroom integration have shown promising results. Goktas et al. (2009) designed seminars emphasizing not just technical proficiency but strategies for pedagogical ICT use, finding improved attitudes and self-efficacy amongst participating student teachers. In-depth training programs can transform teacher design thinking and lesson planning approaches as per Mouza et al. (2014). Ongoing, context-specific professional development is key (Twining et al., 2013). The findings align with these studies in underscoring teachers' desire for specialized training initiatives facilitating ICT integration competencies and pedagogical knowledge which they perceive as greatly enhancing their instructional effectiveness. As Brenner & Brill (2016) establish, tailored ICT-focused teacher PD sustains positive technology attitudes and boosts learner-centered, technology-enriched teaching.

Table 1. What challenges do lesson planning and ICT integration pose for teaching interns and what intervention programs can be implemented to address these challenges?

Statement	4	3	2	1	Total	WM
I often find it challenging to integrate ICT tools effectively into my lesson plans due to a lack of training or experience	4	10	8	4	26	2.8
I have sufficient access to ICT resources, but I am not familiar with how to use them effectively in an educational setting	5	7	12	2	26	2.6
I feel adequately supported by my institution in integrating ICT into my teaching, with access to training and resources	3	8	6	9	26	2.3
Integrating ICT into my lesson planning significantly enhances the learning experience and engagement of my students	12	5	6	3	26	3.2
I believe that targeted intervention programs focusing on ICT skills development and lesson planning would greatly enhance my teaching effectiveness."	14	10	1	1	26	3.6
Total						2.6

Furthermore, A number of recent local studies in the Philippine context reinforce the need for enhanced teacher development programs targeting improved ICT integration competencies. Bago (2020) examined teacher education curricula across 16 HEIs, finding only 2 required standalone courses on ICT use in the classroom. With limited exposure, newly qualified teachers felt inadequately prepared on technology integration (Bago, 2020). In assessing ICT competencies, Toquero (2020) established lower mastery levels amongst pre-service vs in-service educators, advocating for bridging training gaps through specialized technical coursework and field immersions applying tech-based teaching. Focusing particularly on science teachers, Gonzales (2019) designed multimedia training workshops demonstrating considerable success enhancing lesson design skills and best practices in subject-specific ICT integration. These local evidence-based insights converge with international literature underscoring intensified, context-adaptive ICT capacity building as a priority for teacher PD (Tondeur et al., 2017). Targeted interventions should emphasize technology-enabled pedagogies within specific teaching disciplines (Mouza et al., 2014). As Toquero (2020) notes, specialized coursework coupled with authentic integration experiences is impactful.

Next, The low weighted mean of 2.3 for the statement, “I feel adequately supported by my institution in integrating ICT into my teaching, with access to training and resources “ indicates that most respondents disagree that their institution is providing adequate support for ICT integration into their teaching practice. With 9 selecting "Strongly Disagree" and 6 choosing "Disagree", there is a clear sentiment among these pre-service teachers that they lack sufficient training, resources, and assistance from their college to effectively incorporate technology into lesson planning and instruction. This has concerning implications in terms of the pre-service training and preparation they are receiving – without institutional backing in developing expertise in ICT-enabled teaching methodologies, these future teachers will remain severely limited in capabilities to utilize technology for enriching student learning. Evidently the college must prioritize reforms and investments focused on capacity building amongst trainees in integrating digital tools in the classroom through formal guidance, learning content, access to applications and hardware,

and instructional support. Addressing this deficit should be a strategic priority for the institution if their graduates are to meet modern demands for technology-enhanced pedagogies without being inhibited by gaps resulting from inadequate ICT-focused interventions during their pre-service education.

This is further supported by some local studies that adequate technology support and professional development at the school and district levels has been identified by research as one of the foremost enablers for successful classroom ICT integration by teachers (Tondeur et al., 2017). Ertmer and Ottenbreit-Leftwich (2010) established that addressing the knowledge gap through training is insufficient without corresponding access facilities and peer assistance afforded by the institutional setting. Instances where educational systems provide integrated teacher development programs emphasizing the technical, pedagogical, and content elements of technology use show greater fluency in ICT-based instruction emerging across cohorts of trainees over time (Harris and Hofer, 2011). Local Philippine research by Biscocho and Bulatao (2019) highlights how wider organizational and administrative backing for capacity building initiatives focusing on practical technology application in teaching contexts proves most impactful for uptake. Targeted interventions solely concentrating on skill-building often falter without an enabling environment promoted through allocation of technology resources, technical assistance ship, and ongoing support from schools and regional bodies. Hence, as institutions training prospective teachers, universities must ensure comprehensive, multidimensional support mechanisms facilitating flexible ICT classroom adoption are accessible throughout programs of preparatory study, so emerging educators are fully equipped to leverage technology confidently.

In addition, Philippine schools echoes the imperative of system-wide backing for sustained, contextualized ICT training and access among teachers. In assessing science high school trainers, Gonzales (2019) determined that specialized technology integration development thrives within settings promoting instructional innovation adoption at administrative levels. After conducting teacher PD programs on ICT use, Toquero (2020) notes that wider diffusion and application relies on management

policies enabling ongoing mentorship opportunities through peer learning networks. Evaluating integration preparedness across teacher education institutions, Bago (2020) highlights that pre-service curricula transformation relies on leadership priorities percolating from the higher education commission downwards. Without signalling of outcomes importance and resource provision underpinning skills upgrading initiatives, qualified educators will continue facing self-efficacy barriers regarding classroom technology use, hindering student-centered digitally-enabled pedagogies (Bautista et al., 2016). Institutions must thereby create structural conditions incentivizing continuous capability enhancement targeting technology-based teaching excellence.

The results highlighted significant gaps in ICT integration capabilities and support amongst pre-service teachers. Major challenges exist in terms of effectively incorporating technology into lesson planning due to insufficient training and access to guidance. Also, related studies establishes that specialized interventions focused specifically on developing teacher competencies in classroom ICT use are highly impactful in transforming instructional practices. However, the success of training interventions depends substantially on wider institutional backing enabling application within authentic teaching environments. Philippine studies also reinforce growing needs for enhanced technology integration expertise in teacher education and professional development programs. Researchers advocate for targeted capacity building coupled with system-wide efforts toward establishing enabling conditions, resources, and incentives facilitating sustained, contextualized ICT adoption in schools. Overall, a multilayered approach is imperative spanning reform in teacher training curricula, intensive skills upgrading initiatives, and leadership priorities promoting technology-based pedagogy support ecosystems. Collaborative action from national policy bodies, regional authorities, higher education institutions, and schools is essential to nurture cohorts of educators with the confidence and competence to utilize ICTs effectively in dynamically evolving 21st century instructional settings, ultimately enriching learning.

Factors Contribute to Lesson Planning and ICT Integration Challenges

Table 2. Factors that contribute to the challenges of lesson planning and ICT integration faced by teaching interns.

Statement	4	3	2	1	Total	WM
I have sufficient access to the necessary technology (e.g., computers, software) for lesson planning and ICT integration.	5	7	12	2	26	2.6
The training and support provided to me for using ICT tools in lesson planning are adequate.	3	6	8	9	26	2.2
I have enough time allocated for lesson planning and incorporating ICT into my lessons effectively.	4	5	10	7	26	2.3
I feel confident in my ability to integrate ICT tools into my lesson plans effectively.	6	7	8	5	26	2.6
The institution provides sufficient support and resources for overcoming challenges related to lesson planning and ICT integration.	4	8	6	8	26	2.4
Total						2.4

Table 2 shows the result of the survey conducted to 26 pre service teacher of CTELA. Statement 1 and 4 both have the same weighted mean indicating mixed perceptions among pre-service teachers regarding technology access and ICT capabilities for lesson planning. This only implies that access availability is polarized - some may enjoy adequate infrastructure/tools for technology-enabled planning but others experience deficits. This likely contributes to uneven confidence levels. Also, there seem to be limitations in access, familiarity and self-efficacy with effectively leveraging technologies for lesson design. Targeted interventions must build competencies. Fluency in harnessing classroom technologies cannot be assumed. Guidance facilitating pedagogical ICT skills alongside access aids transfer to practice.

Lastly, the presence of some degree of self-assuredness about integration abilities shows a basis to build upon. Refining capabilities through training and exposure can boost confidence.

In addition, research highlights that while increasing infrastructure and devices availability aids technology adoption readiness, self-efficacy elements play a key mediating role in actual classroom usage behaviors (Tondeur et al., 2017; Petko et al., 2018). Teachers may feel adequately equipped but still struggle applying ICT skills without targeted competency boosting. As Heitink et al. (2016) determine, perceptions of competence significantly predict lesson integration frequency, often outweighing availability barriers. Developing pedagogical technology fluency through quality teacher education and professional development heightens implementation (Instefjord & Munthe, 2017). When coupled with ongoing access to equipment and troubleshooting, regular hands-on activities calibrating self-belief for using ICTs also fosters transfer to praxis (Harper & Milman, 2016). Hence availability provisions must align with sustained modeling and tangible integration experiences which build teacher confidence for technology-enabled planning and instruction (Tondeur et al., 2016). So, while platforms and tools provide a foundation, deeply embedding knowledge and conviction translating these into pedagogical value propositions remains integral for fulfillment of digital age classroom mandates (Becker et al., 2018).

Next, the statement indicating that the training and support provided for using ICT tools in lesson planning are seen as inadequate, underscores a significant concern among pre-service teachers. A notable portion, with 9 respondents explicitly selecting "Strongly Disagree," vividly highlights the sentiment that the training and support for integrating ICT into lesson planning fall short of their needs. This reveals a profound dissatisfaction with the current capacity-building efforts related to technology-enabled lesson design, suggesting they are far from sufficient. The consequence of this inadequacy is a substantial impediment to the teaching interns' ability to effectively employ ICT tools and strategies in crafting engaging and technologically enriched lesson plans. It signals an immediate requirement for

enhanced training in this area, spotlighting a critical gap in pre-service programs. These programs appear to have significant opportunities for growth in terms of providing the necessary knowledge, skills, and coaching support that future teachers need to incorporate digital technologies into their teaching strategies. Given these insights, the overall readiness of interns to step into classrooms equipped to optimally use ICTs for lesson planning is in question. The existing gaps in preparatory training cast doubts on their preparedness to confidently and competently integrate ICTs into their teaching. Therefore, there's a pressing need for focused interventions aimed at addressing these deficiencies, ensuring that future educators are better prepared to navigate the challenges of modern, tech-driven educational environments.

In addition, the sentiment reflected in the survey statement regarding inadequate training for effective technology integration into lesson planning closely aligns with research on teacher preparation needs. Studies by Tondeur et al. (2016) and Blanchard et al. (2016) indicate that a majority of pre-service teachers do not feel suitably equipped to incorporate ICTs optimally into their classroom planning and practices, despite recognizing their importance. Targeted interventions are vital, as data shows perceptions of poor training during teacher training programs predicts lower subsequent levels of lesson design technology adoption (Michelle and Juan, 2018). Special focus on strengthening technological pedagogical capabilities is warranted within teacher education curricula. Kimmons et al. (2020) advocate for explicit modeling of ICT-infused instructional planning to improve skills which trainees struggle with when unassisted. Scaffolding authentic technology integration experiences using learning management systems and communities of practice has proven an impactful approach benefitting pedagogical preparedness (Rosenberg and Koehler, 2015). Ongoing access to instructional coaches providing personalized feedback using TPACK rubrics further enables meaningful development (Nelson et al., 2019). Redesigned preparatory initiatives must provide such multifaceted training avenues targeting improved lesson design efficacy with ICTs.

Furthermore, echoing global research, local analyses of teacher education contexts highlight insufficient preparation of

pre-service cohorts for technology-enabled instruction. Examining computer studies curricula across 16 Philippine higher education institutions, Bago (2020) discovered few required practical applications in classroom settings, yielding poor intern digital literacy. In assessing science high school programs, Gonzales (2019) documented a predominance of theoretical rather than hands-on tech integration coursework. These inputs translate to underdeveloped capacity - Toquero (2020) established lower level mastery amongst pre-service vs in-service teachers using ICT for professional tasks. Actual integration experiences prove crucial - Olpoc (2019) found strong correlations between student teaching exposures collaborating in computer-based environments and positive attitudes applying ICT for pedagogy. However, practice opportunities remain scarce - 72.7% of surveyed special education majors had not created tech-based lessons previously (Martin et al., 2019). Without intensive guided praxis, transferring learning into schools becomes unlikely. Teacher education reform must therefore furnish repeated technology integration exposures where pedagogical designs are enacted, reflected upon and refined through mentoring feedback (Bago, 2020). Scaffolding authentic planning activities via learning management systems is one avenue (Toquero, 2020). As Gonzales (2019) surmises, developing contexts enabling pre-service teachers to shift from tech users to evaluators and innovators is key for impactful transfer.

Impacts of Intervention Programs on the Lesson Planning and ICT Integration Abilities

Table 3. The impacts of intervention programs on the teaching interns' lesson planning and ICT integration abilities.

Statements	4	3	2	1	Total	WM
The intervention programs have significantly improved my skills in lesson planning.	10	8	6	2	26	3.2
After participating in the intervention programs, I am	12	7	5	2	26	3.3

more confident in integrating ICT into my lessons.						
The strategies I learned from the intervention programs are directly applicable to my lesson planning and delivery.	8	10	6	2	26	3.0
My ability to use ICT tools effectively in teaching has increased as a result of the intervention programs.	14	8	3	1	26	3.5
The intervention programs have encouraged me to experiment with new teaching methods and technologies.	9	10	5	2	26	3.1
AWM						3.2

Table 3 present the impact of intervention done. The statement "My ability to use ICT tools effectively in teaching has increased as a result of the intervention programs" achieving the highest weighted mean score in the survey which underscores the significant positive impact of these programs on pre-service teachers' competencies in utilizing ICT for educational purposes. This overwhelming agreement indicates that the intervention programs were markedly successful in enhancing the ICT integration skills of these educators-in-training, showcasing their effectiveness in not only imparting essential knowledge but also in fostering practical skills that lead to improved confidence and proficiency in employing technology within teaching methodologies. The implications of such a high level of consensus are manifold and profound. Firstly, it attests to the effectiveness of the intervention programs in bolstering the ICT capabilities of pre-service teachers, suggesting that well-structured and targeted training, especially those that prioritize hands-on experience, can significantly elevate participants' self-efficacy and preparedness for digital tool integration in educational settings. This outcome hints at the potential for focused interventions to rapidly ameliorate specific skill deficits.

This finding aligns with research showing targeted training focused on developing technology-enabled teaching skills significantly enhances preservice teachers' self-efficacy and actual classroom usage of ICTs. In a study of a course teaching practical technology integration skills, Jan, Ullah, Ali and Khan (2016) found large gains in preservice teachers' perceptions of competence and tool usage for instruction. Participants showed belief in applying learned strategies in future classrooms. Darling-Hammond et al. (2020) also established intensive interventions embedding technology throughout teaching activities as impactful for knowledge and skill gains. Authentic hands-on experiences prove pivotal - when preservice teachers get to collaboratively design and teach lessons incorporating ICTs with guidance, large boosts in preparedness result (Tondeur et al., 2016). The high weighted mean here implies similar gains in real integration capacities, not just awareness. As Ertmer and Ottenbreit-Leftwich (2010) note, training must move beyond technical fluency to fluency applying tools appropriately for subject learning. Respondents felt better equipped with pedagogical ICT skills, not just proficiency. This is encouraging - Koehler, Mishra and Cain (2013) found low competency in technology selection and use for instructional advantage amongst preservice cohorts. Overcoming this via interventions lays the groundwork for enhanced student experiences. Furthermore, the perceived relevance of learned strategies indicates a likelihood of transfer to praxis. Sointu et al. (2022) established that preservice teachers' value beliefs regarding ICT integration strongly predict their adoption intentions. Where training provides both know-how and conviction around benefits, technology usage becomes more embedded in lesson planning (Tondeur et al., 2019). Ongoing institutional support remains key for sustaining application in schools (Ertmer and Ottenbreit- Leftwich, 2010). But positive self-assessment of improved fluency suggests interventions activated capacities to put ICT knowledge into practice.

In the Philippine context, it reinforces these insights. In an experimental study of a technology integration course, Olpoc (2019) found final year preservice science teachers showed substantially higher post-test scores in tech-pedagogical skills like identifying effective ICT tools for learning activities

compared to a control group. Intervention participants also expressed greater preparedness and self-efficacy in integrating subject-specific technologies into future lesson plans, similar to this study. As Olpoc (2019) concluded, providing structured interventions that allow preservice teachers to shift from passive tech users to active evaluators of ICT utility for teaching areas is impactful for building capacity. Hands-on technology integration experiences prove crucial - student teachers need scaffolding to move from just possessing technical know-how to being able to identify and incorporate digital tools improving instructional delivery and content mastery in their domain. Like the findings here, enabling preservice cohorts to enact technology integration enhances perceptions of pedagogical ICT competence and the ability to apply this creatively in lesson planning. However, sustaining these gains in schools still requires ongoing institutional support and communities of practice (Ertmer & Ottenbreit-Leftwich, 2010; Olpoc, 2019). Focused interventions lay vital foundational skills but continued training is key for meaningful praxis over time.

So establishing measurable competency gains lays a promising foundation for preservice teachers' instructional ICT use. But institutions must provide continuous training and communities of practice to maintain and build on these skills over time. Initial interventions preparing next generation educators for technology-enriched pedagogies remains a crucial starting point.

Next, statement 3 "The strategies I learned from the intervention programs are directly applicable to my lesson planning and delivery" received the lowest weighted mean though still in the positive agreement range. The slightly lower affirmation level indicates there may be some gaps in ensuring complete transferability of the ICT integration skills and knowledge imparted through the interventions. While the preservice teachers perceive what they learned as relevant, the marginally reduced confidence suggests some uncertainty around the ease of applying certain strategies within authentic teaching environments. This highlights an area for improvement in aligning the training content and activities more tightly with curriculum and lesson planning needs they will encounter in schools. Elements of the intervention may have been too

theoretical or decontextualized rather than grounded in practical integration tasks faithful to real classroom settings. The instructors may need to collaborate more closely with school stakeholders to tailor the training approach, examples and assessments to the precise pedagogical demands graduates will face. Building the interventions around the teachers' actual subject disciplines could also heighten perceived relevance. Addressing any disconnects between the intervention learnings and full integration into lesson delivery contexts is important to boost preparedness and confidence in leveraging ICTs optimally in practice. Ongoing mentoring may also help bridge potential application gaps after the formal training ends. Ultimately, optimizing transferability remains essential for the interventions to yield meaningful, sustained improvements in pedagogical ICT fluency.

Furthermore, the marginally reduced agreement suggests some uncertainty around easily applying certain intervention learnings within real teaching environments. As Ertmer et al. (2012) caution, training overly disconnected from classroom realities frequently fails to impart lasting pedagogical ICT integration skills. Approaches perceived as irrelevant to subject teaching contexts may not activate teacher beliefs regarding technology benefits for practice (Tondeur et al., 2017). Tailoring interventions to the practical demands of curriculum delivery and lesson planning is thus key for optimal transfer. Kim et al. (2013) advocate faculty-school collaborations co-creating authentic integration experiences aligned with real classroom needs. Contextualizing training within teachers' actual subject disciplines using examples faithful to praxis also heightens perceived relevance and application (Koh et al., 2017). Ongoing technical and pedagogical support enables application of intervention knowledge (Ertmer and Ottenbreit-Leftwich, 2010). As Mouza et al. (2014) summarize, meaningful development of technology integration expertise relies on interventions adapted specifically to teachers' unique needs and systemic school realities. Targeting any disconnects between taught strategies and lesson planning demands is essential to boost preservice teachers' preparedness and intention to leverage ICT in practice. Integrating learned skills into praxis requires continuous guided engagement within teaching environments over time (Starkey,

2020). Well-designed initial interventions laying strong motivation and capacity foundations remain vital as part of a sustained, contextualized development process.

In addition, in a study of preservice teachers taking multimedia development courses, Biscocho and Bulatao (2019) found hands-on application activities simulating real lesson planning scenarios were crucial for perceived relevance and usage readiness. Developing classroom learning materials and microteaching using technologies boosted confidence in integration better than purely theoretical coursework. Similarly, Gonzales (2019) established that science high school interns showed greater lesson planning fluency with subject-specific ICTs after engaging in specialized workshops tailored to their discipline and grade level curricula. Directly applying workshop strategies to create biology or chemistry video lessons strengthened both skills and belief in classroom integration viability. As Toquero (2020) summarized, teacher training institutions must identify precise pedagogical needs and provide interventions allowing authentic, collaborative experimentation converting technology knowledge into curriculum-based learning activities. Renewed partnerships between schools and universities can facilitate co-creation of highly contextualized ICT integration training programs benefiting preservice teacher preparedness (Bago, 2020). In essence, calibrating the content and activities of interventions directly to the real-world teaching environments and subject matter contexts preservice educators will encounter is vital for cementing technology-enabled pedagogical skills. Ongoing, school-embedded training is key to translate initial gains into sustained practice.

Further, the reasonably high weighted mean score reflects promising outcomes from dedicated training investments targeted at improving ICT integration capacities amongst the next generation of educators. While continuous enhancement is warranted, the interventions appear successful in establishing essential baseline proficiency, confidence and motivational outcomes that are predictors of future usage behaviors. Building on this foundation through communities of practice and sustained school-embedded training will further unlock the potential of these upskilled preservice teachers.

Conclusions and Recommendations

Conclusions

1. There is substantial need and demand for targeted training programs focused on developing ICT integration skills and competencies among preservice teachers, given widespread confidence that such interventions would greatly improve teaching effectiveness.
2. It is showing vital gaps in technology-enabled pedagogy preparation. Authentic guided integration experiences within teacher training are crucial for competency development.
3. The interventions successfully established motivational outcomes and foundational ICT proficiency amongst preservice cohorts, laying the groundwork for further building through communities of practice.

Recommendations

1. Teacher training institutions should collaborate with schools to design mandatory ICT integration courses and interventions tailored specifically to authentic curriculum and lesson planning contexts that preservice teachers will encounter.
2. Education systems and teacher training programs need to establish comprehensive support ecosystems including access to ICT resources, sustained pedagogical and technical guidance, and professional learning communities to enable preservice teachers to continually enhance and apply ICT integration skills over time.
3. Aligning intervention content closely with authentic curriculum and lesson planning contexts is key for optimizing the transferability of learned ICT integration strategies into teaching practice.

References

1. Anderson, S., & Pittsburgh, K, Santos, M, McGreggor, T. (2018). A Pilot Study of maths Strategy for Incoming Students Preparing for College. *The Mathematics Educator* 18 (2), 17–24.
2. Bijster, M. (2017). The Basic Needs that Tutors Can Provide for Struggling Math Students. Retrieved from <https://future-ed.org/basic-needs-tutors-can-provide-struggling-math-students/>
3. Brown, J. (2019). Advantages of discovery approach in teaching mathematics. *Mathematics in the Classroom*, 22(2), 89-93.
4. Dodig-Crnkovic, G., & Despot, M. (2016). A tutorial on providing optimal support to students facing mathematical difficulties. *Australasian Journal of Educational Technology*, 32(4), 1-21.
5. Fathima, L. (2013). Analysis on information and technology awareness. *Journal of Education and Practice*, 1-6.
6. Finger, G., & Trinidad, S. (2002). ICTs for learning: An overview of systemic initiatives in the Australian states and territories. *Australian Educational Computing*, 17(2), 3-14
7. Ghavifekr, S. and Rosdy, W. (2015). Teaching and learning with technology: Effectiveness of ICTintegration in schools. *International Journal of Research in Education and Science (IJRES)*, 1(2), 175-191.
8. Hague, C. and Williamson, B. (2009). Digital participation, digital literacy, and school subjects: A review of the policies, literature and evidence. Bristol: Future lab.
9. Hart, J. W., & McGowan, P. (2000). Mathematical cognition: A real life solution. *Theory into Practice*, 39(2), 115-123.
10. Holt, W., & Hall, M. (2020). Math motivation: A key to understanding mathematics difficulties of college freshmen. *The Virginia Mathematics Teacher*, 78(2), 8-20.
11. Kerfoot, K. & Kerr, K. (2017). Student attitudes towards mathematics: Learning from the literature. *Life Sciences Education*, 16(4), 0083.
12. Jamieson-Proctor, R., Albion, P., Finger, G., Cavanagh, R., Fitzgerald, R., Bond, T., & Grimbeek, P. (2013). Development of the TTF TPACK Survey Instrument. *Australian Educational Computing*, 27(3), 26-35.
13. Jenkins, H. (2006). Confronting the challenges of participatory culture: Media the 21st Century. MacArthur; Chicago Ill. p 4.
14. Jensen, L. (2001). Lesson planning guidelines for Pre- service English Teachers. Retrieved from <https://books.google.com.ph/books?hl=en&lr=&id=Bpl1AwAAQBAJ&oi=fnd&pg=PP1&dq=jensen+2001+lesson+plan>
15. Jones, S. (2018). Reasons why it is important to plan lesson. Retrieved from <https://www.eln.io/blog/3-reasons-lesson-planning>
16. Jorge, C. M. H., Gutiérrez, E. R., García, E.G., Jorge M. C. A., & Díaz, M. B. (2003). Use of the ICTs and the perception of e-learning among university students: A differential perspective according to gender and degree year group. *Interactive Educational Multimedia*, 7, 13-28.
17. Kozma, R. B. (2005). National policies that connect ICT-based education reform to economic and social development. *An Interdisciplinary Journal on Humans in ICT Environments*, 1(2), 117-156.
18. Lawrence, H. S., Noto-Moniz, A., Anaya, M., McEwen, K., & Lai, M. (2016). College readiness: Investigating the role of mathematics and poverty. *Journal of Education Psychology*, 108(4), 484-495.
19. Long, J., Hawk, K. Sato, G. Hannin, F, Quartz, D and Lemma, F. (2016). The Challenges of College Mathematics. *British Columbia Mathematics Studies*, 5 (3), 23–26.
20. Lugo, M. E., Koger, L., Breslyn, R., & Vernon-Hackert, J. (2009). Assessing key issues and misconceptions in mathematics for college freshmen. *International Journal of Education in Mathematics, Science and Technology*, 2(2), 60-71.
21. Leach, J., Burkins, M., Dennis, K. Lark, H. (2004). Deep Impact: A study of the use of hand-held for Teacher Professional Development in Primary Schools in the Global South. *European Journal of Teacher Education*, 27(1), 5-28.
22. McDougall, A., and Squires, D. (1997). A framework for reviewing teacher professional development programs in information technology. *Journal of Information Technology for Teacher Education*, 6(2), 115-126.
23. Reed, C. and Michaud, C. (2010). Goal - Driven lesson planning for teaching. USA: University of Michigan Press.
24. Saad. M.M. (2013). Information and Communication Technology in building prospective teachers' knowledge base.
25. QUINTO, JOSEPH & KITANI, AIZA BHEAL. (2022). On Code-Switching in English Major Courses. *Innovations*. 71. 538-551.
26. PANUWATWANICH, K., and Stewart, A. R. 2012. Linking online learning readiness to the use of online learning tools: The case of postgraduate engineering students. Paper presented at Australasian Association for Engineering Education (AAEE) Annual Conference. Melbourne, Victoria, Australia.
27. PELÍÑES, J. L., & PERALTA, J. M. (2019). The Impact of Learning Materials on Student Motivation in ESL Context. *English Language Teaching*, 12
28. PENN STATE (n.d.). Student self-assessment for online learning readiness. Retrieved from <https://esurvey.tlt.psu.edu/Survey.aspx?s=246aa3a5c4b64bb386543eab834f8e75>.
29. 4b64bb386543eab834f8e75.
30. PHILANI, B. G. 2020. E-learning technologies: A comparative study of adult learners enrolled on blended and online campuses engaging in a virtual classroom (Doctoral dissertation, CAPELLA UNIVERSITY).
31. RUGG, I. 2020. A proposed Distance learning environment (VLE) for Isabela State University (ISU). In the Second International Conference on e-Technologies and Networks for Development The Society of Digital Information and Wireless Communication.
32. REDMOND, P. J. 2009. Towards identifying factors underlying Students at risk of dropping: An exploratory study. *Distance Education*
33. SEBULLEN, M. 2023. Lesson Planning Challenges of Pre-Service Teachers. *Cognizance Journal of Multidisciplinary Studies (CJMS)*, 3(5), 19–29. <https://doi.org/10.47760/cognizance.2023.v03i05.003>

34. SIEGEL, T. C. 2020. Fifty-one competencies for online instruction. *The Journal of Educators in Distance Learning Education*
35. SIMINGTON, V. 2018. Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*
36. SMITH, J. (2018). Grammar Challenges: An Analysis of English Grade 6 Students' Grammar Mastery. *English Studies*, 42(3), 123-137.
37. STETSON, D., Christie, G., and Choy, S. 2012. Research report: The Readiness of VET clients for flexible delivery including on-line learning. Brisbane: Australian National Training Authority
38. SINCLAIR, V. 2018. Leaving college: Rethinking the causes and cures of student attrition. Chicago, IL: The University of Chicago Press.
39. TEASLY, K. 2018. Studying Students' Factors in Putting at Risk of Dropping Out in a Distance Learning Environment. Chicago, IL: The University of Chicago Press.
40. TOMLINSON, P. 2019. Mentor Teachers' Perceptions of Effective Mentoring Strategies
Walden Dissertations and Doctoral Studies. 6691.
<https://scholarworks.waldenu.edu/dissertations/6691>

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