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EDUCATION

THE RELATIONSHIP BETWEEN SCHOOL GOVERNANCE AND TEACHERS RETENTION AMONG SELECTED BASIC FAITH-BASED PRIVATE SCHOOLS IN THE PHILIPPINES

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Abstract

This research paper explores the relationship between school governance and teacher retention among selected basic faith-based private schools in the Philippines. Teacher retention has become a pressing issue in recent years, with "burnout" being a significant factor driving educators to leave their positions due to exhaustion of personal and professional resources. This study aims to fill the gap in research by examining how faith-based private schools in the Philippines address this issue and reduce the intention of teachers to leave their jobs. Using a descriptive correlation design, the study involved 320 basic education private school teachers selected through random sampling. Data was collected using Google Forms. The findings reveal that the extent of school governance, particularly in terms of accountability and transparency, was rated positively. Similarly, aspects of employee retention such as recognition, work environment, and organizational policy were interpreted very favorably, indicating satisfaction with the implementation of school governance and employee retention policies. The correlation analysis indicates a significant relationship between school governance and employee retention. Effective management and implementation of school governance practices can greatly influence teacher retention, ultimately aiming to keep teachers productive and reduce turnover by fostering a positive work environment that promotes engagement within the school community.

Keywords: *school governance, employee retention, basic schools*

Employee retention is one the most common and prevailing challenges in school organization. It meant to encourage employees to remain with the organization for the maximum period of time or until retirement. Teachers who intended to stay in school provided lots of advantages in terms of financial resources, time, energy in recruiting and integrating in the school operation. Effective school retention system should know how to attract and retain its teachers for maximum efficiency. It is also critical to the long-term health and success of any organization. It is known fact that retaining your best employee or teacher ensures satisfaction, effective succession, and deeply imbedded organizational knowledge and learning.

Globally, 44 million additional primary and secondary teachers are needed to meet Sustainable Development Goal 4 to the attainment of quality education for all by 2030. Teacher shortages affect both developed and developing countries. Most of these teachers (7 out of 10) are required at the secondary level, and over half of those needed are required to replace existing teachers leaving the workforce. Teacher attrition globally between 2015 and 2022 from primary education doubled around the world from 4.6 to 9 %. Regardless of the country's income level, and even remuneration, teachers are leaving the profession within the first five years of practice (UNESCO, 2023). Study conducted by Garcia (2022), indicates that teacher retention has been difficult for schools as nearly 16% of teachers every year due to overwork and low pay. As a result, many school administrators spend significant time and money hiring new teachers, which affects school budgets and limits student achievement. Pengue (2021) on the other hand, argues that across the world, 33% of employees leave within six months after being hired, the latest employee retention trends indicate that the number of people who quit their jobs has increased in recent years. Tenny, (2020) mentioned that employee retention affects an organization's performance, productivity, culture, profitability, and customer satisfaction in positive and negative ways. Losing employees is costly and hiring and training new talent too frequently leads to expensive onboarding processes, and lack of employee retention doesn't look good for a company's culture. Not only is poor retention a monetary hit to your organization, it's also bad for moral and company culture (Reimer, 2021). Retaining employees is important for the prosperity and well-being of your company. Hiring and training new staff members takes a lot of time, energy, and money, and employee departures can hurt company results. Several issues are brought about by low staff retention, such as high costs, knowledge loss, and low production (Paulsen, 2021).

Meanwhile, in the study of Fuscaldo (2022), employees stay with a company when they receive competitive pay and benefits, have opportunities to grow, are respected and valued, and support the company culture and mission. Bradford (2017) posits that appreciation and recognition go a long way to keeping employees happy, and there are more ways to show that than through a decent pay cheque. Benefits over and above pay play a huge role in keeping them. In addition, according to a survey, majorities of workers who quit a job in 2021 say low pay (63%), no opportunities for advancement (63%) and feeling disrespected at work (57%) were reasons why they quit (Parker-Horowitz, 2022).

In the study done in Asia by Mercer (2022), ASEAN, faced with a growing shortage of skilled workers and the challenging reality of transitioning employees back to on-site work, companies in Southeast Asia (Indonesia, Malaysia, Thailand, and the Philippines) are finding it more difficult to attract and retain talent. Dissatisfaction with pay and benefits, and limited career advancement have emerged as the primary drivers of higher-than-usual attrition levels. Riedel (2017) research in Asian countries indicates that high teacher turnover has become a serious problem globally, in many international schools and is a growing concern in segments of the East Asian Regional Council of Schools (EARCOS). Among the reasons cited for the migration is lack of effective mentorship, lack of international leadership support, and ineffective systems are major contributors. Liu and Onwuegbuzie (2012), study showed that 40.4% of teachers would certainly leave the teaching profession for another occupation if the opportunity arose due to high level of stress, low salary, inadequate breaks and holidays, heavy workload, and students' behavior. Bunnell and Poole (2023) stated that an insecure and precarious working environment characterized by short-term contracts and subsequent high rates of annual turnover per school is the current situation in Asia Pacific. Sribayak et al. (2018) mentioned that Thai teacher attrition is influenced by demotivating work policies, inappropriate

salary and benefits, negative characteristics of the profession, and family responsibilities are believed to be the reasons teachers consider leaving their teaching career.

On the other hand, by Bulawat (2021) teachers' turnover among public schools in Nueva Ecija, Philippines shows that teachers' desire to leave the public was greatly fueled by their dissatisfaction of the way they were given responsibilities as well as with the career advancement procedures that the public schools have. Failure to improve school policies and implement provision of resources and technological support which might have improved the working conditions of the teachers in the public schools. Cabingas (2019) discussed the reasons for teacher attrition are lack of administrative support, negative perceptions on their skills in teaching and inadequacies, and non-commensurate income and safety in their careers will likely push them to migration. Philstar.com (August 29, 2023) also confirms that shortage of teachers in public schools in Metro Manila is attributed to lack of personnel and administrative support. Tarraya (2023, June 24) found out that an increased workload from policy makers often resulted in teachers' burnout and teachers' satisfaction is crucial to their teaching management and related activities in the Philippine Public School Teachers.

On the other hand, OECD (2019) noted that the most frequently observed trends in governance policy developments between 2008 and 2019 were on policies to refine education system's formal structure by creating mechanisms for quality assurance and decentralizing decision making and policies to review education system's objectives using national strategies and plans, and the modernization of curricular and qualifications frameworks. Supraidi et al. (2021), mentioned that school governance is the autonomy of schools in managing their schools, both human, financial, and material resources in school. And the school stakeholders are expected to make appropriate decisions based on the factual school conditions in which the school principal should support good governance at schools. Balarin et al. (2008) stated that good governance is a process in managing schools for increasing the schools' development and accountability which is also essential in legitimizing schools as institutions. Lingard et al. (2002), discussed that school governance exists to enhance the quality of producing the effective school governance performance. Risteska et al. (2010) stated that school governance is a set of responsibilities, practices, policies, and procedures carried out by an institution in providing strategic direction for ensuring goals achievement and responsible, accountable and transparent use of resources. Which implies that implementing good school governance will increase the level of participation, accountability, and transparency of a vocational school as well as the level of effectiveness of school management. Transparency is built to serve easy access to processes, institutions, and information (Risteska et al., 2010). Generally, the educational provision can be improved through better management practices, transparency in resource use, and accountability to all stakeholders (Abebe, 2018). Meanwhile, Supraidi et al. (2021) indicates that accountability is linked to management and concepts of participation, decentralization, empowerment, and transparency. The demands of both democracy and efficiency require some form of accountability at schools in which the political power of the leaders covers three ways namely enforcement, monitoring, and answerability. The accountability differs depending on the organization and whether the decision is internal or external. However, Hanberger (2016), mentioned that principals should monitor and provide information to control teachers and hold them accountable. Thus, the decision makers at schools, either private schools or public schools should be accountable to public and institutional stakeholders. Further, Kamalaveni, M.S; Ramesh, S; Vetrivel, T. (2020), concluded that decision quality requires a conducive climate of self-governing schools to support participative decision making, and transparency in school leadership in setting the school policies. In other words, the principal leadership strategies must be interpreted as the ability to influence and manage others efficiently, effectively, and economically in achieving the goals.

Therefore, the objective of the current study is to contribute to the knowledge-based effect of good school governance on teachers' retention. The present study provides knowledge on school good governance which is essential to maintain accountability and transparency for the school management especially in teachers' retention. Furthermore, this research addressed the empirical gap since most of the studies utilized the retention variable as matched with other variables but not school governance. Also, population gap is addressed in this research because the population utilized were private school teachers from faith-based institutions.

Methodology

Research Design

This study utilized a quantitative research methodology, which offers data suitable for generalization (Creswell, 2008). Specifically, a descriptive correlation design was employed to examine the influence of school governance on teacher retention within selected private faith-based basic education institutions in the Philippines.

Population and Sampling Techniques

The study comprised a sample of 320 teachers from faith-based basic education private schools in the Philippines. Random sampling techniques were employed to ensure representation from selected private schools.

Instrumentation

The data collection instruments used in this study encompassed two dimensions for measuring school governance variables: accountability and transparency. Additionally, the teacher retention variable was assessed through employee recognition, work environment, and organizational policies.

The reliability and validity of both school governance and teacher retention dimensions were assessed, demonstrating acceptable results when employing Cronbach's alpha. The internal consistency of the questionnaire is detailed in Table 1. According to Polit and Beck (2012), coefficients approaching .70 are considered adequate for group-level comparisons, while coefficients of .80 or higher are highly desirable.

Table 1
Cronbach Alpha Table

Variables	Number of Items	Cronbach Alpha	Verbal Interpretation
School Governance			
Accountability	11	.79	Acceptable
Transparency	10	.90	Excellent
Teacher's Retention			
Teacher's Recognition	10	.763	Acceptable
School Environment	7	.889	Good
School Policies	10	.777	Acceptable

Data Gathering Procedures and Analysis

The researcher collected data using Google Forms. Subsequently, the gathered data underwent statistical treatment, employing descriptive analysis to ascertain the extent of each variable and descriptive correlation to determine the correlation between them.

Ethical Consideration

The researcher submitted this paper for approval by the Ethical Review Board of the University, addressing any issues related to the gathering and conduct of the research. All relevant protocols concerning the ethical treatment of the respondents were submitted for scrutiny and clearance by the institution's ethics review committee.

Results

The results below present the detailed analysis and interpretations of data that determine the extent of school governance and teacher retention and the relationship between these variables.

School Governance

Table 2 shows the descriptive results of school governance dimensions which are accountability and transparency. The overall mean score for school governance was 3.73 with verbal interpretation of *Good.* The two dimensions got a mean score of 3.78 for transparency and 3.69 for accountability which is a verbal interpretation of *Good.*

Table 2
Summary of Descriptive Results of School Governance

School Governance	M	SD	SR	VI
Transparency	3.78	.37	Agree	Good
Accountabilty	3.69	.32	Agree	Good
Overall	3.73	.30	Agree	Good

Legend: 1.00- 1.49= Strongly Disagree (Very Poor); 1.50- 2.49=Disagree (Poor); 2.50-3.49=Moderately Agree (Fair); 3.50- 4.49=Agree (Good); 4.50-5.00=Strongly Agree, (Very Good); SR = Scale Response, VI = Verbal interpretation

Transparency got an overall mean score of 3.78 and interpreted as *Good.* It has 10 items ranging from 3.94 to 3.70 mean score. Among the top 3 items were "The school timely informs the teachers about new updates;" "The school ensures that the teachers understand all their obligations;" and "The school announces new changes to all teachers." While "my school provides accurate information about everything in the organization" was the lowest of all items.

This result confirms previous studies of Bulawat (2021) which showed that teachers' turnover among public schools in the Philippines shows that teachers' desire to leave the public was greatly fueled by their dissatisfaction of the way they were given responsibilities as well as with the career advancement procedures that the public schools have. Failure to improve school policies and implement provision of resources and technological support which might have improved the working conditions of the teachers in the public schools. Cabingas (2019) discussed the reasons for teacher attrition are lack of administrative support, negative perceptions on their skills in teaching and inadequacies, and non-commensurate income and safety in their careers will likely push them to migrate. Philstar.com (August 29, 2023) also confirms that shortage of teachers in public schools in Metro Manila is attributed to lack of personnel and administrative support. Supraidi, et al. (2021), mentioned that school governance is the autonomy of schools in managing their schools, both human, financial, and material resources in school. And the school stakeholders are expected to make appropriate decisions based on the factual school conditions in which the school principal should support good governance at schools.

Balarin et al (2008) stated that good governance is a process in managing schools for increasing the schools' development and accountability which is also essential in legitimizing schools as institutions. Risteska et al. (2010) stated that school governance is a set of responsibilities, practices, policies, and procedures carried out by an institution in providing strategic direction for ensuring goals achievement and responsible, accountable and transparent use of resources. Which implies that implementing good school governance will increase the level of participation, accountability, and transparency as well as the level of effectiveness of school management.

Teachers' Retention

Table 2 on Teachers' retention had three dimensions which are employee recognition, work environment, and school policies. The overall mean score of 3.72 indicates that all dimensions were verbally interpreted as "Good." For the teacher recognition dimension, the overall mean score is 3.86 interpreted as " Good." Teacher Recognition with 3.86 mean score; Work Environment with 3.64 mean score, and School Policies with 3.63 mean score the lowest.

Table 3
Summary of Descriptive Results of Teachers' Retention

Employee Retention	M	SD	SR	VI
Teacher Recognition	3.86	.33	Completely Agree	Very Good
Work Environment	3.64	.33	Completely Agree	Very Good
School Policies	3.63	.45	Completely Agree	Very Good
Overall	3.72	.21	Completely Agree	Very Good

Legend: 1.00- 1.49= Strongly Disagree (Very Poor); 1.50- 2.49=Disagree (Poor); 2.50-3.49=Moderately Agree (Fair); 3.50- 4.49=Agree (Good); 4.50-5.00=Strongly Agree, (Very Good); SR = Scale Response, VI = Verbal interpretation

Under Teacher Recognition, the item with the highest mean is "I am acknowledged by my school" with 3.91 and the lowest is "The criteria for teacher promotion have been explained to me" with 3.83 mean score. Work Environment dimension has an overall mean score of 3.64 interpreted as "Very Good." The item with highest mean is "I have all the materials needed to do my job in my work environment" with 3.72 mean score and lowest were "My school has strict policies at my work environment" and "My school helps me establish a relationship to work in a group" with 3.61 mean score. The last dimension was School Policies with 3.63 mean score and interpreted as "Very Good." The item with the highest mean score with 3.70 is "My school refers to its policies to solve existing challenges that occur," and the lowest with 3.48 men score is "I know all the consequences for not following the school policies."

The result of this study, in support of the study conducted by Garcia (2022), indicates that teacher retention has been difficult for schools as nearly 16% of teachers every year due to overwork and low pay. As a result, many school administrators spend significant time and money hiring new teachers, which affects school budgets and limits student achievement. Moreover, Guiguema (2023) mentioned that employee retention affects an organization's performance, productivity, culture, profitability, and customer satisfaction in positive and negative ways.

Losing employees is costly and hiring and training new talent too frequently leads to expensive onboarding processes, and lack of employee retention doesn't look good for a company's culture. Not only is poor retention a monetary hit to your organization, it's also bad for moral and company culture (Reimer, 2021). Retaining employees is important for the prosperity and well-being of your company. Hiring and training new staff members takes a lot of time, energy, and money, and employee departures can hurt company results. Several issues are brought about by low staff retention, such as high costs, knowledge loss, and low production (Paulsen, 2021). Furthermore, the study of Fuscaldo (2022) confirmed that employees stay with a company when they receive competitive pay and benefits, have opportunities to grow, are respected and valued, and support the company culture and mission.

Relationship Between School Governance and Teachers' Retention.

Table 3 shows the relationship between school governance and teacher retention. This study examined the relationship between School Governance and Teacher Retention. The study revealed that there was a "very strong" significant relationship between school governance and employee retention r=.174**, n=348, p=.001 as shown in table 4. However, the table also indicates that "accountability" has a weak relationship with "working environment," while "transparency" and "school policies' ' has "very weak" relationship.

Table 4
Correlation between School Governance and Teacher Retention

	Teacher Recognition			Working Environment			School Policies			Teacher Retention		
	r	*p*	*VI*	*r*	*p*	*VI*	*r*	*p*	*VI*	*r*	*p*	*VI*
Accountability	.085	.112	NS	.113*	.034	S	.003	.956	NS	.111*	.039	S
Transparency	.094	.080	NS	.074	.169	NS	.136*	.011	S	.192**	.000	S
School Governance	.101	.059	NS	.104	.053	NS	.084	.116	NS	.174**	.001	S

*Legend: ** Correlation is significant at the 0.01 level (2-tailed) * Correlation is significant at the 0.05 level (2-tailed). +1 Perfect Relationship, +0.80-+0.99 Very Strong Relationship, +0.60-+0.79 Strong Relationship, +0.40-+0.59 Moderate Relationship, +0.20-+0.39 Weak Relationship, +0.01-+0.19 Very Weak Relationship, 0 No Relationship*

In the study Apat (2022) on the school governance on employee retention, an industry risk and outlook during the pandemic employed describe a positive significant relationship on employee retention. The study suggested that organizations should develop a program for a governance management and employee empowerment program to aid the recovery program.

In addition, Supraidi et al. (2021) examined the role of leadership styles and school governance on employee retention and results found out the significant relationship between school governance and employee retention. Further, it is concluded that decision quality requires a conducive climate of self-governing schools to support participative decision making, and transparency in school leadership in setting the school policies.

 Meanwhile, Hanberger (2016), mentioned that principals should monitor and provide information to control teachers and hold them accountable. Thus, the decision makers at schools, either private schools or public schools should be accountable to public and institutional stakeholders.

In other words, the principal leadership strategies must be interpreted as the ability to influence and manage others efficiently, effectively, and economically in achieving the goals. Therefore, the objective of the current study is to contribute to the knowledge-based effect of good school governance on teachers' retention.

Discussion

This study delves into the impact of school governance on teacher retention within selected private faith-based basic education institutions in the Philippines.The findings indicate that these schools exhibit "good" governance practices, particularly in terms of accountability and transparency, which strongly influence teachers' decisions to remain in their positions. Factors such as teacher recognition, conducive working environments, and fair school policies also play crucial roles in teacher retention. It is evident that these aspects positively affect teachers and deter them from seeking opportunities elsewhere.

Interestingly, while overall school governance influences teacher retention, the study reveals that only accountability is directly related to the working environment, while transparency is associated with school policies. This suggests that different aspects of governance have varying impacts on teacher retention factors.

Based on these findings, the study recommends further exploration using a mixed-method approach and incorporating additional indicators of school governance and retention to enrich future research endeavors. This holistic approach could provide deeper insights into the complex relationship between governance practices and teacher retention outcomes.

References

Abebe, H. (2018). Effects of compensation to employee. https://core.ac.uk/pdf/aaa199938964.pdf

Apat, E. J. C. (2022). Governance and employee retention: An industry risk and outlook during pandemic. *International Journal of Academe and Industry Research*: Volume 3 Issue 3, 3, 87.

Balarin, M., Brammer, S., James, C., & McCormack, M. (2008). *The school governance study.* London: Business in the Community.

Bradford, J. (2017). *A guide in improving staff retention.* https://bradfordjacobs.com/blog/a-guide-on-improving-staff-retention/

Bulawat, A. (2021). *Teachers' turnover among public schools: basis for teachers' retention program.* https://www.researchgate.net/publication/352768512_TEACHERS'_TURNOVER_AMONG_PUBLIC_SCHOOLS_BASIS_FOR_TEACHERS'_RETENTION_PROGRAMS-

Bunnell, T., & Poole, A. (2023). International schools in China and teacher turnover: The need for a more nuanced approach toward precarity reflecting agency. *Asia Pacific Journal of Education,* 1-15. https://doi.org/10.1080/02188791.2021.1940840

Cabingas, L. (2019). *Who let the teachers out: exploring the main factors which contribute to teacher attrition in Philippine schools.* https://www.academia.edu/39721541/Who_Let_the_Teachers_Out_Exploring_the_Main_Factors_which_Contribute_to_Teacher_Attrition_in_Philippine_Schools

Creswell, J. W. (2008). *Research design: Qualitative, quantitative and mixed.* https://www.ucg.ac.me/skladiste/blog_609332/objava_105202/fajlovi/Creswell.pdf

Fuscaldo, D. (2022). *How to manage and improve employee retention.* https://www.businessnewsdaily.com/15878-employee-retention-rate.html

Garcia, M. (2022). *Teacher retention: useful tips to maintain high-quality staff.* https://educationadvanced.com/resources/blog/teacher-retention-useful-tips-to-maintain-high-quality-staff/

Guiguema, L. (2023). *Strategies to mitigate employee turnover in the information technology industry.* ProQuest Dissertations Publishing.

Hanberger, A. (2016). Evaluation in local school governance: A framework for analysis. *Education Inquiry, 7*(1), 1-18. https://doi.org/10.3402/edui.v7.29914

Lingard, B., Hayes, D., & Mills, M. (2002). Developments in school-based management: The specific case of Queensland, Australia. *Journal of Educational Administration, 40*(1), 6–30. https://doi.org/10.1108/09578230210415625

Liu, S., & Onwuegbuzie, A. J. (2012). Chinese teachers' work stress and their turnover intention. *Teaching and Teacher Education, 28*(1), 105-114. https://doi.org/10.1016/j.tate.2011.08.007

Mercer. (2022). Asia dominates the world's most expensive city rankings for employees working abroad: Mercer's 2022 Cost of Living Survey.

OECD. (2019). *Education policy outlook 2019*: *Working together to help students achieve their potential.* OECD Publishing. https://doi.org/10.1787/surveys-che-v15-2008-en

Parker, K., & Horowitz, J. M. (2022). *Majority of Workers Who Quit a Job in 2021 Cite Low Pay, No Opportunities for Advancement, Feeling Disrespected.* Pew Research Center.

Paulsen, E. (2021). Why Employee Retention is Important. In T. E. Nelson (Ed.), *Managing Employee Retention* (4th ed., pp. 19-38). Quantum Workplace. https://doi.org/10.1016/b978-0-7506-7484-3.50005-6

Polit, D. F., & Beck, C. T. (2012). *Data collection in quantitative research. Nursing Research: Generating and Assessing Evidence for Nursing Practice*. https://www.scirp.org/reference/referencespapers?referenceid=1616412

Pengue, J. (2021). *Why employee retention is important?* https://writersblocklive.com/blog/employee-retention-statistics/

Philstar.com. (August 29, 2023). *Glaring' teacher shortage on school opening day needs 'strategic' solutions*. https://www.philstar.com/headlines/2023/08/29/2292294/glaring-teacher-shortage-school-opening-day-needs-strategic-solutions-lawmaker

Reimer, T. (2021). *Employee engagement and retention-how they are connected*. https://peoplelift.com/post/employee-engagement-and-retention/

Risteska, M., Mickovskall, A., & Kraja, M. (2010). *Good governance in education Case studies: Municipalities of Kisela Voda, Kriva Palanka, Vrapchishte, Bitola, Strumica, Shtip, Kicevo and Veles*. Shqipe Gerguri - SEEU.

Riedel, E. (2017). *Perception of international teacher turnover in East Asia Regional Council of Schools*. https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=5672&context=dissertations

Sribayak, V., Tangkiengsirisin, S., & Hongboontri, C. (2018). Factors influencing teacher attrition in Thai context. *Asia Pacific Journal of Education*, 1-17. https://doi.org/10.1080/02188791.2021.1940840

Supraidi, D., Usman, H., Jabar, A., & Widyastuti, I. (2021). *Good school governance: An approach to principal's decision-making quality in Indonesia*. https://files.eric.ed.gov/fulltext/EJ1323729.pdf

Tarraya, H. (2023, June 24). *Teachers' workload policy: Its impact on Philippine public-school teachers.* https://files.eric.ed.gov/fulltext/ED629465.pdf

Tenny, M. (2020). Why organizational culture is so important (Top 10 Reasons). In *K. Shaefer (Ed.), Corporate Culture* (6th ed., pp. 215-222). https://doi.org/10.1057/9781137300089.0007

UNESCO. (2023). *Global report on teachers: addressing teacher shortages*. https://teachertaskforce.org/sites/default/files/2023-11/2023_TTF-UNESCO_Global-report-on-teachers-Addressing-teacher-shortages_EN.pdf

EDUCATION

Influence of Inquiry- Based Learning (IBL) on Students' Engagement

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Abstract

This study delves into the efficacy of implementing inquiry-based learning (IBL) to foster engagement among 100 randomly selected Grade 6 pupils. The framework of inquiry-based learning (IBL) emphasizes authentic science teaching and learning, aiming to enrich students' cognitive, affective, and psychomotor domains. Utilizing a descriptive-correlational design, the study assessed the impact of IBL on student engagement, focusing on five sub-variables: engagement, explanation, exploration, elaboration, and evaluation. A five-point Likert scale was employed alongside a set of 20-item descriptors to gauge the level of student engagement. The findings underscored high levels of inquiry-based learning utilization across various dimensions. Notably, engagement (M= 4.26 ± 0.384) and exploration (M= 4.36 ± 0.362) exhibited particularly robust scores. Furthermore, the study revealed substantial utilization of inquiry-based learning concerning explanation (M= 4.50 = 0.420), elaboration (M= 4.54 ± 0.682), and evaluation (M= 4.58 ± 0.376). Moreover, these dimensions of inquiry-based learning are significantly correlated with engagement in science. Importantly, the results highlighted the significant influence of inquiry-based learning on students' engagement (β = 0.647, p < .001). This suggests that an augmented implementation of inquiry-based learning correlates with a notable increase (0.647) in students' engagement with science subjects. Ultimately, these findings furnish concrete evidence affirming that IBL activities play a pivotal role in enhancing students' involvement and interest in science classrooms.

Keywords: *inquiry-based learning (IBL), students' engagement, science education, influence*

Inquiry-based learning stands as a pedagogical approach that empowers learners to actively construct knowledge through problem-solving, critical thinking, questioning, and hands-on experiences. This method, particularly in the domain of science education, underscores the active role of learners in shaping their understanding of the natural world. It serves as a framework for prioritizing authentic science teaching and learning, with its key features including active pupil engagement and the substantiation of knowledge claims through observations, experiences, or credible evidence.

According to Mantua (2019), the essence of inquiry-based learning lies in its student-centered approach, pivoting towards questions and problem-solving. Students are encouraged to learn through reasoning, experimentation, and the consideration of alternative hypotheses (Vasquez, 2018). Science education advocates for a curriculum that champions inquiry-based teaching methods, involving a spectrum of activities such as observation, questioning, and experimentation.

Bright's (2021) literature review accentuates three main mediums in inquiry-based science teaching: inquiry, discovery, and experiences. Inquiry entails the exploration of scientific principles through experiments and investigations, often leading to discoveries through pattern recognition and information synthesis. Discovery, on the other hand, aims at acquiring knowledge, concepts, and generalizations. Experiences form the foundational setting where inquiry and discovery processes occur, nurturing science process skills and facilitating fact gathering.

Aksela et al. (2020) elaborate on the competencies fostered through Inquiry Based Science Education (IBSE), encapsulated by the 5 E's: Engagement, Explanation, Exploration, Elaboration, and Evaluation. This approach envisions a transformative learning experience, acknowledging the pivotal role of scientific knowledge in preparing learners for a technologically advanced world.

Inquiry experiences offer invaluable opportunities for students to deepen their understanding of scientific content and practices, fostering excitement, motivation, and engagement in learning. They also serve as a platform for assessing soft skills like teamwork, responsibility, and initiative. However, the implementation of inquiry-based learning in classrooms is not without challenges. Common obstacles include inadequate support, training, and resources, an emphasis on content assessment over inquiry-based learning, and the time-intensive nature of inquiry approaches (Moreto, 2021).

Celedonio (2022) further identifies challenges in measuring success, addressing low engagement, integrating inquiry with the curriculum, managing classrooms, and grappling with the overall complexity of inquiry-based learning. Thus, considering these challenges and opportunities, this study aims to explore the influence of inquiry-based learning on student engagement in science education. It seeks to evaluate how IBL can enhance teaching practices and foster a culture of enthusiastic learning among both educators and learners.

The study was conducted to ascertain the influence of inquiry-based learning to students' engagements among the Grade 6 pupils in Pulong Sta. Cruz Elementary School, Division of Santa Rosa City Laguna. Also, this study aims answers to the succeeding objectives:

1. What is the extent of utilization of the inquiry-based learning in teaching Science instruction in the classroom in terms of:
   a. Engagement;
   b. Explanation;
   c. Exploration;
   d. Elaboration; and
   e. Evaluation.
2. What is the extent of students' engagement in Science?
3. Does the use of inquiry-based science learning significantly influence students' engagement?

Methodology

Research Design

The researcher employed a descriptive-correlational research design as the principal methodology for this study. Each dimension, including engagement, explanation, exploration, elaboration, and evaluation, along with the influence of Inquiry-Based Learning (IBL) on students' engagement, was meticulously presented in the research instrument. This approach was chosen to effectively quantify the outcomes among the study participants.

Population and Sampling Techniques

The participants in this study were Grade 6 pupils from Pulong Sta. Cruz Elementary School, Division of Santa Rosa, Laguna. The sample comprised one hundred pupils from both the morning and afternoon class shifts. Simple random sampling was deemed appropriate for this research endeavor. In simple random sampling, the researcher employs a non-judgmental approach to selecting sample members (De Belen, 2015). This method was chosen based on the premise that it allows for the unbiased selection of participants, ensuring representativeness within the population (Wallen, 2015; Birion & De Jose, 2016).

The rationale behind selecting Grade 6 pupils was twofold: first, their involvement in the study facilitated an examination of their utilization of Inquiry-Based Learning (IBL) within the classroom setting and its impact on student engagement. Second, these pupils were chosen because they had prior experiences with the implementation of IBL, given their participation in science classes. Moreover, their accessibility to the researcher, as they were under her supervision and instruction, facilitated data collection and interaction throughout the study.

Instrumentation

The instrument utilized in this study was a descriptive survey questionnaire, comprising various sections. A single survey instrument was employed for the student participants, aiming to measure the influence of Inquiry-Based Learning (IBL) on student engagement among Grade 6 pupils. The design of the survey questionnaire was adapted from the work of Gejda (2006), titled "Inquiry-Based Learning in the Science Classroom: A Survey on Teachers' Practice".

The questionnaire directly addressed the current utilization of Inquiry-Based Learning in the classroom. The researcher systematically formulated and modified the test items, ensuring they elicited responses from participants to collect relevant data.

To validate the instruments, the researcher sought assistance from the academic head and program coordinator. The instrument was also reviewed and validated by the researcher's advisor. Validation and reliability testing were conducted, with experts in English and the Program Science Coordinator evaluating the instruments based on criteria such as conformity with objectives, clarity and construction, difficulty level, and relevance. Test items failing to meet the criteria were revised accordingly.

To further assess validity and reliability, the researcher administered the test questionnaire to ten public school students at the same grade level. Subsequently, the data obtained from this pilot testing were analyzed to address specific study issues. Statistical tools including frequency, mean, and percentage were utilized to calculate the Mean Percentage responses (MPS) of the students. Additionally, a validation certificate, included as one of the appendices, was obtained to validate the instruments used.

Data Analysis

The questionnaire was administered directly by the researcher, who oversaw the survey process and collected the completed papers afterward. Subsequently, the collected data were tallied, computed, and interpreted. To facilitate data analysis, the collected data were encoded and analyzed using the software Jamovi version 0.6.8.

Mean and standard deviation were employed to ascertain the level of utilization of the inquiry-based approach in science instruction across dimensions such as engagement, explanation, exploration, elaboration,

and evaluation. These statistical measures provided insights into the average level and variability of utilization within each dimension.

Furthermore, Pearson correlation coefficient (r) was utilized to investigate the existence and strength of a significant relationship between the level of inquiry-based approach utilization in science instruction and the influence of inquiry-based learning strategies on student engagement. This statistical analysis enabled the researcher to determine whether there was a meaningful association between these variables and to what extent they were correlated.

Ethical Considerations

The researcher adhered to a systematic ethical approach outlined by Creswell (2018), as cited in Batuctoc and Medrano (2021) and Marcelo and Juanillas (2021), to ensure ethical procedures were maintained throughout the study. These procedures were vital to safeguard the rights of both the researcher and participants, particularly concerning the disclosure of personal information and experiences.

Throughout the research process, the researcher prioritized maintaining the highest standards of output while protecting the rights of the respondents. This included respecting their right to confidentiality, voluntary participation, and withdrawal from the study at any point. Participants were assured that their personal information and experiences would be treated with utmost confidentiality.

Prior to data collection, the researcher provided comprehensive information to participants regarding their involvement in the study. This encompassed details about the study's objectives, benefits, requirements, and the type of data needed. By transparently communicating these aspects, the researcher aimed to uphold the integrity and seriousness of the research process, thereby fostering trust and cooperation among participants.

Results
Extent of Use of Inquiry-Based Learning in Terms of Engagement

Table 1 shows the extent of use of inquiry-based learning in terms of engagement. The result shows that the respondents indicated 'high' extent of utilization of inquiry-based learning (M= 4.26 ± 0.384) in terms of engagement.

Table 1
Descriptive Statistics on the Extent of Use of Inquiry-Based Learning in Terms of Engagement

Statement	Mean	SD	Verbal Interpretation
My teacher…			
Begins the lesson by asking thought-provoking questions.	4.42	0.554	High
Start the lesson with brainstorming.	4.51	0.674	Very High
Asks students for relevant information about their lessons.	4.49	0.703	High
Allows the students to investigate a problem and search for possible solutions.	4.46	0.540	High
Provides opportunity to think creatively and use the student's intuition.	4.39	0.601	High
Provides a learning situation for a laboratory activity.	3.54	0.626	High
Allows the students to share various concepts.	4.08	0.580	High
Simulates certain ideas in science.	4.19	0.526	High
Grand Mean	4.26	0.384	High

Scoring System: 1.00 – 1.49 Very Low; 1.50 – 2.49 Low; 2.50 – 3.49 Moderate; 3.50 – 4.49 High, 4.50 – 5.00 Very High

It can be gleaned from the data that the use of inquiry-based learning in terms of engagement among the classes of the students is high. Among the strategies highly used by the teachers is brainstorming (M = 4.51, SD = 0.674). Additionally, teachers ask students to investigate a problem relevant to their lessons

and search for possible solutions. Furthermore, their teachers begin the lesson by asking thought-provoking questions and provide opportunities to think creatively and use students' intuition and offer laboratory activities to simulate certain ideas and share various concepts.

Use of Inquiry-Based Learning in Terms of Exploration
     Table 2 shows the extent of use of inquiry-based learning in terms of exploration. The result shows that the respondents indicated 'high' extent of utilization of inquiry-based learning (M= 4.36 ± 0.362).

Table 2
Descriptive Statistics on the Extent of Use of Inquiry-Based Learning in Terms of Exploration

Statement	Mean	SD	Verbal Interpretation
My teacher…			
Observes student's interaction	4.55	0.554	High
Ask interesting questions relevant to the lessons to get our attention.	4.49	0.674	Very High
Gives consultation for inquiries.	4.30	0.703	High
Creates opportunities for students to work together.	4.60	0.540	High
Leads the students to the importance of a certain concept.	4.40	0.601	High
Directs the students to certain important ideas.	4.03	0.626	High
Allows the students to experiment by providing objects they can compare.	4.28	0.580	High
Let the students to explore construct by themselves to discover new ideas.	4.21	0.526	High
Grand Mean	4.36	0.384	High

Scoring System: 1.00 – 1.49 Very Low; 1.50 – 2.49 Low; 2.50 – 3.49 Moderate; 3.50 – 4.49 High, 4.50 – 5.00 Very High

     The data above shows that teachers create opportunities for students to work together and observes interaction. Moreover, teachers ask interesting questions, directs students to the importance of certain concept and let them explore construct by themselves to discover new ideas.

Use of Inquiry-Based Learning in Terms of Explanation
     Table 3 shows the extent of use of inquiry-based learning in terms of explanation. The result shows that the respondents indicated 'Very high' extent of utilization of inquiry-based learning (M= 4.50 ± 0.420).

Table 3
Descriptive Statistics on the Extent of Use of Inquiry-Based Learning in Terms of Explanation

Statement	Mean	SD	Verbal Interpretation
My teacher…			
Asks students to explain concepts.	4.60	0.550	Very High
Asks students to justify their thinking.	4.56	0.625	Very High
Draws student's previous experiences in the lessons.	4.26	0.705	High
Asks students to clarify their thinking.	4.42	0.741	High
Asks students to explain definitions.	4.57	0.624	Very High
Provides directions for students.	3.68	0.530	High
Provides explanation for students.	4.66	0.536	Very High
Gives new labels to simplify diagrams.	4.29	0.782	High
Grand Mean	4.50	0.420	Very High

Scoring System: 1.00 – 1.49 Very Low; 1.50 – 2.49 Low; 2.50 – 3.49 Moderate; 3.50 – 4.49 High, 4.50 – 5.00 Very High

Across all aspects of inquiry-based learning in terms of explanation it can be gleaned from the data that in IBL approach, teachers always ask for an explanation for the students with 4.66 mean score. In this sense, it allows the students to explain scientific concepts with a 4.60 mean score. In doing such, students can only justify their concepts when they establish mastery in providing definition to certain concepts with a 4.57 mean score. Relatively, this allows the students to justify their thinking ability with a 4.56 mean score which all these descriptive statements verbally interpreted as 'Very High'. This only transpires that the utilization of inquiry-based learning in terms of explanation is highly evident.

In addition, inquiry-based learning (IBL) is an effective teaching approach that entails letting students describe the natural or material world in their own words (Marquez, 2019). This process encourages students to pose questions, come to conclusions, and test those conclusions in the pursuit of new scientific knowledge.

Use of Inquiry-Based Learning in Terms of Elaboration

Table 4 shows the extent of use of inquiry-based learning in terms of elaboration. The result shows that the respondents indicated 'Very high' extent of utilization of inquiry-based learning (M= 4.54 ± 0.682).

Table 4

Descriptive Statistics on the Extent of Use of Inquiry-Based Learning in Terms of Elaboration

Statement	Mean	SD	Verbal Interpretation
My teacher…			
Encourages students to apply concepts.	4.63	0.562	Very High
Encourages students to apply their skills.	4.61	0.618	Very High
Encourages students to extend their skills.	4.61	0.567	Very High
Refers students to the existing evidence.	4.40	0.586	High
Provides students with alternative explanations.	4.97	0.890	Very High
Requires students to use explanations.	3.52	0.643	High
Expects students to use definitions.	4.44	0.641	High
Expects students to use labels	4.16	0.735	High
Grand Mean	4.54	0.682	Very High

Scoring System: 1.00 – 1.49 Very Low; 1.50 – 2.49 Low; 2.50 – 3.49 Moderate; 3.50 – 4.49 High, 4.50 – 5.00 Very High

It can be noticed that four (4) from these descriptions gained 'Very High' verbal interpretation which indicate interrelationship. When students are provided with the opportunity for alternative explanation, they establish interest in IBL class interaction with a 4.97 mean score. In this sense, it allows the students to apply their scientific concepts with a 4.63 mean score. If this approach is given to the class, it allows the students to apply and extend their skills to other situations with 4.61 mean scores respectively.

The data presents that the utilization of IBL greatly allows students to explore and ask questions about the scientific concepts around them and learning helps them develop critical thinking and problem-solving skills. Students put what they've learned in an earlier phase of learning practice. This could involve hands-on tasks, information presentations, or other techniques that provide reinforcement. Students can draw connections between new information and prior knowledge with the aid of elaboration (Luna, 2021). Posing "Why?" questions to students enables them to consider the new ideas more thoroughly and consider how they relate to other subjects, which improves the quality of their learning.

Use of Inquiry-Based Learning in Terms of Evaluation

Table 5 shows the extent of use of inquiry-based learning in terms of evaluation. The result shows that the respondents indicated 'Very high' extent of utilization of inquiry-based learning (M= 4.58 ± 0.376).

Table 5
Descriptive Statistics on the Extent of Use of Inquiry-Based Learning in Terms of Evaluation

Statement	Mean	SD	Verbal Interpretation
My teacher…			
Assesses students' knowledge.	4.81	0.443	Very High
Observes students applying new concepts	4.69	0.526	Very High
Observes students applying new skills.	4.61	0.751	Very High
Assesses student' skills	4.70	0.541	Very High
Gives students with feedback to enhance thinking	4.62	0.582	Very High
Provides students with feedback to enhance skills	4.61	0.567	Very High
Asks open-ended questions.	4.45	0.657	High
Looks for evidence for changed behavior.	4.42	0.699	High
Looks for evidence for changed thinking.	4.41	0.740	High
Permits students to assess their own learning.	4.56	0.538	Very High
Allows students to assess their group skills.	4.53	0.643	Very High
Grand Mean	4.58	0.376	Very High

Scoring System: 1.00 – 1.49 Very Low; 1.50 – 2.49 Low; 2.50 – 3.49 Moderate; 3.50 – 4.49 High, 4.50 – 5.00 Very High

It can be gleaned from the data that in IBL, teachers usually assess students' knowledge with a 4.81 mean score. In this sense, it enables teachers to measure the effectiveness of their teaching by linking student performance to specific learning objectives in science. Moreover, teachers also assess the student's ability to efficiently and effectively use a repertoire of knowledge and skills to negotiate a complex task in science with a 4.70 mean score and which allows the student to apply their new concept with a 4.69 mean score. The data implies that IBL exponentially helps learners make their own connections and evaluate what they learn. Their curiosity helps them engage and gain a deeper understanding of topics and content thus questioning and providing feedback necessitates in the learning process. Answering questions, assessing the given situations, resolving issues through an applied skill, and analyzing scientific problems through evidence are all components of inquiry-based learning (Forough, 2018).

Level of Engagement
Table 6 shows the level of students' engagement to the class. The result shows that the respondents indicated 'high' influence of Inquiry-Based Learning (IBL) to the class (M= 4.32 ± 0.423).

Table 6
Descriptive Statistics on the Level of Engagement in Science Class

Statement	Mean	SD	Verbal Interpretation
I raise my hands in class to answer the teacher's questions.	4.08	0.825	High
I actively participate in small group discussions.	4.40	0.739	High
I ask questions when I don't understand the teacher.	3.43	1.174	Moderate
I do all the homework problems.	4.58	0.669	Very High
I come to class every day.	4.76	0.452	Very High
I visit our teacher's office to review assignments or to take tests.	3.16	1.022	Moderate
I find ways to make our science lessons interesting to me.	4.38	0.708	High
I take down notes during classes.	4.52	0.611	Very High

{table continues on the next page}

I look over class notes between classes to make sure I understand the lessons.	4.42	0.768	High
I really desire to learn our science lessons.	4.64	0.503	Very High
I am confident that I can learn well in the class.	4.58	0.638	Very High
I put effort into doing well in the class.	4.45	0.702	High
I am organized in doing Science activities.	4.48	0.745	High
I am inspired to get good grades.	4.55	0.716	Very High
I am doing well in science tests.	4.20	0.682	High
I enjoy our science classes.	4.70	0.611	Very High
I help fellow students in the class during activities.	4.07	0.844	High
I make sure to study on a regular basis.	4.23	0.827	High
I find ways to make Science lessons relevant to me.	4.37	0.774	High
I listen carefully during class discussions.	4.33	0.853	High
Grand Mean	4.32	0.423	High

Scoring System: 1.00 – 1.49 Very Low; 1.50 – 2.49 Low; 2.50 – 3.49 Moderate; 3.50 – 4.49 High, 4.50 – 5.00 Very High

The data shows that among the twenty (20) indicators, students come to school every day with a 4.76 mean score as the highest influence of IBL with the learners. Furthermore, students enjoy the lessons in the class with a 4.70 mean score. Essentially, teachers establish students' creativity to instill an engaging discussion in science class which impacts students' desire in the science class with a 4.64 mean score. The data implies that engagement in science class highly involves interaction among the learners with the goal of generating mutual benefit, mindful of scientific concepts and skills and imperatives of fostering more responsive and inclusive modes of knowledge production and discussion, increasing emphasis on students' participation and engagement. Results showed that students move from participatory roles towards constructive ones.

Students build the lessons they learn based on their own curiosity, rather than just following along with a lesson, which helps them develop into independent thinkers and problem solvers. Student engagement helps others to stimulate learning and improve their critical thinking and problem-solving abilities (Cilindro, 2021). Furthermore, students can cooperate, work with classmates, and develop their collaborative skills. Students who can create their own knowledge using these strategies are focus on the learning process and retain science concepts better.

Relationship Between the Use of Inquiry-Based Learning and Engagement in Science

Table 7 shows the relationship between the extent of utilization of inquiry-based learning and its influence on students' engagement. The results present that inquiry-based learning influences students' engagement.

Table 7
Correlation Matrix Between the Use of Inquiry-Based Learning and Engagement in Science

		1	2	3	4	5	6	7
1. Engagement	r	—						
	p	—						
2. Exploration	r	0.356***	—					
	p	<.001	—					
3. Explanation	r	0.479***	0.249*	—				
	p	<.001	0.012	—				

{table continues on the next page}

4. Elaboration	r	0.398***	0.435***	0.417***	—		
	p	<.001	<.001	<.001	—		
5. Evaluation	r	0.012	0.018	-0.045	0.045	—	
	p	0.908	0.860	0.654	0.655	—	
6. Inquiry-Based Learning	r	0.680***	0.617***	0.641***	0.761***	0.279**	—
	p	<.001	<.001	<.001	<.001	0.005	—
7. Science Engagement	r	0.219*	0.202*	0.334***	0.326***	-0.003	0.374***	—
	p	0.029	0.044	<.001	<.001	0.973	<.001	—

*Note. * $p < .05$, ** $p < .01$, *** $p < .001$*

The data illustrates a significant correlation between the extent of inquiry-based learning implementation and students' engagement levels. It highlights how students' involvement and motivation are amplified when they are empowered to construct their own knowledge through investigation and interaction. Collaborative learning environments, where students are encouraged to explore and experiment, foster increased engagement and participation in the classroom.

Classroom engagement has a profound impact on students' participation and performance. When students are given the autonomy to generate knowledge through hands-on exploration, they thrive. Providing ample opportunities for inquiry-based learning not only enhances students' interest in the subject matter but also nurtures their analytical and critical thinking skills (Castañas, 2021).

Inquiry-based learning, as described by Duque (2020), blends hands-on, learner-centered activities with discovery. Rooted in the scientific method, this approach enables students to observe phenomena, formulate research questions, conduct experiments, and communicate their findings. Importantly, the teacher assumes the role of a facilitator, guiding student discussions and providing support rather than dictating the learning process. This methodology cultivates independent learners by instilling a sense of ownership and responsibility for their own learning journey.

Influence of Use of Inquiry-based Learning to Engagement in Science

Table 8 shows that the p-value is less than the significance level of 0.05, it is concluded that inquiry-based learning influences students' engagement in science . In the next table, it shows inquiry-based learning has an estimate of $\beta = 0.647$ (F = 18.9 with $p < .001$) which means that an increase in the extent of use of inquiry-based learning leads to an increase of 0.647 in students' engagement in science.

Table 8

Predictors of Science Engagement

Predictor	Estimate	SE	t	p	R	R^2	Adjusted R^2	F	df1	df2	p
Intercept	1.437	0.664	2.17	0.033	0.402	0.162	0.153	18.9	1	98	<.001
Inquiry-Based Learning	0.647	0.149	4.35	<.001							

The data suggests a significant potential of inquiry-based learning to enhance students' engagement in the classroom. It indicates that the utilization of inquiry-based learning can lead to increased student involvement, particularly through discussions and activities that require higher-order reasoning skills. In this approach, students take an active role in shaping ideas, fostering a deeper understanding of the lesson content.

Discussions

Inquiry-based learning was first intended to promote social interaction among students, but it has now evolved into a paradigm for addressing problems that draws on and refines their inquiry-based skills. This

strategy may work especially well in a scientific context since investigation and questioning are essential components of a scientific methodology. Students of all backgrounds gain from the use of inquiry-based learning as it helps them advance their present learning, build long-term abilities, and influence their engagement in the class.

According to the results, the application of inquiry-based learning is positively and directly correlated with student engagement as its influence. Resources may be scarce, and creating lessons for inquiry-based learning might take a lot of effort. However, hands-on, and experiential learning allows students to experience deeper learning and develop direct connections, which is beneficial for their general engagement as well as their recall and retention of knowledge. Inquiry-based learning, as highlighted by Duque (2020), prioritizes student participation in the pursuit of scientific knowledge. By encouraging students to investigate materials, pose questions, and exchange ideas, this approach promotes a student-centered learning environment. Rather than passively receiving information from the teacher, students actively engage in the learning process, fostering autonomy and motivation.

Moreover, inquiry-based learning focuses on developing students' abilities to analyze, evaluate, and explore diverse perspectives on real-world issues. It occurs within a supportive learning environment where the teacher guides and scaffolds learning, fostering exploration and inquiry. This approach not only enhances student engagement but also deepens their comprehension of the material.

Studies have shown that inquiry-based learning leads to improved student engagement, as it encourages active participation in classroom activities and stimulates students' curiosity in scientific discovery. Through relevant tasks and independent research, students construct and acquire knowledge, actively engaging in the cognitive and discovery aspects of learning. Ultimately, inquiry-based learning emerges as a dynamic methodology that fosters optimal learner engagement and relevance to real-world challenges.

Inquiry-based learning must be highly valued at all academic levels, beginning in the early stages and spanning all disciplines, to fully utilize this cutting-edge student-centered approach. For an interactive learning experience that demands critical thinking from students, in-depth knowledge, and motivated, engaged students, it is imperative that IBL be ingrained in regular school curricula.

References

Aksela, K., Wang, J., & Wen, S. (2020). Examining reflective thinking: a study of changes in methods students' conceptions and understandings of inquiry teaching. *International Journal of Science and Science Education*. 1-21.

Batuctoc, C.,& Medrano, (2021), "Tracking the footprints puzzle: The problematic persistence of Ethical Consideration and Theory," *Science Education, 94*(6),1092-1122.

Birion, H.,Wallen, K., & De Jose, K., (2016) Current Topics in Science Education: Using Sampling Technique in Educational Research. *Journal for Educational Research*.

Bright, I. (2021). "I know it's so good, but I prefer not to use it." *International Journal of Teaching and Learning in Higher Education, 20*(3), 394-404. (EJ869324).

Castañas, O.(2021). Effect of 5E instructional model in student success in primary school 6th year circulatory system topic. *Asia-Pacific Forum on Science Learning and Teaching*, Volume 9, Issue 2, Article 10, p.2

Celedonio, C. (2022). *Developing Preservice Elementary Teachers' Knowledge and Practice through Modeling-Centered Scientific Inquiry in the Philippines*.

Cilindro, H. (2021). Scientific Enlightenment for an age of science. The *Science Teacher*, January, 13-15.

De Belen, E. (2015). The Effectiveness of Inquiry-based Learning to Train the Students' Metacognitive Skills Based. *International Journal of Instruction, 12*(2), 505516.

Duque T. (2020). Putting constructivist teaching into practice in science. *Journal of Science Education*, Vol. 3, No. 2.

Forough, T. (2018). Teachers' understanding and the use of the learning cycle. *Journal of Research in Science Teaching, 27*(9), 821-834.

Gejda, H. (2006). Inquiry-Based Learning in the Science Classroom: A Survey on Teachers' Practice. *Australian Journal of Teacher Education, 40*(12).

Librada, I. (2021). The effect of the inquiry-based learning approach on student's critical-thinking skills. *Journal of Mathematics, Science & Technology Education, 12*(12), 2887-2908.

Luna, R. (2021). Reforming Science Teaching: What research says about inquiry. *Journal of Science Teacher Education, 13*, 1-2.

Mantua, A. (2019). Classroom management and inquiry-based learning: Finding the balance and achievement in Science Philippine Education. *Science Scope, 32*(9), 1821. (EJ850038).

Marcelo, F. & Juanillas, E. (2021). Learning and thinking styles: An analysis utilizing Ethical Standards in Writing. *Educational Psychology, 20*(4), 413–431.

Marquez, C. (2019). Students' discussions in practical scientific inquiries. *International Journal of Science Education, 26*(1),25-45.

Moreto, B. E. (2021). Implementing inquiry based teaching methods in teaching science in Ateneo School. Manila, Philippines. *Science Journal*.

Tudavia, S. (2020). What is the place of lecture in student learning today? *Communication Education, 66*(2), 243-245.

Vasquez, P. L. (2018). A case study of Urban student and teacher Experiences surrounding an outdoor environmental Science Field Trip. *Philippine Education and Learning Pedagogy*.

Wallen, K.L., & Fraenkel, J., (2015. Sampling technique in research design. *Journal of Education Research, 36*(2), 222-225.

EDUCATION

Gamification Pedagogy, Student Engagement, and Self-Efficacy Among Selected High Schools in the United Arab Emirates

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Abstract

An innovative teaching method called "gamification" is being considered as a promising approach to enhance students' active learning skills and self-efficacy. However, its effectiveness in teaching pedagogical knowledge, particularly in mathematics and science, has not been thoroughly investigated. This qualitative exploratory case study examined gamification practices in a high school setting, including the rationale for integrating gamification in certain subjects and the challenges schools face during implementation. Data were collected from two high schools, involving eight teachers and eight students from the mathematics and science departments. Participants were selected based on their affiliation with these departments and their proficiency in computer literacy, as determined by a criterion questionnaire. The research was based on the TPACK and Self-directed Literacy Model frameworks and utilized individual interviews, field notes, and assessment data for data collection. The collected data were then transcribed, coded, and analyzed to identify common themes and patterns related to teachers' and students' perceptions of gamification's impact. Six key themes including the integration of gamified learning and engagement; motivation and alignment with educational goals; technical barriers and resource constraints. The content analysis results suggest a positive potential for gamification in education, while also highlighting the need for further research to determine its effectiveness in various contexts.

Keywords: *gamified e-learning, mathematics, science, self-efficacy, motivation, gamification pedagogy*

Educational technology plays an important role in teachers' and students' lives, which helps them to learn by themselves (O'Flaherty & Phillips, 2015). It helps today's teachers to put together new technologies into their classrooms that provide accelerated learning and fun opportunities that allow students to engage in unique and innovative ways. In this sense, an innovative pedagogy, "gamification," is considered one of the pedagogical approaches that can have a substantial impact on the development of students' active learning skills (Murillo-Zamorano, López Sánchez, Godoy-Caballero, & Bueno Muñoz, 2021). It includes game-related elements like points, badges, and rewards in an educational setting (Swacha, 2021). These elements help in student motivation and engagement, as research in the field of gamification has predominantly shown a strong connection between increased student engagement and self-efficacy (Chans & Portuguez-Castro, 2021). There is a gap in the existing gamification research, particularly in understanding pedagogical knowledge and practices in planning and carrying out the subjects to achieve effective student engagement (Torrisi-Steele & Drew, 2013; Dichev & Dicheva, 2017).

Considering these concerns, the goal of my work is to examine how educators plan to implement, integrate, and evaluate gamification technology in mathematics and science subjects at the high school level in the UAE. This research examined gamification practices carried out in a high school setting, the rationale for integrating gamification in selected subjects' teaching, and the challenges encountered by schools during the implementation of gamification.

Gamification is likely to be one of the next big trends in educational technology as schools have begun to diversify the curriculum to inspire students. For the last ten years, much research has been done on gamification and learning outcomes (Faiella & Ricciardi, 2015; Nacke & Deterding, 2017; Perryer, Celestine, Scott-Ladd, & Leighton, 2016; Subhash & Cudney, 2018; Zainuddin, Chu, Shujahat, & Perera, 2020). Through this research analysis, we can see the remarkable growth and expansion in the field of gamification and student engagement.

Gamified learning is a way of trying and testing techniques in a class-based context to engage the students more effectively. For instance, many platforms such as ClassCraft, Kahoot, Socrative, and 3D GameLab have been integrated into education to enhance students' motivation and engagement. Deterding (2014) and Dicheva et al. (2015) stated that effective gamification motivates and engages student players for an extended duration. The ideas, understandings, and experiences of students in a mathematics classroom are considerably productive when they are actively engaged. Katmada et al. (2014) agreed that engaging students with games in mathematics not only captures their attention but also fosters the development of more effective learning environments. Gamified labs offer a secure and realistic environment for student learning. Also, language learners use gamification to develop their skills in speaking, listening, writing, reading, and grammar. An innovative pedagogical approach based on the TPACK framework, derived from teacher feedback, is found to have a significant impact on teaching social science.

Unfortunately, there is a lack of attention to the implementation of gamification pedagogy, which has been consistently underscored by many researchers (Nacke & Deterding, 2017; Sánchez-Mena & Martí-Parreño, 2017). Our research work addresses the existing gap in knowledge and understanding of pedagogical practices of gamification. It guides the planning, design, implementation, and assessment of the subject courses that integrate gamification as an instructional pedagogy. For instance, Sánchez-Mena and Martí-Parreño (2017) studied integrating gamification in educational technology, revealing both pros and cons. On the positive side, it develops students' attention, students' motivation, and cooperative learning. Conversely, the drawbacks encompass a lack of resources, time and facilities limitations, students' disinterest, short-term impact, and challenges in managing uncontrolled learning.

This is the specific area we aim to investigate in our study. We have proposed a framework for gamification pedagogy that can change the way we think about student engagement. It aims to provide practical guidance for teachers seeking to integrate gamification based on their experiences, with a focus on enhancing student engagement and fostering the development of self-efficacy.

Gamification integration effectively means combining three types of knowledge: technology, pedagogy, and content (TPACK framework) (see Figure 1). Therefore, it is a valuable tool for understanding gamification in education.

Figure 1
TPACK Framework Mishra (2019)
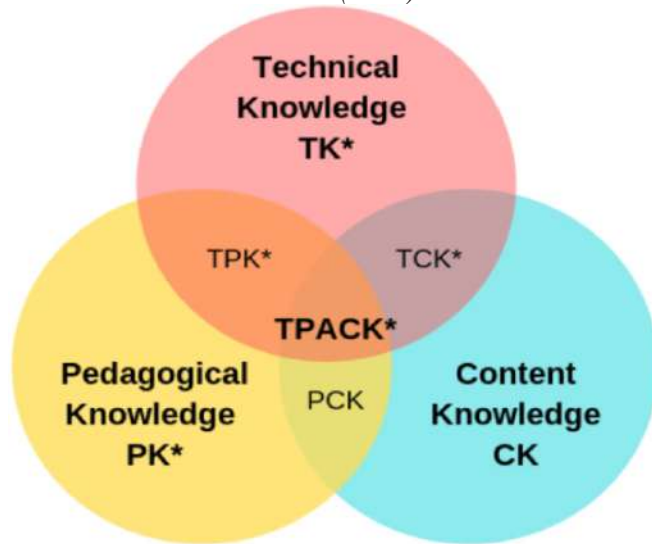
Furthermore, in understanding teaching practices of gamification, W.H.-Y. and Soman (2013) utilize a Self-Directed Literacy Model, as shown in Figure 2. This model involves several key steps: first, understanding the target student population and the relevant context of the topic to be taught; second, defining learning objectives; third, structuring the experience; fourth, identifying the resources; and finally, applying gamification elements.

Figure 2
Integration of TPACK and Self-Directed Literacy Model
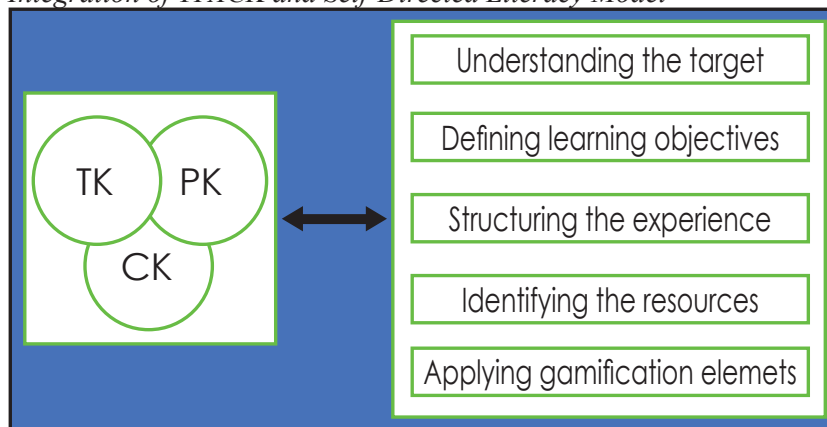
Methodology

Research Design

This study employs an exploratory qualitative case study approach to examine the integration of gamified technology and its impacts on teaching and learning methods.

Participants, and Sampling Techniques

The participants in this study were teachers and students selected from high schools in the United Arab Emirates. A total of sixteen participants, aged between 15 and 50 years, comprising eight teachers and eight students, were interviewed. Interview questions, field notes, and assessment data were utilized to gain insights into and enhance teaching strategies. A purposeful sampling technique was employed

to select participants, focusing on teachers and students from the Mathematics and Science departments who possessed computer skills and knowledge of gamification. This criterion questionnaire ensured the eligibility of teachers and students to participate in the study.

Instrumentation

In this study, we employ our proposed framework to formulate interview questions derived from Table 1, Table 2, and Table 3, aimed at enhancing our understanding of teaching and learning strategies (Creswell & Creswell, 2017). Interviews are conducted separately for teachers, focusing on comparisons between gamified and non-gamified pedagogical approaches. For students, the interviews center on their engagement levels. Participants share their perceptions, experiences, challenges, and suggestions concerning the integration of gamification in education.

Table 1

Generated Interview Questions from the Combination of TPACK and Self-directed Literacy Model for Gamified Pedagogy

Sl. No	Subjects (Mathematics/ Science)	Combination of Elements from TPACK and self-directed literacy model.	Generated Interview questions for teachers who use gamification
1		Knowing how teaching transforms using digital technological tools (TK). Understanding whether teachers use gamified technology in an effective way – Pedagogy knowledge (PK). Subject knowledge that improves student self-efficacy and engagement (CK) Step 1: Understanding the target student population and relevant context of the topic to be taught Step 2: Structuring the experience	Why do you use gamification in your subject?
2		Understanding the impact of technology tools on learning activities. Technology knowledge (TK) Step 4: Identify the resources.	What ways do you use gamification in your instructional approach?
3		Knowing how teaching transforms using digital technological tools (TK). Teaching methods that involve knowledge of suitable pedagogical strategies (PK). Step 1: Understanding the target student population and relevant context of the topic to be taught Step 2: Defining learning objectives Step 3: Structuring the experience Step 5: Applying gamification elements	Based on your knowledge and experiences, what are the benefits and challenges of integrating gamification, in terms of your teaching?

Table 2

Generated Interview Questions from the Combination of TPACK and Self-directed Literacy Model for Non-Gamified Pedagogy

Sl. No	Subjects (Mathematics/ Science)	Combination of Elements from TPACK and self-directed literacy model.	Generated Interview questions for teachers who use gamification
1		Understanding the target student population and relevant context of the topic to be taught (pk) Step 5: Applying gamification elements	What do you think about the idea of adding game-like elements to your teaching to make it more engaging for students?
2		Understanding whether teachers use gamified technology in an effective way – Pedagogy knowledge (PK). Knowledge of teaching difficult concepts (content) using technology (CK). Step 2: Defining learning objectives Step 3: Structuring the experience.	Do you think using games in the classroom could help students feel more connected to each other and create a positive learning environment?
3		Knowing how teaching transforms using digital technological tools (TK). Students' knowledge of the subject gamification technology – content knowledge (CK). Step 2: Defining learning objectives. Step 3: Structuring the experience. Step 5: Applying gamification elements.	Are there any challenges you have about trying out gamification in your teaching? What could make it easier for you?

Table 3

Generated Questions from the combination of TPACK and Self-directed literacy model for Student engagement

Sl. No	Subjects (Mathematics/ Science)	Combination of Elements from TPACK and self-directed literacy model.	Generated Interview questions for teachers who use gamification
1		Understanding whether teachers use gamified technology in an effective way – Pedagogy knowledge (PK). Step 1: Structuring the experience Step 5: Applying gamification elements.	Have the teachers ever used gamification in your subject course? If yes, how does gamification help to understand difficult concepts from the subject? And how it keeps students engaged.

{table continues on the next page}

2	Students' knowledge of the subject gamified technology – content knowledge (CK). Step 1. Understanding the target student population and relevant context of the topic to be taught Step 2. Defining learning objectives Step 5. applying gamification elements.	If not, can you give some suggestions on how you want to get engaged effectively in the classroom?
3	Students' knowledge of the subject gamified technology – content knowledge (CK). Step 1: Defining learning objectives. Step 2 applying gamification elements.	When you use gamification what are the common benefits and challenges you face? And what are they?

Data Gathering Procedures

Upon receiving approval from the administration to conduct the study, participants were selected based on a criterion questionnaire assessing their affiliation with a high school mathematics and science department and proficiency in computer literacy. Basic information about each participant was then collected. After conducting the interviews, transcripts were shared with participants for accuracy checks before data analysis commenced.

Field notes were taken to document participants' attitudes and behaviors during the interview process, as emphasized by Phillipi and Lauderdale (2017) in qualitative studies for recording essential research information. The collected interview transcripts, field notes, and assessment data were subsequently analyzed.

Data Analysis

The views, comments, opinions, and insights gathered from participants, including students, were processed using QDA Miner Lite software to generate codes, categorize them into themes, and conduct further analysis.

Ethical Considerations

Before administering the questionnaire, an application was submitted to the Ethics Board of the University, and approval was obtained, considering the ethical considerations inherent in qualitative research (Sanjari et al., 2014). The study aimed to explore the perceptions of teachers and students regarding the impact of gamification. Measures were taken to ensure confidentiality, with responses anonymized to protect the identity of participants.

Results

Our qualitative research provides a detailed account of pedagogical considerations behind the research questions.

Gamification Practices Carried Out in a High School Setting

Participants who utilize gamification and those who do not in mathematics and science disciplines were critically assessed. It was observed that schools in the United Arab Emirates are leading in integrating gamification elements into their curriculum to enhance student engagement and motivation. Many participants have recognized the effectiveness of gamification in these subjects. For instance, a math teacher mentioned, "Using leaderboards and badges reinforces students' strengths and builds their confidence in math abilities." Another math teacher added, "I incorporate educational math apps and

online games to enable students to practice concepts interactively." A science teacher noted, "I utilize educational science simulations and online games for virtual labs, models, and simulations of natural phenomena."

Additionally, a student commented, "Showbie has become an essential resource in our classrooms, serving as a comprehensive digital portfolio that captures and showcases our learning journeys." Science students expressed, "The gamified approach makes science more engaging and interactive," while math students noted, "It makes math more enjoyable and engaging." One student highlighted, "Gamification can effectively explain complex concepts in a more engaging and interesting manner."

The Rationale for Integrating Gamification in Selected Subjects' Teaching

All sixteen respondents unanimously agreed that gamification not only enhances student engagement but also aligns with educational goals and boosts motivation. This study suggests that gamification has the potential to motivate, develop skills, and optimize effective engagement.

According to a math teacher, gamification in mathematics motivates students to practice, master concepts, understand real-world applications, and build self-confidence in their math abilities. However, the integration of gamification into science subjects does not yield the same results, as noted by other teachers.

One teacher mentioned, "It boosts students' confidence in understanding challenging concepts once they are motivated." Students reported that gamified elements help them understand subjects and topics more clearly. Another math teacher emphasized, "It creates a positive learning environment where students actively participate, work towards goals, and celebrate successes. This builds confidence in their math skills and a sense of achievement, leading to increased engagement in the classroom."

The Challenges Encountered by Schools While Implementing Gamification

Integrating gamification, several challenges and difficulties were encountered. The first major challenge was resource constraints, as many students and teachers noted that it requires significant preparation time. For instance, one participant mentioned, "Gamification applications are time-consuming and can be distracting for younger learners."

Despite these challenges, gamification proved effective in reducing students' anxiety towards mathematics and encouraging them to take risks in tackling new and challenging tasks. Teachers stressed the importance of adapting these strategies to fit the challenges posed by game elements in science subjects. They also highlighted the necessity for professional development opportunities and access to relevant resources to successfully integrate gamification into teaching practices.

Technical barriers and resource constraints, such as time, budget limitations, and availability of educational materials, significantly impacted the design and implementation of gamified learning initiatives.

Six key themes emerged from codes in the interview transcript: integration of gamified learning, engagement, motivation, alignment with educational goals, technical barriers, and resource constraints. Figures 3 and 4 emphasize how the integration of gamified learning, engagement, and motivation contributes to self-efficacy.

Figure 3
The Final Result in Word Cloud

Figure 4
The Final Result in Graph

Gamification Pedagogy
Distribution of Themes (Frequency)
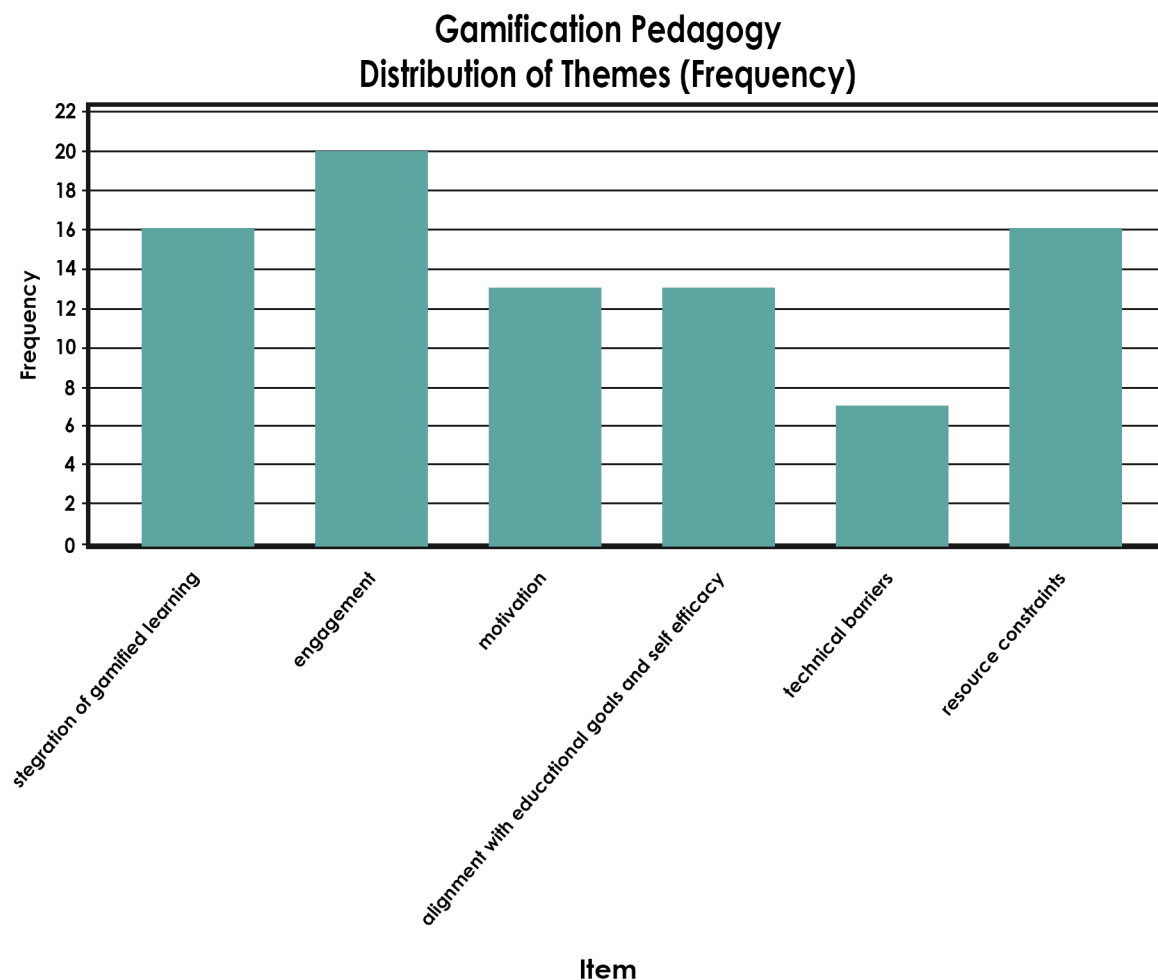
Discussions

   The research findings underscore the potential of gamification pedagogy to enhance learning experiences in high school mathematics and science. Integrated gamified learning approaches have demonstrated promise in fostering student engagement and motivation. However, successful implementation of gamification strategies requires careful consideration of factors such as alignment with educational goals, technical infrastructure, and resource availability. Future research should prioritize addressing these challenges and exploring innovative ways to leverage gamification for enhanced learning outcomes in high school education.

References

Chans, G. M., & Portuguez-Castro, M. (2021). Gamification as a strategy to increase motivation and engagement in higher education chemistry students. *Computers, 10*(10), 132. https://doi.org/10.3390/computers10100132

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). *SAGE.*

Deterding, S. (2014). The ambiguity of games: Histories and discourses of a gameful world. In S. P. Walz & S. Deterding (Eds.), *The Gameful World: Approaches, Issues, Applications* (pp. 23–64). MIT Press.

Dichev, C., & Dicheva, D. (2017). Gamifying education: What is known, what is believed and what remains uncertain: A critical review. *International Journal of Educational Technology in Higher Education, 14*(9), 1–36. https://doi.org/10.1186/s41239-017-0042-5

Dicheva, D., & Dichev, C. (2015, October). Gamification in education: Where are we in 2015? In E-learn: World Conference on E-learning in corporate, government, healthcare, and higher education (pp. 1445-1454). *Association for the Advancement of Computing in Education* (AACE).

Faiella, F., & Ricciardi, M. (2015). Gamification and learning: A review of issues and research. *Journal of e-Learning and Knowledge Society, 11*(3), 14–21.

Katmada, A., Mavridis, A., & Tsiatsos, T. (2014). Implementing a game for supporting learning in mathematics. *The Electronic Journal of e-Learning, 12*(3), 230–242.

Martí-Parreno, J., Seguí-Mas, D., & Seguí-Mas, E. (2016). Teachers' attitude towards and actual use of gamification. *Procedia- Social and Behavioral Sciences, 228*, 682–688. https://doi.org/10.1016/j.sbspro.2016.07.104

Mishra, I. (2019). Gamification as a self-direct approach to attain instruction concepts in Indian school system. *Open Journal of Social Sciences, 7*, 227-232. https://doi.org/10.4236/jss.2019.75019

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for integrating technology in teachers' knowledge. *Teachers College Record, 108*(6), 1017–1054.

Murillo-Zamorano, L. R., López Sánchez, J. Á., Godoy-Caballero, A. L., & Bueno Munoz, C. (2021). Gamification and active learning in higher education: Is it possible to match digital society, academia, and students' interests? *International Journal of Educational Technology in Higher Education, 18*(1), 1–27. https://doi.org/10.1186/s41239-021-00253-8

Pombo, N., Garcia, N., & Alves, P. (2019). How to get a badge? Unlock your mind: Motivation through student empowerment. In *2019 IEEE Global Engineering Education Conference* (EDUCON) (pp. 115-119). IEEE. https://doi.org/10.1109/EDUCON.2019.8725146

Nacke, L., & Deterding, S. (2017). The maturing of gamification research. *Computers in Human Behavior, 71*, 450–454. https://doi.org/10.1016/j.chb.2016.12.019

O'Flaherty, J., & Phillips, C. (2015). The use of flipped classrooms in higher education: A scoping review. *The Internet and Higher Education, 25*, 85-95. https://doi.org/10.1016/j.iheduc.2015.02.002

Perryer, C., Celestine, N. A., Scott-Ladd, B., & Leighton, C. (2016). Enhancing workplace motivation through gamification: Transferable lessons from pedagogy. *The International Journal of Management Education, 14*(3), 327–335. https://doi.org/10.1016/j.ijme.2016.05.002

Phillipi, J., & Lauderdale, J. (2017). *A guide to field notes for qualitative research: Context and conversation*. Vanderbilt University School of Nursing. https://doi.org/10.1177/1049732317697102

Sánchez-Mena, A., & Martí-Parreno, J. (2017). Drivers and barriers to adopting gamification: Teachers' perspectives. *Electronic Journal of e-Learning, 15*(5), 434–443.

Sanjari, M., Bahramnezhad, F., Fomani, F. K., Shoghi, M., & Cheraghi, M. A. (2014). Ethical challenges of researchers in qualitative studies: The necessity to develop a specific guideline. *Journal of Medical Ethics and History of Medicine, 7*.

Subhash, S., & Cudney, E. A. (2018). Gamified learning in higher education: A systematic review of the literature. *Computers in Human Behavior, 87*, 192–206. https://doi.org/10.1016/j.chb.2018.05.030

Swacha, J. (2021). State of research on gamification in education: A bibliometric survey. *Education Sciences, 11*(2), 1–15. https://doi.org/10.3390/educsci11020069

Torrisi-Steele, G., & Drew, S. (2013). The literature landscape of blended learning in higher education: The need for better understanding of academic blended practice. *International Journal for Academic Development, 18*(4), 371–383. https://doi.org/10.1080/1360144X.2013.836568

Wang, H.-Y., & Soman, D. (2013). Gamification of education. *Research Report Series: Behavioural Economics in Action*. Rotman School of Management, University of Toronto.

Zainuddin, Z., Chu, S. K. W., Shujahat, M., & Perera, C. J. (2020). The impact of gamification on learning and instruction: A systematic review of empirical evidence. *Educational Research Review, 30*, 100326. https://doi.org/10.1016/j.edurev.2020.100326

EDUCATION

Exploring Students' Lived Experiences in the Marriage and Family University Course: Implications for Curriculum Development

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Abstract

Marriage is a cornerstone of human civilization's sociological structure. To sustain its viability, incorporating marriage education into the curriculum, especially for young adults navigating significant life decisions, is essential. Despite its importance, relationship education within higher education, particularly concerning marriage and family, remains underdeveloped. Enhancing knowledge and improving these curricula for young adults is a crucial area for research. This study employs a phenomenological approach to explore the experiences of students who have taken an undergraduate marriage and family course. Fifteen adults were interviewed, and their responses were analyzed to uncover the essence of their experiences. Three main themes emerged: First, teacher quality is characterized by open-mindedness and the ability to foster open discussions. Second, lesson delivery is enriched through multiple perspectives and personal experiences, not solely from the teacher, and includes opportunities to discuss diverse and even opposing viewpoints. Third, lesson content must be context-sensitive, thoughtfully integrating culture, tradition, and religious perspectives, while fostering diverse viewpoints and open discussions beyond a single perspective. These themes highlight the potential to reshape undergraduate Marriage and Family course curricula to enhance students' learning experiences by broadening the scope and incorporating cultural sensitivity. The findings of this study will contribute to refining relationship education curricula, with a specific focus on marriage and family courses for emerging adults.

Keywords: *marriage education, relationship curriculum, young adults*

In the intricate web of human relationships, marriages stand as particularly complex. The success or failure of a marriage extends beyond the couple, impacting their children and society at large. A harmonious marriage sets the stage for children to internalize healthy relationship dynamics, creating a positive societal cycle (Ponzetti, 2015). Conversely, marital dissolution has far-reaching effects, from individual discontent to broader societal issues (Ponzetti, 2015). The rising divorce rates emphasize the urgency of addressing marital challenges. Divorce impacts children, who often emulate their parents' communication and conflict-resolution strategies, perpetuating a cycle that requires intervention. Beyond the family, divorce leads to single-parent, single-income households, which face financial strain and associated challenges.

Recognizing this need, educational programs on marriage and relationships have emerged, even within school curricula. Integrating such programs into formal education equips youth with essential life skills, influencing their future success. Prioritizing relationship education helps students break the cycle of their parents' struggles (Ponzetti, 2015) and fosters a generation capable of navigating relationships with resilience (Johnson et al., 2014).

This research focuses on relationship courses for young adults, particularly a marriage and family course. Higher education often emphasizes academics, but some universities offer practical, skill-based courses like relationship education (Cottle et al., 2014). This qualitative study explores the lived experiences of individuals who have taken such courses. Relationships, marriage, and family profoundly influence lives (Akgül, 2022; Berger & Font, 2015), necessitating ongoing education and understanding in this area.

Despite its importance, relationship education for young adults is under-researched. This study aimed to fill this gap by examining the experiences of those who have taken a marriage and family course during their emergent adulthood. These insights contribute to enhancing relationship education curricula, making them relevant and relatable for young adults, as noted by Ponzetti (2015), Benham-Clarke et al. (2022), and Farrelly et al. (2023).

Methodology

Research Design

This study employed an interpretive phenomenological qualitative research design. The purpose of qualitative research is to gather information from participant experiences and perspectives rather than numerical data. This approach allows researchers to delve deeply into the data and employ various analytical lenses.

Participants

Participants were selected through purposive sampling. Eight participants were senior students who had recently completed the Marriage and Family course, while the remaining seven were graduates who had taken the course no more than 10 years prior. This resulted in a total of 15 participants from the same university.

Data Collection

Data collection involved semi-structured and unstructured, in-depth interviews featuring open-ended questions. These interviews were conducted individually, either in person or virtually, based on the participant's location and preference, with each session lasting between 30 to 60 minutes. Each interview was recorded using a recording application. Open-ended questions facilitated unrestricted sharing of perspectives from participants. When a participant willingly shared without prompting, the researcher adopted a passive role, allowing the participant ample space to independently reflect upon and expand upon their experiences.

Table 1

Interview Protocol

Research Question	Prompts/ Follow Up Questions
1. What is your personal experience regarding your journey as a student/ graduate who has taken the Marriage and Family course?	1. Can you tell me about your experience taking the marriage and family course? 2. What did you learn and how did you feel about the material? 3. How has the course impacted your views on marriage and family? 4. Were there any specific topics or discussions in the course that stood out to you? Why? 5. How well do you feel like the course adequately prepared you for any challenges or issues that arose in your own relationships or family life? Why or why not? 6. In what ways do you think the course could be improved to better serve students or serve the individual in the class for their future?

Data Analysis

The Interpretative Phenomenological Analysis (IPA) was used to analyze the interview data. The steps in IPA begin with transcribing the recordings as soon as the interviews are completed. The transcriptions are then examined and analyzed. The transcriptions are read and reread to understand how participants made meaning of their experiences in the Marriage and Family course, and initial notations are made. Significant aspects of the participant's experiences are analyzed and detailed with codes. Connections among the codes allow for clustering into code groups and subgroups, which are then established into final themes.

Figure 1

Interpretative Phenomenological Analysis (IPA) Sequence
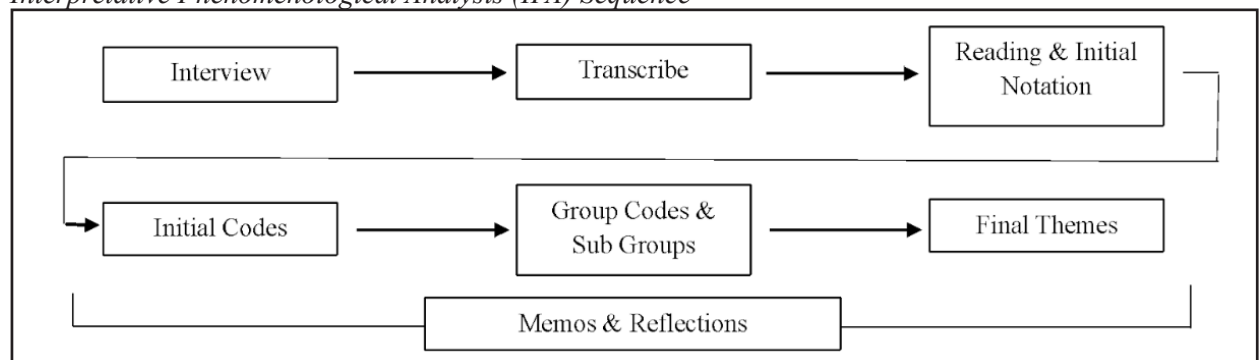
Ethical Considerations

Prior to conducting interviews, an application was submitted to the Institutional Review Board (IRB) of the university, and approval was granted. Before the interviews, participants read and signed a consent form to confirm their voluntary participation and were informed that all information would be handled confidentially.

Results

Three themes were identified from the data analysis: The first is "Lesson Content", which encompassed the recollection of course subject matter, participants' views and opinions on the content with special attention given to topics surrounding religion, culture, and sex education, as well as suggestions given for enriching lesson materials, and the perceived applicability and relatability of the content to their personal

lives. The second theme is "Delivery of Lessons", which consists of reflections on how the course was taught, participants' perspectives on the delivery methods employed, suggestions for enhancing the delivery of lessons, and considerations of cultural influences on the teaching and learning experience. The third and final theme is "Teacher Quality", which encompasses the participants' views and opinions on the calibre of teaching they experienced, as well as their suggestions for improvement to foster better teaching practices.

Theme 1: Lesson Content

Lesson content is the foundational element of the curriculum, playing a central role in the classroom. It was analysed that all participants shared insights on the various topics that were covered. The participants recalled the different subjects from their class, with some voicing their thoughts about the content and material including topics that resonated with them on a personal level through its applicability and relatability. Notably, among the topics shared, religion and sex education emerged as recurring points among a significant portion of the participants. The sharing of what the participants recalled included recalling their feelings and experiences which also led them to share suggestions for richer content which they expressed in their interview.

Throughout the interviews conducted with 15 participants, a comprehensive array of 145 topics emerged, reflecting the breadth of content covered in the marriage and family course as recalled by the participants. The 145 Topics can be organized into several categories as there was a vast number of topics that were recalled. One of these categories includes the foundations of marriage and family from a Christian and biblical standpoint, with topics such as family worship and spiritual life. Relationship dynamics was another category of topics that included communication in relationships, understanding emotions and feelings, setting boundaries, and attachment issues. Additionally, subjects like family planning and parenting techniques and styles were covered under the heading of parenting and child rearing. Interracial and multicultural marriages, as well as Asian cultural views on marriage and family, were among the cultural and societal factors that were discussed. Intimacy and sexuality were other subjects discussed from a biblical and Christian standpoint. Addressing addiction to pornography, practicing safe sexual behaviour, and comprehending marital sexual relationships were among the topics covered.

Another area of topics that participants learned about included challenges and conflict resolution, which included managing conflicts and disagreements in relationships as well as understanding the factors that contribute to divorce. Another category that participants remembered was personal growth and development, which included developing healthy connections prior to starting a family and understanding oneself, one's partners, and each other's family backgrounds. The participant-learned lessons came from the teacher's personal experiences and testimony, as well as marriage to a spouse with a physical disability.

Culture

Culture, when mentioned independently, was referred to either as a theme of the topics learned or as the varied responses given to specific situations, such as during discussions on sex education. Some participants observed a connection between other students from Asian backgrounds and those from Western and African cultures, as shared by the participants below:

It was also like, uncomfortable for me, yeah, every time, she [talked] about it. I'm like, I'm looking at the guys, the girls, my friend also like, oh god, this is like sensitive. But then for those who grew up in Western [culture], I mean, there are some Asians that grew up in the US that part, they're like more open about it. (P3)

So mostly because in our [University], mostly students are like Asians, and we are not like really open to all those things. But for African people, yeah. Because the cultures are very open, right? Like, like Westerns or European people. They're just quite open for us. Asians, even though we know we're just quiet, don't want to share like that, just smile and laugh. Yeah, it was like that. (P1)

Yeah, because they don't feel very comfortable to. This is something that, you know, mostly in Asian culture, they're not very comfortable to discuss these things. But yes, the Western would like to ask.

But I'm sure the Asians did have, but it was maybe that they didn't want to ask. They didn't want to feel shy, especially the size (of the class) and like you know, they don't want to talk about those things. (P11)

Sex Education

Participants expressed interest and vividly recalled discussions on sex education. Several shared their feelings and experiences related to this topic when it was addressed in their class such as the following experience from participant 12 (P12):

I think for maybe when the introduction to the how you say to the topic, I think most of the students would giggle or would have a reaction that seems like like, Oh my God, yeah, that kind of reaction. Because like how do you say the topic of pornography has always been something that's not many people talk about, not much people talk about it and it's too perverted. OK, the the [sic] topic in people's minds like it's too perverted. It's too. Yeah, like taboo. It's much outside of education. (P12)

Participant 3 (P3) expressed discomfort during discussion on sex yet emphasized the necessity of learning about sex education. All participants who discussed this topic conveyed openness to and acknowledged the importance of learning about sex education:

So, the uncomfortable one was, like, related to sex education… But it's actually good to yeah, to expose these things to them. So yeah, it was uncomfortable. But also at the same time, like, we need to, we need to go out of our comfort zone. (P3)

Participants offered numerous suggestions regarding potential enhancement to the class after they shared their experience on topics related to sex education. These suggestions were things that they were expecting to learn in class but did not, what changes would help improve the experience and learning, and further topics that could be covered in the class. Participant 14 expressed some topics that could be discussed in class:

I was hoping to have more of whatever people feel taboo topics are… I think taboo topics are different in different places… Anything. Intimacy. Those topics were like everything else, just like brush aside or not even were they brought up those like cheating? Sex. Intimacy… Yet again surface, just one or two slides. (P14)

Religion

Religion was a prevalent topic among all participants. Given that the course was offered at a Christian university, religion played a significant role in their discussions about their experiences. The topics were also interconnected as well such exemplified by the discussion of religion within the context of sex education, as describe by P10:

It wasn't really a sexual part, like it wasn't really, you know like sexual where like they read, they talk like openly like that. But I he only talks about the talk about certain Bible verses or is it a chapter And then he he explained to us like the intimacy in that in that Bible verses but I can't really recall which Bible verses OK… But for those who are [non-Christian], right, those who don't know anything about the Bible, they will, I think, a [sic] little bit confused of why it's happening. Sexuality lesson is more towards like Bible. I feel like this was Bible than more practical. (P10)

While most participants appreciated the inclusion of faith-based topics, they also highlighted the importance of adopting a more balanced approach. They emphasized the need to consider students who may not identify as Christians or be familiar with biblical teachings. Participant 16 explains why this suggestion is important:

Cuz [sic] I know there are some people on campus who aren't [this religion], who may not even be Christian or just do not go to church or have anything just like that. So, it would be easier

for an idea to be approached generally and then say according to our beliefs, this is what it says afterwards. Yeah. Then if you try to force the religious aspect first, because it feels like now you're forcing them to because of religion. But if you show the benefits of how it will be for them even without religion, then it's easier to tackle religion. (P16)

Further Views and Opinions

Participants shared their views and opinion of the different topics as shown above and they also discussed their views and experiences on how applicable and relatable the content was. Participants were able to understand themselves and the family they grew up in. Some participants were able to identify what kind of partner to look for in the future. Other participants were able to use what they learned in class into their own daily life. And several also expressed appreciation that they had some basic knowledge to be able to look back on to face certain evens in their future. As P4 puts it:

So, I think having this class or this kind of talks like helps to helps [sic] the young people to see the future like there's more to just I do. (P4)

It was also noted that eight out of the fifteen participants articulated a sense of inadequacy in the depth of the course content, expressing a desire for a more comprehensive exploration rather than surface-level coverage. Participants emphasized the need for deeper discussions to make a more profound impact. This sentiment was echoed by P16, who suggested getting into more detail. Additionally, Participant 5 lamented the superficial treatment of certain subjects, describing it as merely scratching the surface. Similarly, Participant 3 characterized many discussions as shallow, lacking in depth. Moreover, P11 highlighted the prevalence of general perspectives in class discussions. These insights underscore the participants' collective aspiration for a more thorough and nuanced exploration of course topics.

Theme 2: Delivery of Lessons

The second and prominent theme that emerged was the delivery of lessons which is the way the course content was presented and conveyed to the students. This is another aspect of the curriculum that can make an impact on the experience and effectiveness of the course. In this section of this analysis, participants provided valuable insights into their experiences with the course instruction by describing the methods by which the content was taught but also offering their perspectives and opinions on the effectiveness of these instructional approaches. Moreover, participants offered constructive suggestions on how the mode of delivery could be improved.

Throughout the interviews the participants provided a range of instructional methods and materials which provided insight into their learning experiences within the marriage and family course. Instructional materials encompassed various mediums, including videos, worksheets, reading assignments, and online resources, while interactive learning activities fostered engagement through group discussions, projects, and sharing of personal experiences mainly from the teachers, some guest speakers, and a few classmates. Assessment methods included exams, quizzes, and critical thinking questions, ensuring comprehension. Special projects, such as interviewing couples and engaging with children, were some activities that participants were able to recall even for those who had taken the course between five to 10 years ago. The incorporation of faith and scriptures, including discussions on the five love languages and biblical verses was another layer of how the content was delivered to the participants.

View and Opinions on Delivery of Lessons

Varying perspectives on the mode of delivery of lessons were discovered during the analysis of the interviews. A couple participants viewed the course as distinctly different from their traditional courses and in particular P9 likened the course to a workshop when the class was taught right:

But it's still. It doesn't feel like a lot of classes. They feel like a class. This was more of a feeling of, I don't know, it didn't feel like a class per SE, It felt like maybe a [workshop]…This class had

the atmosphere of that's OK you have the atmosphere of you can take this. You can take these tips on how to train children. You can take these tricks on how to have a fight and not end up divorced. You can take these opinions on marriage and sex. You can take these opinions on pornography. You don't have to take any of them. You don't have to take all of them, but all of them are presented right. (P9)

Further significant observations regarding the view and opinions of the delivery of lessons included a remark by P12 who remarked on the outdated nature of some of the videos used in the course suggesting a more updated version for more impact and relevancy to the viewers. Additionally, there was noticeable emphasis on stories as an effective mode of teaching the lesson. Participant 10, who took the course almost 10 years ago, still remembers a story told by the teacher. The participant credits this vivid memory to the story and not being from the textbook because of the emotions it evoked.

Participants who referenced textbooks expressed a negative sentiment or intonation, indicating a general dissatisfaction with this mode of learning. It became evident through the data analysis that the preferred method of learning, as highlighted by the majority of participants, was through engaging discussions. Several participants preferred discussions as they were able to present their own viewpoints as well as see the viewpoints of others. Participant 5 mentioned that class was enjoyable and one of the contributions to the was the following:

So basically, like the way she just, she teaches in class, it's not really like so focused on like OK, memorizing, memorizing, memorizing. So, she makes a lot of discussion, a lot of group work (P5)

Suggestions for Enhanced Delivery of Lessons

Just as participants shared their suggestions for a richer lesson content, when it came to their view of improving the delivery of lessons, the participants offered insights based on their won experiences. One of the suggestions that came up was the idea of not having exams in the course as it was suggested that it was not appropriate for evaluating marriage and family dynamics as it is something in the future. A proposed alternative was having a class that was akin to attending seminars, participating in discussions, and submitting reports. The participant felt that this would be more effective and relevant.

Another suggestion made by more than one participant was to have more session where classes would be separated into separate or smaller groups. In particular, P11 and P16 believe that taking this suggestion will allow for more sharing of insights and dynamic discussions that can allow the students to delve deeper into whatever topic they are discussing at that moment. In terms of communication between teacher and students, a smaller sized class or separated group could allow for more feedback and sharing. Further suggestions regarding how course content can be improved through teachers is by having different teachers to teach the class so that there are more perspectives to learn from. Theis suggesting by P14 also includes inviting families to come to the class to answer questions and share their own experiences.

The final suggestions are related to teachers which will lead to the third and final theme. But before getting there, here are some final suggestions on how teachers can help to improve how lessons are delivered:

I think to improve the course the way the teacher present [sic] the lessons that that can be more interesting for the students and also like more practical lessons. (7)
Could give the class to people who are passionate about families and relationships and younger people. So not just people who are, let's say, maybe pastors in this school to do to teach us people who want to help young people. I think that would be nice. Charismatic people. (P14)

The students' suggestions are not about grand gestures or extravagant lessons. Rather, they value the simplicity of discussions and teaching methods that extend beyond the confines of textbooks. Engaging in discussions rather than traditional lectures is considered sufficient by the participants to maintain their interest.

Theme 3: Teacher Quality

The third them that emerged during analysis and reading through the transcripts of the participants was the quality of the instructors of the marriage and family course. Participants shared their experiences and reflections on their instructors, highlighting aspects such as instructional practices, classroom management, effectiveness in facilitating learning, and the connection established with students. This section unveils the qualities that participants deem essential for an effective teacher, derived from their personal experiences and perceptions, shedding light on what made their learning experiences favorable based on the quality of instruction provided.

In exploring the quality of instructors within the marriage and family course, participants provided insights into various dimensions of teaching effectiveness. They highlighted instances where instructors failed to fulfill promises, thereby diminishing the practicality of the course, demonstrating a need for reliability. Conversely, participants commended instructors who demonstrated resourcefulness by going the extra mile to incorporate relevant research, fostering a rich learning environment. Moreover, engaging teaching methods, such as inviting guest speakers, were valued for their ability to capture student interest and promote active participation. The significance of relatability was emphasized through instructors sharing personal anecdotes, enhancing connection and understanding among students. However, rigidity in teaching approaches, particularly reliance on textbook readings, was perceived as inflexible, hindering adaptability to diverse learning needs. On the other hand, articulate explanations and proficient communication were recognized as essential qualities, facilitating comprehension and engagement.

Collaborative efforts, evident in instructors making arrangements with others and organizing practical activities, demonstrated a commitment to student-centered learning and organizational skills. Nevertheless, superficial exploration of topics left participants yearning for deeper insights, highlighting the importance of thorough coverage. Interactive teaching styles, characterized by open discussion and flexibility, were favored over passive lecturing, promoting active learning and critical thinking. Furthermore, diligent preparation and avoidance of slide-based teaching demonstrated instructors' dedication to delivering meaningful instruction. Adaptability to large class sizes, versatility in presenting multiple perspectives, and efficient classroom management underscored instructors' ability to navigate diverse learning environments effectively. Overall, these findings elucidate the multifaceted nature of effective teaching within the marriage and family course, emphasizing the importance of dynamic, engaging, and student-centered instruction.

Participants had positive words for their instructor who fostered an environment conducive to open debate, personal opinions, and candid discussions ad highlighted by P9 and P5 with P9 commending the instructor's non-judgmental approach, appreciating how they presented facts without judgment, particularly in sensitive topics like religion and sex education:

He had a way of not judging, right? He stated facts, but he wasn't judging or condemning people with different lifestyles, but he was stating the facts and why Christians believe the way they do and how the different situations will affect you like it. It was very how do you non-judgmental? (P9)

There's midterm and there's finals, but like along the way there's no like quizzes, there's some assignments. So, it's it was very chill. She always encouraged discussion between teacher and students, and she always, well, she's not very, like, too serious. She's always makes jokes here and there. So we ended up laughing in class instead of just like OK, I need to be serious all the time and it's. (P5)

Further commendation by participants are teachers who are "sensitive" or "culturally aware" that the students they are teaching have their differences especially in religion and are mindful in how they convey and approach different topics in a way that shows care and in a respectful and inclusive manner. Participant 3 shares her thoughts and feelings on how she views this:

They're not [Christian]. Yeah. So, she has to be careful what she's going to share. Yeah. Because they might feel like are you trying to like to convert us to have something like that. Yeah. But then, but in the way she, she related with biblical things, it's also nice. Like, yeah, yeah, it's good. (P3)

As with the preceding themes, participants offered valuable insights into the characteristics of an effective instructor for the Marriage and Family course. This section of the analysis encapsulates their perspectives, opinions, and recommendations regarding the desirable attributes of an instructor for this course. Notably, a recurrent suggestion emphasized the importance of having a knowledgeable instructor who is willing to address challenging topics openly. Furthermore, participants expressed a preference for instructors with professional backgrounds, particularly those with experience as marriage counsellors. Participant 11expresses hope for this to happen:

So, it really depends on who they really give. So I hope the [University] see whatever the Academy committee in AIU understands the importance of the class much better so that I can. Yes, in certain classes they really need to have certain people who really know what they're talking about. (P11)

Discussion

The themes explored in this analysis demonstrated interconnectedness and shared aspects, highlighting the holistic nature of the participants' experiences. Each theme provided a platform for participants to reflect on their personal encounters and offer suggestions for enhancing the course, drawing from their unique perspectives. Overall, the findings emphasize the importance of dynamic, engaging, and culturally sensitive instruction in the Marriage and Family course. Notably, religion and culture emerged as recurring threads woven throughout all three themes, underscoring their significant influence on the learning environment.

Culture played a pivotal role in shaping discussions and interactions within the course, influencing both lesson content and delivery. Participants recognized the importance of cultural sensitivity, acknowledging that diverse cultural backgrounds could impact how lessons were received and interpreted. Teachers who exhibited cultural awareness were deemed effective in navigating these dynamics, fostering an inclusive and respectful learning environment.

Similarly, religion permeated discussions across all themes, prompting participants to advocate for a balanced and inclusive approach to religious topics. It was crucial for instructors to facilitate open dialogue and accommodate diverse perspectives, ensuring that students felt comfortable expressing their beliefs without fear of judgment or bias. By maintaining neutrality and allowing for diverse viewpoints, instructors could foster enriching discussions and promote critical thinking.

Moreover, the significance of sex education resonated throughout the analysis, with participants emphasizing the importance of addressing this topic thoughtfully and comprehensively. Effective delivery of sex education required teachers to be knowledgeable, proactive, and unafraid to broach sensitive subjects. Engaging instructional methods and a willingness to explore diverse perspectives were essential in promoting understanding and awareness among students.

The interconnectedness of culture, religion, and sex education underscored the nuanced nature of the participants' learning experiences. By prioritizing cultural sensitivity, fostering open dialogue on religious topics, and addressing sex education with competence and tact, instructors could enhance the quality and effectiveness of the marriage and family course, ensuring a more meaningful and inclusive educational experience for all participants.

Participants' suggestions for richer content, improved delivery methods, and effective teacher qualities provide valuable insights for enhancing the course. The findings highlight the marriage and family course's multifaceted nature, with implications for curriculum development and instructional practices. The participant's insights offer valuable guidance for enhancing the quality and effectiveness of future courses, allowing the chance for more enriching and meaningful learning experiences that students can take away with them.

References

Akgül, M. Ş. (2022). Examining undergraduates' perspectives on the concepts family and marriage. *International Online Journal of Education and Teaching (IOJET), 9*(1). 34-45.

Benham-Clarke, S., Roberts, G., Janssens, A., & Newlove-Delgado, T. (2022). Healthy relationship education programmes for young people: systematic review of outcomes. *Pastoral Care in Education, 41*(3), 266–288. https://doi.org/10.1080/02643944.2022.2054024

Berger, A., Wildsmith, E., Manlove, J., & Steward-Streng, N. (2012). Relationship violence among young adult couples. *Child Trends Research Brief*, #2012–14. http://www.childtrends.org/Files//Child_Trends-2012_06_01_RB_CoupleViolence.pdf

Berger, L. M., & Font, S. A. (2015). The role of the Family and Family-Centered Programs and Policies. *The Future of Children, 25*(1), 155–176. https://doi.org/10.1353/foc.2015.0007

Cottle, N. R., Thompson, A., Burr, B. K., & Hubler, D. S. (2014). The effectiveness of relationship education in the college classroom. *Journal of Couple & Relationship Therapy, 13*(4), 267–283. https://doi.org/10.1080/15332691.2014.956357

Farrelly, N., Barter, C., & Stanley, N. (2022). Ready for Relationships Education? Primary school children's responses to a Healthy Relationships programme in England. *Sex Education:Sexuality, Society and Learning, 23*(4), 425–441. https://doi.org/10.1080/14681811.2022.2052834

Johnson, R. L., Sendall, M. C., & McCuaig, L. (2014). Primary schools and the delivery of relationships and sexuality education: the experience of Queensland teachers. *Sex Education: Sexuality, Society and Learning, 14*(4), 359–374. https://doi.org/10.1080/14681811.2014.909351

Ponzetti, J. J. (2015). Evidence-based Approaches to Relationship and Marriage education. *Textbooks in Family Studies*.

EDUCATION

STUDENT PERCEPTIONS OF ONLINE LEARNING IN THEOLOGY PROGRAM AT A FAITH-BASED COLLEGE IN HONG KONG

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Abstract

Evaluating online educational programs is crucial for understanding academic achievement, with student satisfaction serving as a key indicator of program quality. This study assesses the online theological learning program at a faith-based college in Hong Kong, focusing on curriculum depth, delivery methods, and teacher-student engagement. Using a 30-item Curriculum Delivery Interaction Questionnaire (CDIQ) with a 5-point Likert scale, responses from 186 theology students were analyzed. Results reveal high satisfaction across all dimensions: 86.02% of students were satisfied with the curriculum, 89.24% with delivery quality, and 83.33% with interactions. These findings provide insights for improving online theological programs, emphasizing curriculum strength, effective delivery, and meaningful interactions. Future research could explore faculty perspectives and employ qualitative analyses to further understand student satisfaction in online theological education.

Keywords: *online learning, theology program, curriculum, delivery, interactions*

Mainstream education plays a pivotal role in shaping individuals' futures by imparting knowledge and instilling fundamental values and attitudes crucial for personal development. Malcolm X, one of the prominent African American leaders during the civil rights movement, emphasized that education is the passport to the future (Edelberg, 1986). However, while general education focuses on enhancing critical thinking and problem-solving skills for success in various domains, theological education offers a more comprehensive approach, addressing physical, mental, and spiritual dimensions to cultivate a fulfilling life both in this world and the next (White, 2000).

Regrettably, the opportunity for theological education remains elusive for a significant portion of the global population, with certain regions prohibiting the dissemination of religious knowledge. In various third-world countries and developing regions, the pursuit of religious education is actively restricted (Watson, 2010). Pellot's study (2014) underscores the centrality of freedom of expression to religious liberties. However, individuals residing in these areas often find themselves deprived of the fundamental right to freedom of speech. Furthermore, Pellot highlights that in some of the most oppressive regimes, religious expression is not only stifled but also met with persecution, as authorities fear that such activities might undermine governmental authority (Censorship, 2014). Consequently, certain countries remain anonymous in this discourse due to the risks associated with religious expression.

Nevertheless, divine intervention persists in aiding and demonstrating affection towards individuals who continue to pursue theological education. As recorded by the prophet Isaiah, the self-oracle of the Lord states, "Behold, I will do a new thing, Now it shall spring forth; Shall you not know it? I will even make a road in the wilderness And rivers in the desert" (Dybdahl, Andrews Study Bible, 2010, New King James Version, Isaiah 43:19). This compelling assurance from the Lord underscores His ability to orchestrate remarkable deeds for His people, unimpeded by any hindrances. With the evolution of educational modalities from traditional correspondence courses to the transformative realm of online distance learning facilitated by the Internet, individuals now enjoy enhanced rights and accessibility to education. Consequently, online education has emerged as a viable alternative for implementing theological education.

Online education represents a paradigm shift in contemporary teaching methods. Ogilvie (2009) observes that technological advancements have granted many students access to education that was previously hindered by various constraints. The ubiquity of the Internet has facilitated the integration of education into digital platforms, revolutionizing knowledge acquisition. Traditional educational norms, which mandated physical attendance on campus, have been reshaped by online education, leading to a transformative period for educational institutions (King & Alperstein, 2014). Consequently, disciplines such as theology have also embraced online education, offering fully digital degree programs as alternatives to traditional face-to-face instruction.

Online education within the realm of theology involves utilizing information technology to facilitate educational and training endeavors related to the study of religion and beliefs, along with exploring other dimensions of religious inquiry. In recent years, there has been a noticeable surge in the popularity of online theological education. Brown (2016) highlighted that over fifty percent of member institutions affiliated with the Association of Theological Schools (ATS) provide fully remote programs. Moreover, many of these institutions now offer Master of Divinity (MDiv) and/or Master of Arts (MA) degrees entirely through online platforms. Subsequent to Brown's report, statistics provided by ATS reveal that out of more than 270 theological schools surveyed, 178 institutions offer online education courses, indicating that approximately 70 percent of ATS-affiliated schools have incorporated online theological courses into their offerings (Ellingsen, 2019). A comparison between the findings of these two studies demonstrates a notable twenty percent increase in enrollment over a span of three years.

Another significant driving force behind the rise in popularity of online theological education, besides advancements in information technology, is the impact of the COVID-19 pandemic. Koksal (2022) observed that following the pandemic, online education gained prominence as educational institutions shifted to remote learning environments. The World Economic Forum (2020) highlights the widespread closure of physical classrooms, affecting over 1.2 billion students globally, further accelerating the growth of online

education. Yamada (2020) anticipates that e-learning will continue to shape the future of theological education. Statistics from Auburn Seminary reveal a 200 percent increase in online enrollment within the Association of Theological Schools (ATS), contrasting with a decline in overall enrollment across ATS-affiliated institutions (Ellingsen, 2019). This underscores the pervasive adoption of online education in response to the pandemic and signifies a broader shift toward alternative theological education modalities.

The impetus behind online theological education stems from its intrinsic benefits within the theological realm. Firstly, online theology programs offer convenience, eliminating the need for students to relocate geographically, as demonstrated in Ogilvie's (2009b) research, where convenience emerged as a primary motivation for online education adoption. Additionally, online theological education tends to be more cost-effective than traditional campus-based learning with tuition fees nearly 50% lower and no expenses related to physical infrastructure or accommodation. Thirdly, online theological education addresses the challenges faced by students in regions with restricted religious expression, where traditional institutions may be unable to provide desired religious education due to legal or social constraints. Online platforms offer access to diverse educational materials while ensuring anonymity and privacy, thereby expanding the geographical reach of religious instruction and facilitating access for students from various regions.

While online theological education offers numerous benefits, its drawbacks remain subject to scholarly debate. One significant concern scholar raise pertains to the challenge of delivering spiritual formation in an online setting. Spiritual formation, understood as character development and the pursuit of the ultimate good, has historically been associated with traditional theological education, raising doubts about its efficacy in an online environment (Hockridge, 2011). The communal aspects integral to spiritual formation are typically cultivated offline, posing a limitation to online education's ability to facilitate this aspect of students' development (Brown, 2016a).

Furthermore, Ogilvie (2009a) elucidates perspectives from various scholars regarding the limitations of online theological education: the complexity of theological concepts may not be adequately addressed through text-based teaching alone, hindering students' intellectual development and comprehension. Similarly, the contextual understanding crucial to theology, stemming from history, culture, and tradition, may be compromised in online courses, where meaningful peer discussion and collaboration are limited. This lack of immersion may impede students' ability to apply theoretical knowledge in practical contexts. Additionally, technical barriers and the labor-intensive nature of online education pose challenges for instructors, potentially diminishing the educational experience for both teachers and students. While online theological education may offer greater interactivity and flexibility, ensuring its quality demands significant time and effort from instructors. Thus, the ongoing discourse surrounding the feasibility and effectiveness of online theological education underscores the complexity of this educational modality.

Understanding the advantages and drawbacks inherent in online theological education underscores the necessity of evaluating students' perceptions of such programs. As highlighted by Law et al. (2019), assessing students' perceptions toward online learning is crucial for discerning the factors that may impact their online learning experiences. Students' feedback serves as a crucial component in appraising the effectiveness of online theology courses. Educators utilize this feedback to refine programs and ensure alignment with evolving learner expectations, highlighting the importance of robust assessment for continuous improvement and efficacy. Therefore, the primary objective of this study was to evaluate students' satisfaction levels regarding the online learning theology curriculum, delivery quality, and interactions.

Methodology

Research Design

This study employed a survey research methodology, utilizing a cross-sectional design to gather data through tailored questionnaires aimed at addressing the research inquiry. The cross-sectional design efficiently captured data from a diverse group of participants, allowing for a simultaneous examination of students' perceptions of the curriculum, delivery methods, and interactions within the educational setting. The survey research methodology ensured systematic data collection through structured questionnaires,

facilitating comprehensive responses from undergraduate and graduate students at a faith-based college. Overall, the adoption of this research design enabled the efficient and rigorous collection of data to address the study's objectives.

Population and Sampling Techniques

The sampling approach for this study involved delineating two cohorts: undergraduate and graduate theology students enrolled at the College. Recognizing the intricate nature of online learning, characterized by fluctuating enrollment dynamics influenced by diverse circumstances, the study employed a purposive sampling approach. The survey distribution was conscientiously limited to individuals currently participating in coursework during the present term to ensure that participants possessed the requisite expertise to offer informed feedback based on their academic progression. This approach enhanced the accuracy of the data collected.

Instrumentation

An online survey questionnaire using SurveyMonkey was utilized to gather data. The questionnaire comprised three sections: the first section focused on gathering demographic details of the respondents, such as age, gender, and academic level. The second section employed a 5-point rating scale to assess students' satisfaction levels concerning various aspects of the online theology program, including its curriculum, delivery methods, and interactive elements. This scale was derived from the College's Student Satisfaction Assessment Tool (College, 2023) with minor modifications to align with the objectives of this study. The final section consisted of an open-ended question aimed at soliciting suggestions or comments for enhancing the online theology program.

Data Gathering Procedures

Upon approval of the study, surveys were disseminated via SurveyMonkey. The link was sent to the students' email addresses.

Data Analysis

This research utilized descriptive statistics for data analysis. Jamovi, Version 2.3.28.0, an open-source software for computer-based data analysis, was employed for this purpose. Descriptive statistics facilitate the examination of data at various levels, helping to identify patterns and trends crucial for a comprehensive understanding of students' perceptions regarding online theology curricula within a faith-based college in Hong Kong. The primary utility of descriptive statistics lies in summarizing the collected data, with data organization accomplished through frequency and percentage computations. Leveraging descriptive statistics in this context is advantageous as it enables objective data analysis, relying on numerical computations to mitigate the influence of researcher biases or subjective interpretations.

Ethical Considerations

Prior to distributing the questionnaire, an application was formally submitted to The Institutional Review Board (IRB), the University's ethics committee, and subsequently received approval. Before respondents engaged with the research questions via SurveyMonkey, their voluntary participation was secured through informed consent procedures. Notably, no email addresses were solicited, and responses were anonymized to ensure they were not linked to any individual's identity. Throughout this process, strict confidentiality measures were upheld to safeguard all collected information.

Results

Students' Perceptions of Curriculum

Table 1 presents an insightful analysis of students' perceptions regarding the online theology curriculum offered by the college. The data indicates that 48.92% (n=91) of respondents express satisfaction with the

online learning curriculum, while 37.10% (n=69) report feeling very satisfied. This translates to a combined satisfaction rate of 86.02% among students, reflecting a predominantly positive overall impression of the curriculum.

Table 1
Overall Impression of the Curriculum

	Counts	% of Total	Cumulative %
Very Dissatisfied	1	0.54%	0.54%
Dissatisfied	4	2.15%	2.69%
Neutral	21	11.29%	13.98%
Satisfied	91	48.92%	62.9%
Very Satisfied	69	37.10%	100.0%

The theology program's curriculum spans 124 credits over 4-6 years, allowing students to enroll in 21-30 credits per academic year across five terms. It comprises theological studies (94 credits), covering Biblical, Theological, Historical, and Church ministry/mission studies, and general courses (30 credits) aimed at enhancing students' relationship with God and equipping them with essential ministry skills. These results imply that the students are satisfied with the content of the online learning theology curriculum.

Curriculum Impact on Spiritual Relationship

Table 2 illustrates the online learning theology curriculum's impact on fostering spiritual relationships with God among the participants. According to the data, respondents' ratings are notably positive: 49.46% (n=92) of students expressed satisfaction, while 44.62% (n=83) reported feeling very satisfied. This indicates a high level of contentment among the participants. Remarkably, a vast majority, accounting for 94.08% of the respondents, acknowledged that the online theology curriculum contributed significantly to enhancing their relationship with God. This highlights the effectiveness and value of the online learning platform in nurturing spiritual growth and deepening connections with God.

Table 2
Curriculum's Contribution to Relationship with God

	Counts	% of Total	Cumulative %
Very Dissatisfied	0	0.0%	0.0%
Dissatisfied	2	1.08%	1.08%
Neutral	9	4.84%	5.92%
Satisfied	92	49.46%	55.38%
Very Satisfied	83	44.62%	100.0%

The study of students' perceptions of online learning in theology at the College revealed that online education could nurture spiritual character and deepen students' relationship with God. Survey data demonstrate strong satisfaction with the online theological curriculum's ability to enrich students' spiritual lives. The online learning theology curriculum at the College serves as a platform for students to engage in spiritual practices such as Bible study, prayer, and Christian services. These practices, integral to nurturing and strengthening one's relationship with God, are facilitated through the curriculum. Moreover, the curriculum encourages students to actively participate in evangelism, enabling them to spread God's message and further solidify their bond with Him. By providing resources and opportunities for students to delve into these spiritual disciplines, the online learning theology program aids in deepening their understanding of theology teachings and fostering intimacy with God.

Students' Perceptions of Delivery

Table 3 delineates the frequencies encapsulating the overall impression of the delivery. Significantly, 49.46% of participants, comprising 92 respondents, expressed satisfaction, while an additional 39.78%, accounting for 74 individuals, articulated being very satisfied. Collectively, these figures amount to 89.24% of respondents, suggesting a very high level of satisfaction with curriculum delivery.

Table 3
Overall Impression of Delivery

	Counts	% of Total	Cumulative %
Very Dissatisfied	1	0.54%	0.54%
Dissatisfied	2	1.08%	1.62%
Neutral	17	9.14%	10.76%
Satisfied	92	49.46%	60.22%
Very Satisfied	74	39.78%	100.0%

The effectiveness of the online learning theology program at the College hinges on the quality of delivery methods, encompassing the delivery platform and tools facilitating online learning. Moreover, the instructional capabilities of the instructors play a crucial role in ensuring successful delivery. Evidently, the results underscore a high level of satisfaction among students about these aspects.

Perceptions of Teachers' Delivery Abilities

Table 4 reveals that the most prominent aspect of the survey on the delivery of the online learning theology program was teachers' punctuality in joining online conference rooms. As depicted in the table, 36.56% (n=68) of students expressed satisfaction, while 61.29% (n=114) reported feeling very satisfied, culminating in an extraordinary 97.85% of participants acknowledging the commendable quality of delivery in online theology. Particularly noteworthy is the zero percentage of participants expressing dissatisfaction, highlighting the unanimous positive appraisal of the punctuality and teaching attitude of instructors.

Table 4
Teachers' Punctuality

	Counts	% of Total	Cumulative %
Very Dissatisfied	0	0.0%	0.0%
Dissatisfied	0	0.0%	0.0%
Neutral	4	2.15%	2.15%
Satisfied	68	36.56%	38.71%
Very Satisfied	114	61.29%	100.0%

Academic consensus acknowledges the significant importance of punctuality, which is a fundamental characteristic for individuals and organizations. The study by Half (2023) emphasizes that punctuality reflects organizational efficiency and highlights dependability. Additionally, Birt (2023) stressed that punctuality is instrumental in earning respect from peers and is considered a distinguishing trait of experienced professionals. Consequently, it is noteworthy to observe from the survey results that among the respondents, 182 students confirmed the consistent punctuality of instructors in accessing the online conference room, affirming the reliability of the faculty members at the College.

Other notable high scores pertain to the proficiency of teachers in delivering course content, as elucidated by Table 5 and Table 6, which meticulously showcase the adeptness of instructors in both the clarity of course content delivery and the coherence of their language. The satisfaction level of students

regarding the faculty's capacity to convey course material stands at an impressive 90.3%, as evidenced by 168 respondents expressing contentment. Similarly, the clarity and logical coherence of the teachers' delivery language garnered high satisfaction, with 92.5% of respondents, totaling 172 individuals, reporting a sense of fulfillment in this aspect

Table 5
Teachers' Ability to Deliver Content

	Counts	% of Total	Cumulative %
Very Dissatisfied	0	0.0%	0.0%
Dissatisfied	3	1.6%	1.6%
Neutral	15	8.1%	9.7%
Satisfied	85	45.7%	55.4%
Very Satisfied	83	44.6%	100.0%

Table 6
Clarity and Coherence of Delivery Language

	Counts	% of Total	Cumulative %
Very Dissatisfied	0	0.0%	0.0%
Dissatisfied	2	1.1%	1.1%
Neutral	12	6.4%	7.5%
Satisfied	90	48.4%	55.9%
Very Satisfied	82	44.1%	100.0%

The implied message of the above tables is that the teachers have been highly effective in delivering course content, as evidenced by high satisfaction levels among students. This effectiveness is particularly highlighted in the clarity and coherence of their language when delivering course material. Consequently, the teachers' proficiency in conveying information has contributed significantly to student satisfaction.

Students' Perceptions of Interactions
Table 7 shows that 83.33% of students were satisfied with interactions with faculty and peers. The positive responses suggest a supportive and engaging learning environment.

Table 7
Overall Impression of Interactions

	Counts	% of Total	Cumulative %
Very Dissatisfied	0	0.0%	0.0%
Dissatisfied	6	3.23%	3.23%
Neutral	25	13.44%	16.67%
Satisfied	76	40.86%	57.53%
Very Satisfied	79	42.47%	100.0%

Effective interactions between teachers and students are pivotal in online learning. The survey results demonstrate high satisfaction rates among students regarding interactions with instructors, and positive outcomes were observed in peer interactions with advanced social media applications.

The findings from this study of students' perceptions of online learning within the theology program at a faith-based college in Hong Kong offer valuable insights into online learning in theology. Primarily, students perceive the curriculum as pivotal in nurturing a profound relationship with God, thereby affirming its effectiveness in advancing the program's core mission of spiritual and religious education. Moreover, the adept delivery skills exhibited by instructors emerge as a notable driver of student satisfaction. Through articulate and coherent instruction, educators effectively transmit course content, enhancing student comprehension and involvement. Furthermore, the generally positive interactions between teachers and students contribute to a supportive learning environment. The absence of "very dissatisfied" sentiments underscores the overall contentment with interaction quality, indicative of a collaborative and nurturing atmosphere within the online learning community. Hence, these collective findings underscore the efficacy of the online theology program in meeting its educational objectives and fostering meaningful connections among students, instructors, and their faith.

The positive results of the study on students' perceptions of online learning in theology at a faith-based college in Hong Kong provide a nuanced perspective on the concerns raised by scholars regarding the challenges of delivering spiritual formation in an online setting. While scholars have expressed concerns about the efficacy of online education in facilitating spiritual formation due to its historical association with traditional theological education and the communal aspects typically cultivated offline (Hockridge, 2011), the findings of this study suggest that online learning can indeed contribute positively to students' perceptions of spiritual and religious education. By demonstrating students' favorable perceptions of the curriculum, delivery, and interactions within the online theology program, the study suggests that online education has the potential to effectively support spiritual development and religious education, even in the absence of traditional communal settings. Thus, while scholars may raise valid concerns about the challenges of delivering spiritual formation online (Brown, 2016a), the findings of this study offer evidence that online theological education can still be effective in meeting the needs of students in faith-based institutions. Lastly, this study addresses scholars' concerns, such as those highlighted by Ogilvie (2009a), about the potential limitations of online theological education due to technical barriers affecting educators and learners. Despite these concerns, the findings show high student satisfaction with delivery methods, including the platform and tools. This reflects positively on instructors' instructional capabilities, suggesting that effective methods can enhance the online theological education experience. Furthermore, it indicates that substantial capital investments in IT infrastructure have sufficiently mitigated concerns arising from technical obstacles.

This study acknowledges a significant limitation regarding its generalizability. Given its nature as a case study evaluating students' perspectives within the online learning theology curriculum of a faith-based college in Hong Kong, the findings are constrained in their applicability to broader contexts. Consequently, while the insights from this research are valuable within the studied context, caution must be exercised in extrapolating these findings to other online learning theology programs or educational institutions, especially those operating within distinct cultural and organizational frameworks. Additionally, the sample size may not encompass the entirety of student perspectives, limiting the study's ability to capture the full range of experiences and opinions regarding the curriculum, quality of delivery, and interactions between faculty and students. While the insights gained from this study are valuable within the specific institution studied, caution should be exercised when applying these findings to other settings or populations.

Discussion

The study confirms that online theological education at the College effectively supports students' spiritual growth and satisfaction with curriculum delivery and interactions. The high levels of student satisfaction suggest that the program meets its educational objectives and fosters meaningful connections. Despite concerns about online education's ability to deliver spiritual formation (Hockridge,

The investigation into students' perspectives on online theology education at the College highlights its potential to nurture spiritual growth and deepen students' relationship with God. The curriculum provides

opportunities for spiritual practices such as Bible study and prayer, which aid in a deeper understanding of theological concepts and foster intimacy with God. Furthermore, the assessment of online theology education delivery at the College underscores the clarity and coherence of instructional language. Survey results indicate significant student satisfaction, emphasizing the importance of effective communication and faculty expertise. Despite encountering technical obstacles, students express considerable satisfaction with the online delivery platform facilitated by the Learning Management System (LMS). Additionally, high satisfaction rates are observed in instructor interactions and positive outcomes in peer interactions through advanced social media, although there is room for improvement in individual peer interactions, suggesting areas for enhancement in the online theology program. Therefore, the research outcomes validate the effectiveness of the online theology program offered at a faith-based college in Hong Kong, as evidenced by students' widespread satisfaction with the program.

This study recommends that, to enhance the online theology program, the College should reinforce the curriculum's balance between theory and practice, focus on fostering engaging interactions among students and between students and faculty to encourage teamwork and collaboration, and refine effective online delivery methods to optimize the learning experience.

References

Birt, J. (2023). Punctuality and attendance at work: Definition and tips.

Brown, E. S. (2016). Accessible, effective: How online theological education is shifting the formation model. The Association of Theological Schools. https://www.ats.edu/files/galleries/formation-online.pdf

Index on Censorship. (2014, January 3). The worst countries for religious freedom. Index on Censorship. https://www.indexoncensorship.org/2014/01/worst-countries-religious-freedom/

College. (2023). The college handbook. College.

Dybdahl, J. L. (Ed.). (2010). *Andrews study Bible.* Andrews University Press.

Edelberg, C. D. (1986). Morrison's voices: Formal education, the work ethic, and the Bible. *American Literature*, 58(2), 217–237. https://doi.org/10.2307/2925816

Ellingsen, M. (2019). Neurobiological data on what online education could be doing to our spirituality and our brains: Some Augustinian/Niebuhrian reflections. *The Association of Theological Schools*, 52.

Half, R. (2023). *5 reasons for why punctuality is important for your career.* Robert Half. https://www.roberthalf.com.hk/blog/jobseekers/punctuality-5-reasons-why-it-will-always-be-relevant-your-career

Hockridge, D. (2011). What's the problem? Spiritual formation in distance and online theological education. *Journal of Christian Education*, 54(1), 25–38. https://doi.org/10.1177/002196571105400104

King, E., & Alperstein, N. (2014). *Best practices in online program development: Teaching and learning in higher education*. Taylor & Francis Group. http://ebookcentral.proquest.com/lib/andrews-ebooks/detail.action?docID=1864773

Koksal, I. (2022). The rise of online learning. *Forbes.* https://www.forbes.com/sites/ilkerkoksal/2020/05/02/the-rise-of-online-learning/

Law, L., Hafiz, M., Kwong, T., & Wong, E. (2019). Evaluating students' perceptions on the effectiveness of online intercultural learning experience via a SPOC. *Current Issues in Comparative Education, 21*(1), 69–92.

Ogilvie, M. C. (2007). Teaching theology online. ResearchOnline@ND. https://researchonline.nd.edu.au/theo_article/66/

Watson, K. (2010). Contrasting policies towards (mainly) Christian education in different contexts. *Comparative Education, 46*(3), 307–323.

White, E.G. (2000). *True education*. Pacific Press Publishing Association.

World Economic Forum. (2020, April 29). The COVID-19 pandemic has changed education forever. This is how. *World Economic Forum*. https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/

Yamada, F. M. (2020). Living and teaching when change is the new normal: Trends in theological education and the impact on teaching and learning. *The Wabash Center Journal on Teaching, 1*(1), Article 1. https://doi.org/10.31046/wabashcenter.v1i1.1580

PSYCHOLOGY

EFFECTS OF STRESS MANAGEMENT PSYCHOEDUCATION ON THE STRESS LEVELS OF CHURCH PASTORS IN THE PALAWAN MISSION

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Abstract

Stress is a universal experience, affecting individuals across various domains, including pastors who navigate both personal and church-related challenges alongside familial responsibilities and individual vulnerabilities. Consequently, pastors are not immune to stress. This study seeks to investigate the impact of stress management psychoeducation on the stress levels of Palawan Mission pastors. Employing a pretest-posttest design, online questionnaires served as research instruments for data collection. Stress levels were described using mean and standard deviation, while a paired t-test assessed the intervention program's effectiveness. Rooted in Welford's Performance and Demand Theory, which posits stress arises from a misalignment between demands and an individual's coping abilities, the psycho-education intervention targeted 22 Palawan Mission pastors, including pre-interns, interns, and regular pastors. Findings revealed a slight decrease in overall stress levels post-intervention (pre-test: M = 2.18, SD = 0.37; post-test: M = 2.06, SD = 0.35), suggesting the intervention offered valuable support and coping strategies. However, further analysis indicated no significant difference in stress levels before and after psychoeducation among pastors. Consequently, the researcher recommends augmenting activities, refining the intervention program, expanding participant numbers, extending the interval between pre-test and post-test assessments, and conducting evaluations immediately after the final activity.

Keywords: *stress management, psychoeducation, stress, church pastors*

The call of duty for pastors is very high especially that they do multi-tasking. From the responsibilities in the house, the relationship in the home and neighbors, to church Administration and pastoral works, as Church representative in the community and the relationship with Superiors all contributes to pastor's stress and personal being. Furthermore, their financial concerns and change of assignments contributes to their stresses and excitements. This study will evaluate the effect of the Stress Management program on the gospel workers whether it has an impact on their psycho-social life as a person.

Pastors are also human, like anyone else who at times get tired but their inspiration is their dreams to achieve for their churches and the family. Their journey is not an easy road at times it has rocks and thorns but their strength is in the promises of the Lord who calls them in the ministry.

The researcher initially observed during the need assessment survey that pastors experience an emotional distress due to transfer and rotation of mission field, financial setback due to lesson quarterly and book of the year charges and the relationship with critical members etc. Further, through their personal experiences' adversity quotients vary also to different work conditions. It is evident that pastors are assigned in different mission fields such as rural or urban districts, island or mainland territories, hospitals, schools, or single pastorate churches in Palawan Adventist Mission territory.

In recent years, there has been a significant increase in the literature on occupational stress among clergy and pastors. This growth in research reflects a growing awareness of the distinct issues this group faces. However, much research has focused on Western Protestant clergy, with less attention to diverse religious traditions and cultural contexts. More research is needed on the experiences of mission pastors, who may face additional stressors related to their specific roles and environments.

There is also a need for a more rigorous evaluation of stress management interventions for clergy and pastors. Several studies used limited sample sizes, lacked control groups, or relied exclusively on self-report measures. Additionally, there is debate in the literature about the most effective format and content for stress management programs for clergy. Some studies have focused on mindfulness-based interventions, while others have incorporated cognitive-behavioral techniques or emphasized spiritual practices. More research is needed to identify the critical components of effective stress management programs for this population.

The researcher conducted an informal interview with a pastor who has been involved in voluntary missionary work for over a decade. Recently appointed as a district pastor, he admitted feeling neither excited nor depressed about the new role. He confessed to anticipating criticism, citing a clear understanding of his capabilities. Throughout the conversation, the researcher detected the pastor's reluctance regarding the transfer, primarily due to the distance it would create between him and his wife, who holds a steady government job over 100 kilometers away. Additionally, financial strain emerged as a significant concern for him, stemming from past medical expenses that accumulated into debt for their family.

Pastors may have anxiety that is not addressed because no one facilitates. This prompted the researcher to study the psycho-emotional setbacks related to adversity quotient and give suggested intervention programs that will help the pastors overcome their anxieties. The questionnaire's focus is on the physical condition, cognitive reactions, behavioral and emotional responses of our target respondents.It became apparent to the researcher that the pastor may be grappling with unaddressed anxiety, compounded by the lack of support. This realization prompted the researcher to delve into the psycho-emotional challenges associated with adversity quotient and propose intervention programs aimed at assisting pastors in overcoming their anxieties.

Psycho-educational interventions, which combine education about stress and coping with skill-building activities, effectively reduce stress in various populations (Van Daele et al., 2012). A meta-analysis by Dharmawardene et al. (2016) found that psycho-educational interventions significantly reduced stress among healthcare workers. Similarly, a systematic review by Ruotsalainen et al. (2015) concluded that psycho-educational interventions effectively prevented and treated work-related stress in various occupational groups.

Several studies have examined the impact of psycho-educational stress management programs for clergy and pastors. These programs effectively reduce stress and improve overall well-being among clergy and pastors. By providing education on stress management techniques, such as mindfulness, relaxation

exercises, and boundary setting, these programs equip clergy and pastors with practical skills to better cope with the unique stressors they face in their roles (Sielaff et al., 2020). Additionally, the inclusion of psychoeducation helps to destigmatize seeking support for mental and emotional well-being within religious communities. As a result, clergy and pastors can better fulfil their roles and serve their congregations with a greater sense of balance and resilience (Clemens et al., 1978). Similarly, Scott and Lovell (2015) evaluated a psycho-educational program for rural clergy and found significant reductions in psychological distress and burnout post-intervention.

This study will answer the effect of the stress management program and psycho education on the level of Palawan Adventist Mission pastors. Specifically, it sought answers to the following problems:

1. What are the levels of stress among pastors in Palawan Mission before and after the Stress Management Psychoeducation?
2. Is there a significant difference in the levels of stress before and after the Psychoeducation among Pastors?

Methodology

Research Design

The researcher has chosen the pretest and posttest design in which the same assessment instrument is given to the same respondents. Further, a pretest posttest design is an experiment where measurements are taken both before and after a treatment. The design means that you cansee the effects of some type of treatment on a group. Pretest posttest designs may be quasi-experimental, which means that participants are not assigned randomly.

Another advantage of the pretest-posttest design is that not only can the researcher determine if there is a difference between the experimental and the control group, but also can determine how much of a change or how much growth there was between the pretest and the post-test.

Participants

This study focuses among the pastors of Palawan Mission which includes pre-intern, intern, and regular pastors. The researcher has reached out to 22 participants using online questionnaires therefore they have good internet or data connection. Further, the researcher gave an informed consent form to the participants and all consented to involve them on this survey. Then, the Pre-test questionnaire was sent.

The researcher observed that 10 of the 22 participants were aged 25-30. That means many are young in the ministry and are physically strong, enthusiastic, and idealistic. Further, 15 of the 22 participants are married and have more financial concerns and accountability than the seven single respondents. Moreover, only nine regularly employed respondents have full salaries, allowances, and benefits, including medical, dental, and educational; the rest are neophytes.

Data Gathering Procedure

After obtaining a go signal from the Ethics Review Board of the Adventist University of the Philippines, the researcher identified the participants from the Palawan Mission working force. Then researchers gave a written Informed Consent form to the subjects and waited for their confirmation with signature. Upon receiving the consent form, the researcher sent the Perceived Stress Questionnaire one by one on Google forms and sent via messenger to the participants for the Pretest Evaluation. After some time, the researcher made a follow up to the participants and reminded them to accomplish the questionnaire.

All the respondents willingly answered the Pretest Perceived Stress Questionnaire after which the group was given an intervention and after a given time a Posttest of Perceived Stress Questionnaire will be given to the target participants. To add, the questionnaire's focus is on the physical condition, emotional reaction, and behavioral responses of our target respondents.

Intervention

The intervention topics were given in four sessions, two online meetings and two face to face sessions with group sharing during the ministerial retreat at Roberto Paraiso, Taytay, Palawan. Elated, the researcher had received commendations from the participants about the topics and group sharing activities. The following week after the retreat, post-tests were administered, and then the participants confirmed completion of the forms.

Instrumentation

The researcher used the Perceived Stress Questionnaire developed by (Cohen et al., 1983). It is a well-established self-report measure based on the psychological conceptualization of stress. The stress assessment instrument is a well-established and widely used tool. Despite being introduced in 1983, it continues to be a favored option for gaining insights into the impact of various scenarios on our emotions and perceived stress levels. Pastors are asked to rate each statement using the scale below based on their physical (e.g., I don't suffer from headaches), emotional (e.g., I am irritated with little annoyances), and behavioral (e.g., I can't go with my daily activities).

Data Analysis

Before analysis, the raw data obtained from the online Perceived Stress Questionnaire was initially verified to ensure it was accurate and precise. All responses that were incomplete or inconsistent were not included in the analysis. The data was subsequently reformatted and normalized using Microsoft Excel (Version 2019) to guarantee consistency and the ability to make significant comparisons between responses. Microsoft Excel was utilized to visually represent the descriptive information, which includes a bar graph. Using SPSS (Version 26) descriptive statistics, including mean, standard deviation, and minimum/maximum values, were calculated for each stress dimension (physical, emotional, behavioural) and overall stress.

To evaluate the effects of the Stress Management Psycho-Education program, paired t-tests were utilized to compare the scores before and after the intervention for each component of stress as well as overall stress. The significance level was established at a p-value of less than 0.05. The intervention's size of effect was determined by computing Cohen's d.

Results

Pre-Intervention Level of Stress

Pre-test before the psychoeducation was done to provide a solid foundation for evaluating the impact of the interventions and drawing meaningful conclusions about their effectiveness. Table 1 presents the stress level before Stress Management Psychoeducation was introduced to the Pastors in Palawan.

Table 1

Stress Level of Palawan Mission Pastors Before the Stress Management Psychoeducation

	Min	Max	Mean	Standard Deviation	Interpretation
Physical Stress	1.60	.27	2.3455	.40402	Rarely (Low)
Emotional Stress	1.40	.87	2.0545	.39179	Rarely (Low)
Behavioral Stress	1.33	.80	2.1303	.42438	Rarely (Low)
Overall Stress	1.47	.82	2.1768	.36563	Rarely (Low)

Scoring System: 1:00-1.49 Never (Very low); 1.50-2.49 Rarely (Low); 2.50 – 3.49 Sometimes (Moderate); 3.50- 4.49 Often (High); 4.50-5:00 Always (Very High)

The results revealed a Low level of physical (mean=2.35. SD=.40), emotional (Mean=2.05, SD=.39), behavioral stress (Mean=2.13, SD=.42), and overall stress (Mean=2.18, SD=.37) among Palawan mission pastors. Among the physical stress, sweating, headaches, and migraine were the three physical stress

symptoms that the pastors in the Palawan mission rarely experienced. The pastors in the Palawan mission sometimes experienced the symptoms of emotional stress, such as not making up their minds soon enough, being calm or cool, and lack of focus. Furthermore, among the behavioral stress items, falling asleep in 20 minutes or less, making decisions without difficulty, and wishing I could be happy as others seem to be among the highest-rated items and were sometimes experienced by the pastors in Palawan Mission. Concerning our above discussion, the overall stress of the Palawan Mission Pastors was low before the Stress Management Psycho-Education program was introduced.

Post Intervention Level of Stress
     A post-test was conducted to evaluate the intervention programs' effectiveness, sustainability, and impact.Analyzing physical, emotional, and behavioral stress indicators revealed low-stress levels across these domains, results are shown in Table 2.

Table 2
Stress Level of Palawan Mission Pastors After the Stress Management Psychoeducation

	Min	Max	Mean	Standard Deviation	Interpretation
Physical Stress	1.60	3.13	2.2519	.34346	Rarely (Low)
Emotional Stress	1.27	2.93	1.8970	.42100	Rarely (Low)
Behavioral Stress	1.20	2.80	2.0394	.44823	Rarely (Low)
Overall Stress	1.42	2.76	2.0628	.35483	Rarely (Low)

Scoring System: 1:00-1.49 Never (Very low); 1.50-2.49 Rarely (Low); 2.50 – 3.49 Sometimes (Moderate); 3.50- 4.49 Often (High); 4.50-5:00 Always (Very High)

     After the intervention program and the post test, the mean scores for physical stress (Mean=2.25, SD=.34), emotional stress (Mean=1.897, SD=.42), and behavioral stress (Mean=2.04, SD=.45) were indicative of reduced stress levels among participants. With the data above, the researcher found out that the result revealed a very minimal effect.
     Among the physical stress indicators, the three items with the highest mean scores were "I don't suffer from headaches," "I am sweating," and "I don't have a migraine." This suggests that participants reported experiencing these symptoms less frequently after the intervention, indicating a positive impact on their physical well-being.
     Regarding emotional stress, items related to irritability, anger, and worry were rated the highest among the emotional stress indicators. Notably, pastors reported rarely experiencing irritability with little annoyances, losing their temper under pressure, and worrying over insignificant matters, reflecting improved emotional resilience, and coping mechanisms.
     Regarding behavioral stress, pastors reported improvements in sleep quality and decision-making abilities. Falling asleep within 20 minutes, updating family members regarding affairs, and making decisions without difficulty were among the top-rated items, indicating enhanced behavioral functioning and adaptability.

Pre- and Post-Intervention Comparison
     Table 3 presents the mean and standard deviation before and after the Stress Management Psychoeducation among pastors from Palawan Mission. The results showed that the stress level in terms of physical, emotional, and behavioral factors slightly decreased after the Stress Management Psychoeducation though it is not statistically significant.

Table 3

Comparison of Stress LevelsBefore and After the Invention

		Mean	N	Standard Deviation	Mean difference	t	p	Cohen's d (Effect size)
Pair 1	Physical Stress (pretest & posttest)	2.3455	22	.40402	.09351	.971	.342	.207 (Small)
		2.2519	22	.34346				
Pair 2	Emotional Stress (pretest & posttest)	2.0545	22	.39179	.15758	2.156	.043	.460 (Medium)
		1.8970	22	.42100				
Pair 3	Behavioral Stress (pretest & posttest)	2.1303	22	.42438	.09091	.377	.183	.294 (Small)
		2.0394	22	.44823				
Pair 4	Overall Stress (pretest & posttest)	2.1768	22	.36563	.11400	1.907	.070	.407 (Small)
		2.0628	22	.35483				

However, statistically speaking, the decrease in the means is not statistically significant for physical and behavioral stress. The Stress Management Psychoeducation was statistically significant only for emotional stress. The overall result is not significant for the two-tailed test but significant only for the one-tailed test (Sig-.07/2=.035). This result suggests that the intervention was not so effective in reducing the stress level of the pastors from the Palawan mission.

Further results in Table 3 are the presentation of the effect size. Effect size is a statistical concept that refers to the magnitude of a difference or relationship between two variables. It is used to quantify the strength of an effect in a way that can be compared across different studies. In this study, the effect size is small for physical, behavioral, and overall stress and medium for emotional stress.

Discussion

The study found low physical, emotional, behavioral, and overall stress levels among the 22 Palawan pastors before and after the psycho-education intervention, based on mean scores on the Perceived Stress Questionnaire (PSQ). Pre-intervention, overall stress was low (M=2.18, SD=0.37) and decreased slightly post-intervention (M=2.06, SD=0.35).

In contrasts with other studies the moderate to high levels of occupational stress were commonly reported among clergy. For example, a study of pastors in the U.S. found that 75% of the reports were "extremely stressed" or "highly stressed" (Pastor Stress Statistics, 2023). The results of the study suggest that the psycho-education intervention positively impacted the stress levels of the Palawan pastors. Despite the already low-stress levels before the intervention, there was a slight decrease in overall stress post-intervention, indicating that the intervention may have provided valuable support and coping strategies for the pastors.

While it is true that the stress levels decreased across all domains post-intervention, paired t-tests revealed that the reductions were statistically significant only for emotional stress (p=.043). The researcher assumed that pastors emotionally tough because most of them are working students and they are used to be contented with what they received. The effect size was medium (Cohen's d=0.46). Prior clergy stress management interventions have yielded mixed results. A 6-month mindfulness program decreased stress and burnout scores among experimental groups. However, a 6-month post-test stress reduction course found no significant impact on the control group's burnout or mental health (Muse et al., 2016).

The lack of significant effects for physical, behavioral, and overall stress in the current study may reflect the small sample size (underpowered to detect smaller effects), the low baseline stress levels (floor effect), and/or issues with the PSQ's sensitivity to change. The short follow-up period is also a limitation; some studies have found more substantial effects several years post-intervention (Herr et al., 2018).

Therefore, the Stress Management Psycho-Education program is not so effective in reducing stress levels among pastors from Palawan Mission though it shows minimal result. It is evident by minimal improvements in physical, emotional, and behavioural stress indicators that the program needs improvement. These findings emphasize the significance of tailored interventions in enhancing pastoral communities' welfare and the potential advantages of incorporating stress management measures into pastoral care and support activities.

Reliable and valid measures of stress are essential to evaluating the effectiveness of stress management interventions. Typical measures used in clergy stress research include the Perceived Stress Scale (Cohen et al., 1983), the Depression Anxiety Stress Scales (Lovibond & Lovibond, 1995), and the Maslach Burnout Inventory (Maslach et al., 1996). These tests have exhibited favorable psychometric characteristics and have been utilized in several studies on clergy stress.

However, some researchers have argued for the importance of using biomarkers in addition to self-report measures to assess stress. For example, Nater et al. (2013) used biomarkers, such as cortisol levels, heart rate variability, and inflammatory markers, to provide objective data that can complement self-reported experiences of stress. While self-reported can provide valuable insights into an individual's perception of stress, incorporating biomarkers into stress assessment can offer a more comprehensive understanding. Researchers can better understand its impact on the body by measuring physiological responses to stress. Similarly, Kim et al. (2018) used heart rate variability to measure stress and found that it was a feasible and sensitive measure of stress in this population. Incorporating biomarkers in stress management program evaluation could provide a more comprehensive understanding of the effects of intervention.

However, the lack of significant effects on physical, behavioral, and overall stress raises questions. The low baseline stress could have created a floor effect. The limited sample size needed more statistical power to identify more subtle changes. The PSQ may also lack sensitivity to short-term fluctuations. Significantly, the brief follow-up period limits conclusions about the durability of effects. Prior studies finding stronger results often reassessed months or years later.

Overall, this study provides preliminary evidence of the benefits of equipping clergy with stress management skills, even when baseline stress is low. With rising occupational demands on pastors, such training may help build resilience. However, more rigorous research with larger samples, controlled designs, and longitudinal follow-up is needed to establish the efficacy and effectivity of psychoeducation for this population. Integrating stress management into pastoral formation and exploring the role of spiritual practices in coping also merit further study.

The researcher would like to suggest few recommendations for further study and improve psycho-education interventions. First, expand stress management training for pastors. Palawan Mission Management should proactively provide psychoeducation on coping skills as part of pastoral formation and continuing education. Even if stress levels seem low, equipping clergy with tools to manage challenges can foster resilience and prevent future strains.

Secondly, conduct more rigorous evaluation research. While this study suggests the benefits of psychoeducation for pastors, more robust research is needed to draw firm conclusions. Future studies should use larger samples, control groups, random, assignment, and longitudinal designs. Triangulating self-reports with biomarkers and observer ratings could reduce bias. Further, may conduct similar evaluation and intervention program to other mission and conferences to affirm that the psycho-education program will benefit participants.

Thirdly, promote a culture of self-care. Alongside providing stress management trainings, denominations should actively encourage clergy to prioritize their well-being. May include mentoring of an experience pastor to a younger one, supporting practices like taking time off, seeking counselling, and maintaining boundaries can help reduce stigma and grant "permission" to pastors to attend to their personal needs.

Lastly, conduct spiritual retreat. Spiritual disciplines such as personal prayer, intercessory prayer, meditation, and testimonies may be especially meaningful ways for pastors to cope with stress. Research should examine how psycho-education programs can incorporate these practices and evaluate their distinctive benefits for clergy well-being.

References

Clemens, N. A., Corradi, R. B., & Wasman, M. (1978). The parish clergy as a mental health resource. *Pastoral Psychology, 27*(1), 53-62. https://doi.org/10.1007/bf01532857

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*(4), 385-396. https://doi.org/10.2307/2136404

Dharmawardene, M., Givens, J., Wachholtz, A., Makowski, S., & Tjia, J. (2016). A systematic review and meta-analysis of meditative interventions for informal caregivers and health professionals. *BMJ Supportive & Palliative Care, 6*(2), 160-169. https://doi.org/10.1136/bmjspcare-2014-000819

Herr, R M., Barrech, A., Riedel, N., Gündel, H., & Angerer, P. (2018, February 3). Long-term effectiveness of stress management at work: Effects of the changes in perceived stress reactivity on mental health and sleep problems seven years later. *International Journal of Environmental Research and Public Health/International Journal of Environmental Research and Public Health, 15*(2), 255-255. https://doi.org/10.3390/ijerph15020255

Kim, H., Cheon, E J., Daiseg, B., Lee, Y H., & Koo, B. (2018, March 25). *Stress and heart rate variability: A meta-analysis and review of the literature.* https://doi.org/10.30773/pi.2017.08.17

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the beck depression and anxiety inventories. *Behaviour Research and Therapy, 33*(3), 335-343. https://doi.org/10.1016/0005-7967(94)00075-U

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory Manual* (3rd ed.). Consulting Psychologists Press.

Muse, S., Love, M., & Christensen, K. (2016). Intensive outpatient therapy for clergy burnout: How much difference can a week make? *Journal of Religion and Health, 55*(1), 147–158. https://doi.org/10.1007/s10943-015-0013-x

Nater, U M., Skoluda, N., & Strahler, J. (2013, September 1). *Biomarkers of stress in behavioural medicine.* https://journals.lww.com/co-psychiatry/abstract/2013/09000/biomarkers_of_stress_in_behavioural_medicine.4.aspx

Ruotsalainen, J. H., Verbeek, J. H., Mariné, A., & Serra, C. (2015). Preventing occupational stress in healthcare workers. *Cochrane Database of Systematic Reviews, 2015*(4), Article CD002892. https://doi.org/10.1002/14651858.CD002892.pub5

Sielaff, A M., Davis, K., & McNeil, J D. (2020, November 30). *Literature Review of Clergy Resilience and Recommendations for Future Research.* https://doi.org/10.1177/0091647120968136

Scott, G., & Lovell, R. (2015). The rural pastors initiative: Addressing isolation and burnout in rural ministry. *Pastoral Psychology, 64*(1), 71-97. https://doi.org/10.1007/s11089-013-0591-z

Van Daele, T., Hermans, D., Van Audenhove, C., & Van den Bergh, O. (2012). Stress reduction through psychoeducation: A meta-analytic review. *Health Education & Behavior, 39*(4), 474-485. https://doi.org/10.1177/1090198111419202

PSYCHOLOGY

Thriving in Solitude: Efficacy of Online Flourishing Program in Reducing Loneliness among Overseas Filipino Workers (OFW)

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Abstract

Loneliness refers to how individuals perceive their vulnerability, irrespective of time or place. Factors contributing to loneliness include being away from home. This study examined loneliness levels among overseas Filipino workers (OFWs) before and after participating in an online flourishing program with Positive Psychological Interventions (PPI) aimed at enhancing coping skills and resilience. Using a pre-experimental design (specifically pretest-posttest), 24 OFWs completed loneliness assessments before and after the intervention. Initially, participants exhibited moderate loneliness levels, which decreased to low during the post-intervention. Statistical analysis (t-score = 4.2, df = 23, p < .001) rejected the null hypothesis, indicating a significant reduction in loneliness. The program, titled "Thriving in Solitude," effectively lowered loneliness, highlighting its efficacy. These findings suggest potential for further research in other participant groups and underscore the importance of ongoing support post-intervention to sustain benefits.

Keywords: *loneliness, overseas Filipino workers (OFWs), positive psychological intervention (PPIs), positive coping skills, resilience*

Filipinos are known for their strong familial ties, often maintaining extended family setups even after their children and siblings marry. Many are driven by poverty to seek opportunities overseas, particularly in fields like housekeeping, caregiving, geriatrics, and nursing. These jobs often include benefits such as housing, airfare, and work visas, provided by employers. Poverty is cited as the primary motivator for many Overseas Filipino Workers (OFWs), who endure significant risks abroad in hopes of supporting their families (Datu Yuri et al., 2022).

Despite advancements in communication technology, OFWs continue to face profound loneliness while separated from their families for extended periods. Loneliness among OFWs has been linked to social isolation and even severe outcomes like suicide (Psychology Today, 2023). Loneliness, characterized by feelings of being alone despite being surrounded by others, significantly impacts cognitive functions and social well-being (American Psychological Association, 2023).

Positive Psychological Interventions (PPIs), such as journaling, expressing gratitude, and engaging in social activities, have proven effective in alleviating loneliness and enhancing overall well-being (Sin et al., 2019). The researcher proposes an online Positive Psychological Intervention Program tailored to OFWs, aiming to mitigate loneliness and improve their psychological resilience. Such interventions, adaptable to various online platforms and delivery methods like coaching or mentoring, can effectively foster positive emotions and engagement. This initiative seeks to fill a crucial gap, as there currently exists no established model for providing OFWs with targeted online psychosocial support focused on loneliness. The goal is to offer effective assistance and enhance the well-being of this vulnerable group.

Methodology

Research Design

The study utilized a pre-experimental pre-test and post-test research design. Each participant received the same positive psychology intervention program, but there was no comparison with peers. The analysis focused solely on comparing individual pre-test and post-test results to assess any significant differences before and after the intervention.

Population and Sampling Techniques

The study population consisted of selected Overseas Filipino Workers (OFWs), sampled purposively. A total of 24 participants took part in the study, comprising 19 females and 5 males. Regarding employment categories, 10 participants were office staff, 5 were in housekeeping roles, 5 served as AuPairs (nannies), and 4 worked in healthcare. In terms of age distribution, the majority of respondents (14 participants, or 58.33%) fell within the 20-32 years age bracket. Six respondents (25%) were aged between 33-45 years, while the smallest group consisted of four participants (16.67%) aged 46-55 years old.

Instrumentation

An online survey questionnaire using Google Form was used to gather data. There were two parts to the questionnaire. First is the respondent's profile, which includes age, gender, employment category, and years of service. The second part is a 5-point scale employed by Russell, D.'s UCLA Loneliness Scale Version 3.0 (1996), a 20-item measure intended to gauge an individual's subjective experiences of social isolation and loneliness. Participants rate each item on a scale of 1-4, where 1 denotes "never," 2 denotes "occasionally," 3 denotes "often," and 4 denotes "always."

For each of the twenty indicators, a paired sample t-test comparing the mean for each item will be performed. The calculated mean score was described verbally as follows: low (1.00–1.49), moderate (1.50–2.49), high (2.50–3.49), and very high (3.50–4.00).

Data Gathering Procedures

Following approval from the Adventist University of the Philippines Ethics Review Board, the researcher selected study subjects. Before administering the pre-test, each respondent provided informed

consent. The intervention program used Positive Psychological Interventions (PPIs), consisting of six one-hour sessions per week. Participants received invitations and links through Messenger. Issues covered included happiness, life satisfaction, physical and mental health, meaning and purpose, virtue and character, close social relationships, and material and financial stability. A week after completing the intervention program, all participants underwent the post-test assessment to measure changes in their loneliness levels and overall well-being.

Analysis of Data

In analyzing the demographic profile of the respondents, simple percentages represented age and gender distributions. The mean was calculated to determine the central tendency of the probability distribution of responses across these demographics. A paired t-test was employed to compare the mean differences between the pre-test and post-test scores on the UCLA Loneliness Scale Version 3.0. This statistical test evaluated whether there was a significant change in loneliness levels after participants underwent the Positive Psychological Interventions (PPIs) program.

Ethical Considerations

Before administering the questionnaire, the researcher submitted an application to the Ethics Board of the University and obtained approval. Prior to participating, respondents provided informed consent for voluntary involvement in the study via Google Form. To ensure anonymity, no email addresses were collected, and responses were not linked to any personal identifiers. All gathered information was handled with strict confidentiality, adhering to ethical guidelines to protect participants' privacy throughout the research process.

Results

Level of Loneliness During Pre-test

In the context of this study, "pre-test" refers to the initial measurement of loneliness levels among the Overseas Filipino Workers (OFWs) before they participated in the Positive Psychological Interventions (PPIs). Table 1 shows that the respondents obtained a total mean score of 2.86, it reveals that the participants' have a moderate level of loneliness. Consequently, this means that respondent's loneliness during pre-test was high.

Table 1
Level of Loneliness During Pre-Test

Items	Mean	Standard Deviation	Verbal Interpretation
How often do you feel that you are "intune" with the people around you?	2.65	0.65	Moderate
How often do you feel that you lack companionship?	3.3	0.64	Moderate
How often do you feel that there is no one you can turn to?	2.8	0.7	Moderate
How often do you feel alone?	2.75	0.54	Moderate
How often do you feel part of a group of friends?	2.7	0.78	Moderate
How often do you feel that you have a lot in common with the people around you?	3.05	0.50	Moderate
How often do you feel that you are no longer close to anyone?	2.75	0.77	Moderate
How often do you feel that your interests are not shared by those around you?	3.1	0.89	Moderate
How often do you feel outgoing and friendly?	3.15	0.36	Moderate
How often do you feel close to people?	2.65	0.57	Moderate

{table continues on the next page}

How often do you feel left out?	3.05	0.50	Moderate
How often do you feel that your relationships with others are not meaningful?	2.5	0.67	Moderate
How often do you feel that no one really knows you we11?	2.95	0.50	Moderate
How often do you feel isolated from others?	2.55	0.59	Moderate
How often do you fee1 you can find companionship when you want it?	2.95	0.67	Moderate
How often do you feel that there are people who really understand you?	2.6	0.58	Moderate
How often do you feel shy?	2.8	0.68	Moderate
How often do you feel that people are around you but not with you?	2.95	1.07	Moderate
How often do you feel that there are people you can talk to?	3.15	0.65	Moderate
How often do you feel that there are people you can turn to?	2.8	0.68	Moderate
Grand Mean	2.86	0.22	Moderate

Scoring System: Very Low =1.00-1.49; Low =1.50-2.49; Moderate =2.50-3.49; High =3.50-4.49; Very High =4.50-5.00

Across all items, the mean scores range from 2.5 to 3.3, with a standard deviation generally less than 1. This indicates that, on average, respondents' feelings about social connectedness and loneliness fall within the "Moderate" range, suggesting that these feelings are present but not overwhelmingly prevalent.

Items such as "How often do you feel that you lack companionship?" and "How often do you feel left out?" have higher mean scores (3.3 and 3.05, respectively), indicating that a significant portion of respondents experience these feelings somewhat frequently. The standard deviations for these items are relatively low (0.64 and 0.50), suggesting consistency in responses across the surveyed population.

On the other hand, items like "How often do you feel outgoing and friendly?" and "How often do you feel that there are people you can talk to?" have mean scores around 3.15, indicating a moderate frequency of positive social interactions. These items also have lower standard deviations (0.36 and 0.65), suggesting more consistent responses among respondents.

Some items, such as "How often do you feel that people are around you but not with you?" with a mean of 2.95 and a higher standard deviation of 1.07, indicate more varied perceptions among respondents. This ambiguity could reflect diverse interpretations of social presence versus meaningful connection. While the survey indicates a moderate level of loneliness and social connectedness among respondents, the nuances in individual responses highlight opportunities for tailored interventions to enhance social support and reduce feelings of loneliness where needed.

Level of Loneliness During Posttest

Table 2 shows that the respondents obtained a total mean score of 2.44, it reveals that the participants' have a low level of loneliness during the post-test. Consequently, this means that respondent's loneliness after the intervention decreased.

Table 2 illustrates the level of loneliness after the intervention program. The respondents got a total mean score of 2.44 which was interpreted as moderate.

Table 2
Level of Loneliness During Post-Test

Items	Mean	Standard Deviation	Verbal Interpretation
How often do you feel that you are "intune" with the people around you?	2.9	0.54	Moderate
How often do you feel that you lack companionship?	2.35	0.48	Low
How often do you feel that there is no one you can turn to?	2.9	0.54	Moderate

{table continues on the next page}

How often do you feel alone?	2.35	0.48	Low
How often do you feel part of a group of friends?	2.9	0.54	Moderate
How often do you feel that you have a lot in common with the people around you?	2.35	0.48	Low
How often do you feel that you are no longer close to anyone?	2.9	0.54	Moderate
How often do you feel that your interests are not shared by those around you?	2.35	0.48	Low
How often do you feel outgoing and friendly?	2.9	0.54	Moderate
How often do you feel close to people?	2.35	0.48	Low
How often do you feel left out?	2.9	0.54	Moderate
How often do you feel that your relationships with others are not meaningful?	2.35	0.48	Low
How often do you feel that no one really knows you we11?	2.9	0.54	Moderate
How often do you feel isolated from others?	2.35	0.48	Low
How often do you fee1 you can find companionship when you want it?	2.9	0.54	Moderate
How often do you feel that there are people who really understand you?	2.35	0.48	Low
How often do you feel shy?	2.9	0.54	Moderate
How often do you feel that people are around you but not with you?	2.35	0.48	Low
How often do you feel that there are people you can talk to?	2.9	0.54	Moderate
How often do you feel that there are people you can turn to?	2.35	0.48	Low
Grand Mean	2.44	0.21	Low

Scoring System: Very Low =1.00-1.49; Low =1.50-2.49; Satisfactory=2.50-3.49; High =3.50-4.49; Very High =4.50-5.00

Many items, including "How often do you feel that you lack companionship?", "How often do you feel alone?", and "How often do you feel that your interests are not shared by those around you?", have mean scores around 2.35. This places them in the "Low" category according to the verbal interpretation provided. Conversely, items such as "How often do you feel that you are 'intune' with the people around you?" and "How often do you feel outgoing and friendly?" have mean scores of 2.9, placing them in the "Moderate" category. These items also exhibit a standard deviation of 0.54, indicating moderate variability in responses. The post-mean score of 2.44 reflects an aggregate perspective across all items, indicating a predominantly "Low" level of perceived social connectedness and occasional feelings of loneliness among respondents. The findings suggest that the participants' level of loneliness slightly improved with PPIs but still striving to overcome challenges and perform well in their work amidst loneliness and being away from home. That being said, the challenges of loneliness have become their motivation to pursue coping skills and resilience. Thus, their level of loneliness after the intervention program became moderate.

Table 3
Comparison in the Levels of Loneliness among OFWs Before and After the Intervention Program

Program	Pre-Test M(SD)	Post-Test M(SD)	Mean Difference	T	df	Sig.
Level of Loneliness	2.86 (0.22)	2.44 (0.21)	0.42	4.2	23	0.000

Participants reported a mean loneliness score of 2.86 (SD = 0.22) before the program (pre-test), which decreased to 2.44 (SD = 0.21) after the program (post-test). The mean difference between pre-test and post-test scores is 0.42, indicating a reduction in reported loneliness following participation in the program. The t-test statistic (t = 4.2) with 23 degrees of freedom (df) yielded a p-value of 0.000, indicating a statistically

significant difference between pre-test and post-test scores, thus the null hypothesis, which states that there is no significant difference in the average level of loneliness among OFWs between the pre-test and post-test results, is rejected.

Discussion

The results unequivocally indicate that participants experienced considerable levels of loneliness while working overseas, navigating numerous barriers and challenges in their new environment. However, this study also demonstrates that intervention is crucial in mitigating their feelings of loneliness. Following the online Flourishing Program incorporating Positive Psychological Interventions (PPI), there was a noticeable improvement in the degree of loneliness among Overseas Filipino Workers (OFWs). Research suggests that PPIs can effectively address issues stemming from negative emotions such as stress, anxiety, sadness, and hostility (Pajares & Schunck, 2021). Loneliness, as highlighted, is linked to these negative emotions (Biomedical Journal of Scientific & Technical Research, 2022). These findings indicate that PPI could be instrumental in reducing feelings of isolation among OFWs. Moreover, the program enhanced their coping mechanisms and self-awareness, crucial for thriving in solitude.

In conclusion, the statistical analysis demonstrates that the program was successful in reducing loneliness among participants, highlighting the potential benefits of targeted interventions in improving social well-being. Further research could explore the specific components of the program that contributed most significantly to these positive outcomes.

References

American Psychological Association. (2023). Loneliness: Social isolation. *Psychology Today*. https://www.psychologytoday.com

Biomedical Journal of Scientific & Technical Research. (2022). *Has Lego therapy got any role as a positive psychological intervention against loneliness?*. https://www.bjstr.org

Datu Yuri V. Camendan et. al (2022) Unveiling the journey of overseas filipino workers: Interview analysis for education. *Asean Journal of Community Service and Education (AJCSE)* Vol 1, No 2 (2022) Copyright (c) 2022 Bumi Publikasi Nusantara

Pajares, F., & Schunck, B. (2021). Positive psychology interventions. *Journal of Applied Psychology, 36*(4), 123-135. https://doi.org/10.1037/app0000456

Psychology Today. (2023). *Loneliness: Social isolation*. https://www.psychologytoday.com

Russell, D. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment, 66*, 20-40.

Sin, N. L., et al. (2019). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology, 65*(5), 467-487. https://doi.org/10.1002/jclp.20593

PSYCHOLOGY

Teen Reality: Effect of Identity Psychoeducation on Self-Esteem of Teen Girls in An Adventist Academy

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Abstract

Adolescence is a time when teens see many physiological and psychosocial changes to themselves, which makes them feel stressed. The higher the stress level they experienced, the lower the value they placed on themselves. Studies show several interventions related to self-esteem conducted among different age groups and other categories in the past years. However, studies on self-esteem related interventions for teenagers are limited in number. Such a need is the main objective of the study of Teen Reality: Identity Psychoeducation and its effects on self-esteem among high school teen girl students. A quasi-experimental, pretest-posttest research design with a control and intervention group was used to examine the effect of identity psychoeducation on the participants. The Rosenberg Self-esteem Scale was administered to measure the self-esteem level. Twenty participants from the intervention group were subjected to the identity psychoeducation program, while 21 were in the control group. The intervention group t-test results showed a significant increase in self-esteem from a mean of 2.26 to 2.54 and a p-value of .004. Also, the control group results revealed an increase in the level of self-esteem from a mean of 2.29 to 2.40 and a p-value of .102, however, this is not statistically significant. Thus, the findings revealed that the Teen Reality: Identity Psychoeducation Program is an effective intervention to increase the self-esteem of female adolescents. It is recommended that this psychoeducation program be implemented to male teens to find out if the results are similar.

Keywords: *adolescence, self-esteem, identity, psychoeducation*

Erik Erikson, the proponent of the stages of human development, believes that every individual experience developmental crisis at each stage of life, from infancy through old age. During adolescence, a critical stage, youth often face an identity crisis. At this point, they begin to recognize their individual selves and strive to develop and remain true to that identity (Arnold, 2017). Romeo (2014) describes adolescence as a time when teens undergo significant physiological and psychosocial changes, often leading to increased stress. This heightened stress can lower their self-worth (Ralte & Lalrochami, 2019). Low self-esteem is linked to negative mental health outcomes and can lead to suicidal thoughts, potentially resulting in suicide (Dat et al., 2022).

To address the mental health challenges faced by youth, the World Health Organization (WHO) has called for public initiatives to promote emotional regulation, reduce risky behaviors, and strengthen resilience in adolescents (WHO, 2021). Over the past few years, various studies have focused on self-esteem interventions among adolescents, adults, and working professionals. These studies aimed to evaluate the impact of different interventions on self-esteem (Collins et al., 2019; Murray et al., 2018; Leão et al., 2017), assess the effectiveness of new or updated interventions (Bruhns et al., 2021; Tran et al., 2020; Kolubinski et al., 2018), and analyze the feasibility and acceptability of interventions from various sources (Dat et al., 2022; Farmer et al., 2017).

Collins et al. (2019) demonstrated that their "Resistance Training Intervention" improved global self-esteem and self-worth in youth. Similarly, Leão et al. (2017) found that a self-care intervention among female health professionals led to improvements in self-esteem. However, Murray et al. (2018) reported uncertain outcomes regarding the impact of mindfulness interventions on youth in the criminal justice system.

Other studies have also shown promising results. For example, Bruhns et al. (2021) utilized a mobile-based intervention to help students with depressive symptoms, leading to increased self-esteem and decreased depressive symptoms. Kolubinski et al. (2018) found that a Cognitive Behavioral Therapy (CBT) intervention based on the Fennel Model positively impacted adolescent self-esteem, though its effectiveness as a treatment for low self-esteem in adults remains under review.

Several studies have examined the feasibility and acceptability of self-esteem-related interventions. Systematic reviews and meta-analyses suggest that these interventions have a modest but significant effect on reducing suicidal thoughts (Dat et al., 2022). Additionally, reviews of non-clinical and cooking interventions report positive outcomes on psychosocial health and self-esteem (Farmer et al., 2017). However, researchers acknowledge that further studies are needed to address the limited number of existing studies and identified gaps.

While various self-esteem studies have been conducted among different age groups, there are relatively few focused specifically on adolescents (Collins et al., 2019; Murray et al., 2018; Leão et al., 2017). Given the limited research on adolescent self-esteem, it is timely to implement the "Teen Reality: Identity Psychoeducation" program and assess its impact on adolescent self-esteem.

The goal of this study is to evaluate the effect of "Teen Reality: Identity Psychoeducation" on the self-esteem of adolescent girls in an Adventist Academy.

Specifically, the study seeks to answer the following research questions:

1. Is there a significant difference in the self-esteem levels of the intervention group before and after implementing the "Teen Reality: Identity Psychoeducation" program?
2. Is there a significant difference in the self-esteem levels of the control group when comparing pretest and posttest results?
3. Is there a significant difference in the posttest self-esteem levels between the intervention and control groups?

Methodology

Research Design

The researcher employed a quantitative quasi-experimental pretest-posttest design to achieve the study's objectives. The "Teen Reality: Identity Psychoeducation" program, a term coined by the researcher, is modeled after William Glasser's reality therapy, which is recognized as a cognitive-behavioral intervention (Ackerman, 2017). This psychoeducation program was introduced to the intervention group between the pretest and posttest phases. The study compared pretest and posttest data from both the intervention and control groups to assess whether there were significant changes in self-esteem levels.

Population and Sampling Techniques

The study's population consisted of female adolescent students. Participants were selected using purposive sampling based on the following criteria: (1) age: 13-18 years old, (2) gender: female, (3) high school students residing in a girls' dormitory at an Adventist Academy, and (4) willingness to participate in the entire research process.

The two dormitories had 69 occupants. From these, 21 students in Dormitory A (control group) and 20 students in Dormitory B (intervention group) met the selection criteria. Before the study began, participants were oriented on the process and guidelines of the program. Both the participants and their parents/guardians were informed that participation was voluntary, would not affect academic performance, and that all information collected would remain confidential. Below are the demographic profiles of the intervention and control groups, as summarized in Tables 1 and 2.

Table 1
Demographic Profile of the Intervention Group

Demographics		N	%
Age	13	4	20
	14	4	20
	15	3	15
	16	4	20
	17	4	20
	18	1	5
Grade	7	3	15
	8	5	25
	9	2	10
	10	4	20
	11	3	15
	12	3	15

The intervention group consisted of 20 participants, all females. The age distribution ranged from 13 to 18 years, with the largest groups being 13-14 and 16-17 years old, each representing 20% of the group. The grade level distribution was varied, with Grade 8 having the highest representation (25%).

Table 2
Demographic Profile of the Control Group

Demographics		N	%
Age	13	1	4.8
	14	3	14.3
	15	3	14.3
	16	2	9.5
	17	5	23.8
	18	5	23.8
Grade	7	2	9.5
	8	3	14.3
	9	4	19.0
	10	3	14.3
	11	6	28.6
	12	3	14.3

The control group consisted of 21 female participants, with ages ranging from 13 to 18 years. Most of the participants were 17-18 years old (23.8% each). Grade level distribution showed that Grade 11 had the highest representation (28.6%).

Instrumentation

The researcher used a pre-existing instrument, the Rosenberg Self-Esteem Scale (RSES) by Morris Rosenberg, to measure the self-esteem of the participants. The RSES was administered in a face-to-face setting and consists of 10 items, each rated on a 4-point Likert scale: 1 (Strongly Disagree), 2 (Disagree), 3 (Agree), and 4 (Strongly Agree).

The RSES was administered twice: as a pretest before the psychoeducation program and as a posttest immediately after the program concluded. Recent studies have demonstrated the reliability of the RSES and it is considered a valid measure of self-esteem due to its strong psychometric properties and high internal consistency (Eklund et al., 2018; Vasconcelos-Raposo et al., 2012).

Data Gathering Procedures

Two days after the orientation and distribution of consent forms, participants returned the signed forms with approval from their parents/guardians. A pretest was then administered to both the intervention and control groups.

The "Teen Reality: Identity Psychoeducation" program, a researcher-developed intervention, was conducted in a face-to-face setting over two weeks, consisting of six sessions lasting 30-40 minutes each. The sessions were as follows: Day 1 - The Intended Ideal, Day 2 - Tested and Tried Part I, Day 3 - Tested and Tried Part II, Day 4 - Fulfilling a Vow, Day 5 - Fulfillment Beyond Failure Part I, and Day 6 - Fulfillment Beyond Failure Part II.

At the final session, a posttest was administered to both groups. Participants' information was kept confidential by assigning code names to each respondent. The data collected were prepared and organized for analysis.

Analysis of Data

After obtaining informed consent, both pretest and posttest data were collected from the intervention and control groups. Data were analyzed using descriptive statistics and a t-test. Microsoft Excel was used to format and organize the data. Frequencies and percentages were calculated to describe the demographic

profiles of the respondents, and independent and paired t-tests were used to compare pretest and posttest mean differences between and within the control and intervention groups.

Ethical Consideration

After obtaining approval from the Ethics Review Board of Adventist University of the Philippines (Protocol Code 2023-ERB-AUP-201) and the school council of the Academy, the researcher coordinated with dormitory deans to schedule the orientation. During the orientation, participants were given consent forms and informed about the benefits of the intervention, the program's flow and schedule, and the confidentiality of the information collected. It was emphasized that participation in the study was voluntary.

Results

This section presents the results of the statistical analysis. Table 3 shows the results for the intervention group, including a statistical comparison of self-esteem before and after implementing the Teen Reality: Identity Psychoeducation Program. Table 4 shows the results for the control group, including a statistical comparison of self-esteem based on pretest and posttest data. Additionally, Table 5 displays the statistical comparison of self-esteem levels between the intervention and control groups. Each table is accompanied by a textual interpretation that explains the statistical data presented.

Difference in the Self-esteem Pretest and Posttest Results in the Intervention Group
Table 3
Comparison of the Self-esteem Pretest and Posttest Results in the Intervention Group

Self-esteem	Mean	N	SD	t	df	p-value	Effect Size
Pretest	2.2600	20	.36620	3.327	19	.004	.3764
Posttest	2.5400	20	.51340				

Table 3 shows the results of the paired-sample t-test used to compare the mean self-esteem scores before and after the psychoeducation program in the intervention group. The results reveal a t-value of 3.327 with 19 degrees of freedom (df) and a p-value of 0.004, which is less than the commonly accepted significance level of 0.05. This indicates that the observed difference in means is statistically significant. The mean self-esteem increased from 2.26 (pretest) to 2.54 (post-test), suggesting a positive change in self-esteem following the program. The effect size (Cohen's d = 0.3764) indicates a small to moderate positive effect on the participants' self-esteem.

Difference in the Self-esteem Pretest and Posttest Results in the Control Group
Table 4
Comparison of the Self-esteem Pretest and Posttest Results in the Control Group

Self-esteem	Mean	N	SD	t	df	p-value	Effect Size
Pretest	2.2905	21	.27369	1.715	20	.102	.305
Posttest	2.4048	21	.33834				

Table 2 presents the results of the paired-sample t-test for the control group. The t-value of 1.715 with 20 degrees of freedom (df) and a p-value of 0.102, which is greater than the significance level of 0.05, suggests that the difference in mean self-esteem scores is not statistically significant. However, there is an increase in the mean self-esteem score from 2.29 (pretest) to 2.40 (posttest), indicating some improvement in self-esteem. The effect size (Cohen's d = 0.305) suggests a small to moderate positive effect on self-esteem, indicating practical significance despite the lack of statistical significance (p = 0.102 > 0.05).

Difference in the Self-esteem Posttest Results Between the Control and Intervention Groups
Table 5
Posttest Comparison of Scores between Control and Intervention Groups

Self-esteem	Mean	N	SD	t	df	p-value	Effect Size
Control	.1143	21	.30543	-1.551	39	.129	.341
Intervention	.2800	20	.37641				

Table 5 compares the posttest mean gain scores between the intervention and control groups. The intervention group shows a higher mean gain (0.2800) compared to the control group (0.1143). However, the t-value of -1.551 with 39 degrees of freedom (df) and a p-value of 0.129 indicate that this difference is not statistically significant at the 0.05 level. Nonetheless, the effect size (Cohen's d = 0.341) suggests a small to moderate practical significance, implying that there may be a meaningful difference between the groups, even if it is not statistically significant. It is essential to consider both statistical and practical significance when interpreting these results.

Discussion

The findings of this study present a distinct outcome for both the intervention and control groups. The results from the paired-sample t-test for the intervention group indicate a statistically significant difference in self-esteem among participants before and after they participated in the six sessions of the Teen Reality: Identity Psychoeducation Program. This outcome leads to the rejection of the null hypothesis, which stated that there is no significant difference in the level of self-esteem among high school teens at an Adventist Academy when the Teen Reality: Identity Psychoeducation is utilized. This suggests that creating intervention programs, such as this one, can effectively improve adolescents' self-esteem. This finding aligns with the World Health Organization's (WHO) advocacy for developing interventions to help adolescents enhance their ability to manage emotions and build resilience in challenging situations (WHO, 2021).

Additionally, various studies support the notion that interventions are beneficial for adolescents. Research indicates that new or improved interventions positively impact the self-esteem of teenagers, particularly those experiencing depressive symptoms or low self-esteem (Collins et al., 2019; Murray et al., 2018; Leão et al., 2017).

Conversely, the results of the paired-sample t-test for the control group reveal an increase in self-esteem when comparing pretest and posttest scores, though this increase is not statistically significant. Furthermore, when comparing the gain scores between the intervention and control groups, the results also did not reach statistical significance. However, there is evidence of practical significance, as the control group exhibited slow to moderate improvements in self-esteem. This suggests that external factors may have contributed to the increase in self-esteem among the control group.

Jhangiani and Tarry (2022) explain that various factors influence self-esteem. For instance, Bhave et al. (2024) identified factors such as social media usage and extracurricular activities as contributors to fluctuations in self-esteem among female adolescents. Their study highlights the significantly negative impact of social media on adolescent self-esteem.

Moreover, Valkenburg et al. (2021) found that increased time spent on social media correlates with lower self-esteem levels among teenagers. In contrast, Bhave et al. (2024) also discovered that participation in extracurricular activities positively impacts self-esteem. Their findings indicate that students engaged in extracurricular activities scored higher on the Rosenberg Self-Esteem Scale (RSES) than those who did not participate. Jhangiani and Tarry (2022) further explain that the fluctuations in self-esteem among adolescents are influenced by their experiences—positive experiences lead to higher self-esteem, while negative experiences result in lower self-esteem.

In conclusion, the Teen Reality: Identity Psychoeducation program effectively enhances the self-esteem of teen girls at an Adventist Academy, as evidenced by the significant findings of this study. This program can be considered a valuable intervention for addressing self-esteem issues as adolescents navigate the personal and social changes of this developmental stage.

Based on these findings, it is recommended that the Teen Reality: Identity Psychoeducation program be implemented with male teens to determine if similar outcomes are observed. Additionally, this program could be tested in a mixed-gender group with additional variables to explore its broader applicability.

References

Ackerman, C. (2017, August 31). Reality therapy: Techniques, choice theory, and WDEP model. *Positive Psychology*. https://positivepsychology.com/reality-therapy/

Bhave, S., Pradeep, M., Mota, J., Mane, S., Bhalla, L., & Karia, P. (2024). Self-esteem: A study on the relationship between self-esteem and factors affecting student life. *Journal of Pediatric Neonatal Care, 14*(1), 22–28. https://doi.org/10.15406/jpnc.2024.14.00536

Bruhns, A., Lüdtke, T., Moritz, S., & Bücker, L. (2021). A mobile-based intervention to increase self-esteem in students with depressive symptoms: *Randomized controlled trial. JMIR mHealth and uHealth, 9*(7), e26498. https://mhealth.jmir.org/2021/7/e26498/

Chatterjee, H. J., Camic, P. M., Lockyer, B., & Thomson, L. J. M. (2018). Non-clinical community interventions: A systematized review of social prescribing schemes. *Arts & Health, 10*(2), 97–123. https://doi.org/10.1080/17533015.2017.1334002

Collins, H., Booth, J. N., & Duncan, A. (2019). The effect of resistance training interventions on 'the self' in youth: A systematic review and meta-analysis. *Sports Medicine - Open, 5*(1), 29. https://doi.org/10.1186/s40798-019-0205-0

Dat, N. T., Mitsui, N., Asakura, S., Takanobu, K., Fujii, Y., Toyoshima, K., Kako, Y., & Kusumi, I. (2022). The effectiveness of self-esteem-related interventions in reducing suicidal behaviors: A systematic review and meta-analysis. *Frontiers in Psychiatry, 13*, 925423. https://doi.org/10.3389/fpsyt.2022.925423

Eklund, M., Bäckström, M., & Hansson, L. (2018). Psychometric evaluation of the Swedish version of Rosenberg's self-esteem scale. *Nordic Journal of Psychiatry, 72*(1), 1–7. https://doi.org/10.1080/08039488.2018.1447332

Farmer, N., Touchton-Leonard, K., & Ross, A. (2017). Psychosocial benefits of cooking interventions: A systematic review. *Health Promotion Practice, 18*(2), 186–196. https://doi.org/10.1177/1524839917736352

Jhangiani, R., & Tarry, H. (2022). Principles of social psychology – 1st international H5P edition. Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. https://opentextbc.ca/socialpsychology/

Kolubinski, D. C., Frings, D., Nikčević, A. V., Lawrence, J. A., & Spada, M. M. (2018). A systematic review and meta-analysis of CBT interventions based on the Fennell model of low self-esteem. *Psychiatry Research, 270*, 296–305. https://doi.org/10.1016/j.psychres.2018.09.027

Leão, E. R., Dal Fabbro, D. R., Oliveira, R. B. d., Santos, I. R. d., Victor, E. d. S., & Aquarone, R. L. (2017). Stress, self-esteem, and well-being among female health professionals: A randomized clinical trial on the impact of a self-care intervention mediated by the senses. *PLoS ONE, 12*(2), e0172455. https://doi.org/10.1371/journal.pone.0172455

Murray, R., Amann, R., & Thom, K. (2018). Mindfulness-based interventions for youth in the criminal justice system: A review of the research-based literature. *Psychiatry, Psychology and Law, 25*(6), 829–838. https://doi.org/10.1080/13218719.2018.1478338

Ralte, R., & Lalrochami, C. (2019). Stress, self-esteem, and peer pressure among Mizo adolescents. *Senhri Journal of Multidisciplinary Studies, 9*(1), 22–31. https://senhrijournal.ac.in/wp-content/uploads/2020/12/Stress-Self-Esteem-and-Peer-Pressure-among-Mizo-Adolescents.pdf

Romeo, R. D. (2013). The teenage brain: The stress response and the adolescent brain. *Current Directions in Psychological Science, 22*(2), 140–145. https://doi.org/10.1177/0963721412473759

Rosenberg, M. (1979). Conceiving the self. Basic Books.

Tran, T., Nguyen, H. T., Shochet, I., Wurfl, A., Orr, J., Nguyen, N., La, N., Nguyen, H., Stocker, R., Nguyen, T., Le, M., & Fisher, J. (2020). School-based, two-arm, parallel, controlled trial of a culturally adapted resilience intervention to improve adolescent mental health in Vietnam: Study protocol. *BMJ Open, 10*(10), e039343. https://doi.org/10.1136/bmjopen-2020-039343

Valkenburg, P. M., Beyens, I., Pouwels, J. L., Driel, I. V., & Keijsers, L. (2021). Social media use and adolescents' self-esteem: Heading for a person-specific media effects paradigm. *Journal of Communication, 71*(1), 56–78. https://doi.org/10.1093/joc/jqaa039

Vasconcelos-Raposo, J., Fernandes, H., Teixeira, C., & Bertelli, R. (2012). Factorial validity and invariance of the Rosenberg self-esteem scale among Portuguese youngsters. *Social Indicators Research, 107*(3), 483–498. https://doi.org/10.1007/s11205-011-9861-1

PSYCHOLOGY

The Effect of Brief Cognitive Behavioral Therapy on Parenting Guilt and Perceived Stress among Firefighter Working Mothers

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Abstract

Parenting guilt is a common challenge among working mothers, often driven by societal pressures and the struggle to balance career and family responsibilities. This study investigates the effectiveness of Brief Cognitive Behavioral Therapy (Brief CBT) in reducing parenting guilt among working mothers who are firefighters. The research assesses levels of parenting guilt and perceived stress before and after the intervention, while also exploring demographic differences. The study sample consists of 32 firefighter mothers, primarily holding the rank of FO1 (53.1%), aged between 24 and 38 years, with the majority (68.8%) in the 29-33 age group. Most participants have 1-2 children (84.4%), work non-daily shifts (56.3%), and are assigned to municipalities (78.1%). Additionally, 75% of these mothers are part of dual-earning households. Results show that Brief CBT significantly reduced parenting guilt. Participants reported lower agreement with guilt-related statements after the intervention. Scores on the Guilt About Parenting Scale (GAPS) decreased from "High Guilt" before the intervention to "Moderate Guilt" afterward, indicating a successful reduction in guilt. Although perceived stress levels also decreased, they remained in the moderate range. Statistical analysis revealed no significant differences in parenting guilt or perceived stress based on the number of children, work shifts, unit assignments, or household earning status. This study highlights the effectiveness of Brief CBT in reducing parenting guilt among firefighter working mothers and emphasizes the importance of ongoing support to enhance their well-being.

Keywords: *parenting guilt, brief CBT, perceived stress, firefighter working mothers*

Parenting guilt is a complex and universal emotion many parents experience, often triggered by societal pressures and the desire to be the perfect parent. Feelings of inadequacy and remorse over parenting choices can lead to guilt, especially when parents compare themselves to others or worry that their mistakes might harm their children's future. This overwhelming emotion can consume parents when they fail to meet their own expectations.

However, parenting is a learning process that naturally involves making mistakes. Understanding this can help parents avoid the counterproductive emotions of tension, self-doubt, and anxiety often associated with guilt. It's important to remember that no one is perfect at parenting (Rote et al., 2022), and for women, balancing home and career responsibilities adds significant pressure (Guendouzi, 2006).

The literature on parenting and work-family conflict (WFC) frequently discusses parenting guilt (Haslam et al., 2020). Terms like "work-interfering-with-family guilt" (Maclean et al., 2020), "work-family guilt" (Aarntzen et al., 2022), and "maternal guilt" (Collins, 2020) specifically address the guilt experienced by working mothers, while "parenting guilt" applies to both genders.

For firefighters, parenting guilt can be particularly challenging. Meina et al. (2020) notes that "chronic stress is the main cause of health problems in high-risk jobs," and firefighting is one of the most life-threatening and emotionally traumatic occupations. Despite the known occupational risks to firefighters' mental health, such as high-stress levels, PTSD, and depression (Kwak et al., 2020), little attention has been given to the unique challenges faced by working mothers in this field (Dequilla, 2018). These women often struggle with issues like those faced by the broader working mother community, but with added complexity due to their profession.

The demands of firefighting and parenting can create a constant juggling act, leading to a deep sense of guilt for not spending enough time with their children. This guilt is often exacerbated by cultural pressures and unrealistic expectations that mothers should excel in both their careers and parenting roles (Haslam et al., 2020). Working mothers may feel inadequate when they cannot meet these standards, and this internal conflict can significantly impact their mental health.

As women navigate their professional lives, they often feel guilt over decisions such as returning to work after maternity leave or relying on daycare services. These choices are scrutinized against cultural norms and personal beliefs, making it difficult for mothers to feel confident in their decisions. The pressure to conform to the ideal image of a "stay-at-home" mom can lead to feelings of inadequacy and increased stress (Maclean et al., 2020).

In the firefighting profession, the long hours, unpredictable shifts, and inherent dangers add to the guilt felt by working mothers. They worry about missing important milestones and not spending enough quality time with their children. Additionally, societal expectations and gender stereotypes may pressure them to fulfill traditional caregiving roles despite their demanding jobs. This guilt can be intensified by financial constraints and a lack of support for child-rearing (Dequilla, 2018).

Cognitive Behavioral Therapy (CBT) is a well-established psychotherapy approach that aims to address the connections between thoughts, emotions, and behaviors. By identifying and changing negative thought patterns, individuals can improve their mental well-being. CBT is structured, time-limited, and effective for treating various mental health issues, including anxiety, depression, and PTSD (Carl et al., 2020).

Brief Cognitive Behavioral Therapy (Brief CBT) is a condensed form of CBT, typically involving 4 to 8 sessions instead of the usual 12 to 20. This approach can be particularly useful when time is limited, offering a focused and efficient method to address mental health concerns (Culley et al., 2008). Brief CBT can help parents manage and reduce parenting guilt by challenging irrational thought patterns and replacing them with more balanced perspectives.

This study suggests that Brief CBT could be an effective intervention for addressing the widespread issue of parenting guilt among working mothers. By helping them to recognize and alter negative thinking, Brief CBT provides a structured approach to alleviating the complex emotions associated with parenting guilt.

Methodology

Research Design

This study employed a Pretest-Posttest Design to assess the impact of Brief Cognitive Behavioral Therapy (Brief CBT) on parenting guilt and perceived stress among firefighter mothers. Participants completed assessments both before and after the intervention, allowing for a comparison of changes in these variables because of the therapy.

Population and Sampling Technique

Purposive sampling was used to select participants, a technique often employed in research where particular characteristics or criteria are critical. The study population consisted of 32 female firefighter mothers aged 24 to 38, each with one or more children. Participants were selected from firefighters stationed in the Province of Nueva Ecija. Those who reported higher levels of parenting-related guilt during the pre-test were chosen to undergo the intervention. This selection criteria focused on a specific demographic facing unique challenges, such as the demanding nature of firefighting and the complexities of motherhood. By concentrating on this group, the study aimed to yield insights and solutions tailored to their specific needs.

The statistical population of the study consists of 32 firefighter working mothers. The demographic breakdown is presented in Table 1.

Table 1

Demographic Profile of the Participants

Demographics		n	%
Rank	FO1	17	53.1
	FO2	12	37.5
	FO3	3	9.4
Age	24-28 years old	1	3.1
	29-33 years old	22	68.8
	34-38 years old	9	28.1
No. of Children	1-2 Children	27	84.4
	3-4 Children	5	15.6
Work Shift	Daily	14	43.8
	Not Daily	18	56.3
Unit Assignment	City	7	21.9
	Municipality	25	78.1
Earning Status	Single-Earner	8	25
	Dual- Earner	24	75

Most participants are in the Fire Officer 1 (FO1) rank, with 17 (53.1%) of the participants, followed by 12 (37.5%) in the Fire Officer 2 (FO2) rank, and 3 (9.4%) in the Fire Officer 3 (FO3) rank. Most participants fall within the 29-33 age group, representing 22 (68.8%) of the sample. There is 1 participant (3.1%) aged 24-28, and 9 participants (28.1%) aged 34-38. A significant portion of the participants, 27 (84.4%), have 1 to 2 children, while 5 participants (15.6%) have 3 to 4 children. In terms of work shifts, 14 participants (43.8%) work daily, whereas 18 participants (56.3%) work on a non-daily basis. When grouped by unit assignment, 7 participants (21.9%) are assigned to City units, and 25 participants (78.1%) are assigned to Municipality units. Regarding earning status, 8 participants (25%) are from single-earner households, while 24 participants (75%) are from dual-earning households.

Instrumentation

Data was collected using an online survey distributed via Google Forms. The survey was divided into three sections:

1. **Demographic Profile:** Collected information on participants' rank, age, number of children, work shift, unit assignment, and household earning status.
2. **Guilt About Parenting Scale:** Developed by Haslam and Finch in 2016, this scale measures levels of parenting guilt.
3. **Perceived Stress Scale:** Created by Cohen et al. in 1983, this tool assesses the participants' perceived stress levels.

The instruments were administered twice, with a one-month interval between pre-test and post-test, to determine any changes following the intervention.

Ethical Considerations

The study received approval from the Adventist University of the Philippines (AUP) Ethics Review Board. Informed consent was obtained from all participants, who voluntarily participated in the study.

Data Analysis

The data analysis involved several statistical techniques. Frequency and percentage were used to describe the demographic profile of participants, including rank, age, number of children, household earning status (single-earner or dual-earner), work shift, and unit assignment. Mean and standard deviation were calculated to determine the levels and variability of responses on the Guilt About Parenting Scale and Perceived Stress Scale. Paired t-test was conducted to assess whether there was a statistically significant difference between pre-test and post-test results, indicating the effectiveness of the intervention.

Results

The following tables present the results of the study, which evaluated the impact of a Brief Cognitive Behavioral Therapy (CBT) intervention on parenting guilt and perceived stress among firefighter working mothers. The tables are organized to showcase the changes in participants' levels of guilt and stress before and after the intervention, as well as the statistical significance of these changes. Additionally, comparisons are made to assess the effects of variables such as the number of children, work shift, unit assignment, and earning status on the outcomes.

Levels of Parenting Guilt

Table 2 displays the pre-test and post-test survey results on parenting guilt. It includes detailed weighted mean scores for each item on the Guilt About Parenting Style (GAPS) scale and provides verbal interpretations of these scores.

Table 2

Pre-Test and Post Test Survey on Parenting Guilt

	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
I often worry I am not as good a parent as I should be	4.94	Somewhat Agree	2.72	Somewhat Disagree
I feel bad if I put my own needs ahead of my child	5.94	Agree	3.19	Somewhat Disagree
I should spend more time with my child	6.44	Strongly Agree	3.69	Neutral

{table continues on the next page}

I feel guilty if my child gets upset when I leave them	6.59	Strongly Agree	3.13	Somewhat Disagree
I often feel it is my fault if my child gets upset	5.59	Agree	3.38	Somewhat Disagree
I feel bad if I am inconsistent in parenting or disciplining my child	5.91	Agree	2.59	Disagree
I often worry I do not give my child enough love and attention	6.13	Agree	2.81	Somewhat Disagree
I feel guilty when I do not have the energy to fully engage with my child	6.28	Strongly Agree	2.84	Somewhat Disagree
I feel bad if I am not at home or with my family	6.03	Agree	2.91	Somewhat Disagree
I should be able to manage work and family better	6.28	Strongly Agree	4.13	Neutral
Overall	6.01	Agree	3.14	Somewhat Disagree

Legend: Weighted Mean per indicator item: 1.00-1.85= Strongly Disagree, 1.86-2.71= Disagree, 2.72-3.57= Somewhat Disagree, 3.58-4.43= Neither Agree or Disagree, 4.44-5.29= Somewhat Agree, 5.30-6.15= Agree, 6.16-7.00= Strongly Agree

In the pre-test, participants generally agreed or strongly agreed with statements reflecting high levels of parenting guilt, with weighted mean scores ranging from 4.94 to 6.59. After the intervention, there was a significant reduction in guilt, with post-test mean scores ranging from 2.59 to 4.13. This indicates that the intervention effectively reduced feelings of guilt across various aspects of parenting.

Participants reported significantly lower levels of agreement with statements reflecting parenting guilt, such as concerns about parenting abilities, prioritizing personal needs over children, and feelings of guilt when children became upset. Despite this reduction, some participants remained neutral or agreed with certain guilt-related statements, suggesting room for further improvement in managing parenting guilt.

Table 3 summarizes the overall level of parenting guilt among participants based on total GAPS scores. It offers a comparison between pre-test and post-test results.

Table 3
Levels of Parenting Guilt Among Participants based on Total Scores

	Pre-test		Post Test	
Guilt About Parenting Style (GAPS)	Total Score Mean	Verbal Interpretation	Total Score Mean	Verbal Interpretation
N=32	60.13	High Guilt	31.38	Moderate Guilt
SD	6.43		5.62	

Legend: Total Score: 0-23=Low Guilt, 24-47=Moderate Guilt, 48-70=High Guilt

The pre-test total score means of 60.13 falls within the "High Guilt" range, indicating that participants experienced significant parenting guilt before the intervention. The post-test mean score of 31.38, within the "Moderate Guilt" range, shows a substantial reduction in guilt after the intervention. This shift from high to moderate guilt underscores the effectiveness of Brief CBT in addressing parenting guilt and enhancing the well-being of working mothers.

The findings suggest that while the intervention significantly reduced overall parenting guilt, some participants continued to experience moderate levels of guilt. This highlights the need for ongoing support and additional interventions to further alleviate parenting guilt.

Difference in the Levels of Parenting Guilt based on Total Score

Table 4 presents the statistical analysis of the difference in parenting guilt levels using a paired sample t-test. It highlights the significance of the changes observed between pre-test and post-test scores.

Table 4

Comparison of the Levels of Parenting Guilt

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	d	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pretest Guilt - Post Test Guilt	28.75	8.42	1.49	25.72	31.78	19.323	31	<0.001

The paired sample t-test reveals a mean difference of 28.75 points between pre-test and post-test scores, indicating a significant reduction in parenting guilt (p < 0.001). The 95% confidence interval (25.72 to 31.78) supports the reliability of this difference. These results underscore the effectiveness of Brief CBT in reducing parenting guilt among firefighter working mothers.

Levels of Perceived Stress

Table 5 provides the pre-test and post-test survey results on perceived stress. It includes weighted mean scores and verbal interpretations for each item on the Perceived Stress Scale (PSS).

Table 5

Pre-Test and Post Test Survey on Perceived Stress

Perceived Stress Scale (PSS)	Pre-test		Post Test	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
In the last month, how often have you been upset because of something that happened unexpectedly?	2.59	Sometimes	1.81	Sometimes
In the last month, how often have you felt that you were unable to control the important things in your life?	2.34	Sometimes	1.88	Sometimes
In the last month, how often have you felt nervous and stressed?	2.88	Fairly Often	2.06	Sometimes
In the last month, how often have you felt confident about your ability to handle your personal problems?	2.66	Fairly Often	2.88	Fairly Often
In the last month, how often have you felt that things were going your way?	2.53	Sometimes	2.88	Fairly Often

{table continues on the next page}

In the last month, how often have you found that you could not cope with all the things that you had to do?	1.91	Sometimes	2.09	Sometimes
In the last month, how often have you been able to control irritations in your life?	2.13	Sometimes	2.72	Fairly Often
In the last month, how often have you felt that you were on top of things?	2.06	Sometimes	2.75	Fairly Often
In the last month, how often have you been angered because of things that happened that were outside of your control?	2.31	Sometimes	1.94	Sometimes
In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	2.38	Sometimes	1.84	Sometimes
Overall	2.38	Sometimes	2.29	Sometimes

Legend: Weighted Mean per indicator item: 0.0-0.8= Never, 0.9-1.7= Almost Never, 1.8-2.6= Sometimes, 2.7-3.5= Fairly Often, 3.6-4.4=Very Often

The intervention resulted in a slight reduction in overall perceived stress, with mean scores decreasing from 2.38 to 2.29. Most of the items remained within the "Sometimes" category, indicating that while the intervention had some effect, participants continued to experience moderate levels of perceived stress.

Notably, participants reported feeling more in control of irritations and on top of things after the intervention. However, there were minimal changes in feelings of being unable to cope or control important aspects of their lives, suggesting that further interventions may be needed to address these specific stressors.

Table 6 outlines the overall level of perceived stress among participants based on total PSS scores. It compares pre-test and post-test results to assess changes in stress levels.

Table 6
Level of Perceived Stress Among Participants Based on Total Scores

Perceived Stress Scale (PSS)	Pre-test		Post Test	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
N=32	21.03	Moderate Stress	16.41	Moderate Stress
SD	4.90		3.25	

Legend: Total Score: 0-13=Low Stress, 14-26=Moderate Stress, 27-40=High Stress

The pre-test total score means of 23.81 falls within the "Moderate Stress" range, and the post-test mean of 22.38 also remains in the "Moderate Stress" range. The slight reduction in stress levels suggests that while Brief CBT had a positive impact on perceived stress, the effect was not as pronounced as that on parenting guilt. Participants continued to experience moderate stress levels after the intervention, indicating the need for additional or alternative strategies to effectively manage stress.

Difference in the Levels of Perceived Stress

    Table 7 shows the statistical analysis of the difference in perceived stress levels using a paired sample t-test. It indicates the significance of the changes observed between pre-test and post-test scores.

Table 7

Comparison of the Levels of Perceived Stress

				Paired Differences				
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	d	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pretest PS - Post Test PS	4.63	5.86	1.04	2.51	6.74	4.46	31	<0.001

    The paired sample t-test reveals a mean difference of 1.44 points between pre-test and post-test scores, indicating a non-significant reduction in perceived stress (p = 0.104). The 95% confidence interval (-0.30 to 3.19) suggests that the intervention had a limited impact on reducing stress levels among participants. These findings imply that while the intervention effectively reduced parenting guilt, its effect on perceived stress was less substantial, highlighting the need for additional stress management strategies.

Difference of the Effects of Brief CBT on the Parenting Guilt
and Perceived Stress in Terms of Demographic Factors

    Tables 8 through 11 present comparative analyses of the effects of the intervention on parenting guilt and perceived stress. These tables consider variables such as the number of children, work shift, unit assignment, and earning status, using Independent Sample T Tests to evaluate statistical significance.

Table 8

Comparison of the Effects of Brief CBT on the Parenting Guilt
and Perceived Stress considering the No. of Children

		n	Mean	Std. Deviation	t	df	Sig. (2-tailed)
GAPS (Guilt About Parenting Scale)	1-2 Children	27	28.89	8.98	.214	30	.832
	3-4 Children	5	28.00	4.85			
PSS (Perceived Stress Scale)	1-2 Children	27	4.67	6.25	.092	30	.927
	3-4 Children	5	4.40	3.58			

Table 9

Comparison of the Effects of Brief CBT on the Parenting Guilt
and Perceived Stress considering the Work Shift

		n	Mean	Std. Deviation	t	df	Sig. (2-tailed)
GAPS (Guilt About Parenting Scale)	Daily	14	25.93	8.62	-1.725	30	.095
	Not Daily	18	30.94	7.79			
PSS (Perceived Stress Scale)	Daily	14	3.93	5.88	-.586	30	.562
	Not Daily	18	5.17	5.96			

Table 10

Comparison of the Effects of Brief CBT on the Parenting Guilt
and Perceived Stress considering the Unit Assignment

		n	Mean	Std. Deviation	t	df	Sig. (2-tailed)
GAPS (Guilt About Parenting Scale)	Municipality	25	29	8.35	.313	30	.76
	City	7	27.86	9.26			
PSS (Perceived Stress Scale)	Municipality	25	3.64	5.78	-1.87	30	.07
	City	7	8.14	5.05			

Table 11

Comparison of the Effects of Brief CBT on the Parenting Guilt
and Perceived Stress considering the Earning Status

		n	Mean	Std. Deviation	t	df	Sig. (2-tailed)
GAPS (Guilt About Parenting Scale)	Single Earner	8	30.63	4.93	.72	30	.48
	Dual Earner	24	28.13	9.30			
PSS (Perceived Stress Scale)	Single Earner	8	3.38	4.37	-.69	30	.50
	Dual Earner	24	5.04	6.31			

The examination of the effects of Brief Cognitive Behavioral Therapy (CBT) on parenting guilt and perceived stress, across various demographic factors, revealed no significant differences. Specifically, the analysis in Tables 8 through 11 highlights that neither the number of children, work shift, unit assignment, nor earning status impacted the effectiveness of the intervention.

For instance, when comparing participants with 1-2 children to those with 3-4 children, no significant differences were observed in either parenting guilt (GAPS) or perceived stress (PSS) scores. Similarly, the frequency of work shifts, whether daily or not, did not show a significant impact on the outcomes of the intervention. The results were consistent across different unit assignments, whether municipal or city-based, with no statistically significant differences in the effects on parenting guilt or perceived stress.

Moreover, the earning status of participants, whether single or dual earners, also did not yield significant differences in the intervention's effectiveness. This uniformity suggests that the Brief CBT was effective in reducing parenting guilt and perceived stress irrespective of these demographic factors.

Overall, these findings indicate that Brief CBT provides a consistent benefit across various demographic variables. However, it is essential to acknowledge the limitations related to sample size and variability, which could influence the outcomes. Future research could explore these variables further with larger and more diverse samples to validate these findings and potentially uncover more nuanced effects.

Discussion

This study aimed to evaluate the impact of Brief Cognitive Behavioral Therapy (CBT) on perceived stress and parenting guilt among working mothers who are firefighters. The sample consisted of 32 participants, primarily from the FO1 rank and stationed in Nueva Ecija. The participants, aged 24 to 38, varied in the number of children they had, their work shifts, unit assignments, and earning status. Measurements were taken before and after the intervention to assess changes in perceived stress and parenting guilt.

The intervention effectively reduced parenting guilt across several dimensions. Participants reported lower levels of guilt concerning their parenting abilities, prioritizing their needs, spending time with their child, leaving their child, and inconsistencies in parenting. This reduction in guilt was reflected in the

quantitative analysis, which showed a shift in mean scores from agreement to neutrality or disagreement, as well as in the qualitative analysis of specific guilt-related statements.

Similarly, the intervention led to a decrease in perceived stress among participants. Post-intervention assessments revealed reduced frequency of stress-related experiences and an increase in positive coping strategies. Despite this reduction, participants continued to experience moderate stress, indicating a need for additional support and further research to address stressors more effectively.

The study also examined the influence of demographic factors such as the number of children, work shifts, unit assignments, and earning status on parenting guilt and perceived stress. Although some demographic groups showed variations in average scores, these differences were not statistically significant, suggesting that the intervention's effectiveness was consistent across different participant characteristics.

The challenges faced by firefighter mothers in balancing their family responsibilities with job demands can exacerbate stress and feelings of guilt (Hanrahan et al., 2007), and place significant strain on their time (Guendouzi, 2006). Parenting guilt, combined with occupational stressors like PTSD and depression (Kwak et al., 2020), further impacts the mental health of firefighter working mothers. This study highlights the effectiveness of Brief CBT for this often-overlooked group, emphasizing the need for more research and support for firefighter mothers (Dequilla, 2018). The findings offer valuable insights not only for firefighter mothers but for the broader community of working mothers.

Previous research has demonstrated Brief CBT's effectiveness in improving knowledge, attitudes, and self-efficacy among first responders (Freedenthal & Orner, 2012). This study extends those findings by showing that Brief CBT can also reduce parenting guilt and perceived stress. Working mothers can benefit from building support systems, setting realistic expectations, and practicing self-compassion (Dehghanizadeh et al., 2020).

Overall, the intervention showed promising results in reducing parenting guilt and perceived stress among firefighter mothers. These results underscore the importance of programs designed to support working mothers in managing their parental responsibilities and alleviating associated stress and guilt. Future research could explore larger sample sizes, combine Brief CBT with other interventions, and investigate individual case conceptualizations to further understand the long-term efficacy of such interventions on parental well-being.

References

Aarntzen, L., Derks, B., van Steenbergen, E., & van der Lippe, T. (2023). When work–family guilt becomes a women's issue: Internalized gender stereotypes predict high guilt in working mothers but low guilt in working fathers. *British Journal of Social Psychology, 62*(1), 12-29.

Carl, J. R., Miller, C. B., Henry, A. L., Davis, M. L., Stott, R., Smits, J. A., ... & Espie, C. A. (2020). Efficacy of digital cognitive behavioral therapy for moderate-to-severe symptoms of generalized anxiety disorder: A randomized controlled trial. *Depression and Anxiety, 37*(12), 1168-1178.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 385-396.

Collins, C. (2021). Is maternal guilt a cross-national experience? *Qualitative Sociology, 44*(1), 1-29.

Culley, J. A., Dawson, D. B., Hamer, J., & Tharp, A. L. (2020). A provider's guide to brief cognitive behavioral therapy. Department of Veterans Affairs South Central MIRECC: Houston, TX, USA.

Dehghanizadeh, H., Fallah, M., & Vaziri, S. (2020). Mother guilt feeling: A qualitative research of women's employment in the mother-child relationship. *The Journal of Tolooebehdasht*. https://doi.org/10.18502/tbj.v19i2.3393.

Dequilla, L.Y. (2018). *Firefighter mothers and social support: Fighting the fires around work-life balance.*

Freedenthal, S., & Orner, R. (2012). A pilot study of cognitive-behavioral therapy training for emergency services personnel. *Traumatology, 18*(4), 81–85. https://doi.org/10.1177/1534765612449742

Guendouzi, J. (2006). "The guilt thing": Balancing domestic and professional roles. *Journal of Marriage and Family, 68*(4), 901–909.

Hanrahan, J. T., Spector, P. E., & McCarthy, J. M. (2007). Work-family conflict and posttraumatic stress disorder in firefighters. *Journal of Occupational Health Psychology, 12*(1), 42–54.

Haslam, D., Filus, A., & Finch, J. (2020). The Guilt About Parenting Scale (GAPS): Development and initial validation of a self-report measure of parenting guilt and the relationship between parenting guilt and work and family variables. *Journal of Child and Family Studies, 29,* 880–894. https://doi.org/10.1007/s10826-019-01565-8.

Kwak, K., Kim, B. K., Jang, T. W., Sim, C. S., Ahn, Y. S., Choi, K. S., & Jeong, K. S. (2020). Association between shift work and neurocognitive function among firefighters in South Korea: A prospective before-after study. *International Journal of Environmental Research and Public Health, 17*(13), 4647. https://doi.org/10.3390/ijerph17134647

Maclean, E., Andrew, B., & Eivers, A. (2020). The motherload: Predicting experiences of work-interfering-with-family guilt in working mothers. *Journal of Child and Family Studies, 30*, 169–181. https://doi.org/10.1007/s10826-020-01852-9

Meina, M., Ratajczak, E., Sadowska, M., Rykaczewski, K., Dreszer, J., Bałaj, B., Biedugnis, S., Węgrzyński, W., & Krasuski, A. (2020). Heart rate variability and accelerometry as classification tools for monitoring perceived stress levels: A pilot study on firefighters. *Sensors, 20*(10), 2834. https://doi.org/10.3390/s20102834

Rote, W., Hall, C., & Sandifer, E. (2022). Domain-differentiated parental guilt induction: Understanding the structure and correlates of a novel measure. *Parenting, 22*(4), 315–346. https://doi.org/10.1080/15295192.2021.2008769

HUMANITIES

Syntactic Error Analysis of Grade 8 Students' Written Discourse: Basis for an Enhancement Program

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Abstract

Language is a vital medium for information exchange and a dynamic framework facilitating access to a wide array of cultures, intricate concepts, and profound interpersonal connections. This study seeks to scrutinize the syntactic errors manifest in the written discourse of Grade 8 students in Bangkok, Thailand. The researcher used an explanatory sequential design, a mixed-method approach, to fully understand the syntactic challenges students encountered. The analysis revealed that the most frequent syntactic errors among Grade 8 students are related to tenses, capitalization, punctuation, and subject-verb agreement. These errors stem from a complex interplay of factors, including an inadequate grasp of grammatical rules, first language interference, limited English exposure outside the classroom, and varied emotional responses to feedback on writing. To address these issues, a multifaceted enhancement program targeting syntactic awareness and writing proficiency is recommended, including direct grammar instruction and personalized feedback. Additionally, language educators incorporate targeted syntactic instruction into the curriculum, focusing on the identified areas of difficulty. Creating more opportunities for students to engage with the English language in real-life contexts could enhance their syntactic competence. Moreover, educational policymakers should consider integrating language acquisition support mechanisms like tutoring programs and language clubs to foster a more immersive learning environment.

Keywords: *syntactic errors, written discourse, tense errors, syntactic awareness, first language interference, explanatory sequential design, Thailand*

Language is more than just a conduit for information; it is a rich, evolving system that opens doors to diverse cultures, complex ideas, and meaningful relationships (Bonvillain, 2019). As such, achieving proficiency in a language is a labor-intensive task requiring mastery of various dimensions, including speaking, reading, writing, and listening. This is an even more daunting task for educators, who must contend with the innate complexities of language, the heterogeneity of their student bodies, and the fluid nature of linguistic evolution (Genetti, 2018; Cox & Montgomery, 2019).

In the increasingly interconnected landscape of the modern world, English has assumed the role of a global lingua franca, essential for diplomacy, commerce, and academic research (Saeed et al., 2023; Cenoz & Gorter, 2019). For nations in the ASEAN region, this development necessitates an overhaul in language education, pushing English proficiency to the forefront of both personal and professional competencies.

However, achieving English proficiency has proven particularly challenging for Thai students. Despite national initiatives aimed at education reform, Thai students continue to lag behind their ASEAN peers in international English proficiency tests (UNESCO & Organization for Economic Cooperation and Development, 2016 and Education First's annual English Proficiency Index, 2022). This deficit is glaringly evident in written English, where common syntactic errors include improper word order and incorrect usage of prepositions (Hinnon, 2014). One of the main reasons why Thai people make errors is that their language needs explicit verb tenses, leading to intralingual interference and a significant cause of mistakes in their English writing. Considering these findings, second language learners, particularly in multilingual settings such as Thailand, face formidable challenges when tasked with English writing assignments (Sararit, 2015).

Moreover, Bai et al. (2020) stated that previous research focuses primarily on measurable outcomes such as test scores. The attitudes and perceptions of students toward English learning could offer valuable qualitative data. While some studies have looked at the prevalence of syntactic errors among Thai Grade 8 students, there seems to be limited research on the effectiveness of current pedagogical strategies in reducing these errors (Sermsook et al., 2017).

This study aims to address these challenges by analyzing syntactic errors in the written discourse of Grade 8 students in Thailand. This analysis provides valuable insights into these students' proficiency levels across various forms of written communication, such as essays and other academic writing tasks. Ultimately, the goal is to furnish educators with actionable information to help improve English writing skills among Thai students.

Methodology

Research Design

The researcher employed an Explanatory Sequential Design, which is a mixed-methods approach. This design was particularly suited for tackling multifaceted educational issues, allowing for an in-depth understanding through the combination of quantitative and qualitative data. The mixed methods design was used in this study, mainly adopted from Creswell (2011) follow-up explanations variant of the explanatory sequential design of mixed methods. The reliability and validity of research, which have been discussed in both quantitative and qualitative research, had to be reconsidered for mixed methods to reflect the multiple methods of establishing the research's trustworthiness.

Frequency and percentage qualified as parts of quantitative research. Quantitative research involved the collection and analysis of data that was quantifiable. This meant that the data could be counted, measured, and expressed using numbers. Counting frequency (how often something occurred) and calculating percentages (expressing a part as a fraction of 100) were both common quantitative methods. They were often used in surveys, experiments, and observational studies to quantify variables and analyze their relationships (Creswell, 2021).

Population and Sampling Technique

The research focused on Grade 8 students in Bangkok, Thailand, using Cochran's formula to calculate a sample size that ensures reliability and generalizability within a specified margin of error. With a population

of 120 students, the formula initially suggested a sample of 384, but this was adjusted to 92 to reflect the finite population. Stratified random sampling was employed to ensure representativeness across different strata such as academic performance and language proficiency. Students were then randomly selected from each stratum to participate, ensuring a sample that mirrored the school's diversity.

Inclusion and exclusion criteria were key in both the quantitative and qualitative phases, including or excluding students based on factors like academic performance, willingness to participate, and language proficiency. One-on-one interviews and focus group discussions were part of the data collection, with a selection criterion ensuring a rich mix of experiences and perspectives. Ethical considerations were paramount, adhering to principles of voluntariness and confidentiality, with the aim of providing authentic and comprehensive insights into the language arts curriculum and associated challenges faced by students.

Instrumentation

The Explanatory Sequential Design was used to fulfill multiple research objectives. For the quantitative phase, the instrument was a corpus of Grade 8 students' written work, systematically coded to isolate and categorize syntactic errors based on Common Sentence Errors of LibreTexts Humanities (2019), such as subject-verb agreement errors, tenses, misplaced modifiers, run-on sentences, fragments, dangling participles, double negatives, lack of agreement in pronouns, and faulty parallelism.

To gather comprehensive data, each participant engaged in a writing task. This task commenced within a time limit of 45 minutes, and the minimum page requirement was one page. The essay included three main parts: Introduction, the Body of the Essay, and the Conclusion. The participants were guided to write as directly, concisely, naturally, and simply as possible. The respondents wrote a short narrative essay on "My most memorable experience in Middle School." This was essential for fulfilling the objective, which aimed to identify the most frequent syntactic errors in the written discourse of Grade 8 students.

Once the quantitative data were collected and analyzed, the study transitioned to the qualitative phase to address the third objective: understanding the factors contributing to these syntactic errors. Here, semi-structured interviews were conducted with a select group of Grade 8 students and potentially their teachers. These interviews explored the underlying reasons for the prevalence of specific syntactic errors.

Finally, a focus group consisting of teachers was convened in the integration phase. In this focus group, the quantitative and qualitative findings were discussed collectively to address the fourth objective: proposing an enhancement program to minimize syntactic errors. Both the quantitative and qualitative instruments underwent validation processes for reliability and validity to ensure the robustness of the findings, and pilot testing was conducted as necessary. Through this mixed-methods approach, the study aimed to understand syntactic errors in Grade 8 written discourse comprehensively and lay the groundwork for an informed enhancement program.

Data Gathering Procedures

The study, incorporating a mixed-methods approach, commenced with securing ethics approval from the Adventist University of the Philippines and then obtaining formal authorization from the school's director. After meticulous planning to minimize academic disruption, the researcher engaged in stratified random sampling for data collection from 92 Grade 8 students, ensuring representation across various demographics and proficiency levels. Language experts played a crucial role in analyzing syntactic errors in the quantitative phase and in qualitative data collection through interviews or focus groups, contributing to a deeper understanding of the errors through their specialized background in linguistics and syntax.

In the second phase, the qualitative insights were gleaned from the interviews and focus groups, employing thematic analysis to reveal the underlying reasons for syntactic errors. The qualitative phase allowed for an interpretation of data within its real-world context. Finally, the integration of both data types, adhering to the Explanatory Sequential Design, led to comprehensive findings and the development of evidence-based recommendations for enhancing language education, with the aim of improving written English skills among Grade 8 students. The research not only identified the frequency and types of syntactic

errors but also explored the contributing factors, thereby providing a dual perspective of quantifiable data and qualitative insights for educational advancements.

Analysis of Data

The study involved three distinct phases. In Phase 1, quantitative data were gathered from a significant sample of Grade 8 students' written work to identify common syntactic errors, using statistical tools for analysis. This addressed questions about frequent syntactic categories and errors. Phase 2 shifted to qualitative analysis, where students displaying varied error patterns participated in interviews or focus groups, with thematic coding revealing factors behind these errors, such as first language influence and understanding of English grammar rules.

The final phase integrated both data types for a full understanding, leading to the development of an enhancement program targeting identified weaknesses in syntax. This program aimed to address syntactic challenges highlighted by the study, with a comprehensive approach informed by both the numerical data of syntax error frequency and the qualitative insights into students' language learning experiences.

Ethical Considerations

The research involving human subjects meticulously adhered to ethical standards outlined in the Belmont Report and the Declaration of Helsinki, prioritizing respect for persons, beneficence, and justice. These guidelines ensured the protection of participants' autonomy, assessed risks and benefits of the research, and demanded fair treatment of all participants. Full disclosure of the study's nature was provided to participants, and consent was obtained, highlighting the voluntary aspect and the right to withdraw at any point.

The study was conducted with strict adherence to ethical principles, including transparency, justice, and social value. The researcher obtained necessary permissions, ensure participant confidentiality, and maintained the integrity of data collection and reporting. Community involvement and respect for local customs were also emphasized, with the researcher engaging with participants and stakeholders to foster trust and support for the research process. Throughout, the researcher remained committed to upholding ethical standards to protect the interests and well-being of all involved.

Results

Distribution of Syntactic Errors in the written discourse of Grade 8 students

Table 1

Distribution of Syntactic Errors in the Written Discourse of Grade 8 Students

Syntactic Errors	Frequency (f)	Percentage (%)
Subject Verb Agreement	64	11
Misuse Modifier	7	1
Run-on or Fragment	43	7
Dangling Participles	7	1
Tenses	128	22
Double Negatives	0	0
Lack of Pronoun Agreement	19	3
Faulty Parallelism	34	6
Spelling	61	10
Capitalization	93	16
Punctuation	91	15
Conjunction	17	3
Preposition	27	5
Total	591	100

Table 2 categorizes syntactic errors found in Grade 8 students' written work. The most frequent errors involve tenses, noted in 22% of instances, which reflects difficulties students may have with verb conjugation and time aspects in English. Capitalization mistakes are also significant at 16%, suggesting challenges with standard writing conventions. Subject-verb agreement and punctuation errors are also notable, at 11% and 15%, respectively, highlighting common areas where students may misunderstand grammatical rules or the structure of written English.

In the realm of syntactic errors, the absence of double negatives might indicate either a mastery of this particular rule or a lack of complexity in sentence construction that would necessitate their use. The remaining errors, such as those related to modifiers, run-on sentences, pronoun agreement, parallelism, and prepositions, contribute to the comprehensive picture of syntactic areas that could benefit from targeted instructional strategies.

A study involving non-English department students highlighted that verb tense errors, particularly in simple present and past tenses, are common, and such errors need attention from educators to improve students' writing skills. The research found that most errors were related to the present simple tense (Mayaratri, 2020).

The subject-verb agreement issue represents a significant hurdle in students' writing proficiency, as indicated by Sattar, Javed, and Baig (2019). Their research underscores that despite its foundational role in English grammar, achieving mastery in subject-verb agreement remains elusive for many learners. This challenge often manifests as a mismatch between the subject and the verb in number and person, leading to sentences that are grammatically discordant. This problem's persistence points to educators' need to design and implement grammatical exercises that specifically target this aspect of writing. Such exercises could involve drills that reinforce the rules of subject-verb agreement, the use of engaging activities that allow students to practice in a context-rich environment, and analytical tasks that encourage students to identify and correct errors in written passages. Concentrating on this area is expected to enhance student's overall writing clarity and coherence, paving the way for more advanced linguistic competencies.

Key Influences Behind the Occurrence of Syntactic Errors in the Written Communication of Grade 8 Students

Understanding and Application of Grammar Rules

The theme encompasses the diverse struggles that learners face while trying to comprehend and apply grammatical conventions in their writing. These struggles highlight the importance of mastering grammar for effective communication.

The participant P1's statement, "I get mixed up with subject-verb agreement, especially with collective nouns," underlines a common area of confusion in grammar where the collective noun may require singular or plural verbs based on context. Similarly, P2's concern, "Sometimes I confuse subjects and verbs when there's a lot of information in a sentence," speaks to the cognitive load that complex sentences impose on writers, potentially leading to mistakes in subject-verb agreement, as elucidated by Kumayas and Lengkoan (2023), who discuss the necessity of strategic grammar teaching.

P3 expresses difficulty in crafting compound-complex sentences: "Compound-complex sentences are confusing. It's tough to mix different ideas with commas and conjunctions." This reflects the challenges in handling sentence complexity, an aspect also discussed by Nasir (2019), who highlights the multifaceted issues learners face, including the complex relationship between form and meaning in grammar. The statement by P4, "Switching between tenses in an essay disrupts the flow of the narrative," relates to Andrews et al. (2016), who emphasize the need for further research into effective methods of teaching grammar to aid writing.

P5's statement, "I struggle with punctuation, like where commas should go," is indicative of common punctuation challenges that can lead to confusion and misinterpretation. When P6 says, "Subject-verb agreement with compound subjects throws me off," it highlights the intricacies involved in achieving

grammatical concord, a concept central to Myhill et al., (2013) discussion on the impact of teachers' grammatical knowledge on student writing.

The conversational style leading to grammatical issues, as mentioned by P7, "I write like I talk, which causes run-on sentences in my writing," aligns with the findings of Snow and Matthew (2016) who identifies academic language, including grammar, as a barrier to learning. P8's difficulty in differentiating complex from run-on sentences, "Complex sentences and run-on sentences – I can't tell the difference sometimes," is echoed in the work by Dekeyser (2015), who explores the effectiveness of explicit grammar instruction.

P9's issue with verb forms, "I get the singular and plural forms of verbs mixed up often," and P10's struggle with tense usage, "Remembering which tense to use in different situations is really tricky for me," are indicative of the broader difficulties learners have with grammar as detailed by Aman (2020) and Mart (2018), who discuss the challenges and importance of teaching grammar in context.

The convergence of these personal reflections with academic research underscores the critical need for targeted grammar instruction that accounts for the diverse and specific challenges learners face. This alignment supports the notion that grammar instruction should not only focus on the rules but also their application in writing, as suggested by Ajaj (2022), who emphasizes the importance of effective grammar learning for language mastery.

The remarks from focus group participants reflect common challenges in grammar and sentence construction, emphasizing the necessity of proficiency in these areas for clear and coherent writing.

FG1's observation, "We know that to be clear, our sentence structure needs to be correct," encapsulates the essence of grammatical competence as a foundational element of clarity in writing. This aligns with the research by Hapsari et al. (2019), who emphasize the importance of correct grammatical structures in paragraph writing.

FG2's statement, "Understanding the variety of tenses and when to use them is a challenge for us," speaks to the complexity of English tense systems and the confusion it can cause, an issue explored by Kumayas and Lengkoan (2023) in their study on the challenges of teaching grammar. In addition, "Our conversations are full of fragments and run-ons, which seep into our writing" highlights a frequent transition of colloquial speech patterns into written form, leading to structural flaws. This reflects findings by Nasir (2019) regarding the difficulties students face with sentence-level grammar issues.

FG3's confession, "We often struggle with using complex sentences effectively in our essays," indicates a difficulty in harnessing more sophisticated sentence structures to enhance writing, a topic discussed by Andrews et al. (2016) in their examination of grammar instruction for writing development.

Moreover, Teacher 1 (T1) asserts, "As a middle school Language Arts teacher, one of the primary challenges I face when teaching English syntax to Grade 8 students is the need to reteach concepts that they are expected to have mastered in earlier grades." This statement underscores a key issue in language education: the necessity for reinforcement of previously taught material, which is not uncommon in educational settings, as seen in the research by Kumayas and Lengkoan (2023), which indicates that revisiting earlier concepts can be crucial for student comprehension.

Teacher 2 (T2) reveals, "In my experience teaching English syntax to Grade 8 students, a significant challenge is a noticeable decline in student involvement and effort." This observation indicates the motivational challenges educators face, especially in critical developmental stages like middle school. The dynamic classroom environments that T2 strives to create reflect the findings of Nasir (2019), who found that student engagement is a vital component of successful learning outcomes in language acquisition.

Teacher 3 (T3) notes, "Teaching English syntax to Grade 8 students comes with its own set of challenges, notably the pervasive attitude of carelessness." T3's emphasis on demonstrating the real-world implications of poor syntax aligns with the study by Andrews et al. (2016), suggesting that connecting to practical consequences can be an effective strategy in language teaching.

In summary, the three teachers' experiences and strategies highlight a multifaceted approach to teaching syntax that acknowledges the diversity of student needs and learning processes. The integration of review sessions, creation of dynamic learning environments, and real-world applications are all informed by the

understanding that teaching English syntax requires addressing both cognitive and affective domains of students' development, a principle supported by the research of Hapsari et l. (2019) and Myhill et al., (2013). These educators' insights shed light on the complexity of teaching English syntax and the importance of adaptive, responsive instructional design to cater to the varying proficiency levels of students.

Language Background

The theme examines how the syntactic structures and grammatical conventions of a student's first language can affect their learning and use of a second language. The phenomenon is often characterized by the tendency to apply native language patterns to the new language, which can result in errors, especially in the syntax—a critical aspect of language that governs the arrangement of words and phrases to create well-formed sentences.

Participant 1 (P1) states, "Switching between Thai and English can sometimes confuse me, especially with sentence structure." This reflects the cognitive challenge bilingual students face, known as code-switching, where the brain must navigate between two different sets of syntactic rules, often leading to errors in sentence structure due to interference from the native language. This experience is captured by Teacher 1 (T1), who remarks, "Certainly, the cultural and linguistic backgrounds of my students, particularly those from Thai backgrounds, play a significant role in the syntactic errors they make in English." T1's insight underscores the impact of language transfer on learning, a topic explored in the literature on second language acquisition. It confirms that students' first language significantly shapes their approach to learning a second language (Saito, 2015).

In T1's detailed account, "For example, in Thai, the verb form does not change with the subject or tense, unlike in English, where verbs must agree with their subjects in number and tense," the teacher identifies a specific source of difficulty for Thai students learning English. T1 further illustrates this by saying, "This often results in errors such as 'She go to the market yesterday,' where the student directly translates from Thai without adjusting for English verb tense rules." This direct translation without adjustment for the target language's rules is a prime example of negative language transfer (Jiang & Zhao, 2017).

Participant 2 (P2) notes, "Thinking in Thai sometimes messes up my English sentence order, especially with verbs and subjects." This language interference, where the thought patterns in Thai disrupt the construction of English sentences, has been acknowledged as a barrier to acquiring the syntactic competence needed for a second language (Murphy & Ryan, 2020). Meanwhile, T1 adds, "Another common issue stems from the Thai language's relatively flexible sentence structure, which can lead to misplaced words or phrases when students construct sentences in English." These structural differences can result in misplaced words or phrases, pointing to the complexity of language learning for bilingual students.

From Participant 3's (P3) perspective, "My previous schooling in a Thai school did not focus much on writing, which affected my English sentence construction," we see the impact of educational practices on language acquisition. T1's observation that "The reason behind these errors often boils down to a combination of factors, including a lack of understanding of the fundamental rules of subject-verb agreement and difficulty in identifying the true subject of a sentence" connects to the need for explicit instruction in these fundamental rules for students coming from educational backgrounds that did not emphasize these aspects of language learning.

The Focus Group Discussion (FGD) statement, "Many of us come from bilingual backgrounds, and the structure of our first language often influences our English syntax, leading to errors," summarizes the collective experience of bilingual students and is supported by research showing that first language structure plays a significant role in second language syntax acquisition (Ellis, 2019).

Teacher 1's (T1) approach to this challenge, as they say, "To address this, I focus on reinforcing the basics through targeted exercises and providing plenty of examples that illustrate common pitfalls," is a method supported by contemporary research emphasizing the importance of explicit grammar instruction and practice to overcome negative language transfer (Amri, 2016).

These reveal the complexities of teaching English syntax to students with a Thai language background, highlighting the importance of tailored pedagogical strategies that recognize and address the specific challenges posed by language transfer.

External Influences

The theme "External Influences" in the context of the students' statements refers to the variety of factors outside the formal educational curriculum that impact their acquisition and use of English syntax in writing. This encompasses elements such as the linguistic environment at home, the extent of exposure to English through media and reading, the influence of bilingualism, and the types of educational support systems in place, such as the role of parents in supplementing classroom learning or the use of digital tools for grammar correction.

P1 notes the influence of a bilingual environment on learning English, stating: "Speaking English at home has helped, but switching between Thai and English causes errors." This reflects the common experience of bilingual individuals where language interference can occur, leading to errors when codeswitching or translating between languages (DeLuca et al., 2019).

P2 emphasizes the importance of reading in language acquisition: "One of the biggest things that helped me has been reading English novels." This aligns with research that suggests extensive reading in a second language significantly improves grammar and vocabulary (Jegerski, 2021).

P3's experience suggests that the institutional emphasis on English can foster language development: "Before coming to EIS Miss, my English grammar was not that good. I have improved a lot here because I came from a Thai school before, and we don't write that much." Educational settings that prioritize English writing can lead to marked improvements in non-native speakers' grammar skills (Enama, 2016).

P4 acknowledges the benefit of an immersive educational environment: "Studying in an international school has really made a difference in my English writing." P5 points out the long-term benefits of early exposure to English: "I've been here in EIS since K3 and it has been a big plus for my English writing skills." Early and sustained exposure to a second language within an educational setting can lead to greater proficiency and comfort with the language (Castilla-Earls et al., 2016).

P6 talks about the natural acquisition of language skills through exposure to media: "What's making writing feel more natural is speaking English at home. Plus, watching English movies, too." The informal learning of language through media consumption can complement formal education (Carraro & Trinder, 2021).

P7's statement: "The classroom activities designed by our teacher have been instrumental in improving my grasp of English," highlights the role of tailored educational activities in enhancing language proficiency. Structured language activities are known to aid the learning process (Ellis, 2019) significantly.

P8 acknowledges the impact of the home language environment: "We don't speak English at home that much, only me and my siblings since our parents sent us to an International school so we can really learn English." This statement reflects the understanding that while the home environment might not be conducive to English language practice, the school environment provides a compensatory context (Berkowitz et al., 2017).

P9's challenge: "The main issue for me is not using English much outside of school since my family and most of my friends speak Thai," demonstrates the importance of language use outside of educational settings. The lack of English use in the home and social environment may limit proficiency (Ortega, 2020).

P10 expresses a common problem: "I do not speak English that much when I am not at school," which illustrates the challenge of maintaining language proficiency without regular practice. It is well-documented that regular use of a second language is crucial to maintaining and improving proficiency (DeKeyser, 2017).

FG1-S3's experience shows parental involvement in language learning: "My mom enrolled me in this class specifically for improving my writing because the first time I was in the writing class, I really struggled." This parental intervention underscores the role of additional educational resources in addressing learning challenges (Bashir & Conners, 2019).

FG3-S1 points out the disparity between school and home language use: "We don't really speak English much, so it's kinda hard for me to get better at English though I speak a lot here at school." This contrast illustrates how a supportive school environment can aid in learning despite a non-conducive home environment (Ishikawa, 2018).

FG3-S2 addresses the imperfect model of English at home: "I do speak English at home but not the correct way or the right way because my parents' English is bad," suggesting that non-native speech models at home may introduce errors (Frimu & Dekydtspotter, 2022).

The teachers' reflections further reinforce these points. T1 deals with the problem of reteaching past material, T2 faces challenges in student engagement, and T3 observes the reliance on technology and AI tools, which might inhibit active learning. Each educator addresses their challenges through specific strategies to enhance learning and engagement. These approaches are supported by educational research that emphasizes the importance of review, engagement, and real-world applications in learning (Bugtai et al., 2024; Graham et al., 2014; Kirschner & Hendrick, 2020).

Emotional Response to Errors

Students' emotional responses to feedback, whether from teachers or peers, vary significantly based on individual perceptions, past experiences, and the nature of the feedback itself. Starting with Participant 1 (P1) who states, "Making errors makes me feel discouraged, especially when compared to my peers," reflects a common emotional response where errors lead to feelings of discouragement and inadequacy, particularly in comparative contexts. Participant 2 shares a contrasting experience, "It's like, sometimes I don't even notice I'm making a mistake until my teacher points it out," suggesting that feedback acts as an enlightening tool that helps uncover unnoticed errors. The recognition of errors previously overlooked is pivotal for learning and improvement, a sentiment that is echoed by Schartel (2012), who notes that effective feedback focuses on performance rather than the individual, providing a pathway for growth.

Participant 3 initially found corrections annoying but later recognized their value: "But after seeing how the corrections actually make my essays better, I realize I need it." This change of perspective is critical, as it indicates an evolving understanding of feedback as a mechanism for improvement rather than mere criticism. Wilkie and Liefeith (2022) discuss how the perception of feedback's utility can transition from a challenge to a constructive part of the learning process.

Participant 4 expresses a neutral stance, "It's their job to help us learn, right?" This detachment can be seen as an acceptance of the educational role of feedback, where the emotional impact is lessened by the understanding of the teacher's role. Jensen et al. (2021) notes the importance of aligning feedback with the educational journey, which can help mitigate negative emotional responses.

Participant 5 adopts a positive outlook, "It's okay. I mean, that's how we learn." This aligns with Winstone et al. (2017), who emphasize that feedback should be seen as a dialogical process that facilitates learning through engagement and response to the feedback given.

Participants 6 and 7 show varying degrees of acceptance and apprehension, indicating the complex nature of emotional responses to feedback. While one views feedback nonchalantly, "It's not a big deal to me," the other experiences mixed feelings, "It's okay, I guess, because I know I need help. But sometimes, it makes me feel a bit scared." Belch and Law (2018) suggest that engaging students emotionally might make the feedback process more meaningful and better received.

Participants 8 and 9 offer more nuanced views, finding humor or practicality in feedback, respectively. One says, "Sometimes I actually find it kind of funny," while the other pragmatically notes, "If I make a mistake, I want to know about it so I can fix it." This utilitarian approach is recommended by Magaji (2021), who argues for feedback as an interactive process that can facilitate problem-solving and learning.

Looking at the Focus Group (FG) statements, we see a spectrum of responses that highlight appreciation, acknowledgment of feedback's importance for improvement, and the emotional challenges it may bring. FG1 - Students exhibit positive attitudes towards feedback, seeing it as guidance and an essential part of their educational development. S1 in FG1 explicitly states, "Well, as for me Miss, I actually really appreciate

it when you point out any of my mistakes. I don't see it as criticism but more like guidance." This sentiment is supported by the notion that feedback should be a two-way communication that encourages progress, as discussed by Tan et al. (2020).

FG2 and FG3 students express various emotions, from acceptance to embarrassment and concern about grades. They recognize the role of feedback in helping them identify the right path and the need for improvement. S2 in FG3 mentions, "For me, when my teacher gives the correction, I know teachers are trying to help. I will not be worried that they check my work but I worry about my score." The relationship between feedback and emotions is complex, as Purwandari (2023) explores, suggesting that how feedback is delivered can significantly affect emotional responses.

Regarding the teachers' approaches, Teacher 1 (T1) utilizes interactive review sessions and hands-on correction to foster a supportive learning environment. This is in line with the research by Ryan and Henderson (2018), which emphasizes the need for sensitive feedback practices. Teacher 2 (T2) creates a dynamic classroom environment and uses peer review, which Esmaeeli et al. (2023) likely approve of, as it focuses on performance and involves direct observation.

Teacher 3 (T3)'s emphasis on real-world implications and technology integration speaks to the work of Lutovac et al. (2017), who found that pedagogical training can help teachers cope with student feedback by fostering upward emotional spirals.

Each perspective highlights the diverse emotional landscape that feedback can produce, underscoring the importance of understanding and navigating these responses to optimize learning outcomes.

Teachers' Perception on Students' Struggles with Syntax in Writing, and Challenges They Face When Teaching Sentence Structure Improvement

Teachers observe that students are aware of their struggles with syntax, highlighting themes such as the importance of syntax and the impact of receiving grammar feedback. Teachers also note the challenges students face in improving sentence structures, including grappling with grammar rules, overcoming confusion with complex sentences, maintaining coherence and flow, and applying grammar in practical contexts.

Self-awareness and Improvement

Teacher 1 (T1) observes, "I've seen that when I integrate review sessions into our lessons, my students begin to fill in gaps in their understanding. This self-awareness is crucial for their progression in mastering English syntax." They also note, "*When I provide direct feedback on their papers, detailing the errors, students tend to develop a deeper understanding of their mistakes. This approach promotes self-improvement as they become more proficient writers.*" These observations align with the belief that feedback, particularly when it's detailed and integrated into learning activities, can significantly boost students' understanding and proficiency in language use (Celce-Murcia, 2016).

Teacher 2 (T2) comments, "*By engaging students in a more dynamic learning environment, I notice they become more self-aware of their role in mastering syntax and more motivated to improve.*" They also mention, "*Peer review sessions in my class have shown to increase students' self-awareness about syntactic errors, and through collaboration, they foster a supportive atmosphere that encourages self-improvement.*" This perspective underlines the dynamic nature of feedback in collaborative settings and its impact on motivation and cultivating a supportive learning community (Shintani & Ellis, 2015).

Teacher 3 (T3) states, "*In my lessons, showing the practical consequences of poor syntax has made my students more self-aware of the importance of accurate writing, and they are more proactive in their learning.*" They also state, "*Utilizing technology, such as grammar checking tools, helps students independently recognize their syntactic errors, which cultivates a culture of self-improvement in their writing abilities.*" These insights reflect the multifaceted role of feedback in fostering self-awareness and the proactive pursuit of language mastery facilitated by the use of technology (Bodnar et al., 2017).

The essential role of feedback in language learning, particularly for self-awareness and improvement, is illuminated by several theoretical frameworks. Vattøy (2020) encapsulates the relationship between feedback and self-regulatory capacities in language learners, arguing that feedback tailored to students' individual language skills can enhance their self-efficacy. This concept is grounded in socio-cognitive theory, which posits that social interactions, like those between teacher and student, are vital for cognitive development.

Feedback Intervention Theory, highlighted by Schiff et al. (2017), also plays a significant role in shaping learners' responses to feedback. It suggests that feedback should direct attention to the task rather than the self, thus enhancing the learners' awareness of their performance and fostering improvement. This theory underscores the importance of the task-oriented nature of feedback for facilitating linguistic development without impacting the learner's self-esteem.

Ryan and Deci's Self-determination Theory (2000) argues that autonomy-supportive feedback can increase motivation for language learning, implying that when learners perceive feedback as supportive of their learning goals, their motivation to improve increases. Attribution Theory, as discussed by Herra and Kulińska (2018), considers how learners interpret feedback and the resulting impact on their motivation and self-improvement strategies. Learners who attribute their errors to controllable factors are more likely to use feedback constructively for language improvement.

Receiving Grammar Feedback

The central theme of the content focuses on their perceptions and strategies regarding grammar feedback within the educational context. It highlights how educators approach correcting syntactic errors and the various pedagogical techniques they employ to facilitate student learning and improvement.

In addition, Teacher 1 (T1) explains their method: *"My approach to providing feedback on students' syntactic errors involves meticulous corrections directly on their assignments... This direct correction process aids students in becoming more self-aware of their errors and supports their journey towards improvement."* This method reflects the positive perceptions of written grammar feedback and the preference for direct feedback strategies to benefit student learning (Eslami & Derakhshan, 2020).

Teacher 2 (T2) describes a dual approach: *"I use a two-pronged approach for grammar feedback: a general review of common mistakes by the class and individual sessions."* This strategy, emphasizing the balance between collective learning and individual attention, aligns with findings on the importance of tailored feedback to meet specific student needs and enhance the educational experience (Saeli & Cheng, 2021).

Teacher 3 (T3) emphasizes tailored feedback: *"Detailed feedback is an integral part of how I guide my students toward improving their writing skills."* This customized approach is supported by research advocating for detailed feedback to address specific student needs, thereby fostering a proactive learning environment (Sia & Cheung, 2017).

These insights collectively suggest that both learners and educators perceive grammar feedback as a positive and essential element of language education, which facilitates the development of writing skills and enhances students' linguistic competence.

The educational theme of receiving grammar feedback is rooted in diverse theoretical perspectives that emphasize its significance in language learning. Cognitive Feedback Theory, as espoused by Shute (2008), underscores feedback's role in learners' cognitive development, resonating with Participant 1's positive reception to feedback for improving future writing. This theory supports the view that feedback is a crucial instructional tool that enhances learners' understanding and performance.

Bandura's Socio-Cognitive Theory (1986) aligns with Participant 4's belief that receiving grammar feedback is an expected part of the educational process, stressing the interaction between social context and cognitive development. Constructivist Feedback Theory, derived from Bruner's work (1990), parallels Participant 6's practical approach to feedback, highlighting the active role learners play in constructing their understanding of grammar through feedback. The Self-Determination Theory of Ryan and Deci (2000) elucidates Teacher 1's approach to direct correction, positing that feedback supporting autonomy and competence can motivate learners to engage more deeply with language learning.

Perceived Importance of Syntax

The theme centers on the recognition of grammar and syntax as critical foundations in teaching writing and communication skills. Teachers emphasize that syntax—the arrangement of words and phrases to form proper sentences—is essential not only for structuring clear and comprehensible thoughts but also for influencing academic assessments and differentiating levels of writing quality.

Teacher 1 (T1) discusses pedagogical strategies: *"I've adopted a strategy of integrating review sessions into my current lesson plans."* Incorporating interactive elements like games and competitions is supported by research as effective for improving grammar retention and making learning enjoyable (Saeli & Cheng, 2021).

Teacher 2 (T2) describes an interactive approach: *"I've made a conscious effort to create a more dynamic and interactive classroom environment."* This is consistent with findings that dynamic classroom environments and project-based assignments enhance the application of syntax rules (Lai et al., 2022).

Teacher 3 (T3) focuses on real-world application: *"I focus on demonstrating the real-world implications of poor syntax."* Using tools for self-correction and promoting discussion aligns with the pedagogical emphasis on the practical application of grammar rules (Pourdana & Asghari, 2021).

These discussions and strategies reflect a common understanding of the pivotal role of syntax in the educational process, advocating for an approach that integrates clear communication, practical application, and engaging teaching methods.

One of the foundational frameworks is Chomsky's Government & Binding and Principles & Parameters models, which elucidate the complex syntactic structures of languages. Another significant framework is the Dynamic Syntax (DS) theory, which views syntax as a progressively developing system during language understanding. This perspective aligns well with interactive and student-centered teaching approaches, where the focus is on the active construction of syntactic knowledge through engaging educational activities.

Factors Influencing Syntax Proficiency

Teachers highlight the various environmental and pedagogical influences contributing to students' syntax proficiency, emphasizing the interconnected roles of the home language environment, educational settings, and specific teaching strategies in fostering students' language development.

Teacher 1 observes, *"Having a student raised in a home where English is spoken, despite Thai being their first language, has clearly benefitted their grasp of English syntax. Such immersion provides continuous, contextual language input, crucial for syntax acquisition."* This reflection supports the idea that a language-rich environment can significantly enhance language proficiency, aligning with findings in language acquisition literature that emphasize the benefits of exposure to a target language within one's social environment for more naturalistic language development and understanding of grammatical structures (Ellis, 2019).

Teacher 2 notes, *"The curriculum at our international school, which emphasizes English across various subjects, has notably improved our students' English writing skills."* This comment highlights the role of educational settings in fostering syntax proficiency, corroborating educational research that suggests that immersive academic environments, like international schools, contribute to better language outcomes through consistent exposure and application of English (Cummins, 2019).

Teacher 3 comments, *"The classroom activities I've designed have enhanced students' English proficiency."* This illustrates the impact of targeted pedagogical strategies on learning syntax, where structured classroom activities that apply language rules actively can significantly bolster a student's command of the language, as supported by pedagogical research (Watson et al., 2021).

From the student's experience, *"One student mentioned that speaking English at home laid a strong foundation for their understanding of how sentences should flow."* This statement aligns with the input hypothesis, which proposes that comprehensible input in a low-anxiety context, such as the home, is key to acquiring syntax and the flow necessary for effective communication (Benavides Vargas, 2023).

Syntax, the arrangement of words and phrases to construct well-formed sentences, is a cornerstone of effective communication and academic writing. Cognitive theories of writing, view syntax as integral to text production, where ideas are translated into linguistic structures that adhere to grammatical rules.

Grappling with Grammar Rules

The reflections from the teachers highlight the various grammatical challenges that students encounter and underscore the importance of targeted grammatical instruction to overcome these hurdles in learning English.

Teacher 1 reflects, *"One challenge I notice is students treating collective nouns as plural because they think of the group as multiple individuals."* This frequent source of confusion arises from the dual nature of collective nouns, which can be perceived as singular entities or as collections of individuals, thereby affecting verb agreement. This intricacy is a noted issue in grammatical instruction, where learners must navigate the nuances of number agreement in English grammar, which is particularly challenging due to its context-dependent nature (Coyle & Meyer, 2021).

Teacher 2 points out, *"Many of my students struggle with maintaining subject-verb agreement, especially in complex sentences where cognitive load increases due to processing multiple pieces of information."* This challenge is compounded when dealing with compound subjects or interruptions between subjects and verbs, requiring a robust understanding of syntax to ensure correct grammatical constructions (Biber et al., 2016).

Teacher 3 mentions, *"The complexity of sentence structures can significantly impede the application of grammar rules, such as subject-verb agreement, especially with compound subjects."* These intricacies represent a significant learning curve and are a central focus in our grammatical education, with considerable instructional time dedicated to mastering these rules (Larsen-Freeman & DeCarrico, 2019).

Additionally, Teacher 3 observes broader issues with tense usage, noting, *"Students sometimes forget which tense to use for different situations, indicating a broader issue with the English tense system."* The appropriate use of tense forms is essential for correctly conveying time relationships and aspects, an area often marked by errors even among advanced learners (Comrie, 2020).

In discussing writing challenges, Teacher 1 adds, *"Students often start writing in one tense and then find themselves switching to another without realizing it."* This tendency to shift tenses inadvertently within a piece of writing can lead to inconsistency and confusion, reflecting a common pitfall that learners face when attempting to maintain tense agreement across clauses and sentences. Effective writing in English requires a firm grasp of tense usage, a skill that is fostered over time through practice and instruction (Larsen-Freeman & DeCarrico, 2019).

The challenges faced by learners in mastering English grammar and syntax can be understood through a multifaceted theoretical lens. Chomsky's Universal Grammar Theory (1965) posits that while the capability for language is innate, the application of abstract grammatical rules, particularly in a language as idiosyncratic as English, often leads to errors in usage.

Overcoming Confusion with Complex Sentences

These perspectives from teachers highlight the multifaceted nature of learning English grammar, emphasizing the importance of addressing these common issues through targeted instructional strategies.

Teacher 1 notes, *"A common difficulty observed in students is their handling of collective nouns, where they often treat them as plural because they think of the group as multiple individuals."* This reflects a broader confusion arising from the unique feature of collective nouns in English, which can be singular or plural depending on the context. This aspect complicates subject-verb agreement and requires a nuanced understanding, challenging even for native speakers (Aarts, 2023).

Teacher 2 comments on another prevalent challenge: *"Students often struggle with subject-verb agreement in complex sentences when there's a lot of information to process."* This cognitive burden increases significantly with compound subjects or interruptions between subjects and verbs, demanding a solid grasp of syntax to ensure grammatical correctness (Biber et al., 2016).

Teacher 3 addresses the issue of compound subjects, *"Subject-verb agreement with compound subjects proves tricky for many students."* The intricacies of such sentence structures present a steep learning curve, often requiring extensive instructional time to master these grammar rules (Celce-Murcia & Larsen-Freeman, 2016).

Expanding on tense usage, Teacher 1 adds, *"Another challenge is managing tense usage, where students sometimes forget which tense to use in different situations."* Selecting the correct tense form is crucial for accurately conveying time relationships and aspects, an area prone to errors even among advanced learners (Comrie, 2016).

Regarding tense consistency, Teacher 2 observes, *"Students often start writing in one tense but then inadvertently switch to another."* Maintaining tense consistency is critical for grammatical accuracy and clarity, yet this remains a common issue that can disrupt the timeline of events in narrative writing (Celce-Murcia & Larsen-Freeman, 2017).

Teacher 3 points out the issue of run-on sentences, *"Run-on sentences pose significant problems for students, where two or more independent clauses are improperly joined."* This makes writing hard to follow and obscures the intended meaning, underscoring the need for proper punctuation and sentence structuring" (Ferris, 2016).

Finally, Teacher 2 highlights additional tense challenges, *"Proper tense usage is foundational, yet students often struggle with this, significantly impacting their ability to communicate clearly and accurately."* Overcoming these tense issues is crucial to learning English grammar" (Celce-Murcia & Larsen-Freeman, 2019).

Navigating the complexities of English grammar, particularly in constructing and comprehending complex sentences, presents a multifaceted challenge that learners face, calling upon various cognitive resources. Cognitive Load Theory, as articulated by van Merrienboer and Sweller (2005), suggests that the intricacies of grammar, such as the dual treatment of collective nouns, can strain the learner's cognitive capacity. This strain is further compounded in situations that demand nuanced understanding, such as maintaining subject-verb agreement amidst the ambiguity of collective nouns being singular or plural based on context.

Working Memory and Language Processing frameworks highlight the role of working memory in managing the information needed for constructing sentences with correct grammar. Krashen's Input Hypothesis (1982) and Selinker's Interlanguage Theory (1972) offer insights into how learners process and internalize complex grammatical structures. According to Krashen, learners advance when exposed to language input that challenges but does not overwhelm their current level of understanding. Similarly, Selinker's theory captures the evolving nature of a learner's grammatical development, where errors are a natural part of progressing towards full linguistic competence.

Task Complexity and Language Performance theories point out that the complexity of a language task can significantly influence linguistic performance, as seen in the difficulty learners have with maintaining tense consistency and avoiding run-on sentences (Lee, 2018). Neurocognitive Perspectives on language processing indicate that different sentence structures activate distinct neural pathways, which can explain the varying degrees of difficulty learners experience with different grammatical constructions (Vogelzang et al., 2020). Lastly, Attentional Control Theory emphasizes the importance of focused attention for learning complex grammar. A

Struggling with Sentence Coherence and Flow

The teachers discuss challenges and strategies related to sentence coherence and flow, highlighting common issues encountered by Grade 8 students in mastering English grammar and writing.

Teacher 1 observes, *"One student struggled with the clarity of their sentences, which made their writing hard to follow."* This is a common challenge for learners who cannot yet organize their thoughts clearly and logically in written form, which is essential for effective communication. Hyland (2016) supports this observation, noting that linguistic challenges in written expression, especially in paragraph construction, are frequent hurdles for learners.

Teacher 2 remarks, *"Another student had scattered ideas due to a lack of logical sentence organization. This often results in disorganized writing that impacts message clarity."* Saddler and Ellis-Robinson (2018) corroborate this, pointing out that learners, particularly those with learning disabilities, may produce writing with less syntactic complexity and more grammatical errors, contributing to the disorganized presentation of ideas.

Teacher 3 comments, *"When the student read their essay aloud, it sounded disjointed. Reading aloud is a technique I encourage because it can highlight issues of coherence and flow that are less apparent when reading silently."* This approach aligns with Gambhir and Gupta (2017), who emphasize the importance of information coherence in successive sentences for clear communication.

Teacher 1 adds, *"Another student struggled with presenting their information effectively, which made it hard for others to understand."* This problem, according to Slioussar and Harchevnik (2024), is often due to difficulties in processing complex information grammatically, affecting the coherency of written outputs.

Teacher 2 further discusses sentence structure issues, *"A student's writing included sentences that were either too long or too choppy, weakening their argument."* They utilize sentence-combining practices, recommended by Saddler (2019), to help students enhance their sentence-writing skills and avoid the pitfalls of overly complex or abrupt sentences.

Reflecting on broader writing challenges, Teacher 3 mentions insights from focus group discussions, *"One student frequently fell into the trap of creating run-on sentences, getting carried away with their thoughts without proper punctuation or conjunctions."* This is part of the broader challenges students face in maintaining disciplined sentence structures, as observed by Markussen (2020), who emphasizes the necessity of organized grammar to avoid obscuring meaning.

Pursuing clarity in writing, especially in forming sentences with coherence and flow, is a critical skill for students grappling with English grammar and writing. The interplay between cognitive capacity and linguistic skill is central to this endeavor, as proposed by theories such as Cognitive Load Theory (van Merrienboer & Sweller, 2005). Students encounter obstacles when their cognitive resources are taxed by the complexity of organizing thoughts into coherent written language.

These elements are the very tools that help students like Participant 8 ensure that their essays exhibit a consistent and logical flow. Teaching strategies that bolster understanding of these elements can be vital in aiding students to overcome issues like those expressed by Participant 5, who struggles with organizing sentences logically. Such educational interventions are supported by the work of Fitriati and Yonata (2017), who advocate for discourse analytical approaches to highlight the connection between coherence, cohesive devices, and writing quality.

Applying Grammar in Context

The theme centers on the practical application of grammatical rules in writing, as students try to bridge the gap between understanding syntax and implementing it effectively in their essays. This multifaceted challenge encompasses issues from review habits to complex sentence construction.

Teacher 1 comments, *"One of my students mentioned that their main issue was not reviewing their work enough."* This reflects a common gap in the writing process where students fail to revisit their drafts to identify and learn from their errors. Regular review and reflection are critical habits that we encourage in our academic settings (Lee, 2017).

Teacher 2 observes, *"Another student struggled with detecting subject-verb agreement errors in their own writing."* This skill is fundamental for clear communication and requires continuous practice and explicit instruction, which we try to provide in our lessons (Nurjanah et al., 2018).

Teacher 3 notes, *"A different student pointed out that they tend to write like they talk, using run-on sentences or speaking in fragments."* This is a typical issue where conversational habits carry over into writing, leading to grammatical inaccuracies. Teacher 1 adds, *"One student tried to make their sentences more complex but ended up creating run-on sentences instead."* While it's important to aim for complexity to enrich writing, it's equally crucial to manage it properly to avoid confusing the reader. We work on balancing complexity with clarity in our writing workshops (Saddler et al., 2018).

Teacher 2 discusses tense management, "Another issue came from a student mixing up tense usage, like confusing past simple with past perfect, or using present simple instead of present continuous." Mastering verb tenses is essential, as it directly impacts the clarity and meaning of texts. We incorporate targeted exercises to enhance understanding and correct use of tenses (Kamaşak et al., 2021).

Students' reflection on inadequate review practices is emblematic of the necessity for self-assessment and revision, a process integral to the Constructivist approach to learning, where knowledge is built through reflective practice (Schön, 1983). Participant 6's difficulty with subject-verb agreement underscores the importance of explicit grammar instruction, which aligns with the principles of Error Analysis (Corder, 1967), focusing on correcting systematic errors through practice and feedback.

The efforts to complexify sentences, resulting in run-ons, highlight the delicate balance required in applying grammar rules to enhance writing without compromising clarity—something the Cognitive Theory of Writing addresses by emphasizing the need for planning and translating thoughts into coherent text.

The concerns about the practical application of grammar, such as tense usage and sentence structure, resonate with Krashen's Input Hypothesis (Krashen, 1982), advocating for exposure to language input slightly exceeding the learner's current level, facilitating the natural acquisition of grammatical structures.

Enhancement Program: Minimizing Syntactic Errors in Grade 8 Written Discourse
Study Title: "Syntactic Proficiency in Middle School Writing: Developing Linguistic Accuracy Among Grade 8 Students"

Rationale
Syntactic errors in writing can impede communication and academic performance. An intervention program that emphasizes grammatical accuracy, language mechanics, and structured writing can significantly improve students' writing skills. Integrating linguistic theory with practical writing exercises can offer students the tools they need to express themselves more clearly and effectively.

Introduction
Competence in writing is crucial for academic success and future professional opportunities. Through a combination of direct instruction, practice, and feedback, students can overcome common syntactic errors and become more proficient writers.

Objective
To implement a structured program that reduces syntactic errors in student writing through explicit grammar instruction, practice, reflection, and feedback.

Professional Development for Language Arts Teachers
Workshops on innovative syntax teaching strategies.
Training on the integration of technology for grammar instruction and practice.

Research Component
Teachers will collect data on syntactic error patterns before and after the intervention.
Students will participate in research by reflecting on their learning and improvement.

Evaluation
Ongoing assessment of student writings to monitor syntactic error frequency.
Pre- and post-intervention comparisons to measure program effectiveness.

Timeframe

Initial assessment and teacher training to take place in the first month of the school year.

Full implementation of the intervention to span the entire academic year, with evaluations at the end of each semester for potential adjustments.

Discussion

Grade 8 students exhibit a pattern of syntactic errors predominantly in the areas of verb tenses, capitalization, and punctuation, with tense-related errors being the most frequent. These mistakes suggest a fundamental challenge in understanding and consistently applying complex grammatical rules. Influences behind these errors are multifaceted, involving students' linguistic backgrounds—particularly for those who are bilingual and may experience interference from their first language—along with cognitive load issues in processing and applying grammatical structures within writing tasks.

Furthermore, students' perceptions of their syntactic struggles reveal a spectrum of emotions from frustration to acceptance, but a general appreciation for feedback that aids their learning process stands out. The ability to identify and address their own errors is still developing, pointing to the need for more guided practice and instructional support. The findings clearly support implementing a structured enhancement program focusing on reinforcing grammatical rules, increasing practice opportunities with immediate feedback, and fostering self-correction skills. Such a program, coupled with professional development for teachers to address these specific challenges, could lead to a marked improvement in the syntactic proficiency of Grade 8 students.

References

Aarts, B. (2023). Rodney Huddleston, Geoffrey K. Pullum and Brett Reynolds, A student's introduction to English grammar, 2nd edn. Cambridge: Cambridge University Press, 2022. Pp. xx+ 400. ISBN 9781316514641 (hb), 9781009088015 (pb). *English Language & Linguistics, 27*(3), 633-640.

Ajaj, I. E. (2022). Investigating the difficulties of learning English grammar and suggested methods to overcome them. *Journal of Tikrit University for Humanities, 29*(6), 45-58.

Aman, N. (2020). Teaching grammar: issues and challenges. *Journal of English Language Teaching Innovations and Materials (JELTIM), 2*(1), 1-13.

Amri, W. (2016). *Teacher's oral corrective feedback strategy in English language classroom* [Doctoral dissertation UIN Ar-Raniry Banda Aceh].

Andrews, J. F., Hamilton, B., Dunn, K. M., & Clark, M. D. (2016). Early reading for young deaf and hard of hearing children: Alternative frameworks. *Psychology, 7*(4), 510-522.

Bai, S., Hew, K. F., & Huang, B. (2020). Does gamification improve student learning outcome? Evidence from a meta-analysis and synthesis of qualitative data in educational contexts. *Educational Research Review, 30*, 100322.

Bashir, E., & Conners, T. J. (2019). *A descriptive grammar of Hindko, Panjabi, and Saraiki* (Vol. 4). Walter de Gruyter GmbH & Co KG.

Belch, K., & Law, S. (2018). Emotions as student feedback. The *Clinical Teacher, 15*(6), 483-487.

Benavides Vargas, C. L. (2023). *Comprehensible input for boosting listening skills among seventh grade*

english language learners (Master's thesis, Pontificia Universidad Católica del Ecuador).

Berkowitz, R., Moore, H., Astor, R. A., & Benbenishty, R. (2017). A research synthesis of the associations between socioeconomic background, inequality, school climate, and academic achievement. *Review of Educational Research, 87*(2), 425-469.

Biber, D., Gray, B., & Staples, S. (2016). Predicting patterns of grammatical complexity across language exam task types and proficiency levels. *Applied Linguistics, 37*(5), 639-668.

Bodnar, S., Cucchiarini, C., Penning de Vries, B., Strik, H., & van Hout, R. (2017). Learner affect in computerised L2 oral grammar practice with corrective feedback. *Computer Assisted Language Learning, 30*(3-4), 223-246.

Bonvillain, N. (2019). *Language, culture, and communication: The meaning of messages*. Rowman & Littlefield Publishers.

Bugtai, G., Batilaran, J., & Kilag, O. K. (2024). Enhancing science education in middle schools: A systematic review. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE), 1*(2), 7-13.

Carraro, K., & Trinder, R. (2021). Technology in formal and informal learning environments: Student perspectives. *Global Journal of Foreign Language Teaching, 11*, 39-50.

Castilla-Earls, A. P., Restrepo, M. A., Perez-Leroux, A. T., Gray, S., Holmes, P., Gail, D., & Chen, Z. (2016). Interactions between bilingual effects and language impairment: Exploring grammatical markers in Spanish-speaking bilingual children. *Applied Psycholinguistics, 37*(5), 1147-1173.

Celce-Murcia, M. (2016). The importance of the discourse level in understanding and teaching English Grammar 1. In *Teaching English Grammar to Speakers of Other Languages* (pp. 3-18). Routledge.

Cenoz, J., & Gorter, D. (2019). Multilingualism, translanguaging, and minority languages in SLA. The *Modern Language Journal, 103*, 130–135. https://doi.org/10.1111/modl.12529

Chavan, P. C., Patil, A. K., Waghmare, C. A., Patil, S. D., & Chate, G. R. (2024). Storytelling with data as an cctive learning tool for C++ programming. *Journal of Engineering Education Transformations, 37*(Special Issue 2).

Common Sentence Errors. (2019, November 30). Humanities LibreTexts. https://human.libretexts. org/Bookshelves/Composition/Introductory_Composition/Writing_for_Success_(Weaver_et_ al.)/7%3A_Syntax/7.3%3A_Common_Sentence_Errors

Comrie, B. (2020). Mapping the world's languages: From data via purpose to representation. *Handbook of the Changing World Language Map*, 61-76.

Cox, C. B., & Montgomery, C. (2019). A study of 21st century skills and engagement in a university Spanish foreign language classroom. *Foreign Language Annals, 52*(4), 822–849. https://doi. org/10.1111/flan.12426

Coyle, D., & Meyer, O. (2021). Beyond CLIL: *Pluriliteracies teaching for deeper learning*. Cambridge

University Press.

Creswell, J. W. (2011). Controversies in mixed methods research. The *Sage Handbook of Qualitative Research, 4*(1), 269-284.

Creswell, J. W. (2021). *A concise introduction to mixed methods research.* SAGE publications.

Cummins, J. (2019). The emergence of translanguaging pedagogy: A dialogue between theory and practice. *Journal of Multilingual Education Research, 9*(13), 19-36.

DeKeyser, R. (2017). Knowledge and skill in ISLA. In *The Routledge Handbook of Instructed Second Language Acquisition* (pp. 15-32). Routledge.

DeKeyser, R., & Prieto Botana, G. (2015). The effectiveness of processing instruction in L2 grammar acquisition: A narrative review. *Applied Linguistics, 36*(3), 290-305.

DeLuca, V., Rothman, J., Bialystok, E., & Pliatsikas, C. (2019). Redefining bilingualism as a spectrum of experiences that differentially affects brain structure and function. *Proceedings of the National Academy of Sciences, 116*(15), 7565-7574.

Education First's Annual English Proficiency Index. (2022). EF English Proficiency Index – Thailand. EF English Proficiency Index. https://www.ef.co.th/epi/regions/asia/thailand/#:~:text=%2362%20 of%2070,Proficiency%20level%3AVery%20low

Enama, P. R. B. (2016). The impact of English-only and bilingual approaches to EFL instruction on low-achieving bilinguals in Cameroon: An empirical study. *Journal of Language Teaching and Research, 7*(1), 19.

Ellis, R. (2019). Towards a modular language curriculum for using tasks. *Language Teaching Research, 23*(4), 454-475.

Eslami, Z. R., & Derakhshan, A. (2020). Promoting advantageous ways for teachers and learners to deal with corrective feedback. *Language Teaching Research Quarterly, 19*, 48-65.

Esmaeeli, B., Esmaeili Shandiz, E., Shojaei, H., Fazli, B., & Ahmadi, R. (2023). Feedback in higher education: An overview of reviews and systematic reviews. *Medical Education Bulletin*, 4(2), 745-764.

Ferris, D. R. (2016). Promoting grammar and language development in the writing class: Why, what, how, and when. In *Teaching English Grammar to speakers of other languages* (pp. 222-245). Routledge.

Frimu, R., & Dekydtspotter, L. (2022). *Inference-based form selection in native and non-native speakers: Evidence from subject.*

Gambhir, M., & Gupta, V. (2017). Recent automatic text summarization techniques: A survey. *Artificial Intelligence Review, 47*(1), 1-66.

Genetti, C. (2018). *How languages work: An introduction to language and linguistics*. Cambridge University Press.

Ghanizadeh, A., Al-Hoorie, A. H., & Jahedizadeh, S. (2020). *Higher order thinking skills in the language classroom: A concise guide.* Springer International Publishing.

Graham, S., Santos, D., & Francis-Brophy, E. (2014). Teacher beliefs about listening in a foreign language. *Teaching and Teacher Education, 40*, 44-60.

Hapsari, A., Ginting, A., & Bram, B. (2019). Grammatical errors in written reflection of English education master's program students. *Bahasa dan Seni: Jurnal Bahasa, Sastra, Seni, dan Pengajarannya, 47*(2), 96-105.

Harun, H., Abdullah, N., Ab Wahab, N., & Zainuddin, N. (2019). Concept based instruction: Enhancing grammar competence in L2 learners. *relc Journal, 50*(2), 252-268.

Herra, A., & Kulińska, A. (2018, December). The role of feedback in the process of learning English as a foreign language. In *Forum Filologiczne ATENEUM* (Vol.6, No. 1, pp. 127-143). Ateneum-Akademia Nauk Stosowanych w Gdańsku.

Hinnon, A. (2014). *Common Errors in English Writing and Suggested Solutions of Thai University Students*. https://so01.tci-thaijo.org/index.php/HUSO/article/view/32281

Hyland, K. (2016). Methods and methodologies in second language writing research. *System, 59*, 116-125.

Ishikawa, M. (2018). Written languaging, learners' proficiency levels and L2 grammar learning. *System, 74*, 50-61.

Jensen, L. X., Bearman, M., & Boud, D. (2021). Understanding feedback in online learning–A critical review and metaphor analysis. *Computers & Education, 173*, 104271.

Jegerski, J. (2021). Krashen and second language processing. *Foreign Language Annals, 54*(2), 318-323.

Jiang, L., & Zhao, Z. (2017). Grammar-aware parallelization for scalable xpath querying. *ACM SIGPLAN Notices, 52*(8), 371-383.

Kamaşak, R., Sahan, K., & Rose, H. (2021). Academic language-related challenges at an English-medium university. *Journal of English for Academic Purposes, 49*, 100945.

Kirschner, P., & Hendrick, C. (2020). *How learning happens: Seminal works in educational psychology and what they mean in practice.* Routledge.

Kumayas, T., & Lengkoan, F. (2023). The challenges of teaching grammar at the university level: Learning from the experience of an English lecturer. *Journal of English Culture, Language, Literature and Education, 11*(1), 98-105.

Lai, B., Tan, K. H., He, M., Mohd Said, N. E., & Muslim, N. (2022). The roles of non-textual elements in sustaining ESL and EFL learning: A Scoping Review. *Sustainability, 14*(16), 10292.

Larsen-Freeman, D., & DeCarrico, J. (2019). Grammar. In An introduction to applied linguistics (pp. 19-34). Routledge.Leacock, C., Gamon, M., Mejia, J. A., & Chodorow, M. (2022). *Automated*

grammatical error detection for language learners. Springer Nature.

Lee, I. (2017). *Classroom writing assessment and feedback in L2 school contexts.* Singapore: Springer Singapore.

Lee, M. K., & Evans, M. (2019). Investigating the operating mechanisms of the sources of L2 writing self-efficacy at the stages of giving and receiving peer feedback. The *Modern Language Journal, 103*(4), 831-847.

Lutovac, S., Kaasila, R., Komulainen, J., & Maikkola, M. (2017). University lecturers' emotional responses to and coping with student feedback: a Finnish case study. *European Journal of Psychology of Education, 32*, 235-250.

Magaji, A. (2021). Promoting problem-solving skills among secondary science students through problem based learning. *International Journal of Instruction, 14*(4), 549-566.

Markussen, P. L. (2020). *What's translation got to go with it?: How translation activities in the composition classroom can cultivate recognized moments of rhetorical and cultural awarenesses in student writers* (Doctoral dissertation, The University of Arizona).

Mart, C. T. (2018). Literature in language teaching: A recipe to maximize learning. *L1-Educational Studies in Language and Literature, 18*, 1-25.

Mayaratri, P. (2020). Analysis of verb tenses errors of non-english students' writing. *Jurnal Bahasa Lingua Scientia, 12*(1), 185-198.

Murphy, A., & Ryan, C. (2020, July). Improving module identification and use in grammatical evolution. In *2020 IEEE Congress on Evolutionary Computation* (CEC) (pp. 1-7). IEEE.

Myhill, D., Jones, S., & Watson, A. (2013). Grammar matters: How teachers' grammatical knowledge impacts on the teaching of writing. *Teaching and Teacher Education, 36*, 77-91.

Nasir, K. (2019). Grammatical difficulties faced by second language (L2) learners in writing sentences. www.academia.edu. https://www.academia.edu/84779851/Grammatical_Difficulties_Faced_by_Second_Language_L2_Learners_in_Writing_Sentences

Nugroho, F. A., & Lintangsari, A. P. (2022). Deaf Students' Challenges in Learning English: A literature review. *Indonesian Journal of Disability Studies, 9*(2), 217-224.

Nurjanah, N., Anggoro, D., & Dwiastuty, N. (2018). Error analysis of the use of question words in English sentences. *Scope: Journal of English Language Teaching, 2*(1), 80-88.

Ortega, L. (2020). The study of heritage language development from a bilingualism and social justice perspective. *Language Learning, 70*, 15-53.

Pourdana, N., & Asghari, S. (2021). Different dimensions of teacher and peer assessment of EFL learners' writing: descriptive and narrative genres in focus. *Language Testing in Asia, 11*(1), 6.

Purwandari, J. D. (2023). EFL students' emotional responses to oral feedback: The case of Indonesia. *Englisia: Journal of Language, Education, and Humanities, 11*(1), 224-235.

Ryan, T., & Henderson, M. (2018). Feeling feedback: students' emotional responses to educator feedback. *Assessment & Evaluation in Higher Education, 43*(6), 880-892.

Saddler, B. (2019). Sentence construction. *Best Practices in Writing Instruction*, 240-260.

Saddler, B., Ellis-Robinson, T., & Asaro-Saddler, K. (2018). Using Sentence Combining Instruction to Enhance the Writing Skills of Children with Learning Disabilities. *Learning Disabilities: A Contemporary Journal, 16*(2), 191-202.

Saeed, E., Mansoor, Z., & Saeed, Z. (2023). The study of English Language as Lingua Franca in Pakistan. *Journal of Multidisciplinary and Advanced Studies, 4*(1), 1–8. https://doi.org/10.37745/bjmas.2022.0083

Saeli, H., & Cheng, A. (2021). Peer feedback, learners' engagement, and L2 Writing Development: The Case of a Test-Preparation Class. *Tesl-Ej, 25*(2), n2.

Saito, K. (2015). Experience effects on the development of late second language learners' oral proficiency. *Language Learning, 65*(3), 563-595.

Sararit, J. (2015). *The most common errors in Thai first-year undergraduate students' writings*. Srinakharinwirot. https://www.academia.edu/12083980/The_Most_Common_Errors_in_Thai_First_Year_Undergraduate_Students_Writings

Sattar, A., Javed, F., & Baig, S. (2019). A study of English language syntactical errors committed by Pakistani higher secondary science students. *Global Regional Review*, 521-535.

Schartel, S. A. (2012). Giving feedback–An integral part of education. *Best Practice & Research Clinical Anaesthesiology, 26*(1), 77-87.

Schiff, R., Sasson, A., Star, G., & Kahta, S. (2017). The role of feedback in implicit and explicit artificial grammar learning: A comparison between dyslexic and non-dyslexic adults. *Annals of Dyslexia, 67*, 333-355.

Sermsook, K., Liamnimitr, J., & Pochakorn, R. (2017). The impact of Teacher Corrective Feedback on EFL Student Writers' Grammatical Improvement. *English Language Teaching, 10*(10), 43-49.

Shintani, N., & Ellis, R. (2015). Does language analytical ability mediate the effect of written feedback on grammatical accuracy in second language writing? *System, 49*, 110-119.

Sia, P. F. D., & Cheung, Y. L. (2017). Written corrective feedback in writing instruction: A qualitative synthesis of recent research. *Issues in Language Studies, 6*(1).

Slioussar, N., & Harchevnik, M. (2024). Word order and context in sentence processing: Evidence from L1 and L2 Russian. *Frontiers in Psychology, 15*, 1344366.

Snow, C. E., & Matthews, T. J. (2016). Reading and language in the early grades. *The Future of Children*, 57-74.

Tan, F. D., Whipp, P. R., Gagne, M., & Van Quaquebeke, N. (2020). Expert teacher perceptions of two-

way feedback interaction. *Teaching and Teacher Education, 87*, 102930.

UNESCO & Organisation for Economic Cooperation and Development. (2016). *Education in Thailand: An OECD-UNESCO Perspective. https://www.academia.edu/84779851/Grammatical_ Difficulties_Faced_by_Second_Language_L2_Learners_in_Writing_Sentences*

Vattøy, K. D., & Smith, K. (2019). Students' perceptions of teachers' feedback practice in teaching English as a foreign language. *Teaching and Teacher Education, 85*, 260-268.

Watson, A. M., Newman, R. M., & Morgan, S. D. (2021). Metatalk and metalinguistic knowledge: The interplay of procedural and declarative knowledge in the classroom discourse of first-language grammar teaching. *Language Awareness, 30*(3), 257-275. http://www.assumptionjournal.au.edu/ index.php/newEnglishTeacher/article/download/3651/2368

Wilkie, B., & Liefeith, A. (2022). Student experiences of live synchronised video feedback in formative assessment. *Teaching in Higher Education, 27*(3), 403-416.

Winstone, N. E., Nash, R. A., Parker, M., & Rowntree, J. (2017). Supporting learners' agentic engagement with feedback: A systematic review and a taxonomy of recipience processes. *Educational Psychologist, 52*(1), 17-37.

HUMANITIES

EFFICACY OF ART INTERVENTION ON THE SELF ESTEEM AND SOCIAL SKILLS OF TEENAGE GIRLS IN THE SHELTERED HOUSING

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Abstract

This study evaluated the impact of art interventions on the self-esteem and social skills of teenage girls residing in sheltered housing. A quasi-experimental, one-group pretest-posttest design was used, involving 20 participants from the Manila Girls Home in Parang, Marikina City. These girls had experienced abandonment, neglect, or poverty-related issues leading to their placement in the shelter. The pretest revealed a mean self-esteem score of 29.55, while the posttest score was 30.10, indicating a slight increase in self-esteem. However, this change was not statistically significant. Similarly, the study found no significant improvement in social skills, with pretest and posttest mean scores of 37.30 and 35.70, respectively. The findings suggest that the art interventions did not significantly enhance self-esteem or social skills among the participants, and thus, the study's hypotheses were not supported.

Keywords: *self-esteem, social skills, teenage girls, art intervention*

The Philippines, despite being one of Southeast Asia's fastest-growing economies, faces a significant homelessness crisis (Leal, 2023). Estimates suggest that approximately 250,000 to 1 million homeless children are in the country (Meribole, 2020). In the U.S., homelessness affects 1 in 30 adolescents and 1 in 10 young adults annually, highlighting a global concern (Ashraf et al., 2022). Homelessness exacerbates issues such as low self-esteem, poor social skills, and mental health problems among affected children and adolescents.

Self-esteem, defined as "a feeling of self-appreciationis crucial for societal adaptation. It develops significantly between the ages of six and eleven, influenced by a child's environment, including their home, neighborhood, and school. Low self-esteem can lead to psychological and social challenges, particularly for homeless children, who face frequent relocations and inadequate support (Murran et al., 2022). Adolescents, in their transition phase, may grapple with identity and self-worth issues, compounded by homelessness (Hashmi, 2013; Prescott et al., 2008). Parental hostility and rejection further contribute to self-esteem problems (Krauss et al., 2020; Ostfeld, 2022).

Social skills are vital during adolescence for building lasting relationships and self-concept (Gutierrez, 2016). Well-developed social skills contribute to confidence and successful task completion. However, children in impoverished or unstable environments may struggle with social competency, often viewed as "different" by peers (Elliot, 2014). Dysfunctional family circumstances can hinder social development and lead to difficulties in forming positive relationships (Loomis, 2017). Effective family support is crucial for developing these skills.

Art interventions have shown promise in enhancing well-being among marginalized youth. Research by Morasco (2013) demonstrated that art programs can foster resilience, creativity, and self-worth in children and youth in emergency housing. Kim et al. (2020) found that food art therapy improved self-expression and social skills among adults with mental illness, though the study's applicability to younger populations and different settings remains unclear.

This study aimed to evaluate the efficacy of art interventions in improving self-esteem and social skills among teenage girls (ages 12 to 18) in sheltered housing. The specific research questions are:

1. What is the level of self-esteem among teenage girls in sheltered housing before and after the intervention?
2. What is the level of social skills among teenage girls in sheltered housing before and after the intervention?
3. Does the intervention result in a significant change in self-esteem levels from pretest to posttest?
4. Does the intervention result in a significant change in social skills from pretest to posttest?

Methodology

Research Design

This study aimed to assess the effectiveness of the Meraki Art Intervention in improving self-esteem and social skills among teenage girls in sheltered housing. A quasi-experimental one-group pretest-posttest design was employed to measure changes in these areas. Participants were observed before and after a six-week intervention program to evaluate any resulting effects.

Participants

The study was conducted at the Manila Girls Home in Parang, Marikina City, under the Manila Boys Town Complex administration. The sample comprised 20 teenage girls aged 12 to 18 who had experienced abandonment, neglect, or poverty-related issues. All participants were living in the shelter due to the reasons.

Participants were selected using purposive sampling based on the following criteria: (a) ages 12 to 18 years, (b) residing in sheltered housing, and (c) willingness to participate in the intervention program. The pretest and posttest assessments were administered, and all data collected were treated with strict confidentiality.

Table 1 summarizes the demographic profile of the 20 teenage girls who participated in the study. It provides details on their age distribution, gender, length of stay in the facility, and types of programs or activities they engaged in. This information offers a comprehensive overview of the sample characteristics and the context in which the intervention was conducted.

Table 1
Demographic Profile

Demographics		N=20	%
Age	12 – 14 years old	11	55.00
	15 – 17 years old	9	45.00
	18 years old	0	0.00
Gender	Female	20	100.00
Lenght of Stay in the Facility	Less than six (6) months	6	30.00
	Six (6) months to one (1) year	5	25.00
	More than one (1) year to five (5) years	6	30.00
	More than five (5) years	3	15.00
Types of programs or activities the facility provides	Mentoring/Tutoring	6	30.00
	Learning Activities	5	25.00
	Church Service	4	20.00
	Indoor Activities	5	25.00

Instrumentation

Validated research instruments were used to collect data. The researcher-made needs assessment survey gathered demographic information, including nickname, age, gender, length of stay, current well-being, and programs offered at the shelter. The Rosenberg Self-Esteem Scale, a 10-item instrument, assessed participants' self-esteem using a 4-point Likert scale (4 = strongly agree, 3 = agree, 2 = disagree, 1 = strongly disagree). The Social Skills Questionnaire—Youth Version, adapted from Spence (1995), included 30 items rated on a 3-point Likert scale (0 = not true, 1 = sometimes true, 2 = mostly true). Both instruments were administered before and after the 6-week intervention.

The Meraki Art Intervention aimed to boost self-esteem and social skills through art activities and peer support. Participants engaged in six different activities over two-hour sessions, allowing them to express their thoughts and receive peer support.

Experimental Manipulations or Interventions

Participants were selected based on ethical approval from the Adventist University of the Philippines Ethics Review Board. Informed consent was obtained prior to administering the needs assessment survey and pre-assessment tools. The six-week intervention consisted of various art activities designed to enhance self-esteem and social skills. Post-intervention assessments were conducted to evaluate the program's effectiveness.

Data Analysis

Data analysis employed several statistical procedures to assess the effectiveness of the Meraki Art Intervention. Percentages were used to describe the participants' demographic profiles, including age, gender, and length of stay. Means were calculated to determine the central tendency of self-esteem and social skills scores. To evaluate the impact of the intervention, a t-test was applied to compare the mean differences between pretest and posttest results. These analyses provided insights into whether the intervention was effective in improving the self-esteem and social skills of the teenage girls residing in sheltered housing.

Results

Level of Self-Esteem During Pre-Test Assessment

Table 2 illustrates the responses of teenage girls on the Rosenberg Self-Esteem Scale during the pre-test assessment. The overall mean score for self-esteem was 29.55.

Table 2

Participants Level of Self-Esteem During Pre-Test Assessment

Rosenberg Self Esteem Scale	Mean	SD	Verbal Interpretation
1. Overall, I am satisfied with myself. (Sa kabuuan, kuntento na ako sa sarili ko.)	2.75	0.786	Agree
2. At times I think I am no good at all. ** (Minsan iniisip ko na hindi ako magaling.)	3.05	0.826	Agree
3. I feel that I have several good qualities. (Pakiramdam ko ay mayroon akong maraming magagandang katangian.)	2.80	0.768	Agree
4. I am able to do things as well as most other people. (Nagagawa ko ang mga bagay gaya ng karamihan sa ibang tao.)	2.70	0.657	Agree
5. I feel I do not have much to be proud of. ** (Pakiramdam ko ay wala akong gaanong maipagmamalaki.)	3.15	0.933	Agree
6. I certainly feel useless at times. ** (Pakiramdam ko ay wala akong silbi minsan.)	2.95	0.759	Agree
7. I feel that I'm a person of worth, at least on an equal plane with others. (Pakiramdam ko ako ay isang taong may halaga, at may kapantay na katayuan tulad ng iba.)	3.00	0.725	Agree
8. I wish I could have more respect for myself. ** (Nais kong magkaroon ako ng higit na paggalang sa aking sarili.)	3.45	0.686	Strongly Agree
9. All in all, I am inclined to feel that I am a failure. ** (Sa kabuuan, nakakagawian kong maramdaman na ako ay isang kabiguan.)	2.95	0.686	Agree
10. I take a positive attitude toward myself. (Nagkakaroon ako ng positibong pananaw sa aking sarili.)	2.75	0.910	Agree
Mean of the Sum of Scores	29.55	3.790	Average

Legend: x per indicator item: 1.00-1.74 = Strongly Disagree, 1.75-2.49 = Disagree, 2.50-3.24 = Agree, and 3.25-4.00 = Strongly Agree.

Mean of the Sum of Scores: 10.00-25.00 = Low, 26.00-29.00 = Average, 30.00-40.00 = High

The analysis of the ten indicator items for the respondents' level of self-esteem resulted in an overall mean score of 29.55 (SD = 3.790), suggesting an average level of self-esteem. One item, "I wish I could have more respect for myself" (mean = 3.45, SD = 0.686), was rated as "strongly agree."

Level of Self-Esteem During Post-Test Assessment

Table 3 presents the level of self-esteem following the intervention program. The participants achieved an overall mean score of 30.10.

Table 3
Participants Level of Self-Esteem During Post-Test Assessment

Rosenberg Self Esteem Scale	Mean	SD	Verbal Interpretation
1. On the whole, I am satisfied with myself. (Sa kabuuan, kuntento na ako sa sarili ko.)	3.40	.883	Strongly Agree
2. At times I think I am no good at all. ** (Minsan iniisip ko na hindi ako magaling.)	2.65	.671	Agree
3. I feel that I have a number of good qualities. (Pakiramdam ko ay mayroon akong maraming magagandang katangian.)	3.30	.801	Strongly Agree
4. I am able to do things as well as most other people. (Nagagawa ko ang mga bagay gaya ng karamihan sa ibang tao.)	3.20	.616	Agree
5. I feel I do not have much to be proud of. ** (Pakiramdam ko ay wala akong gaanong maipagmamalaki.)	2.45	.759	Disagree
6. I certainly feel useless at times. ** (Pakiramdam ko ay wala akong silbi minsan.)	2.45	.686	Disagree
7. I feel that I'm a person of worth, at least on an equal plane with others. (Pakiramdam ko ako ay isang taong may halaga, at may kapantay na katayuan tulad ng iba.)	3.00	.858	Agree
8. I wish I could have more respect for myself. ** (Nais kong magkaroon ako ng higit na paggalang sa aking sarili.)	3.35	.587	Strongly Agree
9. All in all, I am inclined to feel that I am a failure. ** (Sa kabuuan, nakakagawian kong maramdaman na ako ay isang kabiguan.)	2.90	.788	Agree
10. I take a positive attitude toward myself. (Nagkakaroon ako ng positibong pananaw sa aking sarili.)	3.40	.503	Strongly Agree
Mean of the Sum of Scores	30.10	3.210	High

Legend: x per indicator item: 1.00-1.74 = Strongly Disagree, 1.75-2.49 = Disagree, 2.50-3.24 = Agree, and 3.25-4.00 = Strongly Agree.
Mean: 10.00-25.00 = Low, 26.00-29.00 = Average, 30.00-40.00 = High

The post-test results showed four items rated as "strongly agree," including "Overall, I am satisfied with myself" (mean = 3.40, SD = 0.883), "I feel that I have several good qualities" (mean = 3.30, SD = 0.801), "I wish I could have more respect for myself" (mean = 3.35, SD = 0.587), and "I take a positive attitude toward myself" (mean = 3.40, SD = 0.503). The overall mean score of 30.10 (SD = 3.210) indicates a high level of self-esteem among participants after the intervention.

Table 4
Participants Level of Social Skills During Pre-Test Assessment

Social Skills Questionnaire – Youth Version	Mean	SD	Verbal Interpretation
1. I listen to other people's points of view during arguments. (Nakikinig ako sa mga pananaw ng ibang tao sa panahon ng pagtatalo)	1.10	.718	Not True

2. I make requests from my parents or teachers in a polite way. (Gumagawa ako ng mga kahilingan mula sa aking mga magulang o guro sa magalang na paraan)	1.45	.686	Not True
3. I control my temper when I lose in a game or competition. (Kinokontrol ko ang aking init ng ulo kapag natatalo ako sa isang laro o kumpetisyon)	1.05	.686	Not True
4. I control my temper if other kids tease me or say unkind things. (Kinokontrol ko ang aking init ng ulo kung tinutukso ako ng ibang mga bata o nagsasalita ng hindi maganda.)	1.30	.733	Not True
5. I ask other kids in a nice way if I want to join in their activities. (Tinatanong ko ang ibang mga bata sa magandang paraan kung gusto kong sumali sa kanilang mga aktibidad.)	1.20	.894	Not True
6. I show other people if I feel affectionate or good towards them. (Ipinakikita ko sa ibang tao kung nararamdaman ko ang pagmamahal o mabuti sa kanila.)	1.40	.681	Not True
7. I do kind things for other people without having to be asked. (Gumagawa ako ng mabubuting bagay para sa ibang tao nang hindi hinihiling.)	1.25	.851	Not True
8. I say nice things to others when they deserve it. (Nagsasabi ako ng magagandang bagay sa iba kapag karapat-dapat sila.)	1.40	.598	Not True
9. I control my temper when I am told off or criticized by my parents or teachers. (Kinokontrol ko ang aking init ng ulo kapag pinagsasabihan ako o pinupuna ng aking mga magulang o guro.)	1.05	.686	Not True
10. I ask permission before I borrow or use other people's things. (Humihingi ako ng pahintulot bago ako humiram o gumamit ng mga bagay ng ibang tao.)	1.30	.571	Not True
11. I share things with other kids. (Ibinabahagi ko ang mga bagay sa ibang mga bata.)	1.25	.716	Not True
12. I control my temper during disagreements with other kids. (Kinokontrol ko ang aking init ng ulo sa mga hindi pagkakasundo sa ibang mga bata.)	1.00	.562	Not True
13. I ask other kids If I can join in their activities. (Tinatanong ko ang ibang bata kung maari akong sumali sa kanilang aktibidad.)	1.35	.875	Not True
14. The expression on my face is usually right (not always angry or grinning). (Karaniwang tama ang ekspresyon sa aking mukha (hindi palaging galit o ngingiti)	1.25	.550	Not True
15. I say I am sorry when I do something wrong. (Humihingi ako ng tawad kapag may nagawa akong mali.)	1.30	.801	Not True
16. I join in family activities. (Sumasali ako sa mga aktibidad ng pamilya.)	1.30	.733	Not True
17. I invite other kids to join in my games or activities. (Inaanyayahan ko ang ibang mga bata na sumali sa aking mga laro o aktibidad.)	1.35	.671	Not True

18. I tell a parents or teacher If I have a problem or need help. (Sinasabi ko sa mga magulang o guro Kung mayroon akong problema o kailangan ng tulong.)	1.45	.605	Not True
19. I show that I am worried or that I care if someone is hurt or upset. (Ipinakikita ko na nag-aalala ako o nagmamalasakit ako kung may nasaktan o nabalisa.)	1.15	.671	Not True
20. I follow the rules in games or sports. (Sinusunod ko ang mga alituntunin sa mga laro o palakasan.)	1.50	.513	Not True
21. I take part in games and activities with other kids. (Nakikibahagi ako sa mga laro at aktibidad kasama ang ibang mga bata.)	.85	.671	Not True
22. I have conversations with adults. (Nakikipag-usap ako sa mga matatanda.)	1.35	.587	Not True
23. I look people in the eye when we are talking. (Nakatingin ako sa mata ng mga tao kapag nag-uusap kami.)	1.35	.671	Not True
24. My voice usually sounds friendly (not aggressive or unusual)(Ang aking boses ay palakaibigan (hindi agresibo o hindi karaniwan)	.85	.671	Not True
25. I control my temper when I do not get my own way with parents or teachers. (Kinokontrol ko ang aking init ng ulo kapag hindi ko nagagawa ang sarili kong paraan sa mga magulang o guro.)	1.05	.605	Not True
26. I laugh or smile when I am happy or hear funny things. (Natatawa ako o ngumingiti kapag masaya ako o nakakarinig ng mga nakakatawang bagay.)	1.40	.681	Not True
27. I have conversations with other kids. (Nakikipag-usap ako sa ibang mga bata.)	1.60	.598	Not True
28. I show other people that I am listening when we are talking. (Pinapakita ko sa ibang tao na nakikinig ako kapag nag-uusap kami.)	1.20	.696	Not True
29. I can show people when I am angry without losing my temper. (Kaya kong ipakita sa mga tao kapag galit ako nang hindi nawawala ang galit ko.)	1.15	.813	Not True
30. I stand up for myself without losing my temper if other kids behave badly towards me. (Pinaninindigan ko ang aking sarili nang hindi nawawala ang aking galit kung ang ibang mga bata ay kumilos nang masama sa akin.)	1.10	.718	Not True
Mean of the Sum of Scores	37.30	8.361	Moderate

Legend: x per indicator item: 1.00-1.66 = Not True, 1.67-2.33 = Sometimes True, 2.34-3.00 = Mostly True;
Mean: 10.00-29.00 = Low, 30.00-49.00 = Moderate, 50.00-60.00 = High

Table 4 displays the responses of teenage girls to the Social Skills Questionnaire during the pre-test assessment. The overall mean score was 37.30.

The table shows a computed mean of 37.30 (SD=8.361), interpreted as "moderate." It displays the 30 indicator items for the participants' level of social skills, with scores ranging between 1.00 and 1.66, labeled as "Not True."

Level of Social Skills During Post-Test Assessment

The level of social skills following the intervention program is shown in Table 5. The participants achieved an overall mean score of 35.70.

Table 5

Participants Level of Social Skills During Post-Test Assessment

Social Skills Questionnaire – Youth Version	Mean	SD	Verbal Interpretation
1. I listen to other people's points of view during arguments. (Nakikinig ako sa mga pananaw ng ibang tao sa panahon ng pagtatalo)	1.05	.394	Not True
2. I make requests from my parents or teachers in a polite way. (Gumagawa ako ng mga kahilingan mula sa aking mga magulang o guro sa magalang na paraan)	1.35	.587	Not True
3. I control my temper when I lose in a game or competition. (Kinokontrol ko ang aking init ng ulo kapag natatalo ako sa isang laro o kumpetisyon)	1.05	.605	Not True
4. I control my temper if other kids tease me or say unkind things. (Kinokontrol ko ang aking init ng ulo kung tinutukso ako ng ibang mga bata o nagsasalita ng hindi maganda.)	1.15	.671	Not True
5. I ask other kids in a nice way if I want to join in their activities. (Tinatanong ko ang ibang mga bata sa magandang paraan kung gusto kong sumali sa kanilang mga aktibidad.)	1.30	.657	Not True
6. I show other people if I feel affectionate or good towards them. (Ipinakikita ko sa ibang tao kung nararamdaman ko ang pagmamahal o mabuti sa kanila.)	1.35	.587	Not True
7. I do kind things for other people without having to be asked. (Gumagawa ako ng mabubuting bagay para sa ibang tao nang hindi hinihiling.)	1.20	.616	Not True
8. I say nice things to others when they deserve it. (Nagsasabi ako ng magagandang bagay sa iba kapag karapat-dapat sila.)	1.15	.587	Not True
9. I control my temper when I am told off or criticized by my parents or teachers. (Kinokontrol ko ang aking init ng ulo kapag pinagsasabihan ako o pinupuna ng aking mga magulang o guro.)	1.00	.649	Not True
10. I ask permission before I borrow or use other people's things. (Humihingi ako ng pahintulot bago ako humiram o gumamit ng mga bagay ng ibang tao.)	1.40	.598	Not True
11. I share things with other kids. (Ibinabahagi ko ang mga bagay sa ibang mga bata.)	1.25	.716	Not True
12. I control my temper during disagreements with other kids. (Kinokontrol ko ang aking init ng ulo sa mga hindi pagkakasundo sa ibang mga bata.)	1.00	.649	Not True
13. I ask other kids If I can join in their activities. (Tinatanong ko ang ibang bata kung maari akong sumali sa kanilang aktibidad.)	1.20	.616	Not True
14. The expression on my face is usually right (not always angry or grinning). (Karaniwang tama ang ekspresyon sa aking mukha (hindi palaging galit o ngingiti)	1.05	.605	Not True
15. I say I am sorry when I do something wrong. (Humihingi ako ng tawad kapag may nagawa akong mali.)	1.45	.605	Not True

{table continues on the next page}

16. I join in family activities. (Sumasali ako sa mga aktibidad ng pamilya.)	1.05	.686	Not True
17. I invite other kids to join in my games or activities. (Inaanyayahan ko ang ibang mga bata na sumali sa aking mga laro o aktibidad.)	1.05	.686	Not True
18. I tell a parents or teacher If I have a problem or need help. (Sinasabi ko sa mga magulang o guro Kung mayroon akong problema o kailangan ng tulong.)	1.10	.553	Not True
19. I show that I am worried or that I care if someone is hurt or upset. (Ipinakikita ko na nag-aalala ako o nagmamalasakit ako kung may nasaktan o nabalisa.)	1.40	.598	Not True
20. I follow the rules in games or sports. (Sinusunod ko ang mga alituntunin sa mga laro o palakasan.)	1.20	.768	Not True
21. I take part in games and activities with other kids. (Nakikibahagi ako sa mga laro at aktibidad kasama ang ibang mga bata.)	1.05	.605	Not True
22. I have conversations with adults. (Nakikipag-usap ako sa mga matatanda.)	1.25	.716	Not True
23. I look people in the eye when we are talking. (Nakatingin ako sa mata ng mga tao kapag nag-uusap kami.)	1.10	.641	Not True
24. My voice usually sounds friendly (not aggressive or unusual) (Ang aking boses ay palakaibigan (hindi agresibo o hindi karaniwan)	1.05	.686	Not True
25. I control my temper when I do not get my own way with parents or teachers. (Kinokontrol ko ang aking init ng ulo kapag hindi ko nagagawa ang sarili kong paraan sa mga magulang o guro.)	1.10	.553	Not True
26. I laugh or smile when I am happy or hear funny things. (Natatawa ako o ngumingiti kapag masaya ako o nakakarinig ng mga nakakatawang bagay.)	1.40	.681	Not True
27. I have conversations with other kids. (Nakikipag-usap ako sa ibang mga bata.)	1.30	.571	Not True
28. I show other people that I am listening when we are talking. (Pinapakita ko sa ibang tao na nakikinig ako kapag nag-uusap kami.)	1.25	.639	Not True
29. I can show people when I am angry without losing my temper. (Kaya kong ipakita sa mga tao kapag galit ako nang hindi nawawala ang galit ko.)	1.20	.523	Not True
30. I stand up for myself without losing my temper if other kids behave badly towards me. (Pinaninindigan ko ang aking sarili nang hindi nawawala ang aking galit kung ang ibang mga bata ay kumilos nang masama sa akin.)	1.25	.639	Not True
Mean of the Sum of Scores	35.70	6.736	Moderate

Legend: x per indicator item: 1.00-1.66 = Not True, 1.67-2.33 = Sometimes True, 2.34-3.00 = Mostly True.
Mean: 10.00-29.00 = Low, 30.00-49.00 = Moderate, 50.00-60.00 = High

The respondents' overall mean score, as stated in the table, was 35.70 (SD = 6.736). This implies that the participants perceive a "moderate" level of social skills during posttest.

Table 6

Level of Self-Esteem and Social Skills among Participants

	Pre-test M (SD)	Post Test M (SD)	t	df	Two-sided P	Cohen's d
Self Esteem	29.55 (3.790)	30.10 (3.210)	.528	19	.604	4.662
Social Skills	37.30 (8.361)	35.70 (6.736)	.915	19	.371	7.816

Table 6 shows that there is no meaningful difference in the level of self-esteem among the participants, considering the outcomes of the pretest and posttest. This implies that the pretest mean score of 29.55 (SD = 3.790) and posttest mean score of 30.10 (SD = 3.210) have a comparable effect on the level of their self-esteem. Although it was noted that there is an increase in the posttest assessment. Furthermore, results revealed that there is no meaningful difference in the level of social skills among the participants considering the outcomes of the pretest and posttest. It shows that the pretest mean score of 37.30 (SD = 8.361) is greater than that of the posttest mean score of 35.70 (SD = 6.736) in total. The findings concluded that both variables do not lead to increase the level of self-esteem and social skills among the participants, therefore, null hypotheses of this study are not confirmed.

Discussion

The present study assessed the efficacy of art interventions on the self-esteem and social skills of teenage girls living in sheltered housing. Specifically, two main hypotheses were tested using a paired sample T-test to analyze the mean differences between the pre-test and post-test assessments. It was hypothesized that the level of self-esteem would increase among the participants after the intervention and that the level of social skills would also increase.

The results revealed that although there was an overall increase in mean outcomes after the intervention, there was no significant difference in the participants' levels of self-esteem. Comparison of the pre-test and post-test data showed that the participants' social skills levels were lower after the intervention than before. Therefore, no significant difference in the participants' level of social skills was found. Overall, the results indicate that the intervention did not significantly impact either self-esteem or social skills.

The Meraki Art Intervention, named after the Greek word "Meraki," meaning to do work with soul, creativity, and love, was designed to create safe spaces for teenage girls who have experienced abuse, poverty, parental abandonment, and neglect, or were removed from their homes due to lack of proper care. However, this study demonstrated that the art intervention was not effective in improving the self-esteem and social skills of the teenage girls. The lack of confirmation of the two hypotheses could be attributed to several factors, including the participants' age range. Masselink et al. (2017) found that self-esteem levels tend to decrease in early adolescence and increase in later adolescence. The study included participants aged 12 to 18, but focusing on narrower age groups might have yielded different results.

Adolescents face developmental challenges as they transition and search for a sense of identity in society. This includes changing schools, building new social networks, altering family relationships, adopting more adult roles, and forming their identity (Masselink et al., 2017). Living in sheltered accommodation may limit their sense of self and their environment, contributing to the non-significant findings on self-esteem and social skills. The length of stay in the sheltered housing might also have impacted the results, as six participants (30%) had stayed for less than six months. While participants learn coping mechanisms for living in sheltered accommodation, an abrupt shift in their living situation can affect their social skills and self-esteem.

Some limitations were noted due to the special population of the selected participants, making a larger intervention group inadvisable. Building rapport with participants is essential, and a six-week intervention may be insufficient. Additionally, the lack of parental involvement can be a risk factor. Wairimu et al. (2016) noted that youths and adults who perceived themselves as rejected tended toward behavioral problems, conduct disorders, depression, and substance abuse. During the intervention, some participants exhibited

uncontrolled behavior such as irritability, impatience, and verbal aggression. External factors like an open window in the intervention area, people strolling outside, and inadequate ventilation could also divert participants' attention.

This study may guide future research on the efficacy of art interventions in improving self-esteem and social skills among different groups of adolescents who have been abandoned, neglected, or removed from their homes. The results do not imply that art intervention is ineffective but suggest improvements to the program to better support the well-being of adolescents in sheltered housing. It is also recommended to enhance the focus on interpersonal skills by providing different social skills programs for participants to develop various abilities. This intervention can be applied not only to teenage girls but also to children in similar situations.

References

Ashraf, S., Shah, K., Vadukapuram, R., Bhela, J., Chaudhari, G., Mansuri, Z., & Jain, S. (2022). *Homelessness in the child and adolescent population: A study evaluating trends and demographics in regions of the United States*, 2013–2018. https://doi.org/10.4088/PCC.21br03146

Elliot, L. (2014). *Supporting homeless children and youth through proactive and positive behavior management and intervention practices*. https://nche.ed.gov/wp-content/uploads/2018/11/res-summ-pos-beh.pdf

Gutierrez, C. (2016). *Effects of art therapy on identity and self-esteem in youths in the foster care system*. https://scholars.smwc.edu/server/api/core/bitstreams/068c4f9b-7644-43fa-b861-487059d3d3a1/content

Hashmi, S. (2013). Adolescence: An age of storm and stress. *Review of Arts and Humanities, 2*(1), 50–56. http://rah-net.com/journals/rah/Vol_2_No_1_June_2013/2.pdf

Hosogi, M., Okada, A., Fuji, C., Noguchi, K., & Watanabe, K. (2012). Importance and usefulness of evaluating self-esteem in children. *BioPsychoSocial Medicine, 6*, 9. https://doi.org/10.1186/1751-0759-6-9

Kim, J., Choe, K., & Lee, K. (2020). Effects of food art therapy on the self-esteem, self-expression, and social skills of persons with mental illness in community rehabilitation facilities. *Journal of Arts Therapy, 16*(3), 123–136. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7712142/

Krauss, S., & Orth, U. (2020). Family environment and self-esteem development: A longitudinal study from age 10 to 16. *Developmental Psychology, 56*(5), 1046–1057. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7080605/

Leal, S. (2023). *Poverty and homelessness: Facts and statistics in the Philippines*. https://www.researchgate.net/publication/367284451_Poverty_and_Homelessness_Facts_and_Statistics_in_the_Philippines

Loomis, N. (2017). *The impact of social support from teachers on the psychosocial functioning of homeless youth* (Doctoral dissertation, The University of Arizona). ProQuest Dissertations Publishing. https://www.proquest.com/openview/d39fdb2a68be70d470b90141e4d6abe6/1?pq-origsite=gscholar&cbl=18750

Masselink, M., Van Roekel, E., & Oldehinkel, A. J. (2017). Self-esteem in early adolescence as a predictor of depressive symptoms in late adolescence and early adulthood: The mediating role of motivational and social factors. *Journal of Youth and Adolescence, 46*(6), 1287–1303. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5878202/

Meribole, J. (2020). *The state of homelessness in the Philippines*. https://borgenproject.org/homelessness-in-the-philippines/

Morasco, K. (2013). *Art education for children and youth living in an emergency housing shelter*. https://files.eric.ed.gov/fulltext/ED555255.pdf

Murran, S., & Brady, E. (2022). How does family homelessness impact children's development? A critical review of the literature. *Child & Family Social Work, 27*(2), 601–611. https://doi.org/10.1111/cfs.12968

Ostfeld, M. (2022). *Poverty solutions study: Homeless teens face significant health risks, lack of access to shelter.* https://fordschool.umich.edu/news/2022/poverty-solutions-study-homeless-teens-face-significant-health-risks-lack-access-shelter

Prescott, M., Sekendur, B., Bailey, B., & Hoshino, J. (2008). *Art making as a component and facilitator of resiliency with homeless youth*. https://files.eric.ed.gov/fulltext/EJ825771.pdf

Spence, S. (1995). *Social skills training* (Enhancing social competence with children and adolescents). https://www.scaswebsite.com/wp-content/uploads/2021/07/SST-resource-book-low.pdf

Wairimu, M., Macharia, S., & Muiru, A. (2016). *Analysis of parental involvement and self-esteem on secondary school students in Kieni West Sub-County, Nyeri County, Kenya*. https://files.eric.ed.gov/fulltext/EJ1115884.pdf

HUMANITIES

EFFECTIVENESS OF GROUP ART INTERVENTION IN REDUCING STRESS AND BURNOUT AMONG PUBLIC SCHOOL TEACHERS

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Abstract

Teachers play a crucial role in society, yet their mental health is often overlooked. Balancing multiple responsibilities, they nurture students and serve as community role models. These demands can be overwhelming, leading to chronic stress and burnout over time. This study examines the impact of group art interventions on teachers' stress and burnout levels to promote their mental well-being. Data from 19 third-grade public school teachers were collected before and after participating in art sessions. Results from paired sample t-tests indicate a significant reduction in stress levels post-intervention (mean score decreased from 19.00 to 15.37, $p < .001$). Regarding burnout dimensions, there was a notable decrease in occupational exhaustion (mean score decreased from 17.95 to 14.68, $p = .013$) and a significant increase in personal achievement (mean score increased from 26 to 30.84, $p < .001$). However, no significant change in depersonalization was observed (mean scores of 6.47 pre-intervention and 6.37 post-intervention, $p = 0.864$). These findings highlight the effectiveness of group art interventions in reducing stress and occupational exhaustion while enhancing personal achievement among educators. Institutions could consider implementing art-based wellness programs to support teachers' mental health. Future research could explore additional art strategies to address depersonalization and involve diverse participant groups.

Keywords: *teachers, stress, burnout, group art intervention*

Stress can be identified as a universal experience for everyone, occurring at any time and in any place. It is a normal response to daily pressures and demands of life, but it can also be dangerous. The way individuals respond to stress significantly impacts overall well-being (Scott, 2022). Stress can lead to harmful effects when it interferes with functioning. According to the American Psychological Association (APA), stress directly contributes to psychological and physiological disorders and diseases, affecting both physical and mental health and diminishing overall quality of life. Prolonged exposure to stress can lead to severe mental and physical problems and, in extreme cases, even death (Yaribeygi et al., 2017).

The World Health Organization (WHO) defines stress as a state of worry or mental tension caused by difficult situations (WHO, 2023). Common stressors include financial issues, family dynamics, and work responsibilities (Single Care Team, 2023). Stress, although transient in some cases, can cause short-term and long-term physical symptoms. Adults experiencing work-related stress have an increased risk of coronary heart disease and stroke incidents (Kivimäki & Steptoe, 2018). Work stress significantly impacts mental health, a reality experienced by virtually all employed individuals (Baruffati, 2023).

According to Gallup's 2022 Global Emotions Report, 41% of respondents worldwide reported high levels of daily stress, with expectations for further increases by 2023. The report identifies the Philippines as one of the nations with the highest stress levels, with 50% of Filipino workers experiencing stress, surpassing the global average (Gallup, 2022).

In the Philippines, mental health discussions are still not widely accepted. A survey conducted by Milieu Insight and Calm Collective Asia (2021) revealed that 38% of Filipino employees do not feel comfortable discussing their mental health concerns with their supervisors. Despite Filipinos' reputation for resilience, this attitude can lead to poor mental health outcomes. Reported cases of suicide among teachers due to work-related issues highlight the challenges faced by educators, impacting their mental, emotional, and physical well-being (Business Mirror, 2018).

Burnout is another critical issue affecting mental health in work environments. Recognized as an occupational phenomenon by the WHO (2019), burnout results from chronic workplace stress and is characterized by exhaustion, increased mental distance from one's job, and reduced professional efficacy. It can lead to severe consequences if symptoms are ignored (WHO, 2019). Originally described in the 1970s as a reaction to interpersonal job stressors, burnout manifests gradually over time and affects various professions, including social work, medicine, finance, and education (Korunka et al., 2020; Heinemann, 2017).

A global survey by Future Forum (2023) found that 42% of the workforce reported experiencing burnout. In the Philippines, 52% of workers reported experiencing burnout several times a month (Philippine Star, 2022). Occupations involving direct interaction with clients or customers are particularly susceptible to burnout, reflecting a widespread increase in employee exhaustion (Boyle & Bloomberg, 2023).

Teachers, playing a pivotal role in education, face significant job demands that make them susceptible to both stress and burnout. These demands include meetings, lesson preparation, grading, and adapting to educational reforms (Arvidsson et al., 2019). Over time, these pressures can lead to burnout, diminishing the joy and effectiveness of teaching.

Art therapy offers a creative approach to addressing mental health issues. Originating in the late 19th and early 20th centuries, art therapy has evolved through the work of pioneers like Adrian Hill, Margaret Naumburg, and Edith Kramer, each contributing to its therapeutic foundations (Bitonte & De Santo, 2014; Tobin, 2016). Art therapy involves various forms such as dance, music, and storytelling therapy, aiming to enhance self-expression, self-knowledge, and adaptation skills (Andrushko, 2017).

In conclusion, while significant attention is given to student mental health in academic settings, there is a need to address the mental health of educators, particularly in public schools, who also face substantial societal demands and changes. This study aims to investigate the effectiveness of group art therapy interventions for teachers experiencing stress and burnout.

The study aims to answer the following questions: a.) What is the level of stress and burnout among public school teachers before the program? b.) What is the stress and burnout level among public teachers

after the program? c.) Is there a significant difference between the level of stress and burnout of participants after the intervention? d.) What is the reaction and feedback of the participants on the group art therapy program?

Methodology

Research Design

This study adopts pretest-posttest research design to assess the efficacy of a Group Art Intervention in mitigating stress and burnout among public school teachers. The intervention involves participation in a sequence of tailored creative sessions incorporating diverse artistic techniques. Pre- and post-intervention data were collected and analyzed to ascertain the impact of the intervention.

Population and Sampling Technique

The researcher sought permission from the principal of Kalayaan Elementary School to conduct the study and was allocated grade three teachers as participants. Initially, 30 teachers completed the questionnaires, Perceived Stress Scale and The Maslach Burnout Inventory, and expressed interest in attending the intervention but only 19 were able to complete the program successfully. In the final analysis, participants who did not attend at least one of the sessions were excluded from the data analysis. The participants were duly informed about the benefits, procedures, and objectives of the study.

The participants in this study were grade three public school teachers from Kalayaan Elementary School. Distribution of in terms of age, sex, marital status, and years in teaching experience are presented in Table 1.

Table 1
Distribution of Participants in terms of Demographic Profile

Demographic Variable	Category	N	%
Age	25-30	1	5.3
	31-36	1	5.3
	37-41	2	10.6
	42-47	4	21.2
	48-53	2	10.6
	54-59	6	31.8
	60-65	3	15.9
Sex	Male	1	5.3
	Female	18	94.7
Marital Status	Married	18	94.7
	Singe	1	5.3
Years of teaching experience	5-10	1	5.3
	11-16	2	10.6
	17-22	4	21.2
	23-28	2	10.6
	29-33	5	26.5
	34-39	4	21.2
	40-45	1	5.3

The participants' ages range widely, with a concentration between 42 and 59 years old. This distribution suggests a diverse age group, possibly reflecting varying career stages and levels of experience among educators. The overwhelming majority of participants are female, indicating a gender disparity within the group. This gender distribution may influence perspectives on stress and burnout, as research often identifies gender differences in coping mechanisms and stress responses. Most participants are married, which could impact their stress levels and coping strategies differently compared to single individuals. Married participants might face additional stressors related to family responsibilities. Participants exhibit a range of teaching experience, with a notable concentration between 17 and 39 years. This distribution suggests a mix of early-career and seasoned educators, each potentially facing distinct stressors and burnout challenges related to their career longevity.

Instrumentation

The demographic profile, including age, civil status, and years of teaching experience, was collected to identify the participants. To assess and evaluate the stress and burnout rates among the participants, pre- and post-intervention questionnaires were administered. These questionnaires had been previously developed and validated.

Participants completed the pre-intervention questionnaires before the first session of the intervention program. Similarly, they filled out the same questionnaires at the conclusion of the program. Both sets of questionnaires were completed individually and subsequently analyzed comparatively to assess the impact of the intervention.

The instrument used to measure the level of stress was the Perceived Stress Scale (PSS-10). The PSS-10 is a widely used self-reported questionnaire designed to measure the degree of psychological stress perceived by an individual (Lee, 2012). Respondents reflect on their thoughts and feelings over the past month and rate the frequency of their experiences on a five-point Likert scale ranging from 'never' to 'very often'. The responses are scored as follows: 'Never' = 0, 'Almost never' = 1, 'Sometimes' = 2, 'Fairly often' = 3, and 'Very often' = 4. The total PSS score is obtained by summing across all items, resulting in a score ranging from 0 to 40. Higher scores indicate higher levels of perceived stress. Interpretation of the scores categorizes individuals into three groups based on their total score: low stress (0-13), moderate stress (14-26), and high perceived stress (27-40).

To measure burnout, the Maslach Burnout Inventory was used. It is considered a psychometrically sound tool for doing research and measuring occupational burnout (Anitei et al., 2021). The 22-items instrument focuses on three dimensions of measuring burnout, namely, occupational exhaustion (EE), depersonalization (DP), and personal achievement (PA). It is the leading psychological tool used in measuring burnout for more than a decade (Williamson et al., 2018). Each question prompts participants to rate the frequency of their experiences on a seven-point Likert scale ranging from 'never' to 'everyday'. Responses were then assigned numerical values as follows: 'Never' = 0, 'At least a few times a year' = 1, 'At least once a month' = 2, 'Several times a month' = 3, and 'Once a week' = 4, 'Several times a week' = 5, 'Every day' = 6. The score is then obtained by summing across all items for each dimension. For the overall score of occupational exhaustion (EE), the answers to questions 01, 02, 03, 06, 08, 13, 14, and 16 were summed. Similarly, for depersonalization/loss of empathy (DP), the answers to questions 05, 10, 11, 15, and 22 were totaled. Lastly, the overall score for personal accomplishment assessment (PA) was obtained by adding the responses to questions 04, 07, 09, 12, 17, 18, 19, and 21. These scores were then categorized into different degrees of burnout based on predefined thresholds. For occupational exhaustion, scores less than 17 were categorized as low degree, scores between 18 and 29 as moderate degree, and scores greater than 30 as high degree. Similarly, for depersonalization, scores less than 5 were classified as low degree, scores between 6 and 11 as moderate degree, and scores greater than 12 as high degree. As for personal accomplishment assessment, scores below 33 were considered low degree, scores ranging from 34 to 39 as moderate degree, and scores exceeding 40 as high degree.

Table 2
The Maslach Burnout Inventory Three Dimensions

Dimensions	Items
Occupational Exhaustion (EE) pertains to work-related difficulties, stress, and fatigue, distinct from depression, and often alleviated during breaks from work.	01 – I feel emotionally exhausted because of my work
	02 – I feel worn out at the end of a working day
	03 – I feel tired as soon as I get up in the morning and see a new working day stretched out in front of me
	06 – Working with people the whole day is stressful for me
	08 – I feel burned out because of my work
	13 – I feel frustrated by my work
	14 – I get the feeling that I work too hard
	16 – Being in direct contact with people at work is too stressful
	20 – I feel as if I'm at my wits' end
Depersonalization (DP) involves a loss of empathy and connection with others, leading to cynical attitudes and emotional detachment.	05 – I get the feeling that I treat some clients/colleagues impersonally, as if they were objects
	10 –I have become more callous to people since I have started doing this job
	11 – I'm afraid that my work makes me emotionally harder
	15 – I'm not really interested in what is going on with many of my colleagues
	22 – I have the feeling that my colleagues blame me for some of their problems
Personal accomplishment assessment (PA) serves as a "safety valve against burnout, fostering a positive perspective on professional achievements and maintaining fulfillment in the workplace.	04 – I can easily understand the actions of my colleagues/supervisors
	07 – I deal with other people's problems successfully
	09 – I feel that I influence other people positively through my work
	12 – I feel full of energy
	17 – I find it easy to build a relaxed atmosphere in my working environment
	18 – I feel stimulated when I been working closely with my colleagues
	19 – I have achieved many rewarding objectives in my work
	21 – In my work I am very relaxed when dealing with emotional problems

Data Analysis

Descriptive statistical analyses were conducted to provide a comprehensive overview of the grade three teachers from Kalayaan Elementary School. These analyses aimed to characterize the demographic profile, stress levels, and burnout among participants. Additionally, an independent t-test was employed to assess the significance of changes in stress and burnout levels before and after the intervention program.

Ethical Considerations

After receiving the principal's approval, a memo was given to the grade three teachers inviting them to attend an art intervention program. Participants were given the opportunity to review the informed consent materials, ask questions, and provide their consent before taking the pre-intervention questionnaires. Those interested in the study were asked to agree to take part in all the three sessions: once a week face-to-face meeting at 2 hours duration, with a total of four art activities. The topics were overview and introduction to art therapy, wheel of emotion, self-body state, Maslow's hierarchy of needs, inner flame, and debriefing session. Participants were given a chance to ask questions, share personal experiences, and offer insights during the debriefing session. After a week, all of the participants took the post-intervention questionnaires.

Results

Table 3 presents descriptive statistics for stress levels measured before (pre-test) the intervention. It includes information such as the average stress score (mean), and verbal interpretation. The results indicate that prior to the intervention, the teachers experienced a moderate stress with a mean score at 19 (SD=3.480). It implies that the participants might have encountered challenges contributing to their experience of stress before the intervention.

Stress Level During Pre-Intervention
Table 3
Descriptive Statistics on the Stress Level During Pre-Intervention

	Mean	Std. Deviation	Verbal Interpretation
Stress-pretest	19	3.480	Moderate Stress

Burnout Level During Pre-Intervention

Table 4 shows the participants' burnout level across three dimensions prior to the intervention program. The findings describe statistics pertaining to the pre-intervention levels of the three dimensions of Burnout among the participants: Occupational Exhaustion (EE), Depersonalization/loss of empathy (DP), and Personal Accomplishment (PA).

Table 4
Descriptive Statistics on the Stress Level During Pre-Intervention

	Mean	Std. Deviation	Verbal Interpretation
Occupational Exhaustion (EE)	17.95	6.050	Low degree
Depersonalization/loss of empathy (DP)	6.47	3.373	Moderate degree
Personal Accomplishment (PA)	26.00	6.412	Low degree

With a mean score of 17.95 and a standard deviation of 6.050, the data suggests a low degree of occupational exhaustion among participants. This implies that, on average, participants experienced relatively lower levels of exhaustion related to their work before the intervention. In the case of depersonalization/loss of empathy (DP), a mean score of 6.47 (SD= 3.373) indicates a moderate degree according to interpretation. This suggests that participants may have been experiencing loss of empathy and connection with others, leading to cynical attitudes and emotional detachment.

Lastly, the data pertaining to personal accomplishment (PA) reveal a mean score of 26 (SD=6.412), indicating a low level of accomplishment. This implies that participants may have been experiencing feelings of inadequacy or a lack of fulfillment in their professional achievements, despite their efforts and contributions.

Overall, these findings highlight the multifaceted nature of Burnout experienced by the participants prior to the intervention, encompassing dimensions of exhaustion, depersonalization, and reduced personal accomplishment.

Stress Level During Post-Intervention

In Table 5, the participants' stress levels during the post-intervention period are summarized. T h e data indicates the stress level reported by participants following the intervention. The mean stress score post-intervention is 15.37 (SD=4.425), suggesting a moderate degree of stress. This implies that although the participants still experience stress on average, there was a decrease in stress levels compared to the pre-intervention assessment.

Table 5
Descriptive Statistics on the Stress Level During Post-Intervention

	Mean	Std. Deviation	Verbal Interpretation
Stress-posttest	15.37	4.425	Moderate degree

Burnout Level During Post-Intervention

Table 6 outlines the burnout levels of participants following the intervention. The data indicates a low degree of occupational exhaustion among participants, with a mean score of 14.68 (SD= 5.812).

Table 6
Descriptive Statistics on the Burnout Level During Post-Intervention

	Mean	Std. Deviation	Verbal Interpretation
Occupational Exhaustion (EE)	14.68	5.812	Low degree
Depersonalization/loss of empathy (DP)	6.37	3.451	Moderate degree
Personal Accomplishment (PA)	30.84	4.787	Low degree

Results suggest that, on average, participants experienced relatively lower levels of exhaustion related to their work. This implies that despite having a low level of exhaustion before the intervention, the decrease in mean score post-intervention shows a positive impact of the intervention on reducing occupational exhaustion levels among participants.

Comparison of Stress Before and After the Intervention Program

Table 7 presents the results of a t-test conducted to compare stress levels before and after the intervention program. This table examines the mean, standard deviation, t-value, degrees of freedom, and significance level (2-tailed) for stress-pretest and stress-posttest.

Table 7
Paired t-test of Stress Before and After the Intervention Program

		Mean	Std. Deviation	t	df	Sig. (2-tailed)	Verbal Interpretation
Pair 1	Stress-pretest	19.00	3.480	6.120	18	<.001	Significant
	Stress-posttest	15.37	4.425				

The findings presented in Table 7 showcase the results of a t-test analysis conducted to evaluate the impact of an intervention program on participants' stress levels. This analysis compared stress-pretest scores, indicative of stress levels before the intervention, with stress-posttest scores, reflecting stress levels after the intervention.

Before the intervention, participants exhibited a mean stress level of 19.00 (SD=3.480). Following the intervention, there was a noticeable decrease in stress levels, with participants reporting an average stress score of 15.37(SD=4.425).

A t-test was employed to examine the significance of this change, yielding a substantial t-value of 6.120 with 18 degrees of freedom (df = 18) and a p-value of .001. As the p-value is less than the conventional significance level of 0.05, the observed change in stress levels from pretest to posttest is deemed statistically significant. It can be said that the group art intervention program has been effective in reducing the stress level of the study participants.

Comparison of Burnout Before and After the Intervention Program

Table 8 presents the results of a t-test analysis conducted to assess the impact of an intervention program on burnout levels among participants. It includes the mean, standard deviation, t-value, degrees of freedom (df), and significance level (2-tailed) for each pair of pretest and posttest scores.

Table 8

Paired t-test of Burnout Before and After the Intervention Program

		Mean	Std. Deviation	t	df	Sig. (2-tailed)	Verbal Interpretation
Pair 1	Occupational Exhaustion-pretest	17.95	6.050	2.761	18	.013	Significant
	Occupational Exhaustion-posttest	14.68	5.812				
Part 2	Depersonalization (DP)-pretest	6.47	3.373	.174	18	.864	Not significant
	Depersonalization (DP)-posttest	6.37	3.451				
Part 3	Personal Accomplishment-Pretest	26.00	6.412	-3.486	18	.003	Significant
	Personal Accomplishment-posttest	30.84	4.787				

The provided data presents the results of paired samples t-tests for three dimensions: Occupational Exhaustion, Depersonalization (DP), and Personal Accomplishment. For Occupational Exhaustion, participants reported a mean occupational exhaustion score of 17.95 (SD = 6.050), which decreased to 14.68 (SD = 5.812) following the intervention. The difference between these means is statistically significant ($t(18)$ = 2.761, p = .013), suggesting that the group art intervention led to a substantial reduction in occupational exhaustion among the participants, signifying its effectiveness in alleviating this aspect of their professional strain.

However, for Depersonalization (DP), the difference between pretest score 6.47 (SD=3.373) and posttest score 6.37 (SD=3.451) is not statistically significant ($t(18)$ = 0.174, p = .864) suggesting that the intervention did not lead to a significant change in participants' levels of depersonalization or loss of empathy.

For Personal Accomplishment (PA), participants reported a mean score of 26.00 (SD = 6.412), which increased to 30.84 (SD = 4.787) following the intervention. The difference between these means is statistically significant ($t(18)$ = -3.486, p = .003), indicating that the intervention had a significant positive effect on enhancing participants' feelings of professional achievement.

Reaction and Feedback to Group Art Intervention

Table 9

Participants Reaction and Feedback to Group Art Intervention

Theme	Quotes
Appreciation and Gratitude	"We are blessed to have this kind of Art activity. It is wonderful and amazing that we know and realize our diff. emotions and feelings within me through performing diff. activities. It is good to also know our inner feelings and mental health on how to handle this and release them of all negativity and find forgiveness. Thank you so much."

{table continues on the next page}

Personal Development and Self-awareness:	"It helps to gain self-expression, self-awareness, learning and personal development, as well as improve contact, communication, and interaction with other people."
	"It helped me understand myself more, especially my strengths and weaknesses and how I dealt with others."
	"It was great. Through that, I was able to deepen my understanding with my emotions and increase my self-awareness."
	"It boosts our self-esteem and explores our own creativity."
Stress Relief and Coping Skills:	"For me the group art activity that was conducted was exciting and a stress reliever. I was given a chance to self-reflect."
	"Through the activities, I learned to adjust whenever problems exist. I am trying to apply the activities that we made."
	"I can say that I achieved my goal to reduce stress and burnout."
	"...expresses your emotions or feelings while you're in the process of artmaking."

The qualitative data collected from participants' reflections on the art intervention program reveals key themes and insights regarding its impact on their mental health and personal development. One theme that emerges is the appreciation of the art intervention itself. Participants expressed gratitude for the opportunity to engage in art activities, describing it as "wonderful," "amazing," and a blessing. They emphasized how the activities allowed them to explore their emotions, improve their self-awareness, and release negativity. Additionally, participants noted the importance of the group setting in facilitating contact, communication, and interaction with others, highlighting the social benefits of the intervention.

Another theme is Personal Development and Self-awareness. Participants reported that the art activities helped them gain self-expression, self-awareness, and personal development. They described how engaging in the activities deepened their understanding of themselves, including their strengths, weaknesses, and interpersonal dynamics. Furthermore, participants noted that the activities boosted their self-esteem and nurtured their creativity, contributing to their overall sense of well-being and self-fulfillment.

Lastly, the data highlights the theme of Stress Relief and Coping Skills. Participants described the art activities as an effective stress reliever, providing them with a space for self-reflection and relaxation. They reported learning to adjust to challenges and applying the skills learned from the activities to manage stress and reduce burnout.

Discussion

The effectiveness of the intervention program in reducing occupational exhaustion and enhancing personal accomplishment among participants is evident in these findings. Similar positive outcomes have been observed in prior research (Anitei et al., 2021), where participants initially experiencing high levels of burnout showed significant improvement following art therapy sessions. However, the study also indicates a need for further investigation into why there was no significant change in depersonalization/loss of empathy despite improvements in other areas.

In addition to analyzing statistical outcomes, participants provided feedback on the group art intervention. Overall, they expressed satisfaction with the program, highlighting its educational value in enhancing their understanding of stress and burnout. Many participants found the art activities particularly beneficial for gaining self-awareness and deeper emotional understanding. Engaging in creative expression was described as a relaxing experience, offering participants a sense of autonomy and mastery over their creative endeavors.

In conclusion, these findings suggest that group art therapy effectively alleviated stress and mitigated burnout among participants, underscoring its potential as a valuable intervention for addressing these challenges. This underscores the importance of integrating art-based interventions into wellness programs aimed at enhancing mental health in educational settings. Institutions could benefit from implementing such initiatives to support teachers' mental well-being by addressing stress, occupational exhaustion, depersonalization, and feelings of low personal accomplishment. By utilizing art as a medium, the program aims to empower participants in navigating workplace challenges and fostering a more fulfilling professional experience.

While the intervention program led to significant improvements in reducing exhaustion and enhancing personal accomplishment, further exploration is warranted to address depersonalization/loss of empathy in the workplace.

The study encountered several challenges, including a limited participant pool, which constrained the study's ability to sufficiently represent diverse demographic backgrounds and differentiate levels of stress and burnout. Future research should prioritize collecting data from a larger sample size and consider collaborating with multiple institutions or schools to ensure greater diversity among educators, thereby enhancing the study's generalizability.

Additionally, due to time constraints, the researcher had to shorten the art intervention sessions. Future studies should explore extending these sessions to thoroughly assess the long-term effects of such interventions and develop tailored strategies to effectively address specific dimensions of burnout.

References

Aniței, A., Bulugac, D., Cacovean, C., Dascal, M., Henteș, E., Margă, P., & Zbranca, R. (2021). *Impact of artistic interventions on participants with burnout.* Cluj Cultural Center. https://art-wellbeing.eu/research-burnout/

Andrushko, V. A. (2017). Art therapy: A professional discipline in its adolescence. *Journal of Human Behavior in the Social Environment*, 27(4), 349-357. https://doi.org/10.1080/10911359.2016.1259386

Arvidsson, I., Leo, U., Larsson, A., Håkansson, C., Persson R., & Björk, J. (2019). Burnout among school teachers: quantitative and qualitative results from a follow-up study in southern Sweden. *BMC Public Health,* 19(655). https://doi.org/10.1186/s12889-019-6972-1

Bitonte, R. A., & De Santo, M. (2014). Art Therapy: An Underutilized, yet Effective Tool. *Mental Illness,* 6(1), 5354. https://doi.org/10.4081/mi.2014.5354

Boyle, M., & Bloomberg. (2023). The global white-collar burnout picture: Americans are less burned out at work but pencil pushers abroad are more miserable. *Fortune.* https://fortune.com/2023/02/15/worker-burnout-high-return-to-office-mandates-layoff-economy-fears/

Business Mirror. (2018). *Suicide of teachers, children prompts call for government action*. https://businessmirror.com.ph/2018/08/26/suicide-of-teachers-children-prompts-call-for-govt-action/

Clark, A. J. (2017). *Art therapy with adolescents.* Routledge.

Future Forum. (2023). Amid spiking burnout, workplace flexibility fuels company culture and productivity. *Future* Forum Pulse.

Gallup, Inc. (2022). *Global Emotions Report.* Gallup.com. https://img.lalr.co/

cms/2022/06/29185719/2022-Gallup-Global-Emotions-Report-2022_compressed.pdf

Heinemann, L. V., & Heinemann, T. (2017). Burnout Research: Emergence and Scientific Investigation of a Contested Diagnosis. *SAGE Open, 7*(1). https://doi.org/10.1177/2158244017697154

Lee, E.-H. (2012). Review of the psychometric evidence of the perceived stress scale. *Asian Nursing Research, 6*(4), 121-127. https://doi.org/10.1016/j.anr.2012.08.004

Jarzombek, M. (2000). *The psychologizing of modernity: art, architecture, and history*. New York: Cambridge University Press.

Kivimäki, M., & Steptoe, A. (2018). Effects of stress on the development and progression of cardiovascular disease. Nature reviews. *Cardiology, 15*(4), 215–229. https://doi.org/10.1038/nrcardio.2017.189

Korunka, C., Tement, S., Zdrehus, C., & Borza, A. (2020). Burnout Intervention Training for Managers and Team Leaders. https://books.google.com.ph/books/about/Burnout.html?id=pPiTMwEACAAJ&redir_esc=y

Philippine Star. (2022, January 12). Study shows 52% of Filipino workers experience burnout monthly. *Philippine Star.* https://www.philstar.com/headlines/2022/01/12/2154487/study-shows-52-filipino-workers-experience-burnout-monthly

HUMANITIES

Me, Myself, and I: The Effect of Self-Awareness Program in the Emotional Intelligence and Mental Well-Being of Sibuyanon Adolescents

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Abstract

Due to a shortage of mental health practitioners in rural areas like Sibuyan Island, adolescents face significant mental health challenges, including difficulty concentrating in class, low energy, anxiety about participation, and trouble regulating emotions. To address these issues, a self-awareness program was implemented to help adolescents better understand and express themselves. This study aimed to assess the impact of the program on emotional intelligence and mental well-being. A one-group pre-test and post-test research design was used, with 32 adolescents aged 13-17 who had lived on Sibuyan Island their entire lives participating in the 3-day program. Descriptive analysis and paired sample t-tests were used to evaluate changes in mental well-being and emotional intelligence. The results showed a significant improvement in the domain of "social emotional awareness" (p-value = 0.018), indicating a positive impact on emotional intelligence. However, no significant difference was found in mental well-being scores (p-value = 0.968). In summary, the self-awareness program improved adolescents' emotional intelligence but did not significantly impact their immediate mental well-being.

Keywords: *self-awareness, emotional intelligence, mental well-being, adolescents, Sibuyan*

Adolescence is a developmental stage marked by the transition from childhood to adulthood, characterized by significant physical and psychological changes. This period often involves struggles and challenges that can impact adolescents' mental health.

Research by Malolos et al. (2021) highlighted a concerning trend: 10% to 15% of Filipinos aged 5 to 15 are experiencing mental health issues. The World Health Organization reported that 16.8% of Filipinos aged 13 to 17 have attempted suicide. Additionally, mental health issues were identified as the third most common problem in the Philippines. The University of the Philippines Population Institute (2022) also noted that Filipino youth are in particularly poor mental health, with 1 in 5 individuals aged 15 to 24 having attempted suicide. Their survey showed a significant rise in depressive symptoms among Filipino youth from 2013 to 2021.

Despite these alarming statistics, the Philippines faces a shortage of mental health facilities and practitioners. According to Malolos et al. (2021), there are only five government hospitals with psychiatric facilities for children, 84 general hospitals with psychiatric units, and 46 outpatient facilities, of which only 11 are designated for children and adolescents. Furthermore, the majority of mental health practitioners are concentrated in urban areas, leaving adolescents in rural areas underserved. Devi and Patra (2022) highlighted the vulnerability of adolescents to mental health issues due to the numerous physical, psychological, and emotional changes they experience during this transition.

Blakemore and Agllias (2019) defined self-awareness as a state of accurate recognition and understanding of one's feelings, thoughts, motivations, and behaviors. Stefan and Cheie (2022) described self-awareness as the ability to understand one's internal experiences, including thoughts, emotions, and behaviors. Watts and Pina (2023) further explained that self-awareness involves comprehending one's emotions, thoughts, values, strengths, and limitations. Baulch (2023) compared self-awareness to observing one's thoughts and feelings from a detached perspective, focusing on internal experiences rather than external events.

The Alvarado Parkway Institute Behavioral System (2022) identified several benefits of self-awareness, including personal growth, improved emotional regulation, better mental well-being, healthier interpersonal relationships, and greater life satisfaction. Smeets et al. (2015) found that patients recovering from acquired brain injuries who were aware of their limitations showed better outcomes in terms of independence, psychological and emotional adjustment, and employment.

Devi and Patra (2022) emphasized that mental well-being in adolescents is closely linked to self-awareness of their strengths, weaknesses, and desires. They suggested that self-awareness during adolescence can lay a foundation for future life experiences.

Self-awareness is also a key component of emotional intelligence (Ahmed, 2015; Menon & Nakhat, 2020). Gill et al. (2015) developed a causal loop diagram illustrating that self-awareness enhances emotional intelligence. Iqbal et al. (2022) concluded that self-awareness helps in developing emotional intelligence, which can manage deviant behaviors in students.

On Sibuyan Island, adolescents face mental health challenges such as difficulty focusing on class, low energy, anxiety about being called on, impulsivity, mood regulation issues, and trouble expressing thoughts and emotions. To address these issues, a self-awareness program was implemented to help adolescents better understand and express themselves in healthier ways.

The researcher aimed to evaluate the impact of the self-awareness program on the mental well-being and emotional intelligence of adolescents in Sibuyan. This study sought to answer the following research questions:

1. What is the level of emotional intelligence of the participants before and after the program?
2. What is the level of mental well-being of the participants before and after the program?
3. Is there a significant difference in the level of emotional intelligence of the respondents before and after the program?
4. Is there a significant difference in the level of mental well-being of the respondents before and after the program?

Methodology

Research Design

This study employed a one-group pretest-posttest design. According to Cranmer (2023), this design involves two main features: (1) a single group of participants who all receive the same intervention, and (2) measurements of the dependent variable before and after the intervention. The difference between pre-test and post-test scores is used to assess the intervention's impact.

The Self-Awareness Program lasted for three consecutive days, with only a one-day interval between the pre-test and post-test. To control for potential extraneous variables, such as historical events, maturation, or regression to the mean that could affect post-test scores, the researcher minimized the time interval between tests (Price et al., 2013).

Participants

The study included 32 adolescents, aged 13 to 17 years, all of whom were residents of Sibuyan Island. Given that the participants were all from Sibuyan Island, a purposive sampling technique was used. Purposive sampling, as defined by the American Psychological Association (2023), involves selecting participants based on specific characteristics relevant to the study.

Table 1

Participants' Demographic Profile

Demographics		N	%
Sex	Male	11	34
	Female	21	66
Age of Male Participants	13	3	27
	14	6	55
	15	1	9
	17	1	9
Age of Female Participants	13	3	14
	14	7	33
	15	6	29
	16	3	14
	17	2	10
Length of Stay in Sibuyan Island	Since birth	32	100

All 32 participants had lived on Sibuyan Island since birth. Of these, 34% were male and 66% were female. The age distribution was as follows: 27% of males and 14% of females were 13 years old; 55% of males and 33% of females were 14 years old; 9% of males and 29% of females were 15 years old; 0% of males and 14% of females were 16 years old; 9% of males and 10% of females were 17 years old.

Instrumentation

The following instruments were used to assess participants' mental well-being and emotional intelligence:

- **Quick Emotional Intelligence Self-Assessment:** This tool measures four domains of emotional intelligence: emotional self-awareness, emotional management, social awareness, and relationship management. It is adapted from Paul Mohapel's model (New England Occupational Therapy Education Council, 2023).
- **Warwick-Edinburgh Mental Well-Being Scale (WEMWBS):** This scale assesses mental well-being and is validated for individuals aged 13 and above (NHS Health Scotland, 2006; Public Health Scotland, 2023).

Data Gathering Procedure

The researcher conducted a needs analysis by interviewing teachers at the target school. The interviews were recorded, transcribed, reviewed, and analyzed to identify the students' needs. Key issues included difficulty focusing, low energy, anxiety about class participation, low self-confidence, trouble controlling impulses, and communication difficulties. Teachers also requested that the program address specific grade levels with the most challenges.

Based on these findings, the researcher developed the "Self-Awareness Program" to help participants better understand their thoughts, feelings, and behaviors. The program was delivered face-to-face in a classroom setting. Participants were selected by teachers, and an orientation was conducted. Those who chose not to participate or did not meet the criteria were excluded. Informed assent and consent were obtained before administering a pre-test, followed by the intervention. Attendance was monitored to ensure consistency, and a post-test was administered after the program.

Data Analysis

Descriptive analysis was used to make raw data more comprehensible and prepare it for further statistical analysis (Rawat, 2021). Additionally, a paired sample t-test was conducted to determine if there were significant differences in emotional intelligence and mental well-being scores before and after the intervention. The paired sample t-test is commonly used to compare scores from the same group at different times (Kent State University, 2021).

Ethical Consideration

Given the participants' ages (13 to 17 years), informed assent was obtained from the participants and informed consent from their parents or legal guardians. Approval was secured from the target school, the Ethical Review Boards of AUP, and the research instruments and program were validated by three experts.

Results

The data was analyzed using descriptive statistics to determine the levels of emotional intelligence and mental well-being of the participants before and after the program. A paired t-test was then conducted to assess if there were significant differences.

Level of Emotional Intelligence of the Participants Before and After the Program

In the pre-test results in Table 3, three domains—emotional awareness (M = 26.03, SD=3.50), emotional management (M=26.84, SD=4.98), and relationship management (M = 26.91, SD=6.24)—were rated as "effective functioning: consider strengthening." This indicates that participants were already effective in regulating their emotions and managing relationships. However, social emotional awareness (M=23.41, SD=3.67) was rated as "area for enrichment requires attention and development," suggesting a need for improvement in recognizing others' emotions.

Table 3
Result of Emotional Intelligence Pre-test

	Mean	SD	Verbal Interpretation
Emotional Awareness	26.03	3.50	Effective Functioning: Consider Strengthening
Emotional Management	26.84	4.98	Effective Functioning: Consider Strengthening
Social Emotional Awareness	23.41	3.67	Area for Enrichment: Requires attention and development
Relationship Management	26.91	6.24	Effective Functioning: Consider Strengthening

In the post-test presented in Table 4, all domains were rated as "effective functioning: consider strengthening." This shows that the program-maintained participants' effective emotional awareness, emotional management, and relationship management. Notably, social emotional awareness improved from an "area for enrichment" to "effective functioning," indicating the program's success in enhancing participants' ability to recognize others' emotions.

Table 4
Result of Emotional Intelligence Post-test

	Mean	SD	Verbal Interpretation
Emotional Awareness	27.56	6.15	Effective Functioning: Consider Strengthening
Emotional Management	28.06	5.59	Effective Functioning: Consider Strengthening
Social Emotional Awareness	26.22	4.83	Effective Functioning: Consider Strengthening
Relationship Management	30.03	5.92	Effective Functioning: Consider Strengthening

Level of Mental Well-Being of the Participants Before and After the Program
The pre-test showed in Table 5 that most statements were rated as "high," except for "I've been feeling relaxed," which was rated as "average." Overall, the mental well-being of participants was in good condition before the program, with a mean score of 51.19 (SD=8.26).

Table 5
Result of Mental Well-being Pre-test

Test Statement	Mean	SD	Verbal Interpretation
I've been feeling optimistic about the future.	3.97	0.90	High
I've been feeling useful.	3.94	1.01	High
I've been feeling relaxed.	3.06	1.08	Average
I've been feeling interested in other people	3.44	1.01	High
I've had energy to spare.	3.25	1.19	High
I've been dealing with problems well.	3.34	1.23	High
I've been thinking clearly.	3.47	1.19	High
I've been feeling good about myself.	3.78	1.18	High
I've been feeling close to other people.	3.69	0.10	High
I've been feeling confident.	3.75	1.05	High
I've been able to make up my own mind about things.	3.66	1.10	High
I've been feeling loved.	3.97	1.15	High
I've been interested in new things.	4.28	0.77	High
I've been feeling cheerful.	3.59	0.99	High
Mental Well-being Sum	51.19	8.26	High

The post-test results in Table 6 showed all statements rated as "high," indicating that the participants' mental well-being remained at a high level after the program, with a mean score of 51.09 (SD = 8.65).

Table 6
Result of Mental Well-being Post-test

Test Statement	Mean	SD	Verbal Interpretation
I've been feeling optimistic about the future.	3.81	1.20	High
I've been feeling useful.	3.41	1.04	High
I've been feeling relaxed.	3.66	1.10	High
I've been feeling interested in other people	3.56	1.08	High
I've had energy to spare.	3.53	1.14	High
I've been dealing with problems well.	3.53	0.67	High
I've been thinking clearly.	3.63	1.07	High
I've been feeling good about myself.	3.94	0.98	High
I've been feeling close to other people.	3.41	1.10	High
I've been feeling confident.	3.56	1.24	High
I've been able to make up my own mind about things.	3.88	0.94	High
I've been feeling loved.	3.78	1.24	High
I've been interested in new things.	3.84	1.02	High
I've been feeling cheerful.	3.56	1.08	High
Mental Well-being-Sum	51.09	8.65	High

Comparison of Emotional Intelligence Pre-test and Post-test

The paired t-test results in Table 7 showed no significant difference in emotional awareness, emotional management, and relationship management between the pre-test and post-test, suggesting the program did not affect these domains. However, social emotional awareness showed a significant improvement (p-value=0.02), indicating that the program effectively increased participants' awareness of others' emotions.

Table 7
Comparison of Emotional Intelligence Pre-test and Post-test

		Mean	Std. Deviation	t	df	Sig. (2-tailed)	VI
Pair 1	Emotional Awareness (Pre-test)	26.03	3.50	-1.02	31	0.32	NS
	Emotional Awareness (Post-test)	27.56	6.15				
Part 2	Emotional Management (Pre-test)	26.84	4.98	-0.82	31	0.42	NS
	Emotional Management (Post-test)	28.06	5.59				
Part 3	Social Emotional Awareness (Pre-test)	23.41	3.67	-2.50	31	0.02	Sig
	Social Emotional Awareness (Post-test)	26.22	4.83				
Part 4	Relationship Management (Pre-test)	26.91	6.24	-1.95	31	0.06	NS
	Relationship Management (Post-test)	30.03	5.92				

*Legend: **Correlation is signification at the 0.05 level (2-tailed).*

Comparison of Mental Well-being Pre-test and Post-test

The paired t-test results in Table 8 showed no significant difference in overall mental well-being scores between the pre-test and post-test (p-value=0.97), indicating that the program did not significantly impact the mental well-being of the participants.

Table 8

Comparison of Mental Well-being Pre-test and Post-test

		Mean	Std. Deviation	t	df	Sig. (2-tailed)	VI
Pair 1	Mental Well-being (Pre-test)	51.19	8.26	0	31	0.97	NS
	Mental Well-being (Post-test)	51.09	8.65				

*Legend: ** Correlation is significant at the 0.05 level (2-tailed).*

Discussion

The pre-test mean scores of all domains of emotional intelligence increased after the intervention, although the increase was not significant except for social emotional awareness. Malekar (2007) argued that self-awareness is the foundation of emotional intelligence. She believed that a self-aware person can make decisions that not only help themselves but also benefit those around them. Her research showed that leaders with high levels of self-awareness also had higher emotional intelligence (EQ), leading to better relationships and more favorable ratings from both superiors and subordinates compared to those with lower self-awareness. Similarly, Deya and Julius (2014) asserted that self-awareness is essential for developing sound judgment and excellent communication and interpersonal skills. Md-Nawi et al. (2017) also noted that emotional intelligence significantly contributes to success as a student, teacher, parent, manager, and leader.

The mental well-being measured in this study refers to the immediate mental well-being of the participants, assessed immediately after the program. Since the program lasted three consecutive days, some participants reported that the reflections and other activities were taxing, which might have contributed to the decrease in their post-test mental well-being mean scores. Mertens et al. (2022) conducted a study on self-awareness, dividing it into three dimensions: emotional self-regulation, self-esteem, and self-reflection. Their results revealed that emotional self-regulation and self-esteem had a significant positive relationship with psychological well-being. However, self-reflection, heavily utilized in this study's self-awareness program, had no significant relationship with psychological well-being. On the contrary, O'Hara-Gragan (2023) maintained that self-compassion contributes to self-awareness, helping individuals understand human imperfection, respond to difficult situations with self-kindness, and ultimately impacting their well-being.

As adolescents transition from childhood to adulthood, alongside other changes in their physical and psychological health, it is crucial for them to know and understand themselves to maintain their mental well-being. Developing and enhancing emotional intelligence can help them better handle various situations. Devi and Patra (2022) emphasized that self-awareness during adolescence can be a foundation for their experiences as adults.

This study demonstrates that being self-aware can help adolescents improve their emotional intelligence, particularly their social emotional awareness, which can be beneficial in interactions with others. However, the results indicate that self-awareness is not a significant contributing factor to the immediate mental well-being of adolescents. The researcher recommends exploring other potential variables that may influence or affect the emotional intelligence and well-being of adolescents. Increasing the number of participants from different geographical locations is also suggested.
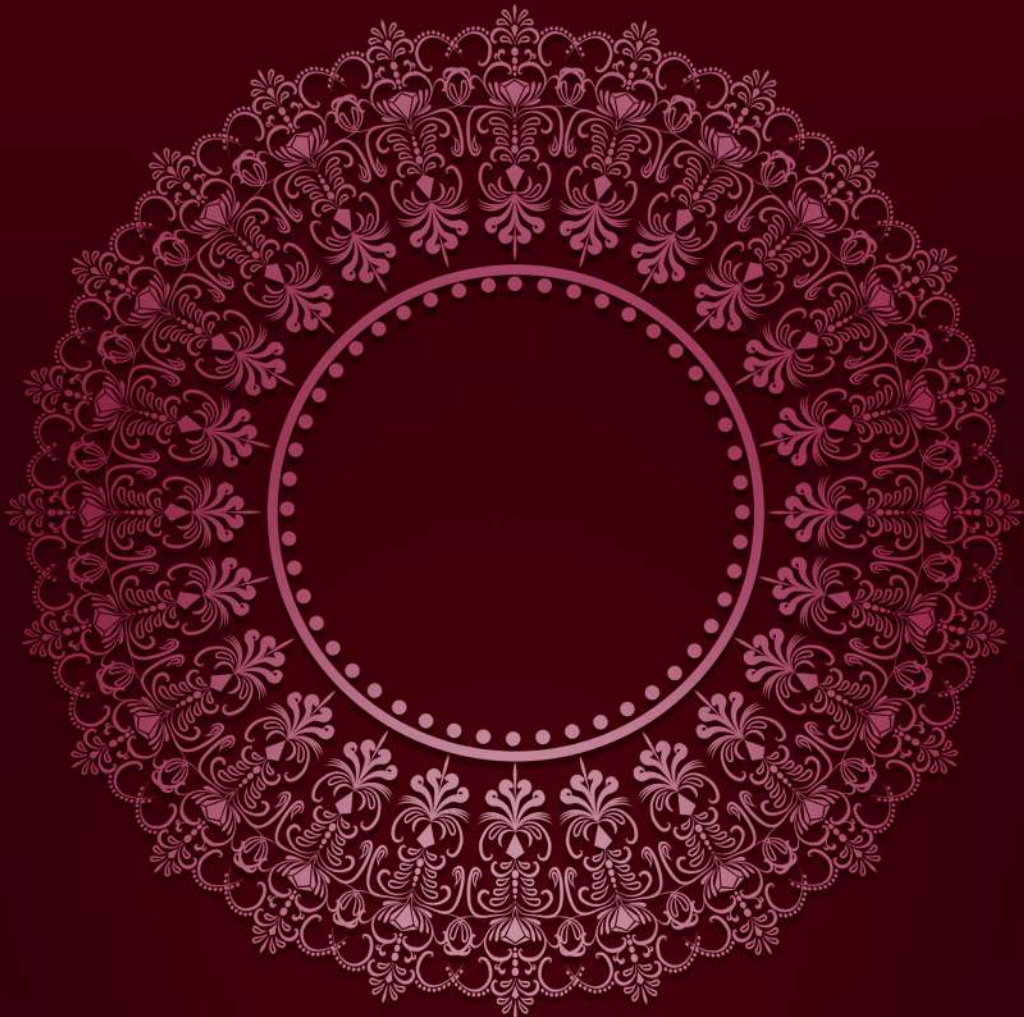
The study reveals that the participants' levels of emotional intelligence and well-being are both in effective functioning. Since the self-awareness program is not a significant indicator of emotional intelligence and well-being, future researchers are encouraged to explore other programs that focus on both intrapersonal and interpersonal aspects to identify factors affecting adolescents' emotional intelligence and mental well-being.

Finally, this study supports the recommendation to place mental health practitioners in high schools, especially in rural areas where they are currently lacking, to facilitate adolescents' self-awareness processes and address their mental health needs.

References

Ahmed, H. (2015). Emotional intelligence and job satisfaction among university teachers. *Scholedge International Journal of Multidisciplinary & Allied Studies, 2*(4).

Alvarado Parkway Institute Behavioral System. (2022, October 3). *Why is being self-aware important for your mental health?* http://bitly.ws/Jy3d

American Psychological Association. (2023). APA dictionary of psychology. https://dictionary.apa.org/purposive-sampling

Baulch, J. (2023). Self-awareness: The key to taking care of your mental health and well-being. *Inner Melbourne Clinical Psychology*. http://bitly.ws/JxZN

Blakemore, T., & Agllias, K. (2019). Students' reflections on vulnerability and self-awareness in a social work skills course. *Australian Social Work, 72*(1), 21-33. https://doi.org/10.1080/0312407X.2018.1516793

Cranmer, G. A. (2023). One-group pretest-posttest design. *Sage Research Methods*. https://bit.ly/44RJlV

Devi, S., & Patra, S. (2022). Exploring adolescents' mental health, strengths, weaknesses, and wishes. *Journal of Psychosocial Research, 17*(2), 467-475. https://doi.org/10.32381/JPR.2022.17.02.18

Deya, A. M., & Julius, S. H. (2014). Decision-making styles and self-awareness among destitute adolescent girls. *Indian Journal of Health and Wellbeing, 5*(9), 1091-1093.

Gill, L., Ramsey, P., & Leberman, S. (2015). A system approach to developing emotional intelligence using the self-awareness engine of growth model. *Systemic Practice & Action Research, 28*(6), 575-594. https://doi.org/10.1007/s11213-015-9345-4

Iqbal, J., Asghar, M. Z., Ashraf, M. A., & Yi, X. (2022). The impact of emotional intelligence on students' study habits in blended learning environments: The mediating role of cognitive engagement during COVID-19. *Behavioral Sciences, 12*(1), 14. https://doi.org/10.3390/bs12010014

Kent State University. (2021). *SPSS tutorials: Paired sample t-test*. https://libguides.library.kent.edu/spss/pairedsamplesttest

Malekar, S. (2007). Emotional intelligence-self awareness. *A Journal of New Delhi Institute of Management, 5*(2), 46. https://doi.org/10.20968/rpm/2007/v5/i2/100966

Malolos, G. Z., Baron, M. B., Apat, F. A., Sagsagat, H. A., Pasco, P. B., Aportadera, E. T. C., Tan, R. J., Evardone, A. J., & Prisno, D. E. (2021). Mental health and well-being of children in the Philippine setting during COVID-19 pandemic. *Health Promotion Perspectives, 11*(3), 267-270. https://doi.org/10.34172/hpp.2021.34

Md-Nawi, N. H., Redzuan, M., Hamsan, H., & Md-Nawi, N. H. (2017). Emotional intelligence (self-awareness, self-management, social awareness, and relationship management) and leadership behavior (transformational and transactional) among school education leaders. *International Journal of Educational Studies, 4*(2), 37-47. http://www.escijournals.net/IJES

Menon, A., & Nakhat, P. (2020). Emotional intelligence in college students. *Journal of Psychosocial Research, 15*(2), 575-587. https://doi.org/10.32381/JPR.2020.15.02.19

Mertens, E., Decovic, M., van Londen, M., & Reitz, E. (2022). Parallel changes and positive youth development and self-awareness: The role of emotional self-regulation, self-esteem, and self-reflection. *Prevention Science, 23*(4), 502-512. https://doi.org/10.1007/s11121-022-01345-9

New England Occupational Therapy Education Council. (2023). The Emotional Intelligence Self-Assessment. https://bitly.ws/TooW

NHS Health Scotland. (2006). *The Warwick-Edinburgh mental well-being scale* (WEMWBS). http://www.ocagingservicescollaborative.org/wp-content/uploads/2014/07/3.2.4-WEMWBS.pdf

O'Hara-Gregan, J. (2023). Supporting early childhood teacher well-being through the practice of mindful self-compassion. *Australasian Journal of Early Childhood, 48*(4), 319-331. https://doi.org/10.1177/18369391231202833

Price, P. C., Jhangiani, R. S., & Chiang, C. A. (2013). Research methods in psychology (2nd ed.). Creative Commons Attribution-NonCommercial-ShareAlike 4.0 *International License*. https://bitly.ws/3gia8

Public Health Scotland. (2023). *Mental Health and Wellbeing*. https://bitly.ws/TosL

Rawat, A. S. (2021, March 31). An overview of descriptive analysis. *Analytic Steps*. https://www.analyticssteps.com/blogs/overview-descriptive-analysis

Smeets, S., Vink, M., Ponds, R., Winkens, I., & Heugten, C. (2015). Changes in impaired self-awareness after acquired brain injury in patients following intensive neuropsychological rehabilitation. *Neuropsychological Rehabilitation, 27*(1), 116-132. http://dx.doi.org/10.1080/09602011.2015.1077144

Stefan, C. A., & Cheie, L. (2022). Self-compassion and social anxiety in late adolescence: Contribution of self-reflection and insight. *Self and Identity, 21*(2), 210-222. https://doi.org/10.1080/15298868.2020.1861082

University of the Philippines Population Institute. (2022, October 10). Pinoy youth in worse mental health today, nationwide survey indicates. http://bitly.ws/JxVK

Watts, S. H., & Pina, K. (2023). Bibliotherapy and social and emotional learning in the elementary music setting. *Journal of General Music Education, 36*(3), 5-12. https://doi.org/10.1177/27527646231154541