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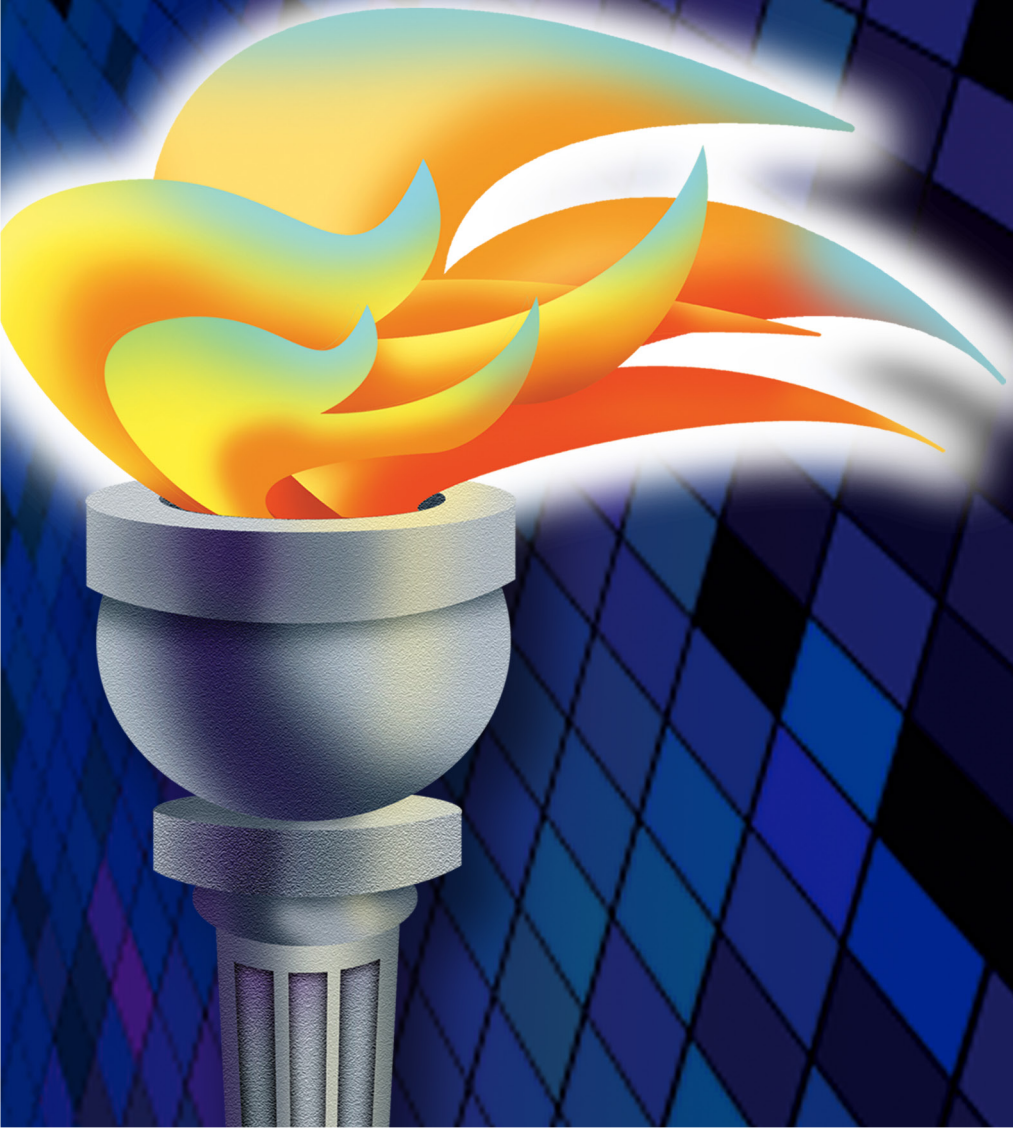

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ABOUT THE JOURNAL

The PAFTE Journal of Education is an international, peer-reviewed, and professional journal published twice a year by the Philippine Association for Teachers and Educators (PAFTE), Inc.. Its official language is English and thus only publishes manuscripts written in English.

AIMS AND SCOPE

PAFTE Journal of Education publishes scholarly articles on teachers, teaching, and teacher education in both local and international perspectives and contexts. It is a venue for teacher-researchers to share their empirical studies at various levels of the education system from early childhood to teacher preparation and teachers' continuing professional development programs in university, including non-formal education. Articles submitted to the PAFTE Journal of Education must shed light on critical and relevant issues and problems surrounding the theory, practice, and profession of teaching in the Philippines and beyond.

PAFTE Journal of Education welcomes submissions on the following broad themes of teacher and teaching research:

- beliefs, thoughts, cognitions, emotions, and well-being
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- understanding and mastery of subject matter
- professionalism, professional identities, and professional development
- values, motivations, commitment and resilience as influenced by contextual factors in structural, cultural and social environments
- learning in the subject matter
- effective teaching strategies across a broad range of teaching contexts and levels
- teaching and learning assessment
- mentoring and supervision in schools

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The journal accepts for publication research manuscripts that are within the journal's scope or with implications for teaching and learning, done within the bounds of ethical practice, and passed the review of the editorial board and peer reviewers. Authors must follow the prescribed format and style in the preparation of the manuscript. If the manuscript does not conform to the journal's format and style, it will be returned to the author for revision or rejected outright. Authors are responsible for the content of their work and, therefore, must defend their work if challenged. The journal reserves the right to make language and technical corrections in the manuscript accepted for publication. With copyright, the journal prohibits the publication of the same manuscript in other journals or publication venues.

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1. Authors guarantee that their manuscript is their original work, no part of it is plagiarized, and has no prior publication in any journal. They warrant that proper attribution through citations of borrowed ideas or information is done. If plagiarism is discovered, the manuscript will be rejected or retracted if it has been published already.

2. Authors take full responsibility of the accuracy of the references and the text being cited.

3. Authors are required to write their names according to their contribution to the research work and to name under the "ACKNOWLEDGEMENT" section individuals or organizations that contributed to the research work.

4. For a manuscript to be included in the publication, authors must revise the manuscript in the light of the reviewers' comments and submit the revised version within the prescribed period. Late submission of the revised version means inclusion of the manuscript in the succeeding issue. Authors must submit the manuscript in softcopy and in conformity to the journal's format and style.

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GUIDELINES FOR MANUSCRIPT PREPARATION AND SUBMISSION

1. The following settings must be observed: 1 inch for top and bottom margins, 1.5 inches for left and right margins, double spacing for text, bottom right corner for page number (x of y – 2 of 17), Times New Roman as font style, and font size of 12.
2. The textual element is in English.
3. The structure of the manuscript covers the following parts:
    a. Title with authors' names, email address, and affiliation with address
    b. Abstract with key words (4-6 in order of importance)
    c. Introduction (integration of context, gap, theoretical underpinnings, related literature and studies, significance, research questions)
    d. Methods
    e. Results and Discussion
    f. Conclusion
    g. Acknowledgment
    h. References
    i. Appendices (if necessary)
4. Text and tables are in Microsoft Word.
5. Tables and figures, if necessary, are embedded in the text.
6. Tables/figures, citations, and references follow the APA 7th Edition Guidelines.
7. Submission of the manuscript is in softcopy.

TABLE OF CONTENTS

[i] Title Page
[ii] Copyright Page
[iii] About the Journal / Aims and Scope
[iv] Editorial Policy
[iv] Peer Review Policy
[v] Author's Responsibilities
[vi] Guidelines for Manuscript Preparation and Submission

[1] ***Students' Learning Styles, Motivation, And Academic Performance In Learning Mathematicsthrough Online Distance Modality***
Novie Nicole F. Buhawe
Sohaya M. Methalicop
Haylon D. Ditucalan
Mindanao State University - Main Campus
haylon.ditucalan@msumain.edu.ph

[39] ***Project Support (Supporting Professional Development Opportunities To Refine Teachers' Competence): Helping Teachers To Teach Better***
Ma. Junelia m. Tibay
Bugarin Elementary School, Pililla Sub-Office,
Department of Education
majunelia.tibay@deped.gov.ph

Ruben E. Faltado III
Binangonan Sub-Office, Department of Education
ruben.faltado@deped.gov.ph

[60] ***Antecedents Of Gender Stereotyping***
Jojames Arnaldo G. Gaddi
Melissa P. Macabodbod
AJ Marielle P. Pongcol
Andrei John Matthew C. Lipio
Stephanie Paula Mendoza
St. Paul University Surigao
mr.jojamesgaddi@gmail.com

[90] ***Cross-Linguistic Influence Of Mother Tongue To English: Phonological And Orthographic Processing Skills***
Mel Jazer P. Cape
Jubille May V. Lila
Keir Paolo L. Viejo
J-Roel B. Semilla
Angeline P. Dinoro, Phd
Juliet C. Tero, Phd
Mindanao State University – Iligan Institute of Technology
jubillemay.lila@G.msuiit.edu.ph

[113] ***Challenges Of Novice Teachers In Lesson Delivery: Basis For Mentoring Program***
Marmie H. Garcia
Tanay National High School
marmie.garcia@Deped.gov.ph

Ruben E. Faltado III
Public Schools Division Binangonan Sub-Office,
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STUDENTS' LEARNING STYLES, MOTIVATION, AND ACADEMIC PERFORMANCE IN LEARNING MATHEMATICS

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ABSTRACT

This study investigated the learning styles, motivational factors, and academic performance of students engaged in online distance learning in mathematics. Employing a descriptive correlational research design, 150 students from various colleges within Mindanao State University – Main Campus participated in the study. The findings indicated that individual learning emerged as the most preferred learning style, while kinesthetic learning was the least favored in the online environment. Key motivational factors identified included intrinsic motivation, self-regulation, self-efficacy, and the perceived utility value of mathematics. The analysis revealed a significant relationship between academic performance and motivation, particularly in the areas of self-regulation and self-efficacy, while intrinsic motivation and utility value were not significantly correlated with academic performance. The study recommends that students develop awareness of their preferred learning styles to optimize academic

outcomes and engage in self-reflective practices to better understand these preferences. Educators are encouraged to design instructional activities that align with students' preferred learning styles and to emphasize the development of self-regulation and self-efficacy, given their positive association with academic success. Further, school administrators should implement intervention programs that address diverse learning styles and motivational needs. Future research is advised to further explore the intricate relationships between learning styles, motivation, and academic performance to deepen understanding and inform educational practices.

Keywords: *academic performance, learning style, motivation, online distance modality*

INTRODUCTION

The onset of the COVID-19 pandemic compelled educational institutions worldwide to transition to non-face-to-face teaching modalities to maintain educational continuity, utilizing various technologies for both synchronous and asynchronous communication between students and instructors (Marinoni, 2020). In the Philippines, universities and state colleges halted in-person classes and rapidly adopted online education. This abrupt shift posed significant challenges for both students and instructors. Consequently, understanding the learning patterns and preferences of online college students has become crucial for developing effective educational strategies to enhance academic performance in a distance learning context. Harb and El-Shaarawi (2006) indicate that aligning students' learning preferences with instructors' teaching styles positively impacts academic performance.

Academic performance, a key indicator of student effectiveness, is typically assessed through classroom performance, graduation rates, and

standardized test results. The quality of education in the Philippines came under scrutiny in 2019 due to low performance outcomes in both local and international assessments (Hernando-Malipot, 2019). Even prior to the pandemic, there were signs of an educational crisis in the Philippines, which the World Bank noted had been exacerbated by COVID-19. Despite various remedial efforts, challenges persist, underscoring the need for a deeper understanding of factors affecting students' academic performance during the pandemic, including their learning styles. Previous research has explored the relationship between learning styles and academic performance (Dalmolin et al., 2018; Magulod, 2019). Studies indicate that students who use divergent learning styles tend to perform better academically, as these styles align more closely with their learning preferences (Vizeshfar & Torabizadeh, 2018). When teaching methods do not match students' learning styles, it could lead to decreased academic performance and negative attitudes toward the subject matter (Naik et al., 2013, as cited in Bosman & Schulze, 2018). Conversely, aligning teaching methods with students' learning styles improves grades and fosters a positive attitude toward learning. Motivation plays a significant role in academic success, influencing study strategies, academic performance, adjustment, and overall well-being (Vansteenkiste et al., 2009). Research by the American Psychological Association (APA) highlights that student motivation is linked to their engagement and success in academic settings. Students are more likely to be motivated when they understand their preferred learning styles, which can, in turn, impact their academic performance.

Given the critical role of learning styles and motivation in academic success, this study examined the relationship between students' learning styles, motivation, and academic performance during the second semester of academic year 2021–2022 at Mindanao State University – Main Campus. Specifically, it investigated the impact of motivation on academic success, identified strategies to enhance academic performance based on learning styles and motivational factors, and provided recommendations for educational practices in the context of online learning. In light of the ongoing educational challenges posed by the

pandemic, this research is essential for identifying strategies to enhance students' academic performance. The study sought to provide insights into how learning styles and motivational factors influence academic outcomes and offer recommendations for improving educational practices.

Literature Review

This study is anchored on several theoretical frameworks related to learning styles and motivation, providing a comprehensive foundation for understanding how these factors influence academic performance. The investigation draws on Reid's Perceptual Learning Style Theory, Neil Fleming's VARK Model, David Kolb's Experiential Learning Theory, and Dunn and Dunn's Learning Styles Model to explore learning preferences. These theories posit that individuals possess distinct learning styles that best suit their learning processes, and that recognizing these preferences can significantly enhance educational effectiveness (Dunn & Burke, 2002; Fleming & Mills, 1992; Kolb, 1984; Reid, 1987, 1995).

Reid (1987) identifies various learning styles, including auditory, visual, kinesthetic, tactile, group, and individual preferences, emphasizing that learners differ in how they absorb and process information. Fleming and Mills (1992) introduced the VARK Model, categorizing learning preferences into Visual, Aural, Read/Write, and Kinesthetic modalities. This model suggests that aligning instructional methods with students' preferred learning styles could lead to improved educational outcomes. Dayon (2018) further elaborates that learning styles are shaped by biological and developmental factors, highlighting the importance of matching teaching strategies with individual learning preferences to enhance student motivation and knowledge acquisition (Zubaedi et al., 2021).

Kolb's Experiential Learning Theory (1984) asserts that learning is a dynamic process involving the transformation of experience into knowledge, following a four-stage cycle: experiencing, reflecting, thinking, and acting. This theory underscores the necessity of recognizing diverse learning styles and adapting pedagogical approaches to

accommodate these variations, thereby enhancing learning experiences and outcomes.

In addition to theories on learning styles, this study incorporates motivational theories, including Deci's Cognitive Evaluation Theory, Skinner's Incentive Theory, and Vroom's Expectancy Theory. Deci's Cognitive Evaluation Theory (1985) explores how external factors affect intrinsic motivation through their influence on perceived competence and autonomy. Skinner's Incentive Theory (1953), as cited in Sincero (2012), emphasizes the role of rewards and reinforcement in motivating behavior, suggesting that individuals are driven by the anticipation of rewards and the avoidance of negative consequences. Vroom's Expectancy Theory (1964), as cited by van Eerde and Thierry (1996), posits that motivation is determined by the perceived value of rewards, the belief in achieving desired outcomes, and confidence in one's ability to attain these goals.

The integration of these theoretical frameworks provides a robust basis for analyzing how students' learning styles and motivational factors influence their academic performance in online learning environments. This study specifically examines these relationships within the context of Mathematics courses (MAT061 and MAT071) at Mindanao State University during the second semester of academic year 2021–2022.

Related Studies

Hamdan and Amorri (2020) and Almarashdi and Jarrah (2021) investigated the impact of online learning environments on academic performance during the COVID-19 pandemic. Hamdan and Amorri focused on the effectiveness of modern teaching methods, such as interactive and student-centered approaches at United Arab Emirates University. Their findings indicated that online learning facilitated greater student independence, participation, and enhanced communication. Similarly, Almarashdi and Jarrah examined high school students' perspectives on online mathematics learning in the UAE, highlighting that while some students preferred online learning, challenges related to mathematical notation and active participation persisted.

In alignment with these, Gopal et al. (2021) and Wahyuningrum and Latifah (2020) explored factors affecting student satisfaction and performance in online education. Gopal et al. identified instructor quality and timely feedback as critical determinants of student satisfaction, emphasizing the role of extrinsic motivation in enhancing academic performance. Meanwhile, Wahyuningrum and Latifah underscored the importance of accommodating diverse learning styles in remote mathematics education. They found that, despite the significance of interactive teaching methods, many online environments lacked such features.

Furthermore, Libasin et al. (2021) and Hwang et al. (2021) evaluated the effects of different online learning formats on academic performance. Libasin et al. compared synchronous and asynchronous learning environments, revealing that synchronous learning, which provides immediate feedback, significantly improved academic performance. Similarly, Hwang et al. examined a social regulation-based online learning framework, finding that it enhanced both learning outcomes and student motivation.

Additionally, Amelia et al. (2020) and Mamolo (2022) investigated the effects of online learning on motivational factors. Amelia et al. focused on online mathematics education in Indonesia, reporting high resilience and positive student responses in supportive online environments. In contrast, Mamolo found significant decreases in student motivation and self-efficacy in the Philippines, coupled with persistently high levels of anxiety.

Moreover, Ariyanti and Santoso (2020) and Mailizar et al. (2020) addressed challenges associated with online learning. Ariyanti and Santoso observed a decline in mathematics performance and a deterioration in student attitudes following the transition to online learning. Similarly, Mailizar et al. identified significant barriers to e-learning, such as limited access to technology, which negatively affected student success.

Finally, Awang et al. (2017) and Ozkal (2019) examined the relationship between motivational factors and academic performance. Awang et al. found no significant relationship between learning styles and academic achievement, suggesting that other factors may play a more pivotal role in performance. Conversely, Ozkal determined that self-efficacy positively predicted academic achievement, whereas disaffection exerted a negative influence.

Statement of the Problem

This study sought to determine the relationships among students' learning styles, motivation, and academic performance in online mathematics courses at Mindanao State University – Main Campus. Specifically, it addressed the following research questions:

1. What are the learning styles of the participants in learning mathematics through online distance modality in terms of:
   1.1. visual;
   1.2. kinesthetic;
   1.3. auditory; and
   1.4. solitary?
2. What is the motivation of the participants in learning mathematics through online distance modality in terms of:
   2.1. intrinsic
   2.2. self-regulation
   2.3. self-efficacy; and
   2.4. utility value?
3. What is the academic performance of the participants in mathematics delivered through online distance modality?
4. Is there a significant relationship between learning styles and the academic performance of the participants?
5. Is there a significant relationship between motivation and the academic performance of the participants?

METHODS

Research Design

This study employed a descriptive-correlational research design to investigate the learning styles, motivation, and academic performance of students enrolled in two Mathematics courses (MAT061 and MAT071) during the second semester of academic year 2021–2022 at Mindanao State University – Main Campus. This design was selected as it facilitates both the description of existing conditions (descriptive) and the examination of relationships between variables (correlational). Stangor (2011) explains that descriptive research seeks to provide a snapshot of individuals' current ideas, feelings, and behaviors, while correlational research measures the association between two or more variables. This methodological approach was considered appropriate to achieve the study's objectives.

Data collection was conducted using a survey questionnaire, and the data were analyzed using descriptive statistical techniques, including frequency counts, percentage distributions, and mode score distributions. These methods offered a detailed understanding of the students' academic performance and illuminated the relationships between their learning styles, motivation, and academic outcomes.

Locale of the Study

This study was conducted at Mindanao State University – Main Campus in Marawi City during the second semester of the Academic Year 2021–2022. Located on a 1,000-hectare campus approximately 2,800 feet above sea level and overlooking Lake Lanao, the university is a prominent public institution of higher education in the Philippines. Established in 1961, it serves as the flagship and largest campus of the Mindanao State University System. The research focused on students enrolled in Mathematics courses, specifically MAT061 and MAT071, and included participants from various programs such as the Bachelor of Secondary

Education (BSED) Major in Mathematics, Bachelor of Science (BS) in Mathematics, and a range of engineering disciplines.

To ensure diverse representation, the study used purposive sampling to select 150 participants from the College of Education, the College of Engineering, and the BS Mathematics program. Purposive sampling (Creswell, 2014; Patton, 2002) was employed to identify participants with specific characteristics relevant to the research objectives, enabling targeted insights from a population that met the criteria rather than relying on random selection. By focusing on students actively engaged in mathematics courses, the study aimed to provide a deeper understanding of the factors influencing their academic performance.

Participants were selected based on the following criteria: (a) enrollment in MAT061 and MAT071, as these courses were central to the study's focus on mathematics performance; (b) program of study, which included students from mathematics-intensive programs such as the BSED Major in Mathematics, BS Mathematics, and various engineering disciplines, ensuring the inclusion of individuals likely to encounter similar academic challenges; (c) ethnic diversity, to reflect the multicultural environment of the university and account for potential cultural influences on academic performance; and (d) demographic balance, with an emphasis on age and gender diversity to explore their relationships on academic outcomes.

The largest group of participants came from the BS Chemical Engineering program (36%), followed by BS Mechanical Engineering (20%) and BSED Mathematics (14%). Smaller groups included BS Civil Engineering, BS Electronics Engineering, and BS Mathematics, each representing 10% of the sample. In terms of ethnic composition, the participants included 88 Meranao (58.7%), 57 Cebuano (38%), and 5 Iranun (3.3%). A majority were aged 21–23 years (60%), with a smaller proportion in the 24–26 age range. The gender distribution comprised 91 females (60.7%) and 59 males (39.3%).

Research Instruments

The study utilized a survey questionnaire adapted from existing international studies to evaluate learning styles and motivation in mathematics. The learning styles component was based on Reid's Perceptual Learning Style model. The questionnaire was divided into three sections. Section (a) focused on the demographic profile, collecting information on participants' ethnicity, gender, and course details, including their Grade Point Average (GPA). Section (b) assessed learning styles using a 20-item instrument categorized into Visual, Auditory, Kinesthetic, and Solitary styles. Specific items represented each category: Visual (Items 3, 7, 8, 15, 19), Auditory (Items 1, 4, 6, 11, 14), Kinesthetic (Items 2, 5, 10, 13, 16), and Solitary (Items 9, 12, 17, 18, 20). Responses for this section were measured on a 4-point Likert scale ranging from 1 (Strongly Disagree) to 4 (Strongly Agree). Section (c) addressed motivation and evaluated intrinsic motivation, self-regulation, self-efficacy, and utility value using the Mathematics Motivation Questionnaire (MMQ), an adaptation of the Science Motivation Questionnaire by Fiorella et al. (2021). This section included 15 items, with Items 1–3 addressing intrinsic motivation, Items 4–7 focusing on self-regulation, Items 8–11 measuring self-efficacy, and Items 12–15 evaluating utility value. Responses were also recorded on a 4-point Likert scale.

The validity of the questionnaire was established through expert review and contextualization to ensure its appropriateness for the study's objectives. The instrument demonstrated strong reliability, achieving a Cronbach's alpha coefficient of 0.871. Pilot testing further confirmed both the reliability and validity of the instrument. Academic performance was measured using the participants' GPA, which reflected their performance in the mathematics courses MAT061 and MAT071.

Data Gathering Procedure

Data collection involved several steps. For instrument development, the survey instruments were adapted from Reid's perceptual learning style

preference and the MMQ, with validation by educational experts. For permission and sampling, the researchers sought permission from the college dean and advisors of students enrolled in MAT061 and MAT071. For data collection, questionnaires were distributed personally to the participants. Multimodal data collection methods were used to enhance the study's trustworthiness. Responses were collected, tallied, and analyzed.

Statistical Tools Used

The study employed various statistical tools to analyze the data. Frequency and percentage distribution were used to describe the demographic profile of the participants, including ethnicity, age, gender, course, and GPA. The mode identified the most frequently occurring values in the dataset, particularly for learning styles and motivation. Pearson correlation was used to determine the degree of linear association between continuous variables. This was used to assess the relationships between learning styles, motivation, and academic performance in mathematics.

Ethical Considerations

The study adhered to strict ethical standards to protect and respect participants throughout the research process. Informed consent was obtained through forms personally delivered and sent via email, ensuring participants were fully aware of the study's purpose, procedures, potential risks, and their right to withdraw at any time. Confidentiality was strictly observed by anonymizing responses and securely storing data to prevent unauthorized access, thereby safeguarding individual identities. Additionally, the researchers were committed to treating participants with respect and sensitivity, particularly when addressing motivation and academic performance, recognizing these as potentially personal matters.

The study design was structured to minimize any potential emotional or psychological harm. Questions were carefully formulated to avoid causing distress, and the researchers were prepared to provide

support if needed. Fairness and equity were emphasized by treating all participants equally and recognizing the diversity of learning styles. Data integrity was maintained through accurate reporting and analysis, ensuring that findings were presented honestly and without bias. Furthermore, participants were provided with feedback on the study's results, fostering transparency and building trust.

Results

The Learning Styles of the Participants

Table 4. 1 *Learning Style in Terms of Visual*

Indicators	Responses (n=150)				Mode	Interpretation
	1	2	3	4		
I learn better by reading what the teacher writes on the screen.	27	21	79	23	3	Agree
When I read instructions; I remember them better.	20	10	84	36	3	Agree
I understand better when I read instructions.	7	6	86	51	3	Agree
I learn better by reading than by listening to someone.	25	31	67	27	3	Agree
I learn more by reading textbooks than by listening to lectures.	33	32	54	31	3	Agree

Legend: 1= "Disagree", 2= "Strongly disagree", 3= "Agree", 4= "Strongly Agree

Table 4.1 presents the participants' learning styles in terms of visual preferences. The data indicate a strong inclination toward visual learning among participants. Specifically, participants showed the highest agreement with the statement "I understand better when I read instructions" (M = 3.0), with 57.3% (n = 86) agreeing and 34% (n = 51)

strongly agreeing. This highlights the effectiveness of written instructions in enhancing comprehension for a significant portion of the participants.

A preference for reading over listening is also evident. For the statement, "I learn better by reading than by listening to someone," 44.7% (n = 67) agreed, and 18% (n = 27) strongly agreed, suggesting a marked preference for visual learning over auditory methods. Similarly, 36% (n = 54) agreed, and 20.7% (n = 31) strongly agreed with the statement "I learn more by reading textbooks than by listening to lectures," though this preference was slightly less pronounced compared to other visual indicators.

The use of visual aids, such as written materials, was also strongly supported. For the statement "I learn better by reading what the teacher writes on the screen," 52.7% (n = 79) agreed, and 15.3% (n = 23) strongly agreed. This further emphasizes the importance of visual aids, such as written notes or screen presentations, in enhancing learning.

These findings underscore the effectiveness of visual learning strategies for the participants. Visual learners tend to excel when provided with written materials, diagrams, and other visual aids. Accordingly, educators should incorporate more visual elements into their teaching methods, such as PowerPoint presentations, diagrams, and detailed written instructions, to better engage and support these learners.

This preference aligns with Williams (2009), who asserts that visual information is more effectively processed and retained by students. Felder's (1998) theory of learning styles, which highlights visual learning as predominant among students, further supports these findings. Additionally, Zopf et al. (2004) reported that 65% of the population are visual learners, reinforcing the results of this study and emphasizing the importance of integrating visual aids into educational practices to enhance comprehension and retention.

Table 4.2 *Participants' Learning Style in Terms of Kinesthetic*

Indicators	Responses (n=150)				Mode	Interpretation
	1	2	3	4		
I prefer to learn by doing something in online class.	48	45	39	18	1	Disagree
When I do things during online class, I learn better.	40	47	51	12	3	Agree
I enjoy learning in online class by doing experiments.	27	41	65	17	3	Agree
I understand things better during online class when I participate in activities.	12	13	101	24	3	Agree
I learn best in online class when I can participate in related activities.	18	20	74	38	3	Agree

Legend: 1= "Disagree", 2= "Strongly disagree", 3= "Agree", 4= "Strongly Agree"

Table 4.2 presents the participants' kinesthetic learning styles, highlighting their preferences for active, hands-on learning in online classes. The data reveal that participants generally agreed with four out of five statements related to kinesthetic learning, while expressing disagreement with one.

A significant number of participants agreed that they understand concepts better and learn more effectively when actively participating in online class activities. Specifically, the statements *"I understand things better during online class when I participate in activities"* and *"I learn best in online class when I can participate in related activities"* received high levels of agreement, with the mode being 3 (Agree) for both. These findings suggest that many participants favor interactive and engaging learning experiences that allow them to apply knowledge practically, rather than passively absorbing information.

This preference for hands-on learning is further supported by the statement *"I enjoy learning in online class by doing experiments,"* where 43.3% (n = 65) agreed and 11.3% (n = 17) strongly agreed. These results indicate that a substantial portion of participants value practical, experimental activities that enhance their understanding and retention of course material.

However, there is notable disagreement regarding the statement *"I prefer to learn by doing something in online class,"* with 32% (n = 48) strongly disagreeing and 30% (n = 45) disagreeing. This suggests that while many students prefer interactive or hands-on learning, a significant proportion does not share this preference. This diversity in responses underscores the need to incorporate a variety of instructional methods in online courses to accommodate different learning styles.

Overall, the results indicate that a majority of participants display kinesthetic learning tendencies, showing a preference for physical engagement and hands-on activities. For these students, integrating practical activities and interactive elements into online mathematics courses may enhance their learning experience. Educators are encouraged to utilize tools such as simulations, manipulatives, and interactive exercises to better engage kinesthetic learners and support their comprehension of abstract mathematical concepts.

These findings align with Tyas and Safitri's (2017) research, which also identified a preference for kinesthetic learning among students. Similarly, Coffield et al. (2004) noted that, although only 15% of the population strongly identifies with a kinesthetic learning style, incorporating kinesthetic elements into instruction can improve learning outcomes for a broader range of learners. Thus, integrating kinesthetic activities into online instruction could benefit diverse student populations by making abstract concepts more tangible and engaging.

Table 4.3 *Participants' Learning Style in Terms of Auditory*

Indicators	Responses (n=150)				Mode	Interpretation
	1	2	3	4		
When the teacher tells me the instructions, I understand better.	22	3	77	48	3	Agree
When someone tells me how to do something in online class, I learn it better.	36	34	48	32	3	Agree
I remember things I have heard during online class better than I have read.	41	46	51	12	3	Agree
I learn better during online class when the teacher gives a lecture.	31	24	68	27	3	Agree
I learn better in online class when I listen to someone.	28	22	70	30	3	Agree

Legend: 1= "Disagree", 2= "Strongly disagree", 3= "Agree", 4= "Strongly Agree"

Table 4.3 presents the participants' learning styles in relation to auditory preferences. The data indicate that participants generally favored auditory learning, with agreement on four out of five statements related to this learning style.

A significant portion of participants, 77 (51.3%), agreed that they understand instructions better when delivered verbally by the teacher. This finding suggests that a substantial number of students prefer auditory instructions, highlighting the importance of verbal communication in their learning process. This preference may be rooted in the perception that listening to instructions or lectures enhances understanding and retention. Consequently, instructors might consider incorporating more verbal explanations, recorded lectures, or spoken instructions to support auditory learners.

The responses also reveal that students prefer listening to lectures and receiving verbal guidance on completing tasks. The statements *"I*

learn better during online class when the teacher gives a lecture" and *"I learn better in online class when I listen to someone"* received notable agreement, ranking as the second and third most agreed-upon auditory indicators, respectively. This suggests that students value traditional lecture-based teaching methods, appreciating the clarity and directness provided by verbal explanations, which offer structured guidance and a clear understanding of the material.

However, the statement *"I remember things I have heard during online class better than I have read"* yielded mixed responses, with some participants agreeing while others either disagreed or expressed uncertainty. This variability indicates that while auditory learning is effective for some students, others may find visual or textual information more beneficial. This diversity underscores the range of learning preferences within the group.

The statement *"When someone tells me how to do something in online class, I learn it better"* received the least agreement among the auditory indicators. While some students benefit from verbal instructions, this approach appears less effective for others. This finding highlights the importance of adopting a balanced instructional approach that integrates auditory, visual, and kinesthetic elements to accommodate varying learning preferences.

Overall, the results suggest that many participants are predominantly auditory learners, processing information more effectively through hearing rather than reading or seeing. For these learners, instructional strategies involving spoken explanations, discussions, and auditory resources can be particularly beneficial. These findings align with Spencer (2018), which indicates that approximately 30% of the population prefers auditory learning and benefits from listening to lectures and conversations. Integrating auditory elements into online education can significantly enhance the learning experience for these students, ensuring they receive information in a format that aligns with their preferences.

Table 4.4 *Participants' Learning Style in Terms of Solitary Learners*

Indicators	Responses (n=150)				Mode	Interpretation
	1	2	3	4		
When I study alone, I remember things better.	14	13	62	61	3	Agree
When I work alone, I learn better.	19	18	64	49	3	Agree
In online class, I work better when I work alone.	30	23	64	33	3	Agree
I prefer working on assignments/ activities by myself.	18	20	74	38	3	Agree
I prefer to work by myself.	25	18	67	40	3	Agree

Legend: 1= "Disagree", 2= "Strongly disagree", 3= "Agree", 4= "Strongly Agree"

Table 4.4 displays the mode and interpretation of the participants' learning styles in terms of solitary preferences. Among the five statements, the participants generally "Agree" with all five indicators.

62 participants, or 41.3% of the 150 participants, agreed with the statement *"I remember things better when I study alone."* This indicator received the highest level of agreement, suggesting that a significant proportion of the participants prefer studying independently and believe it enhances their information retention. This preference may be attributed to several factors, such as greater control over their learning environment, reduced distractions, and the ability to study at their own pace. Studying alone also provides a quiet and focused setting, which is particularly beneficial for mastering complex or detailed subjects like mathematics that demand intense concentration.

Similarly, a majority of the participants indicated that they learn more effectively when working alone, particularly in online classes. Approximately 74% of participants preferred completing assignments or activities independently, with 49.3% agreeing with the statement. This indicator ranked second in terms of agreement, further highlighting the

preference for solitary work among participants. Working independently allows students to focus intently on the task at hand, avoid potential conflicts or distractions associated with group work, and better manage their time and resources. In the context of mathematics, where tasks often require prolonged focus and problem-solving, this preference for solitary work is particularly pronounced. Moreover, in an online learning environment, limited real-time interaction with peers may further reinforce the practicality and appeal of studying and working alone.

Based on these findings, the participants can generally be characterized as solitary learners. These individuals are self-motivated, prefer working independently, and achieve their best learning outcomes when studying or completing tasks alone. In online classes, students are often required to study course materials individually and are expected to meet learning objectives independently. The lack of collaborative activities and reduced opportunities for interaction in an online setting may further encourage this preference for solitary learning.

These results align with findings by Wallace (1993), who observed that students with a strong preference for solitary learning achieved significantly higher academic performance compared to those who preferred learning with peers. Loveless (2010) similarly emphasized that solitary learning can be an effective learning style for students, particularly in environments that demand high levels of focus and self-discipline. Thus, incorporating strategies that support solitary learners—such as providing clear and detailed instructions, self-paced assignments, and tools for independent study—can enhance their learning experiences and academic success in online settings.

The Motivation of the Participants in terms of Intrinsic Motivation, Self-Regulation, Self-Efficacy and Utility-Value.

Motivation, defined as the process of interaction between the learner and the environment, is characterized by the choice, initiation, enhancement, or persistence of goal-directed behavior. It has been interpreted in various ways, including as a quality inherent to the individual, the surrounding

environment, or the activity in which they are engaged. Motivated students typically exhibit behaviors aligned with achieving specific goals.

Tables 4.5, 4.6, 4.7, 4.8, and 4.9 present the participants' motivation in terms of intrinsic motivation, self-regulation, self-efficacy, and utility value, highlighting the different dimensions of their motivational tendencies and their implications for academic performance.

Table 4.5 *Participants' Motivation in terms of Intrinsic Motivation in Mathematics*

Indicators Intrinsic	Responses				Mode	Interpretation
	1	2	3	4		
[1]I enjoy learning math.	12	6	67	65	3	Agree
[2]I find learning math interesting.	9	4	64	73	4	Strongly Agree
[3]I like math that challenges me.	20	14	62	54	3	Agree

Legend: 1= "Disagree", 2= "Strongly disagree", 3= "Agree", 4= "Strongly Agree"

Table 4.5 examines the participants' intrinsic motivation in learning mathematics, highlighting a strong inclination toward personal interest and enjoyment. The data reveal that a significant proportion of students find mathematics engaging, with 48.7% strongly agreeing that it is interesting and 64% in total affirming this sentiment. Furthermore, 44.7% of participants reported enjoying learning mathematics, while 41.3% expressed appreciation for math that challenges them. These findings suggest that a considerable number of students are intrinsically motivated, potentially due to factors such as a natural aptitude for the subject, intellectual stimulation, or positive interactions with their instructors.

Intrinsic motivation enhances the learning experience by fostering sustained engagement and enthusiasm. Students who approach mathematics with genuine interest and find it both challenging and enjoyable are more likely to demonstrate perseverance and achieve improved academic performance. These findings emphasize the

importance of nurturing intrinsic motivation in education to create a more fulfilling and effective learning environment.

The high levels of intrinsic motivation observed among participants indicate that their drive to learn is rooted in personal satisfaction rather than external rewards. As noted by Middleton and Spanias (1999), intrinsically motivated students pursue knowledge for its inherent value, finding learning activities both rewarding and challenging. This intrinsic drive promotes deeper engagement with the material, as students focus on personal growth and the mastery of concepts rather than external validation.

Table 4.6 *Participants' Motivation in terms of Self-Regulation in Mathematics*

Indicators	Responses (n=150)				Mode	Interpretation
	1	2	3	4		
[1]If I am having trouble learning the math, I try to figure out why.	6	8	85	51	3	Agree
[2]I put enough effort into learning the math.	11	7	88	44	3	Agree
[3]I use strategies that ensure I learn math well.	13	5	88	44	3	Agree
[4]I prepare well for math tests and quizzes.	28	13	72	37	3	Agree

Legend: 1= "Disagree", 2= "Strongly disagree", 3= "Agree", 4= "Strongly Agree"

Table 4.6 presents the participants' self-regulation in learning mathematics, revealing that students generally demonstrate strong self-regulation skills. The results indicate a high level of agreement with all four indicators related to self-regulated learning. Notably, 58.7% of participants affirmed that they put in the necessary effort to learn mathematics effectively, reflecting a strong commitment to self-regulated practices. Self-regulated learners are characterized by their ability

to set goals, monitor progress, and persist in the face of challenges (Zimmerman, 2002), suggesting that many participants are proactive in managing their learning processes.

Additionally, 58.7% of participants agreed that they use strategies to ensure effective learning in mathematics, indicating a positive attitude toward employing techniques such as seeking additional resources or practicing problems. This aligns with the attributes of self-regulated learners, who are skilled at selecting and applying strategies that cater to their individual learning needs, thereby enhancing academic success (Schunk & Zimmerman, 2001, as cited in Tran, 2021). Further, 56.7% of participants reported actively trying to understand why they struggle with mathematics, demonstrating self-awareness and a proactive approach to diagnosing and addressing their learning difficulties.

However, only 48% of participants agreed that they prepare well for math tests and quizzes, indicating that while many students engage in self-regulation practices, a significant proportion may lack effectiveness in test preparation. Effective self-regulated learners typically allocate sufficient time and effort for test preparation, including reviewing materials and practicing problems (Zimmerman, 2002). This finding suggests that enhancing students' test preparation strategies could further support their academic performance (Gawrilow et al., 2014; Nemati et al., 2017).

Overall, the results indicate that, while participants exhibit high levels of self-regulation, there is room for improvement, particularly in test preparation practices. Strengthening this aspect of self-regulation could contribute to more consistent academic success in mathematics.

Table 4.7: *Participants' Motivation in terms of Self-Efficacy in Mathematics*

Indicators Self-Efficacy	Responses (n=150)				Mode	Interpretation
	1	2	3	4		
[1]I am confident I will do well on math assignments and projects.	32	24	65	29	3	Agree
[2]I believe I can master the knowledge and skills in the math course.	28	14	80	28	3	Agree
[3]I am confident I will do well on math tests.	34	20	70	26	3	Agree
[4]I believe I can earn a high grade in the math course.	40	23	67	20	3	Agree

Legend: 1= "Disagree", 2= "Strongly disagree", 3= "Agree", 4= "Strongly Agree"

Table 4.7 examines the self-efficacy of 150 participants in mathematics, revealing generally high levels of confidence among students. Approximately 53.3% of participants agreed that they can master the knowledge and skills required for their math course, indicating a strong belief in their ability to comprehend course material. However, 18.7% expressed doubts about their capabilities, suggesting that some students may struggle with the content or lack confidence in their abilities.

Confidence in performing well on math tests was notable, with 64% of participants believing they could succeed. Despite this, 46.7% expressed concerns about their performance, potentially stemming from difficulties in understanding the material or experiencing test anxiety. Similarly, 44.7% of participants believed in their ability to earn high grades, yet 26.7% strongly disagreed, highlighting a divide in confidence that could influence motivation and academic outcomes.

The lowest levels of agreement were observed in confidence regarding math assignments and projects, with only 43.3% affirming their self-efficacy in this area. While 21.3% strongly agreed, the variability in

responses suggests that many students may find these tasks particularly challenging. This disparity underscores the importance of addressing factors that contribute to lower confidence, such as unclear expectations or insufficient practice.

Overall, the findings indicate that while many students exhibit high self-efficacy in mathematics, variations in confidence levels persist, particularly in relation to specific tasks like assignments and projects. These differences in self-efficacy could significantly impact motivation and academic performance. This observation aligns with research by Spencer (2018) and others, who emphasize the critical role of self-efficacy in driving educational achievement.

Table 4.8 *Participants' Motivation in terms of Utility-Value in Mathematics*

Indicators Utility-Value	Responses (n=150)				Mode	Interpretation
	1	2	3	4		
[1]I think about how learning math can help me get a good job.	12	7	82	49	3	Agree
[2]I think about how the math I learn will be helpful to me.	3	7	86	54	3	Agree
[3]I think about how learning math can help my career.	2	6	85	57	3	Agree
[4]I think about how I will use math I learn.	4	5	79	62	3	Agree

Legend: 1= "Disagree", 2= "Strongly disagree", 3= "Agree", 4= "Strongly Agree"

Table 4.8 illustrates the participants' motivation regarding the utility value of learning mathematics. The findings suggest that students generally recognize the practical importance of mathematics and its

relevance to their future careers.

A majority of participants (57.3%) agreed that they consider how mathematics will be useful to them, indicating that many students view mathematics as valuable beyond the classroom, with applications in real-life scenarios and professional contexts. Similarly, 56.7% of participants agreed that they think about how learning mathematics will aid their chosen careers, reflecting an understanding of its significance as a critical skill for professional success.

Additionally, 54.7% acknowledged that learning mathematics could help them secure employment, emphasizing their awareness of the value of mathematical skills in the job market. This aligns with the broader understanding that practical knowledge and skills are essential for career advancement and job opportunities.

Notably, an overwhelming 94% of participants considered how they would use the mathematics they learn, with 52.7% agreeing and 41.3% strongly agreeing. This highlights a strong recognition of the practical applications of mathematics and a commitment to understanding how these skills will be utilized in their future endeavors.

These findings indicate that students place a high value on the utility of mathematics in their future careers and daily lives. Such perceptions are critical motivators, as students who see the relevance of their studies are more likely to remain engaged, persistent, and successful in their academic pursuits (Lawrence & Charbonneau, 2009). When students perceive their learning as meaningful and aligned with their personal and professional goals, they are more motivated to invest effort and achieve academic excellence.

Further research supports the importance of students' perceptions of the utility value of mathematics in influencing academic performance. Malvasi and Gil-Quintana (2022) argue that viewing mathematics solely as a tool for calculations, without appreciating its broader applications, can negatively affect performance. Additionally, Esquivel et al. (2017) found that students' emotions and beliefs about mathematics are

intricately linked and essential for effective learning management. Recognizing the utility of mathematics helps bridge the gap between theoretical knowledge and practical application, enhancing students' motivation and academic outcomes.

The Academic Performance of the Students in Mathematics

Table 4.9 *Participants' Academic Performance in Mathematics Courses*

Average Grade	Verbal Description	Frequency	Percentage
1.00 – 1.50	Excellent	22	14.7
1.75 – 2.00	Very Good	45	30.0
2.25	Good	22	14.7
2.50 – 2.75	Satisfactory	47	31.3
3.00	Passing	14	9.3
Total		**150**	**100.0**

Table 4.9 presents the distribution of average grades among participants in their mathematics courses, categorized by performance levels. The data reveal varying levels of academic achievement, with the majority of students falling within the "Satisfactory" to "Very Good" range.

Among the 150 participants, 47 students (31.3%) achieved an average grade of 2.50–2.75, classified as "Satisfactory." This group constitutes the largest proportion of participants, suggesting that while most students are adequately meeting course requirements, they are not excelling. Following this, 45 students (30%) received an average grade of 1.75–2.00, categorized as "Very Good." This indicates that a significant portion of students are performing well and demonstrating a strong understanding of the course material.

The percentages of students with "Excellent" and "Good" grades are equal, with each category representing 14.7% of the participants. While these results highlight that a notable number of students have

achieved high performance levels, the proportion remains relatively small compared to those in the "Satisfactory" and "Very Good" categories. Meanwhile, the smallest group, consisting of 14 students (9.3%), received an average grade of 3.00, categorized as "Passing." This indicates that a minor segment of students is struggling to meet the minimum academic standards.

Overall, the findings suggest that while the majority of students are meeting course requirements, there is a significant concentration in the "Satisfactory" and "Very Good" performance categories. This distribution implies that the mathematics courses were manageable for most students but also point to an opportunity for enhancing academic performance. The relatively small proportion of students achieving "Excellent" grades underscores the need for increased support and resources to help students reach higher levels of achievement. Efforts to improve teaching strategies, provide additional academic resources, and foster greater student engagement could contribute to improved performance outcomes in future mathematics courses.

Correlational Analysis Between Participants' Learning Style and Academic Performance.

Table 4.10 *Correlational Analysis Between the Academic Performance and Learning Style*

Relationship		Correlation Coefficient (*r*)	*p*-value	Remarks
Visual	Academic performance	-.028	.733	Not significant
Kinesthetic		.156	.056	Not significant
Auditory		.004	.965	Not significant
Solitary Learner		-.055	.501	Not significant

Table 4.10 presents the results of the significance index between the academic performance and learning styles of the participants. The computed p-values for all learning styles—visual, kinesthetic, auditory,

and solitary—are greater than the 0.05 level of significance. These results indicate that the null hypothesis cannot be rejected, suggesting that there is no significant relationship between the participants' learning styles and their academic performance. This finding implies that, within the context of this study, the learning styles of the students did not influence their academic performance in mathematics.

While individuals have different learning preferences, and accommodating these preferences can often enhance learning experiences, the absence of a significant relationship between learning styles and academic performance suggests that learning styles were not a determining factor in the participants' ability to succeed in mathematics. This indicates that even if students exhibited a preference for a particular learning style, it did not necessarily result in improved academic performance.

The lack of a significant relationship between learning styles and academic performance is consistent with the findings of Awang et al. (2017), who similarly concluded that learning styles do not significantly influence students' academic achievement. This conclusion is further supported by the research of Abd Wahab (2006), as cited in Awang et al. (2017), which stated that students' academic performance is not dependent on their learning style.

Correlational Analysis Between Participants' Motivation and Academic Performance.

Table 4.11 *Correlational Analysis Between Participants Motivation and Academic Performance.*

Relationship		Correlation Coefficient (*r*)	*p*-value	Remarks
Intrinsic	Academic performance	-.126	.125	Not significant
Self-Regulation		-.245	.003*	Significant
Self-Efficacy		-.205	.012*	Significant
Self-Value		-.126	.126	Not significant

Table 4.11 presents the results of the correlational analysis between participants' motivation and their academic performance in mathematics. The analysis reveals that intrinsic motivation and self-value do not significantly correlate with academic performance, as their p-values exceed the 0.05 level of significance. This indicates that these types of motivation do not directly impact students' academic success in mathematics within the context of this study. Specifically, while students may find the subject interesting or recognize its relevance to their future careers, these factors do not necessarily translate into improved academic performance.

In contrast, significant correlations were identified between academic performance and both self-regulation and self-efficacy. Self-regulation exhibited a correlation coefficient of -0.245 with a p-value of 0.003, indicating a significant negative relationship. This suggests that students who excel at managing their learning processes—such as setting goals, monitoring progress, and adapting strategies—tend to achieve higher academic performance. Similarly, self-efficacy demonstrated a correlation coefficient of -0.205 with a p-value of 0.012, also indicating a significant negative correlation. This finding highlights that students who possess confidence in their ability to succeed in mathematics are more likely to perform well.

These results underscore the critical role of self-regulation and self-efficacy in academic success. Self-regulation enables students to structure their study habits effectively, overcome challenges, and stay focused, while self-efficacy fosters persistence, resilience, and confidence in their abilities. The significant relationships observed in this study align with prior research. For example, Busari (2002) found that self-regulation significantly contributes to mathematics achievement, while Ozkal (2019) reported that self-efficacy positively predicts mathematics performance. Similarly, Watson (2015) emphasized that students with high self-efficacy tend to excel in mathematics due to their enhanced cognitive capabilities, motivation, and reduced anxiety. Hence, while intrinsic motivation and self-value may enhance student engagement, fostering self-regulation and self-efficacy appears to be more critical for achieving academic success in mathematics.

CONCLUSION

This study examines the relationships between self-efficacy, motivation, and self-regulation in mathematics learning, as well as their impact on academic performance. Data collected from surveys administered to 150 participants reveal that many students exhibit high levels of self-efficacy and motivation, with a significant proportion expressing confidence in their ability to master mathematical concepts and succeed in assessments. However, variations in confidence, particularly concerning test preparation, indicate that some students face challenges in this area. The study also highlights strong self-regulation skills among participants, who actively engage in strategies to enhance their learning, while identifying areas for improvement, especially in test preparation practices.

The findings lead to several key conclusions. First, students predominantly prefer solitary learning, while kinesthetic learning is the least favored in an online class setting. Motivation among participants is characterized by intrinsic motivation, self-regulation, self-efficacy, and utility-value. Intrinsic motivation involves engaging in tasks for enjoyment or challenge rather than for external rewards. Self-regulation refers to the ability to manage one's actions, thoughts, and emotions to achieve long-term goals. Self-efficacy reflects the belief in one's capability to take necessary actions for success, while utility-value pertains to the perceived relevance of learning activities to long-term objectives, even if they are not immediately enjoyable.

The study further reveals that learning styles do not significantly correlate with academic performance. While intrinsic motivation and utility-value show no significant relationship with academic success, self-regulation and self-efficacy are significantly associated with it. These findings suggest that fostering self-regulation and self-efficacy is crucial for improving academic performance in mathematics.

Overall, this study provides valuable insights for educators aiming to support students in achieving their academic goals. By understanding the interplay of learning styles, motivation, and academic performance,

educators can design more targeted interventions to enhance student success in mathematics, particularly in online learning environments.

RECOMMENDATIONS

Based on the conclusions, it is recommended that teachers design activities aligned with students' learning styles to optimize learning outcomes and engagement in online environments. Encouraging students to identify and leverage their preferred learning styles can promote proactive learning and help them navigate online education effectively. School administrators should implement intervention programs tailored to students' learning styles and motivational needs to provide structured support and enhance the overall online learning experience. Parents should monitor their child's academic performance and provide a supportive home environment, which is especially critical in online education. Future research should explore similar topics in diverse contexts, emphasizing the need for continued investigation and development in online learning.

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PROJECT SUPPORT (SUPPORTING PROFESSIONAL DEVELOPMENT OPPORTUNITIES TO REFINE TEACHERS' COMPETENCE): HELPING TEACHERS TO TEACH BETTER

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ABSTRACT

This action research evaluates the effectiveness of *Project SUPPORT* (Supporting Professional Development Opportunities to Refine Teachers' Competence) in enhancing teacher capacity at Bugarin Elementary School during the 2023–2024 academic year. Employing a mixed-methods approach, the study combined quantitative and qualitative data to assess the program's impact. Classroom observations were conducted to examine the implementation of newly acquired teaching strategies, while school-based training sessions addressed teachers' professional development needs. Surveys and interviews provided qualitative insights into teachers' perceptions and experiences with the program. Findings revealed that *Project SUPPORT* significantly improved teacher competence and classroom practices. Teachers demonstrated enhanced pedagogical skills and greater confidence, as evidenced by their effective integration of innovative teaching strategies. Qualitative data further

emphasized positive teacher perceptions, highlighting the program's role in fostering a culture of continuous professional growth and instructional improvement.

Keywords: professional development, pedagogy, support, teacher competence

INTRODUCTION

Teaching is a complex and challenging profession. Teachers constantly seek ways to improve their practice and support their students' success. Action research is a powerful tool that enables teachers to systematically reflect on their teaching, identify areas for improvement, and implement and evaluate changes in their practice. In the ever-evolving landscape of education, the role of teachers is not only pivotal but also increasingly demanding. The journey of imparting knowledge is dynamic, requiring adaptation, resilience, and a commitment to lifelong learning. Recognizing this, professional development for teachers has gained paramount importance. The contemporary educational paradigm emphasizes the necessity of continuous improvement and growth beyond the traditional notion of teaching as a static profession.

The education sector has responded to this need by designing faculty development programs. Teachers are sent to seminars and training sessions tailored to their specialization and needs, and they are encouraged to pursue advanced degrees such as Master's and Doctorate programs. This is reflected in the *Code of Ethics for Professional Teachers*, Section 4, which states:

> *"Every teacher shall participate in the Continuing Professional Education (CPE) program of the Professional Regulation Commission and shall comply with the training programs that will strengthen his competency virtues, increase his productivity, raise the status of his profession, and help him become more*

competent both nationally and internationally." (Republic Act No. 4670, n.d.)

Teachers are facilitators of learning who guide students and impart knowledge using various methods and techniques. Professional growth is thus necessary for teachers to remain effective in the face of changing times. Competent and qualified teachers are at the core of successful educational programs and are instrumental in advancing professionalism.

According to Republic Act No. 10533, SEC. 7: Teacher Education and Training, the DepEd and CHED, in collaboration with partners from government, academia, industry, and non-governmental organizations, are mandated to implement teacher education and training programs. These include:

1. In-Service Training on Content and Pedagogy – Teachers must undergo training to meet the performance expectations of the K to 12 curriculum.
2. Training of New Teachers – Graduates of the current Teacher Education curriculum will receive additional training to align their skills with the demands of the new curriculum.

Despite the widespread recognition of professional development's importance in enhancing instructional effectiveness, gaps remain in understanding how specific professional development models can meet teachers' evolving needs. Current literature often highlights general benefits of professional development but lacks a focus on tailored approaches that address teachers' subject-specific challenges, instructional skills, and classroom management techniques. Additionally, research on sustainable frameworks that integrate into teachers' workloads while providing continuous, practical feedback is limited. These gaps underscore the need for targeted studies on adaptable, evidence-based professional development strategies for primary school settings, such as Bugarin Elementary School, to foster meaningful improvements in teaching quality and student outcomes.

One critical factor for success in the teaching-learning process is the capacity and skills of the teacher. Addressing this need, the school prioritizes teacher training, identifying areas for improvement. To enhance the teaching competence of 13 proficient teachers at Bugarin Elementary School, the researchers will conduct a series of SLAC (School Learning Action Cell) sessions, school-based training on various indicators from the *Philippine Professional Standards for Teachers* (PPST), focus group discussions, and classroom observations for the 2023–2024 school year.

This action research initiative, *Project SUPPORT* (Supporting Professional Development Opportunities to Refine Teachers' Competence), aims to equip teachers with new, effective teaching strategies. By fostering a culture of continuous professional development, *Project SUPPORT* is expected to lead to improved student achievement and greater teacher satisfaction.

Literature Review

Professional development models for teachers have been extensively studied, with conventional approaches such as seminars, workshops, and short-term training programs still widely employed. However, these approaches have been criticized for being inadequate, ineffectual, and limiting in supporting teachers in acquiring new strategies. Despite these concerns, traditional professional development techniques remain prevalent in teacher education. Quality teaching fosters reform and the holistic development of individuals equipped with values and 21st-century skills, including life and career competencies, information and media literacy, and technology skills. These skills encompass critical thinking, communication, collaboration, and creativity (Wagner, 2019). Quality teaching is achieved through continuous teacher learning and the refinement of teaching practices, supported by effective models, resources, and logistical infrastructure (Carver & Feiman-Nemser, 2008). Teaching quality is evident in the application of practices that enhance student achievement (Ganal, Sario, & Gulab, 2019).

The Department of Education adheres to the Philippine Professional Standards for Teachers (PPST) and ensures that teacher performance appraisals align with these standards. According to DepEd Order No. 42, s. 2017, the PPST aims to guide teacher learning and development programs, ensuring educators are well-equipped to implement the K to 12 curricula effectively. The order emphasizes that teacher performance appraisals should align with the PPST, underscoring a commitment to a standardized framework for evaluating educator effectiveness. This integrated approach aims to elevate the quality of education by fostering continuous professional growth and adherence to established standards within the Philippine education system.

In line with the Department of Education's commitment to continuous professional development, DepEd Memorandum No. 50, s. 2020 outlines the Professional Development Priorities for Teachers and School Leaders for School Years 2020–2023. These priorities aim to support the Department's goal of upskilling and reskilling educators to improve student learning outcomes. The three-year priorities are organized around four key domains: Content and Pedagogy, Assessment and Evaluation, Learning Environments, and Teacher and School Leader Well-being. This action research aligns with the DepEd priorities by focusing on the Learning Environments domain, specifically creating classroom settings conducive to student learning and engagement. The researchers seeks to equip teachers with the skills and knowledge necessary to foster supportive and engaging learning environments for their students.

The MATATAG Agenda represents the Department of Education's new initiative to address challenges in basic education in the Philippines. One of its four components is "Support Teachers to Teach Better," which includes providing professional development opportunities, access to quality resources, support for mental and emotional well-being, and a positive work environment. This SUPPORT component highlights the critical role teachers play in enhancing education quality. By addressing teachers' needs, the DepEd aims to improve their effectiveness, thereby helping all learners reach their full potential.

Curricular and instructional models provide teachers with clear guidance on best practices. These models include lesson plans, unit plans, sample student work, peer observations, and cases of exemplary teaching documented in written or video formats. Coaching and expert support, tailored to individual teacher needs, are critical components of professional development. Experts—often master teachers or professional development coaches—offer specialized guidance through one-on-one coaching, group workshops, or technology-based remote mentoring (Darling-Hammond, Hyler, & Gardner, 2019). These models and expert support help teachers enhance their instructional practices, ultimately benefiting student learning outcomes.

A needs assessment is a systematic process used to identify and address organizational gaps that hinder progress toward goals. These gaps may stem from a lack of knowledge, ineffective practices, or insufficient skills among personnel (Jannetti, 2017). Needs assessment helps organizations make informed decisions about areas requiring improvement, ultimately fostering success. Furthermore, it ensures that any training aligns with organizational objectives, clarifies desired outcomes, and secures support from stakeholders. By pinpointing specific training needs, the process ensures that initiatives are targeted and impactful in addressing performance gaps.

Orrill (2006) emphasizes the importance of a learner-centered approach in professional development (PD) for teachers. She argues that PD should prioritize the professional learning of teachers themselves, rather than solely focusing on strategies for student instruction. Orrill contends that while PD often centers on pedagogical techniques and content knowledge, its true impact lies in engaging teachers as learners. This shift fosters deeper professional growth, as teachers perceive PD as an opportunity to advance their personal understanding, which in turn enhances their instructional effectiveness.

Supporting professional development opportunities for teachers is essential to fostering high-quality instruction and improving student outcomes. By refining teachers' competencies through tailored, evidence-

based initiatives, schools empower educators to continuously enhance their teaching practices. This investment not only helps teachers perform better but also ensures that students receive the highest quality education, creating an environment where both educators and learners thrive. Emphasizing ongoing professional growth reinforces a school's commitment to educational excellence and supports the long-term success of the educational community.

Research Questions

The study aimed to evaluate the efficiency of Project SUPPORT implemented by the teachers of Bugarin Elementary School, as assessed through classroom observations and school-based training conducted during the SY 2023–2024. The study addressed the following research questions:

1. What was the performance of the respondents based on the results of the Individual Performance Commitment and Review Form (IPCRF) ratings for SY 2022–2023 in terms of the following domains: 1.1. Content Knowledge and Pedagogy;
   1.2. Learning Environment and Diversity of Learners;
   1.3. Curriculum and Planning;
   1.4. Assessment and Reporting; and
   1.5. Personal Growth and Professional Development?
2. What was the teaching performance of the respondents based on the results of classroom observations for SY 2022–2023?
3. What was the level of capability of the respondents as determined by the Electronic Self-Assessment Tool (e-SAT)?
4. What were the common areas for improvement in instructional delivery as identified from the observers' feedback?
5. What was the level of effectiveness of Project SUPPORT based on the results of the 1st Quarter classroom observations in SY 2023–2024?

METHODS

This action research utilized a complete enumeration of the previous and present results of the classroom observation tool. This means that all respondents in the study underwent classroom observation. The classroom observation tool was used to collect data on the teachers' classroom practices.

Data Gathering

Conduct of Classroom Observations

The researchers conducted classroom observations to collect specific data on targeted aspects using the classroom observation tool.

Gathering and Consolidation of Data/Responses

The researchers gathered and consolidated data based on the Key Result Areas of the teachers. This process aimed to provide valuable insights into teachers' needs and challenges, ensuring that the support and interventions provided aligned with their specific requirements.

Conduct of Learning Action Cell, Focus Group Discussion, Curricular Modeling, and Coaching and Mentoring

The researchers facilitated a dynamic and responsive system, empowering teachers to enhance their teaching practices and ultimately improve their performance. These collaborative and data-driven approaches ensured that the intervention program remained relevant and beneficial to the teaching community it served.

Statistical Treatment of Data

The results of teachers' classroom observations from the previous and current school years were subjected to appropriate statistical tools:

Mean: Used to determine the central tendency across the data set.

Mode: Utilized to identify the most frequently occurring value in the data set.

Standard Deviation: Applied to measure the amount of variation or dispersion within the data values.

Analysis and Interpretation of Data

The results of the statistical treatment were analyzed to draw meaningful conclusions.

To analyze the performance of the respondents based on the result of IPCRF Rating, the 5-point scale was used for interpretation.

Table 1 *Performance Rating Scale*

Scale	Range	Verbal Interpretation	Description
5	4.500 – 5.000	Outstanding	Performance represented extraordinary achievement.
4	3.500 – 4.499	Very Good	Performance exceeded expectations.
3	2.500 – 3.499	Satisfactory	Performance met expectations.
2	1.500 – 2.499	Unsatisfactory	Performance failed to meet expectations.
1	Below 1.499	Poor	Performance was consistently below expectation.

The class observation tool used for Proficient career stage consisted of 7-point scale.

Table 2 *Pedagogical Performance Rating Scale*

Scale	Range	Verbal Interpretation	Description
7	6.21 – 7.00	Applying	The teacher uses a well-connected approach to pedagogical aspects of the indicator, effectively addressing individual and group learning goals.
6	5.41 – 6.20	Consolidating	The teacher employs a well-connected approach to pedagogical aspects of the indicator, consistently aligning with student development to support their success as learners.
5	4.61 – 5.40	Applying	The teacher demonstrates a range of pedagogical aspects of the indicator that may sometimes align with the learners' developmental needs.
4	3.81 – 4.60	Developing	The teacher demonstrates a range of pedagogical aspects of the indicator that are typically in line with the learners' developmental needs.
3	3.00 – 3.80	Organizing	The teacher demonstrates a limited range of pedagogical aspects that are loosely related to the indicator.

Results

Performance based on the results of IPCRF Rating in the SY 2022-2023

Table 1 presents the composite performance of respondents based on the IPCRF Ratings for SY 2022–2023. The results show that teachers achieved outstanding performance in the Key Result Areas of Content Knowledge and Pedagogy (mean score = 4.833) and Curriculum and Planning (mean score = 4.590). Meanwhile, teachers demonstrated very satisfactory performance in Learning Environment and Diversity of Learners (mean score = 4.475), Assessment and Reporting (mean score = 4.359), and Personal Growth and Professional Development (mean score = 4.135).

Table 3 *Performance of the Respondents Based on the Results of IPCRF Rating in the SY 2022 -2023*

KEY RESULTS AREA	MEAN	VI
1.1 Content Knowledge and Pedagogy;	4.833	O
1.2 Learning Environment and Diversity of Learners;	4.475	VS
1.3 Curriculum and Planning;	4.590	O
1.4 Assessment and Reporting;	4.359	VS
1.5 Personal Growth and Professional Development;	4.135	VS
AVERAGE MEAN	**4.478**	**VS**

O – Outstanding, VS – Very Satisfactory, S – Satisfactory, UN – Unsatisfactory, P – Poor

A study on the level of teachers' performance based on IPCRF ratings (Department of Education, 2022) revealed that most teachers received "very satisfactory" and "outstanding" ratings. The study reported an overall mean rating of 4.45, with a verbal interpretation of "very satisfactory," indicating a high prevalence of positive performance evaluations.

Teaching performance based on Classroom Observations in the SY 2022 – 2023

Table 4 *Teaching Performance of the Respondents Based on the Results of Classroom Observations in the SY 2022 – 2023*

INDICATORS	MEAN	VI
1. Applied knowledge of content within and across curriculum teaching areas.	7	**Integrating**
2. Used a range of teaching strategies that enhance learner achievement in literacy and numeracy skills.	7	**Integrating**
3. Applied a range of teaching strategies to develop critical and creative thinking, as well as other higherorder thinking skills.	6	**Consolidating**
4. Displayed proficient use of Mother Tongue, Filipino and English to facilitate teaching and learning.	6	**Consolidating**
5. Established safe and secure learning environments to enhance learning through the consistent implementation of policies, guidelines and procedures.	6	**Consolidating**
6. Maintained learning environments that promote fairness, respect and care to encourage learning.	6	**Consolidating**
7. Established a learner-centered culture by using teaching strategies that respond to their linguistic, cultural, socio-economic and religious backgrounds.	6	**Consolidating**
8. Adapted and used culturally appropriate teaching strategies to address the needs of learners from indigenous groups.	6	**Consolidating**
9. Used strategies for providing timely, accurate and constructive feedback to improve learner performance.	6	**Consolidating**
AVERAGE MEAN	**6**	**Consolidating**

Table 2 presents the teaching performance of respondents based on classroom observation results for SY 2022–2023. The results indicate that teachers achieved an "Integrating" performance level in the indicators applying knowledge of content within and across curriculum teaching areas and using a range of teaching strategies to enhance learner achievement in literacy and numeracy skills, both with a mean score of 7.

Meanwhile, the teachers demonstrated a "Consolidating" performance level, with a mean score of 6, in several indicators. These include applying a range of teaching strategies to develop critical and creative thinking, as well as other higher-order thinking skills. They also demonstrated proficiency in using Mother Tongue, Filipino, and English to facilitate teaching and learning, while establishing safe and secure learning environments through consistent implementation of policies, guidelines, and procedures. Furthermore, the teachers-maintained learning environments that promote fairness, respect, and care to encourage learning. They created a learner-centered culture by employing teaching strategies tailored to the linguistic, cultural, socio-economic, and religious backgrounds of indigenous learners, adapted culturally appropriate methods, and provided timely, accurate, and constructive feedback to enhance learner performance.

Level of capability based on the Electronic Self-Assessment Tool (e-SAT)?

Table 5 *Level of Capability of the Respondents Based on the ESAT*

	OBJECTIVES	Level of Capability			
		Low	Moderate	High	Very High
		1	2	3	4
Content Knowledge and Pedagogy (PPST Domain 1)					
1.1	Applied knowledge of content within and across curriculum teaching areas. (PPST 1.1.2)	0	0	13	0
1.2	Used a range of teaching strategies that enhance learner achievement in literacy and numeracy skills. (PPST 1.4.2)	0	1	12	0
1.3	Applied a range of teaching strategies to develop critical and creative thinking, as well as other higher-order thinking skills. (PPST 1.5.2)	0	10	3	0
Learning Environment & Diversity of Learners (PPST Domain 2 and Domain 3)					
2.1	Managed classroom structure to engage learners, individually or in groups, in meaningful exploration, discovery and hands-on activities within a range of physical learning environments. (PPST 2.3.2)	0	2	11	0
2.2	Managed learner behavior constructively by applying positive and non-violent discipline to ensure learning focused environments. (PPST 2.6.2)	0	1	12	0
2.3	Used differentiated, developmentally appropriate learning experiences to address learners' gender, needs, strengths, interests and experiences. (PPST 3.1.2)	10	0	3	0
Curriculum and Planning (PPST Domain 4)					
3.1	Planned, managed and implemented developmentally sequenced teaching and learning processes to meet curriculum requirements and varied teaching contexts. (PPST 4.1.2)	9	2	2	0
3.2	Participated in collegial discussions that use teacher and learner feedback to enrich teaching practice. (PPST 4.4.2)	0	0	13	0

3.3	Selected, developed, organized and used appropriate teaching and learning resources, including ICT, to address learning goals. (PPST 4.5.2)	0	9	4	0
Assessment and Reporting (PPST Domain 5)					
4.1	Designed, selected, organized and used diagnostic, formative and summative assessment strategies consistent with curriculum requirements. (PPST 5.1.2)	0	0	13	0
4.2	Monitored and evaluated learner progress and achievement using learner attainment data. (PPST 5.2.2)	0	10	3	0
4.3	Communicated promptly and clearly the learners' needs, progress and achievement to key stakeholders, including parents/guardians. (PPST 5.4.2)	0	0	5	8
5. Personal Growth and Professional Development (PPST Domain 7)					
5.1	Applied a personal philosophy of teaching that is learnercentered. (PPST 7.1.2)	0	0	12	1
5.2	Set professional development goals based on the Philippine Professional Standards for Teachers. (PPST 7.5.2)	0	9	3	1
6. PLUS FACTOR					
6.1	Performed various related works/activities that contribute to the teaching-learning process.	0	0	5	8

Table 5 presents the level of capability of respondents based on the Electronic Self-Assessment Tool (e-SAT).

In PPST Domain 1, all 13 teachers (100%) demonstrated high capability in applying knowledge of content within and across curriculum teaching areas. Twelve teachers (92.31%) showed high capability, while one (7.69%) displayed moderate capability in using a range of teaching strategies to enhance literacy and numeracy skills. Additionally, three teachers (23.08%) exhibited high capability, and ten (76.92%) demonstrated moderate proficiency in employing teaching strategies to promote critical, creative, and higher-order thinking skills.

In PPST Domain 3, 11 teachers (84.62%) showed high capability, and two (15.38%) demonstrated moderate capability in managing classroom structures to engage learners in meaningful exploration, discovery, and hands-on activities. Similarly, 12 teachers (92.31%) displayed high capability, and one (7.69%) showed moderate capability in managing learner behavior constructively through positive and non-violent discipline. However, three teachers (23.08%) exhibited high capability, and ten (76.92%) displayed low capability in using differentiated, developmentally appropriate learning experiences to address learners' diverse needs, strengths, and interests.

In PPST Domain 4, two teachers (15.38%) demonstrated high capability, two (15.38%) moderate capability, and nine (69.23%) low capability in planning, managing, and implementing developmentally sequenced teaching and learning processes to meet curriculum requirements. All 13 teachers (100%) showed high capability in participating in collegial discussions to enrich teaching practices using teacher and learner feedback. Additionally, four teachers (30.77%) displayed high capability, and nine (69.23%) moderate capability in selecting, developing, organizing, and using appropriate teaching and learning resources, including ICT, to meet learning goals.

In PPST Domain 5, all 13 teachers (100%) demonstrated high capability in designing, selecting, and using diagnostic, formative, and summative assessment strategies aligned with curriculum requirements. Meanwhile, three teachers (23.08%) exhibited high capability, and ten (76.92%) low capability in monitoring and evaluating learner progress using attainment data. Furthermore, eight teachers (61.54%) displayed very high capability, and five (38.46%) high capability in effectively communicating learners' needs, progress, and achievements to stakeholders, including parents and guardians.

In PPST Domain 7, one teacher (7.69%) exhibited high capability, while 12 (92.31%) demonstrated very high capability in applying a learner-centered philosophy of teaching. Additionally, one teacher (7.69%) showed very high capability, three (23.08%) high capability, and nine

(69.23%) moderate capability in setting professional development goals based on the Philippine Professional Standards for Teachers.

Lastly, in the Plus Factor, eight teachers (61.54%) exhibited very high capability, and five (38.46%) showed high capability in performing related tasks that contribute to the teaching-learning process.

Common areas for improvement in the delivery of instruction based on observer feedback

Table 6 presents the common areas for improvement in the delivery of instruction based on the common areas feedback of the observer.

Table 6 *Common Areas for Improvement in the Delivery of Instruction Based on the Common Areas Feedback of the Observer*

Areas for Improvement	Frequency
1. Follow-up activities	**3**
2. Visual Aids- Choice of font, size, and color	**2**
3. Construct more clarified instructions.	**1**
4. More ICT integration activities	**1**
5. Use bigger font size in the printed materials/visual aids.	**2**
6. Clear the direction indicated in the assignment.	**1**
7. Group activity must be improved so that is parallel to intelligence.	**1**
8. Modify lesson using localized/contextualized stories.	**1**
9. Widen understanding about the differences of within and across the curriculum in lesson planning.	**1**
TOTAL	**13**

The data clearly indicate that 'Follow-up Activities' represent the most common area for improvement, identified three times among the teachers surveyed. This highlights a significant and widespread concern

requiring targeted attention. Other areas, such as 'Visual Aids – Choice of font, size, and color' and 'ICT Integration Activities,' also emerge as areas needing refinement. These findings suggest a range of skills that teachers can enhance, from improving assignment clarity to better curriculum planning. Addressing these areas can provide teachers with the support needed to elevate their teaching practices and, in turn, enhance student learning outcomes.

Consistent with Xana et al. (2021), the findings underscore the need for additional activities and minor refinements to improve educational outcomes, particularly in promoting students' understanding of complex concepts like differential reproduction.

Level of effectiveness of Project SUPPORT based on the 1st Quarter Classroom Observation in the SY 2023 - 2024?

Table 5 discusses the level of effectiveness of Project SUPPORT based on the results of first-quarter classroom observations for SY 2023–2024.

The analysis reveals that only one indicator, "Established safe and secure learning environments," showed improvement following the implementation of Project SUPPORT. This indicator assesses the consistent application of policies, guidelines, and procedures to promote a positive learning environment. During the first-quarter classroom observations in SY 2022–2023, this indicator received an average score of 6.15 (SD = 0.41), categorized as "Consolidating," indicating a solid foundation was already in place. After the implementation of Project SUPPORT, the average score increased to 6.27 (SD = 0.26), remaining within the "Consolidating" category.

Although the increase is modest, it represents a positive trend, suggesting that Project SUPPORT may be contributing to a more structured and supportive learning environment for students. However, it is crucial to note that this observation reflects only initial results. Continued analysis and additional data collection will be necessary to fully understand the program's impact and determine if the positive trend persists over time.

Table 7 *Level of Effectiveness of Project SUPPORT Based on the Results of 1st Quarter Classroom Observation in the SY 2023 – 2024*

Indicators	SY 2022-2023			SY 2023-2024		
	MEAN	SD	VI	MEAN	SD	VI
1. Applied knowledge of content within and across curriculum teaching areas.	**6.65**	0.44	**Integrating**	**5.92**	0.36	**Consolidating**
2. Used a range of teaching strategies that enhance learner achievement in literacy and numeracy skills.	**6.69**	0.44	**Integrating**	**6.00**	0.33	**Consolidating**
3. Applied a range of teaching strategies to develop critical and creative thinking, as well as other higher-order thinking skills.	**6.38**	0.44	**Consolidating**	**5.77**	0.28	**Consolidating**
4. Displayed proficient use of Mother Tongue, Filipino and English to facilitate teaching and learning.	**6.23**	0.43	**Consolidating**	**6.23**	0.28	**Consolidating**
5. Established safe and secure learning environments to enhance learning through the consistent implementation of policies, guidelines and procedures.	**6.15**	0.43	**Consolidating**	**6.27**	0.28	**Consolidating**
6. Maintained learning environments that promote fairness, respect and care to encourage learning.	**6.27**	0.41	**Consolidating**	**6.27**	0.26	**Consolidating**

7. Established a learner centered culture by using teaching strategies that respond to their linguistic, cultural, socio-economic and religious backgrounds.	**6.38**	0.36	**Consolidating**	**6.08**	0.24	**Consolidating**
8. Adapted and used culturally appropriate teaching strategies to address the needs of learners from indigenous groups.	**6.27**	0.38	**Consolidating**	**5.92**	0.23	**Consolidating**
9. Used strategies for providing timely, accurate and constructive feedback to improve learner performance.	**6.46**	0.35	**Consolidating**	**6.04**	0.21	**Consolidating**
AVERAGE MEAN	**6.39**	0.42	**Consolidating**	**6.06**	0.12	**Consolidating**

The analysis highlights the performance trends for key teaching practices across school years 2022–2023 and 2023–2024. Indicator 1, "Applied knowledge of content within and across curriculum teaching areas," recorded mean scores of 6.65 and 5.92, respectively, with verbal interpretations of "Integrating" and "Consolidating". Indicator 2, "Used a range of teaching strategies that enhance learner achievement in literacy and numeracy skills," achieved mean scores of 6.69 and 6.00 with standard deviations of 0.44 and 0.38, interpreted as "Integrating" and "Consolidating."

For Indicator 3, "Applied a range of teaching strategies to develop critical and creative thinking, as well as other higher-order thinking skills," mean scores were 6.38 and 5.77, with standard deviations of 0.44 and 0.33, both verbally interpreted as "Consolidating." Indicator 7, "Established a learner-centered culture by using teaching strategies that respond to linguistic, cultural, socio-economic, and religious backgrounds," showed mean scores of 6.38 and 6.08, with standard

deviations of 0.36 and 0.24, both interpreted as “Consolidating.”

Similarly, Indicator 8, “Adapted and used culturally appropriate teaching strategies to address the needs of learners from indigenous groups,” achieved mean scores of 6.27 and 5.92, with standard deviations of 0.38 and 0.23, both interpreted as “Consolidating.” Indicator 9, “Used strategies for providing timely, accurate, and constructive feedback to improve learner performance,” recorded mean scores of 6.46 and 6.04, with standard deviations of 0.35 and 0.21, both interpreted as “Consolidating.”

Indicators 4 and 6 showed consistent performance, with mean scores of 6.23 and 6.27, respectively, indicating stable proficiency in “Using Mother Tongue, Filipino, and English for teaching and learning” and “Maintaining learning environments that promote fairness, respect, and care.”

Despite a slight decline in the overall scores for several indicators, the consistent performance in Indicators 4 and 6 suggests these are strengths of the teaching practices. This consistency indicates effective strategies in language use and fostering fair and respectful learning environments, valued by students. Moving forward, efforts should focus on addressing areas with declining scores while leveraging existing strengths to enhance teaching practices and overall student learning experiences.

RECOMMENDATIONS

In light of the findings, the following conclusions and recommendations are offered:

1. School administrators may encourage teachers to attend seminars, training, and workshops related to professional growth and teaching and learning development.
2. Teachers may adapt to utilizing integration in teaching and learning to enhance their work performance.
3. Teachers may continuously upgrade their teaching-learning strategies by attending SLAC sessions and other professional development programs.

Further studies considering other variables may be conducted.

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ANTECEDENTS OF GENDER STEREOTYPING AMONG SENIOR HIGH SCHOOL STUDENTS

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ABSTRACT

This study investigates the antecedents of gender stereotyping among senior high school students and the factors that sustain these stereotypes in a private school in Surigao City, Philippines. To assess the antecedents, the study examined the following variables: individual factors, cognitive factors, family factors, and socio-cultural factors. Stratified random sampling was employed to select senior high school students enrolled in the academic year 2023–2024 as participants. The results revealed that the perspectives of senior high school students on gender are occasionally influenced by individual, cognitive, family, and socio-cultural factors. A significant difference was observed across all factors when grouped according to their academic strand. Among these, family emerged as the most influential factor, highlighting its critical role in perpetuating

gender stereotypes, particularly in relation to household responsibilities and gendered roles within the family unit. The study recommends that students enhance their awareness of behaviors that may reinforce stereotypes and reflect on the factors shaping their gender perceptions and actions. This self-awareness is essential in fostering more equitable attitudes and behaviors.

Keywords: antecedents, gender stereotyping, gendered roles, senior high school students

INTRODUCTION

Gender stereotyping has long posed a significant obstacle to achieving true gender equality and continues to perpetuate gender discrimination. This pervasive and multifaceted issue impacts various aspects of individual and societal life, including education, career opportunities, and personal relationships. Gender stereotypes often lead to discrimination, prejudice, and bias against individuals who deviate from traditional gender roles and expectations. Individual, family, cognitive, and socio-cultural factors collectively shape and sustain stereotypical thinking, thereby reinforcing gender stereotypes (Tabassum & Nayak, 2021).

In a study by Bian et al. (2017), the effects of gender stereotyping on children's development were explored, revealing that common stereotypes associate high-level intellectual abilities, such as brilliance and genius, more frequently with men than women. These stereotypes, once internalized, influence children's interests and significantly narrow the range of careers they consider pursuing. According to the researchers, cultural messages about presumed cognitive abilities of males and females drive these perceptions.

In the Philippines, the country ranked 17th among 156 nations in closing gender inequality, as reported by the World Economic Forum's *Global Gender Gap Report 2021.* While the Philippines has closed

78.4% of its overall gender gap, making it the top-performing country in Asia, persistent gender stereotypes in academic and workplace settings undermine this progress. Research by The Women and Gender Institute (UNESCO, n.d.) highlights the prevalence of workplace discrimination based on sexual orientation and gender identity. This issue is shaped by a complex interplay of social, cultural, and historical factors. Traditional Filipino values emphasize distinct gender roles, where men are seen as providers and leaders, while women are associated with nurturing and supportive roles, restricting individuals' career choices and aspirations. Culturally, the concept of "bayanihan" reinforces women's caregiving roles while underrepresenting them in leadership positions. Media portrayals frequently depict women as homemakers, further perpetuating these stereotypes. Historically, the Philippines' colonial past imposed patriarchal norms that marginalized women, limiting their access to education and public life. Despite significant progress, remnants of these inequities persist today.

At St. Paul University Surigao (SPU Surigao), anecdotal evidence suggests that gender stereotyping remains prevalent, affecting both students and faculty members. Traditional expectations, such as "boys should be loud and boisterous" and "girls should be prim and proper," continue to shape perceptions and interactions within the university. These stereotypes limit students' self-expression and hinder their aspirations, particularly in pursuing careers traditionally associated with the opposite gender, such as becoming uniformed personnel. However, a significant gap in research exists regarding the antecedents of gender stereotyping among senior high school students at SPU Surigao. Understanding these antecedents is essential to addressing the root causes of gender stereotyping in the school environment.

To address this research gap, this study aims to investigate the antecedents of gender stereotyping at SPU Surigao, focusing on individual, socio-cultural, familial, and cognitive factors. By identifying the causes of gender stereotyping, the study seeks to foster a more inclusive and equitable environment within the university and provide

insights that could serve as a model for other institutions facing similar challenges.

Gender Stereotyping

Gender stereotypes are deeply rooted in local culture and traditions. Children learn gendered behaviors and expectations from various sources, including family, peers, media, schools, and religious institutions. These stereotypes can negatively affect all genders, as young people are frequently exposed to societal messages about how boys and girls should look, behave, and play. These socially accepted and often unconscious ideas begin to take shape as early as infancy (UNESCO, n.d.).

The issue has become increasingly prevalent and pressing in contemporary society, reflecting the expectations of specific social groups (Ellemers, 2018). Gender stereotypes also significantly influence academic self-concept through social relationships and interactions (Ertl et al., 2017; Rost et al., 2005). Parents and teachers, often unconsciously, project their own gender stereotypes onto children by assessing and appraising academic abilities in ways that align with these biases. For instance, when girls receive more encouragement for excelling in traditionally female-dominated subjects such as English or history, they are more likely to internalize these stereotypes into their academic self-concept (Ertl et al., 2017).

Individual Factors

Physical attributes serve as a primary component in both the formation and perpetuation of gender stereotypes. These stereotypes often stem from societal expectations regarding how individuals should look based on their gender, contributing significantly to the way people are perceived and treated in various social contexts. According to Dökmen (2012), as cited by Gul Unlu (2021), one of the most significant aspects of gender stereotyping lies in the assessment of an individual's physical appearance. This is crucial because a person's physical appearance is often the initial and most readily observable aspect through which stereotypes are

projected onto others. As such, individuals are frequently judged and categorized based on their physical attributes, leading to preconceived notions about their abilities, traits, and behaviors. This expectation to conform to societal norms based on appearance can exert considerable pressure on individuals to align with stereotypical expectations, influencing how they present themselves and interact with others (Gaddi, 2024).

In addition to evaluating physical appearance, perpetuating gender stereotyping can also occur through making jokes about one's gender. These jests and humorous remarks often reinforce existing stereotypes and prejudices, contributing to the normalization of discriminatory attitudes and behaviors. These preconceived notions then form the basis for how individuals are treated, potentially perpetuating stereotypes and prejudices (Law et al., 2021). Such discussions or jokes may reinforce existing stereotypes and prejudices, especially when they promote negative stereotypes about specific groups. This behavior can fuel discrimination, hinder genuine connections, and contribute to a negative social atmosphere, thereby impacting individuals' self-esteem and opportunities for personal development. Zawisza et al. (2018) further argues that stereotypes create a vicious cycle wherein stigmatized individuals experience anxiety, depleting their cognitive resources, leading to underperformance, reinforcing negative stereotypes, and perpetuating fear.

Cognitive Factors

One's cognition significantly influences gender stereotyping, shaping perceptions, attitudes, and behaviors toward individuals based on their gender. Cognitive processes such as categorization, schema activation, and information processing play crucial roles in the formation and reinforcement of gender stereotypes. Individuals tend to categorize others into gender groups based on observable characteristics, which subsequently activate corresponding gender schemas, mental frameworks containing expectations and beliefs about how individuals of a particular

gender should behave. These schemas guide the interpretation of information, reinforcing gender stereotypes through selective attention, memory recall, and judgment processes. Additionally, cognitive biases such as confirmation bias and stereotype threat further sustain gender stereotyping by reinforcing existing beliefs and influencing performance in gender-stereotyped domains.

According to the Fawcett Society (2023), engaging in gender stereotyping limits individuals by constraining them within narrow and often unrealistic societal expectations based on their gender. By perpetuating stereotypes and reinforcing traditional gender roles, individuals are restricted in expressing their identity, aspirations, and capabilities. This limitation hinders personal growth and fulfillment while perpetuating inequality and discrimination within society, obstructing progress toward a more inclusive and equitable world (Languing et al., 2023; Eliot et al., 2024; Gaddi, 2024).

Despite these evident negative effects, people often unconsciously perpetuate gender stereotypes. This phenomenon can be explained by Lewicki's (1986) Theory of Non-conscious Detection of Co-variation, which posits that once individuals form a non-conscious association between two events, they tend to continue the same behavior even after the association loses relevance. The self-perpetuating nature of stereotype formation is further reinforced through continued behavior and social interactions, maintaining and amplifying these stereotypes over time.

Family Factors

Family dynamics play a significant role in perpetuating gender stereotyping through various mechanisms. As Kane (1996), cited by Lumen Learning (2023), highlights, children learn distinct gender expectations from an early age, primarily through socialization within the family unit. Parents often reinforce traditional gender roles and behaviors through their actions, attitudes, and expectations toward their children. For instance, boys may be encouraged to participate in activities deemed masculine, such as sports or outdoor play, while girls are often steered

toward domestic tasks or nurturing behaviors. This process ingrains gender stereotypes in children early on, shaping their understanding of appropriate behavior based on their gender. Additionally, family members may unintentionally transmit gender biases through daily interactions, such as praising behaviors in one gender while discouraging them in another (Cabrigas et al., 2024).

Tabassum and Nayak (2021) further emphasize that within the family, children are exposed to social interactions, experiences, and role models that significantly influence their psychological and emotional growth. Parents play a central role in shaping their child's personality through their behavior, attitudes, and interactions. Children often model their own behaviors and beliefs after those of their parents, internalizing parental values, expectations, and norms as they navigate their social environments. Similarly, Ebert et al. (2024) argue that the family serves as the primary agent of socialization, being the first environment where children encounter societal norms, values, and behaviors. These early experiences within the family context provide the foundation for children's social and cognitive development, influencing their attitudes, beliefs, and behaviors as they engage with the broader social world.

Socio-cultural Factors

The socio-cultural environment plays a significant role in perpetuating gender stereotyping by shaping societal norms, values, and expectations regarding gender roles and behaviors. Cultural beliefs and traditions often reinforce traditional gender norms, prescribing specific roles and behaviors for men and women (Platil et al., 2024; Gaddi, 2024). For instance, media representations, advertisements, and popular culture frequently depict stereotypical portrayals of gender, reinforcing societal perceptions of masculinity and femininity. Sociology establishes that society perpetuates gender roles through gender socialization, occurring via four major agents of socialization: family, schools, peer groups, and mass media. Each agent reinforces gender roles by maintaining normative expectations for gender-specific behavior (Lumen Learning, 2023; Diaz et al., 2024).

One of the most pervasive stereotypes in society pertains to emotions, with societal expectations often dictating how individuals express and perceive emotional experiences. Shafi (2021) argues that men and women experience emotions at similar levels, challenging the stereotype that men are less emotional than women. However, societal norms discourage men from openly expressing vulnerability or sadness, perpetuating the misconception that men do not experience these emotions. This pressure compels many men to suppress their emotions to conform to societal expectations, fearing ridicule or perceived weakness. Such emotional suppression can have detrimental effects on men's mental health, contributing to conditions like depression, anxiety, and emotional distress.

Despite efforts at reform and adaptation, gender stereotypes surrounding emotions persist. Islam and Asadullah (2018) emphasize that entrenched attitudes continue to be reinforced by societal structures and media representations. The pervasive influence of these societal norms and portrayals perpetuates traditional gender roles, making it difficult to dismantle deeply ingrained stereotypes. While progress toward greater gender equality has been made, these persistent stereotypes underscore the need for continued awareness, education, and advocacy to challenge harmful societal perceptions of gender and emotions. Promoting inclusivity and encouraging individuals of all genders to express their emotions openly and authentically are critical for fostering healthier and more supportive communities (Gaddi et al., 2024; Dacoylo et al., 2024).

Research Questions

This study aimed to determine the antecedents of gender stereotyping among senior high school students. Specifically, it sought to answer the following questions:

1. What is the profile of the participants in terms of:
   1.1. Gender;
   1.2. Strand; and
   1.3. Religion?

2. What are the antecedents of gender stereotyping among senior high school students in terms of:
   2.1. Individual factors;
   2.2. Cognitive factors;
   2.3. Family factors; and
   2.4. Socio-cultural factors?

3. Is there a significant difference in the antecedents of gender stereotyping among senior high school students when grouped according to their profile?

METHODS

The descriptive research design was utilized in this study, alongside the survey method. This design was suitable for determining the antecedents of gender stereotyping among Senior High School students at St. Paul University Surigao. Descriptive research, as McCombes (2019) explains, aims to accurately and systematically describe a population, situation, or phenomenon. While it can answer questions such as what, where, when, and how, it does not address why. A descriptive research design can incorporate a variety of research methods to investigate one or more variables.

The participants of this study were 272 senior high school students from St. Paul University Surigao during the school year 2023–2024. They were selected using stratified random sampling, with the sample size determined through Slovin's formula. This sampling technique ensured that all participants represented the population adequately. The study also ensured balanced representation of gender and academic strands, including STEM, HUMSS, ABM, and TVL. This balanced distribution enhanced the reliability and validity of the findings, providing a comprehensive understanding of gender stereotypes among the student body.

A researcher-made questionnaire was developed and subjected

to comprehensive validation and reliability testing. A panel of experts in gender studies, education, and research methodology reviewed the questionnaire for content validity, assessing its clarity, relevance, and comprehensiveness in relation to the study's objectives. The computed Content Validity Index (CVI) for the questionnaire was 0.85, surpassing the acceptable threshold of 0.80. Items falling below this threshold were revised or removed to ensure validity.

Following validation, the questionnaire underwent pilot testing with 30 students from a nearby school to assess its reliability and address any potential issues. The pilot test results were used to calculate Cronbach's alpha, which measured internal consistency. The overall Cronbach's alpha was 0.82, exceeding the accepted threshold of 0.70, indicating good reliability for measuring the intended variables.

The final questionnaire was divided into two parts. Part I collected demographic information about the participants, including gender, strand, and religion. Part II focused on identifying the antecedents of gender stereotyping, operationally defined as follows:

Individual Factors: These refer to physical differences, such as race and gender, and external threats causing stereotypes. For example, participants were asked whether they had judged characteristics as exclusively masculine or feminine.

Cognitive Factors: These include mental processes, such as assumptions and judgments, that lead to gender stereotyping. Items addressed differential treatment based on gender, pressure to conform to gender roles, and preconceived notions about abilities.

Family Factors: These involve family influences, such as gender-specific responsibilities and behaviors instilled by family members. Items examined beliefs about household chores, career suitability, and discouragement of gender-nonconforming interests.

Socio-Cultural Factors: These include societal norms and cultural practices that perpetuate stereotypes. Items prompted reflection on norms for acceptable gender behavior, stereotype-reinforcing language, and

emotional suppression based on gender.

A formal letter was sent to the Principal of the Basic Education Department at St. Paul University Surigao to seek permission to administer the questionnaire. Upon approval, a second letter was sent to the participants, explaining the study's purpose and requesting their consent. Participants were informed of their rights, including the ability to ask questions and withdraw from the study at any time without penalty. Data collection spanned two weeks to allow participants sufficient time to complete the questionnaire.

During data collection, logistical challenges included coordinating schedules with students and addressing initial hesitancy from participants. Concerns about how responses would be used were mitigated by emphasizing the confidentiality and voluntary nature of the study. Ethical measures included:

Informed Consent: The principal and participants provided informed consent after being fully briefed on the study's objectives, their roles, and their rights, including the right to withdraw.

Confidentiality: Personal information, including gender and academic data, was anonymized to protect participants' privacy.

Professionalism and Objectivity: Researchers maintained professionalism to avoid bias or influencing responses, ensuring the integrity of the collected data.

After data collection, responses were tabulated, analyzed, and interpreted using the following statistical tools:

Frequency Count and Percentage Distribution: These tools described participants' demographic profiles, including gender, strand, and religion.

Mean and Standard Deviation: These statistical measures analyzed the antecedents of gender stereotyping among the students.

Analysis of Variance (ANOVA): This test determined significant differences in the antecedents of gender stereotyping based on participants' demographic profiles.

RESULTS AND DISCUSSIONS

Participants Demographic Profile

Table 1 presents the demographic profile of the participants in terms profiles regarding sex, strand, and religion.

Table 1. *Demographic Profile of the Participants*

Profile		f (271)	%
Sex			
	Male	114	42
	Female	157	58
Strand			
	ABM	42	16
	ADT/TVL	21	8
	HUMSS	66	24
	STEM	142	52
Religion			
	INC	15	6
	Roman Catholic	219	81
	Islam	3	1
	Others	34	13

Out of 271 senior high school students, in terms of sex, most of the participants are females with 157 (58%) while 114 (42%) are males. As for strand, there are more STEM students who participated with 142 responses (52%), followed by HUMSS with 66 responses (24%), ABM with 42 participants (16%), and ADT/TVL with 21 participants (8%). As to the religious affiliations of the participants, majority of them are Roman Catholics with 219 (81%), 34 participants (13%) answered others, while 15 students (6%) are INC, and about 3 participants (1%) answered that they are Muslims. The data reveals a strong female presence, significant interest in STEM education, and a predominantly Catholic

population among the participants. These profile variables reflect both the local demographic trends and educational preferences, highlighting the possible cultural and academic inclinations of the students in this region. Studies have shown that female participation in education is notably high in the Philippines, with females consistently outperforming and outnumbering males in higher education enrollment (Orbeta, 2019). Additionally, the growing focus on STEM education aligns with national initiatives aimed at addressing the demand for science and technology professionals, as outlined by the Department of Education's push for STEM programs (DepEd, 2019). The dominance of Roman Catholicism among participants is consistent with the Philippines' religious makeup, where over 80% of the population identifies as Catholic, deeply influencing cultural values and practices in educational settings (Pew Research Center, 2019). These findings highlight the intersection of gender, academic preferences, and religious affiliation in shaping the cultural and academic inclinations of students in this region.

Antecedents of Gender Stereotyping among Senior High School

Table 2 illustrates the antecedents of gender stereotyping among Senior High School students in terms of Individual, Cognitive, Family, and Socio-cultural Factors.

Table 2. *Antecedents of Gender Stereotyping among Senior High School students in terms of Individual, Cognitive, Family, and Socio-cultural Factors*

Indicators	M	SD	CI (95%)	ES (Cohen's d)	VI	QD
Individual Factors						
1. I have used physical appearance as a basis for determining someone's value or worth.	2.58	1.16	(2.44, 2.72)	0.50	A	O

2. I have used language or comments that reinforce traditional gender stereotypes related to physical appearance.	2.40	1.03	(2.27, 2.53)	0.44	D	S
3. I have made assumptions about certain physical features that are exclusively masculine or feminine.	2.49	1.03	(2.36, 2.62)	0.49	D	S
4. I have excluded or marginalized individuals because their physical appearance did not align with societal gender norms.	2.32	1.11	(2.19, 2.45)	0.44	D	S
5. I have participated in discussions or jokes about how an individual acts or look.	2.31	1.16	(2.17, 2.45)	0.43	D	S
Average	2.42	1.10	(2.32, 2.52)	0.46	D	S
Cognitive Factors						
1. I have made assumptions about people's interests or preferences in various areas, such as career choices or hobbies, based solely on their gender.	2.65	1.07	(2.32, 2.58)	0.61	A	O
2. I have treated individuals differently because of their gender.	2.33	1.03	(2.25, 2.51)	0.32	D	S
3. I have pressured or encouraged individuals to conform to specific roles and standards based on their gender.	2.36	1.08	(2.23, 2.49)	0.33	D	S
4. I have attributed certain behaviors or personality traits to individuals based on their gender.	2.42	1.02	(2.19, 2.45)	0.41	D	S
5. I have made judgments about someone's capabilities or competence based on preconceived notions about their gender.	2.30	1.13	(2.41, 2.67)	0.27	D	S

Average	2.41	1.07	(2.30, 2.52)	0.38	D	S
Family Factors						
1. I have been taught by my family that certain household chores or responsibilities are solely designated for a specific gender.	2.85	1.13	(2.72, 2.98)	0.62	A	O
2. I have been raised with the belief that certain career paths or professional aspirations are more suitable for one gender over another.	2.59	1.06	(2.46, 2.72)	0.53	A	O
3. I have witnessed or experienced my family discouraging or disapproving of activities or interests that are considered 'unfit' for my gender.	2.59	1.09	(2.46, 2.72)	0.53	A	O
4. I have been taught gender-specific behaviors or mannerisms that align with societal expectations.	2.71	1.08	(2.26, 2.52)	0.44	A	O
5. I have been raised with the belief that my personal relationships or friendships should follow gender-specific norms.	2.58	1.14	(2.45, 2.71)	0.53	A	O
Average	2.66	1.10	(2.49, 2.71)	0.53	A	O
Socio-cultural Factors						
1. I have conformed to societal norms that dictate appropriate behavior, appearance, or interests based on my gender.	2.56	1.03	(2.30, 2.56)	0.44	A	O
2. I have used language or expressions that reinforce gender stereotypes and perpetuate unequal power dynamics.	2.47	1.09	(2.36, 2.62)	0.47	D	S

3.	I have dismissed or downplayed instances of gender-based discrimination or harassment by attributing them to 'normal' or acceptable behavior.	2.48	1.07	(2.40, 2.66)	0.49	D	S
4.	I have accepted and perpetuated double standards regarding sexual behavior or promiscuity based on societal expectations of gender.	2.58	1.06	(2.45, 2.71)	0.53	A	O
5.	I have reinforced the notion that emotional expression or vulnerability is discouraged or seen as weak based on societal expectations tied to gender.	2.39	1.10	(2.53, 2.79)	0.56	D	S
Average		2.50	1.07	(2.43, 2.65)	0.50	D	S
Overall Average		2.50	1.08	(2.40, 2.60)	0.48	D	S

Scale	Interval	Verbal Interpretation	Code	Qualitative Description	Code
4	3.25-4.00	*Strongly Agree*	SA	*Always*	A
3	2.50-3.24	*Agree*	A	*Often*	O
2	1.75-2.49	*Disagree*	D	*Sometimes*	S
1	1.00-1.74	*Strongly Disagree*	SD	*Never*	N

Out of the five indicators for the variable Individual Factors, Indicator 1, "I have used physical appearance as a basis for determining someone's value or worth," obtained the highest mean score (M = 2.58, SD = 1.16, 95% CI [2.44, 2.72]), with a moderate effect size (Cohen's d = 0.50), verbally interpreted as Agree and qualitatively described as Often. This suggests that students frequently rely on superficial attributes, particularly physical appearance, to evaluate others, reflecting

a significant tendency toward surface-level judgment. The notable effect size indicates practical significance, reinforcing the role of physical appearance in shaping perceptions. This bias may lead to neglecting intrinsic qualities such as talents, character, or personality. As Dökmen (2012), cited by Gul Unlu (2021), emphasizes, physical appearance is one of the most accessible components of gender stereotyping, and this reliance perpetuates social biases. The pressure to conform to societal beauty standards consequently shapes how individuals present themselves and how they are perceived.

In contrast, Indicator 5, "I have participated in discussions or jokes about how an individual acts or looks," received the lowest mean score (M = 2.31, SD = 1.16, 95% CI [2.17, 2.45], Cohen's d = 0.43), verbally interpreted as Disagree and qualitatively described as Sometimes. Although students occasionally engage in such behavior, the moderate effect size indicates its potential consequences. Even casual jokes or discussions may subtly reinforce stereotypes and normalize prejudicial attitudes. According to Ford et al. (2024), humor based on appearance or behavior can solidify harmful stereotypes, especially when repeated in social settings, even if unintentional.

Overall, the average for Individual Factors was M = 2.42 (SD = 1.10, 95% CI [2.32, 2.52], Cohen's d = 0.46), verbally interpreted as Disagree and qualitatively described as Sometimes. This indicates that while students do not consistently stereotype others based on appearance, such behaviors persist. The moderate effect size suggests that these stereotypes, though not predominant, have a tangible impact on social dynamics. Zawisza (2018) notes that stereotypes create a feedback loop, where judgment based on appearance causes heightened anxiety, leading to underperformance and further entrenching negative perceptions.

For Cognitive Factors, Indicator 1, "I have made assumptions about people's interests or preferences in various areas, such as career choices or hobbies, based solely on their gender," recorded the highest mean score (M = 2.65, SD = 1.07, 95% CI [2.32, 2.58], Cohen's d = 0.61), verbally interpreted as Agree and qualitatively described as Often.

The moderate effect size highlights the practical significance of gender-based assumptions, suggesting that gender continues to shape students' perceptions of interests and career paths. As the Fawcett Society (2023) asserts, such assumptions limit young people's options, reinforce societal gender norms, and contribute to gender disparities in education and the workforce.

Conversely, Indicator 5, "I have made judgments about someone's capabilities or competence based on preconceived notions about their gender," had the lowest mean score (M = 2.30, SD = 1.13, 95% CI [2.41, 2.67], Cohen's d = 0.27), verbally interpreted as Disagree and qualitatively described as Sometimes. Although these judgments are less frequent, they remain significant. This finding aligns with the Philippines' 16th-place ranking in the 2023 Global Gender Gap Index by the World Economic Forum, reflecting progress toward more equitable treatment in education and the workplace.

The overall average for Cognitive Factors was M = 2.41 (SD = 1.07, 95% CI [2.30, 2.52], Cohen's d = 0.38), verbally interpreted as Disagree and qualitatively described as Sometimes. While students occasionally rely on gender stereotypes, the behavior is not dominant. The moderate effect size suggests that stereotypes persist due to unconscious cognitive biases, as explained by Lewicki's (1986) Theory of Non-conscious Detection of Co-variation. This theory posits that individuals may continue applying disproven stereotypes unconsciously.

For Family Factors, Indicator 1, "I have been taught by my family that certain household chores or responsibilities are solely designated for a specific gender," had the highest mean score (M = 2.85, SD = 1.13, 95% CI [2.72, 2.98], Cohen's d = 0.62), verbally interpreted as Agree and qualitatively described as Often. This indicates a moderate to large effect size, highlighting the family's role in reinforcing gender roles. Kane (1996), cited by Lumen Learning (2023), notes that the internalization of gender roles begins at a young age through family teachings.

Indicator 5, "I have been raised with the belief that my personal relationships or friendships should follow gender-specific norms," recorded the lowest mean score (M = 2.58, SD = 1.14, 95% CI [2.45, 2.71], Cohen's d = 0.53), verbally interpreted as Agree and qualitatively described as Often. The moderate effect size suggests these beliefs still influence interpersonal dynamics. Tabassum and Nayak (2021) emphasize that families significantly shape children's views on gender roles.

The overall mean for Family Factors was M = 2.66 (SD = 1.10, 95% CI [2.49, 2.71], Cohen's d = 0.53), verbally interpreted as Agree and qualitatively described as Often. The findings reinforce the family's substantial influence on students' gender-related beliefs, as families are primary agents of socialization (Ebert et al., 2024).

For Socio-cultural Factors, Indicator 4, "I have accepted and perpetuated double standards regarding sexual behavior or promiscuity based on societal expectations of gender," recorded the highest mean score (M = 2.58, SD = 1.06, 95% CI [2.45, 2.71], Cohen's d = 0.53), verbally interpreted as Agree and qualitatively described as Often. This reflects societal norms that apply different standards to men and women, reinforcing unequal treatment.

Indicator 5, "I have reinforced the notion that emotional expression or vulnerability is discouraged or seen as weak based on societal expectations tied to gender," had the lowest mean score (M = 2.39, SD = 1.10, 95% CI [2.53, 2.79], Cohen's d = 0.56), verbally interpreted as Disagree and qualitatively described as Sometimes. This suggests a growing awareness of emotional well-being, challenging traditional norms.

The overall mean for Socio-cultural Factors was M = 2.50 (SD = 1.07, 95% CI [2.43, 2.65], Cohen's d = 0.50), verbally interpreted as Disagree and qualitatively described as Sometimes. This suggests occasional influence of socio-cultural factors on students' gender perspectives. Islam and Asadullah (2018) highlight the media's role in perpetuating stereotypes within Filipino society.

To sum, among the variables, Family Factors had the highest mean (M = 2.66, SD = 1.10), indicating the strongest influence on students' gender beliefs, while Cognitive Factors had the lowest mean (M = 2.41, SD = 1.07), suggesting growing awareness of gender stereotypes' harmful effects. The overall mean was M = 2.50 (SD = 1.08, 95% CI [2.40, 2.60], Cohen's d = 0.48), verbally interpreted as Disagree and qualitatively described as Sometimes. While gender stereotypes remain prevalent, there is a gradual shift toward more equitable attitudes, consistent with the Philippines' progress in gender equality as indicated by the 2023 Global Gender Gap Index.

Significant Difference on the Antecedents of Gender Stereotype among Senior High School

Table 3 presents significant differences in the antecedents of gender stereotyping among senior high school students in terms of individual factors, cognitive factors, family factors, and socio-cultural factors when grouped according to their profile, such as sex, strand, and religion.

Table 3. *Significant Difference on the Antecedents of Gender Stereotyping among Senior High School Students when grouped according to their profile variables*

Profile	Factors	F	p-value	Decision	Interpretation
Sex	Individual Factors	3.231	0.073	Do not reject Ho	Not Significant
	Cognitive Factors	2.303	0.130	Do not reject Ho	Not Significant
	Family Factors	0.617	0.433	Do not reject Ho	Not Significant
	Socio-cultural Factors	0.742	0.390	Do not reject Ho	Not Significant
Strand	Individual Factors	4.465	0.004	Reject Ho	Significant
	Cognitive Factors	6.041	0.001	Reject Ho	Significant
	Family Factors	3.857	0.010	Reject Ho	Significant
	Socio-cultural Factors	4.246	0.006	Reject Ho	Significant

Religion	Individual Factors	3.884	0.010	Reject Ho	Significant
	Cognitive Factors	1.780	0.151	Do not reject Ho	Not Significant
	Family Factors	0.880	0.452	Do not reject Ho	Not Significant
	Socio-cultural Factors	1.671	0.174	Do not reject Ho	Not Significant

The findings reveal no significant differences in the antecedents of gender stereotyping among senior high school students in terms of Individual Factors (p = 0.073), Cognitive Factors (p = 0.130), Family Factors (p = 0.433), and Socio-cultural Factors (p = 0.390) concerning their sex. Since the respective p-values are higher than the expected level of significance (0.05), the hypothesis is not rejected. This indicates that the antecedents of gender stereotyping among senior high school students do not significantly differ based on their sex. This implies that regardless of whether students are male or female, they are similarly influenced by individual, cognitive, family, and socio-cultural factors in relation to gender stereotyping. One potential explanation for these non-significant differences could be cultural similarities and shared socialization patterns within the sample, fostering common beliefs and attitudes about gender. Limited exposure to non-traditional gender roles within their environment may also contribute to these uniform perspectives. This interpretation aligns with Rudman and Goodwin (2004), as cited by Bosak et al. (2017), who noted that both men and women can hold and propagate gender stereotypes, though the specifics and focus of these stereotypes may vary.

In terms of strand, there is a significant difference in the antecedents of gender stereotyping among senior high school students for Individual Factors (p = 0.004), Cognitive Factors (p = 0.001), Family Factors (p = 0.010), and Socio-cultural Factors (p = 0.006). Since the respective p-values are lower than the expected level of significance (0.05), the hypothesis is rejected. This suggests that the academic strand influences students' perceptions of gender stereotypes, potentially shaped by curriculum content, peer influence, teacher expectations, and access to opportunities. For instance, certain strands may inadvertently reinforce stereotypes by emphasizing subjects traditionally associated

with specific genders or by promoting unequal expectations for male and female students. Peer groups within different strands may also reinforce stereotypical behaviors, while teacher biases and school culture could further perpetuate gender norms. Taher (2021) and Gaddi et al. (2024) highlight that despite technological advancements, girls still face fewer opportunities than boys in accessing and benefiting from quality education. Empirical evidence from European countries similarly points to the underrepresentation of women in technical fields such as engineering, science, mathematics, and computing, while women are overrepresented in humanities, languages, education, and the arts. This disparity reinforces traditional gender roles and widens the gender inequality gap.

Regarding religion, no significant differences were found in the antecedents of gender stereotyping for Cognitive Factors ($p = 0.151$), Family Factors ($p = 0.452$), and Socio-cultural Factors ($p = 0.174$). This indicates that, regardless of their religious affiliation, students are similarly affected by these factors, reflecting shared cultural and social norms that transcend specific religious teachings. The uniformity may stem from the cultural context in which students, irrespective of religion, are exposed to similar societal expectations regarding gender roles. However, there was a significant difference in Individual Factors ($p = 0.010$), suggesting that religious affiliation influences students' perceptions of gender. Religious beliefs and teachings may shape attitudes, beliefs, and behaviors related to gender roles and expectations. Orbeta (2019) noted that while patriarchal relations are central to many global religions, this is not universally applicable. Some religious orders emphasize cooperation and respect for women, while others prioritize male leadership but indirectly allow women spaces to practice agency and exercise power.

In response to the findings, schools can adopt several practical strategies to address and reduce gender stereotyping within their communities, fostering a more inclusive environment for all students. Addressing perceptions based on physical appearance could be highly impactful. Schools could hold workshops or activities that encourage students to value one another for their character and abilities rather than

looks. This might involve sessions where students share their unique skills and talents or participate in discussions focused on recognizing internal qualities over external ones. Reflective activities where students confront their own biases around appearance could also promote a healthier, more respectful peer culture.

Another effective approach involves tackling career-related stereotypes that often guide students' ambitions. Schools can emphasize personalized career counseling that supports students' genuine interests and strengths, regardless of gender. Hosting speakers from diverse professions and highlighting non-traditional career paths within the curriculum could broaden students' perspectives, helping them see themselves in roles free from gender constraints.

Given the strong influence of family expectations on students' views of gender roles, schools could also foster family engagement. Organizing family-oriented events, such as an "Inclusion Day," would offer parents insights into the benefits of gender-neutral roles both at home and in the broader community. Schools could provide resources or workshops that encourage families to model gender-inclusive behavior, showing children that domestic and professional roles can be shared equitably.

On a broader level, integrating discussions about emotional well-being into school programs can help dismantle stereotypes around emotional expression. Activities such as group discussions, role-playing, and guest talks from mental health professionals could foster a more open attitude towards emotions, particularly for male students who may feel restricted by societal norms. Encouraging all students to express themselves freely can lead to healthier, more authentic relationships.

Lastly, schools might consider implementing community-wide initiatives aimed at breaking down stereotypes. For example, organizing a "Breaking Stereotypes Week" would allow students to share their insights, engage with peers, and become more aware of the diversity within their community. Student-led campaigns and collaborative projects that

champion gender inclusivity can have a lasting impact, helping cultivate a school culture where everyone feels valued and understood.

CONCLUSIONS

The study's findings provide a deeper understanding of the antecedents of gender stereotyping among senior high school students, highlighting the roles of individual, cognitive, familial, and socio-cultural factors, with family emerging as the most influential. This emphasizes the critical role families play in perpetuating gender stereotypes, particularly through expectations surrounding household responsibilities and gendered roles. The findings also reveal differences in gender perceptions across academic strands and the impact of religion on individual perspectives, underscoring the need for targeted interventions to address these specific influences and promote a more inclusive approach to gender in educational settings.

The study recommends actionable steps to address these findings. For students, fostering awareness and self-reflection about the factors shaping their gender perceptions can empower them to identify and counteract stereotypes. For teachers and school staff, incorporating gender-sensitive materials, inclusive language, and diverse instructional strategies can help create a classroom environment that challenges gender biases. School administrators are encouraged to implement targeted policies and programs to address the root causes of gender stereotypes and foster a supportive and inclusive school climate. Families are also integral to this effort; parents and guardians can engage in open discussions about gender roles, model equitable behavior, and encourage children to explore diverse interests and activities without gendered constraints.

For future research, this study provides a foundation for examining the influence of different academic strands on students' views of gender and exploring more focused intervention strategies to address gender stereotyping in educational and family contexts.

Limitations and Future Directions

This study faced several limitations that warrant consideration. First, challenges in data collection, including potential response biases and the limited geographic scope, may impact the generalizability of the findings. Additionally, the study captures students' gender perceptions at a single point in time, restricting insights into how these perceptions might evolve over time. To address these limitations, future research could incorporate longitudinal designs to track changes in gender perceptions and stereotypes over time. Qualitative methods, such as in-depth interviews or focus groups, are also recommended to delve into individual experiences and provide deeper insights into the complex factors influencing gender stereotypes.

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CROSS-LINGUISTIC INFLUENCE OF MOTHER TONGUE TO ENGLISH: PHONOLOGICAL AND ORTHOGRAPHIC PROCESSING SKILLS

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ABSTRACT

Cross-linguistic influence in reading and spelling is a growing focus in second language (L2) learning research. This study examines how phonological and orthographic processing skills in the mother tongue (L1) influence English (L2) reading and spelling. Using purposive sampling, 80 grade three pupils who spoke Bisaya at home participated. Data were collected using comparable phonological measures, i.e., letter-sound knowledge, rhyme choice, real word and pseudoword reading and orthographic measures, i.e., real word and pseudoword spelling, in both languages. Linear correlation analysis revealed that phonological and orthographic skills in L1 significantly predict English reading and spelling abilities. The findings highlight the interdependence of L1 and L2 literacy skills, with implications for future research.

Keywords: cross-linguistic influence, mother tongue, second language learning, phonological skills, orthographic skills

INTRODUCTION

Learners begin their education in their mother tongue, building a foundation that supports the acquisition of additional languages. The Mother Tongue-Based Multilingual Education (MTB-MLE) program under the K-12 curriculum emphasizes using the first language (L1) as the medium of instruction in Grades 1 to 3 to develop speaking, reading, writing, and listening skills. This foundation establishes a bridge to school languages and prepares learners for academic and lifelong success (DepEd, 2016).

Phonological and orthographic processing skills are crucial for literacy development. Phonological processing involves recognizing and manipulating sounds in spoken language, including phonemic awareness, memory, and retrieval, which aid in decoding and spelling tasks (Wolf et al., 2012; Poulsen et al., 2015). Orthographic processing refers to recognizing written language patterns, grapheme-phoneme relationships, and word forms, facilitating spelling and fluent reading (Apel, 2011; Ehri, 2005). Both skills interact to support literacy, with deficits in either domain leading to difficulties in reading and writing (Ehri, 2005).

In the Philippines, literacy challenges persist, as evidenced by the Early Grade Reading Assessment (EGRA), where many learners are classified as non-readers. The PISA 2022 ranked the Philippines sixth-lowest in reading, while the National Achievement Test (NAT) recorded a mean percentage score of 54.42% in English reading comprehension for grade 3 learners. These findings highlight the urgent need for targeted interventions, such as phonics and orthographic skill development, to improve literacy outcomes.

Although previous studies demonstrate that L1 skills facilitate L2 literacy acquisition, they primarily focus on older learners or specific

domains like spelling and collocations. Dich (2011) and Nemati and Taghizadeh (2013) emphasize the role of L1 orthographic knowledge and linguistic transfer in L2 learning. McManus (2021) provides a broader analysis of cross-linguistic influence, showing both positive and negative impacts across phonology, morphology, and syntax. However, research on the influence of L1 phonological and orthographic skills on L2 literacy in young learners remains limited.

This study addresses this gap by exploring how L1 phonological and orthographic processing skills impact English literacy development among grade 3 pupils. It specifically aims to determine: (1) the proficiency levels of pupils in phonological and orthographic skills in L1 and L2, and (2) whether these L1 skills predict English word reading and spelling abilities.

Hypotheses

The study formulated the following null hypotheses:

Ho_1: Mother tongue phonological skills do not predict English reading and spelling skills.

Ho_2: Mother tongue orthographic processing skills do not predict English reading and spelling skills.

Cross-language Transfer

Cross-language transfer, rooted in Interlanguage Theory, refers to how a learner's native language (L1) influences the acquisition of a second language (L2). This transfer plays a pivotal role in language learning, where certain features of L1 are carried over to L2, while others are not. The extent of this transfer depends on factors such as the learner's L2 proficiency, structural similarities between the two languages, and learners' emotional state. For instance, learners often rely on their L1 alphabet knowledge to identify the sounds of letters in L2.

In reading, Bisaya-speaking learners might mispronounce *red* as /rɪd/ because the letter *e*, which carries a soft /e/ sound in English, corresponds to /ɪ/ in Bisaya. Similarly, they may struggle with spelling in L2 due to reliance on Bisaya's phoneme-grapheme correspondence, where words are consistently spelled as pronounced. In contrast, English often violates this rule, leading to spelling errors. These mistakes, however, are not mere deficiencies but evidence of learners' strategies as they create an interlanguage—a temporary, functional system to bridge gaps between L1 and L2. Error analysis, as Kim et al. (2020) suggests, can reveal these strategies and provide valuable insights into learners' developmental processes.

Cross-linguistic influence extends beyond individual errors, playing a critical role in literacy acquisition. Sun et al. (2021) found that L1 phonological awareness significantly impacts English word reading, while spelling skills in L2 are shaped by L1 orthographic rules (Dich, 2011; Treiman & Kessler, 2014). For example, bilingual learners transfer cognitive spelling techniques from L1 to L2, but these must be adapted to the unique demands of the target language.

Ultimately, the interplay between cross-linguistic transfer and language-specific constraints highlights the complexity of acquiring reading and spelling skills in L2. While L1 can provide a foundation for L2 literacy, successful acquisition requires learners to meet language-specific requirements (Bialystok, 2002; Figueredo, 2006; Geva, 2006). This dynamic interaction underscores the importance of understanding cross-linguistic influence as both a challenge and a resource in second language learning.

Cross-Linguistic Influence in Reading

Reading is a critical skill for children to acquire, as it involves associating sounds with meanings. Children develop these associations in diverse ways, sparking significant interest among researchers and educators seeking to understand literacy development, reading impairments, and the effectiveness of "code-focused" (phonology-based) versus "meaning-

focused" (vocabulary and morphology-based) approaches to reading instruction (Connor et al., 2004).

Sun et al. (2021) investigated English word reading among bilingual learners in the United States, focusing on children exposed to structurally diverse languages like Spanish and Chinese. Their study examined the roles of phonological and morpho-semantic abilities in word reading relative to a child's linguistic background. Results indicated that Spanish–English bilinguals relied more heavily on phonological awareness compared to English monolinguals. Additionally, native language metalinguistic skills were found to exert both direct and indirect influences on English word reading, highlighting the interplay between linguistic background and reading development.

Cross-Linguistic Influence in Spelling

While spelling is an essential aspect of literacy, it has received less attention than reading, with much of the research focusing on monolingual learners. Recently, there has been growing interest in spelling development among multilingual learners, particularly those whose L1 is not English. Bilingual literacy researchers suggest that the degree to which spellers transfer L1 orthographic knowledge to L2 depends on their proficiency in L2. The more skilled learners are in L2, the less they rely on L1 orthographic knowledge (Lefrancois, 2001; Figueredo, 2006).

Dich (2011) observed that cross-linguistic influence in English spelling varies across different components of spelling proficiency. Spelling in one language may involve distinct cognitive processes compared to another, highlighting the need for learners to meet language-specific requirements when acquiring literacy skills in L2. If learning to spell in L2 required entirely new skills unrelated to L1, all learners would need to develop these unique abilities. However, the positive influence of linguistic similarities suggests that when L1 and L2 share orthographic traits, learners can transfer knowledge more effectively, benefiting

from the overlap in required skills (Bialystok, 2002; Durgunoğlu, 2002; Figueredo, 2006; Geva, 2006).

METHODS

Research Design

This study utilized regression analysis to examine the relationship between phonological and orthographic skills in the mother tongue (L1) and English (L2) reading and spelling skills. Regression analysis predicts the value of a dependent variable based on one or more independent variables, offering insights into the strength and nature of these relationships (Field, 2018). This method was suitable for the study, as it enabled the prediction of English literacy skills based on learners' proficiency in their first language. The key variables measured included phonological and orthographic processing skills in both L1 and L2.

Participants of the Study

The study involved 80 Grade 3 Bisaya-speaking children, with an average age of 9.5 years. Using purposive sampling, all Grade 3 students (40 males and 40 females) from a public school in Iligan City were selected. This school was chosen because most learners spoke only the mother tongue (Bisaya), unlike other schools where children are more proficient in English or Filipino as a second language.

Ethical Considerations

The study included Grade 3 pupils, with informed consent forms ensuring participants understood the study's purpose, data confidentiality, voluntary participation, right to withdraw, and the researcher's contact information. Participation was entirely voluntary, allowing students to decline or withdraw at any time without repercussions. Data from withdrawn participants were excluded from the study.

Measures

The instruments used to assess children's phonological and orthographic skills in the mother tongue (Bisaya) and English were adapted from the *Early Grade Reading Assessment (EGRA, 2016)* toolkit provided by the Department of Education (DepEd), except for the rhyme choice measure.

Letter-Sound Knowledge

This task assessed pupils' ability to produce the sounds of letters. The alphabet was presented in random order, with each letter appearing multiple times to prevent rote recitation. The assessment consisted of 50 letters, and a checklist was used to record responses. Pupils were individually tested as the researcher pointed to a letter for them to sound out. Correct responses were recorded (1 = correct; 0 = incorrect), and self-corrections were counted as correct. Incorrect responses were marked with a slash (/).

Rhyme Choice

This auditory measure evaluated phonemic awareness by identifying rhyming patterns. Pupils determined whether word pairs rhymed, marking *Oo* (Bisaya) or *Yes* (English) for rhyming words and *Wala* (Bisaya) or *No* (English) for non-rhyming words. The Bisaya task used materials from DepEd, while the English task was adapted from the *Phonemic Awareness Assessment* developed by CIERA, with a reliability coefficient of 0.80. Each of the 10 items was scored (1 = correct; 0 = incorrect), with errors marked by a slash (/).

Real Word Reading

This task measured word recognition and decoding skills using a list of unrelated, familiar words. Pupils read aloud words such as *dugangi* (Bisaya) or *come* (English). Only pronunciations with all correct phonemes were marked as correct (1 = correct; 0 = incorrect), with mispronunciations recorded using a slash (/). Self-corrections were considered correct.

Pseudoword Reading

To evaluate decoding ability without sight recognition, pupils read aloud 20 pseudowords. For example, the Bisaya task included *sak* and the English task included *nad*. Correct pronunciations were scored (1 = correct; 0 = incorrect), with mispronunciations marked by a slash (/). Self-corrections were also accepted as correct.

Real Word Spelling

This task consisted of spelling 15 familiar words of varying lengths (4 to 8 letters). The target word was read aloud twice, such as *salamat* (Bisaya) or *under* (English). Only fully correct spellings were scored (1 = correct; 0 = incorrect).

Pseudoword Spelling

This task measured internalized orthographic rules by requiring pupils to spell pseudowords. For instance, the Bisaya task used *wak* and the English task used *veb*. Scores ranged from 0 to 3, with each point corresponding to a correctly placed letter.

Scoring and Proficiency Levels

Scores from both Bisaya and English assessments were transmuted into proficiency levels: Beginning, Developing, Approaching Proficiency, Proficient, and Advanced. A corresponding grade scale was applied to each proficiency level, as shown in Table 1.

Table 1 *Proficiency level of learners' phonological and orthographic skills*

Proficiency levels	Grading scale	Interpretation
Advanced	90% and above	The pupil at this level exceeds the core requirements in terms of knowledge, skills and understandings, and can transfer them automatically and flexibly through authentic performance tasks.

Proficient	85% - 89%	The pupil at this level has developed the fundamental knowledge and skills and core understandings, and can transfer them independently through authentic performance tasks.
Approaching Proficiency	80% - 84%	The pupil at this level has developed the fundamental knowledge and skills and core understandings and, with little guidance from the teacher and/or with some assistance from peers, can transfer these understandings through authentic performance tasks.
Developing	75% - 79%	The pupil at this level possesses the minimum knowledge and skills and core understandings but needs help throughout the performance of authentic tasks.
Beginning	Below up to 74%	The pupil at this level struggles with his/her understanding; prerequisite and fundamental knowledge and/or skills have not been acquired or developed adequately to aid understanding.

Data Gathering and Procedure

Permission for the study was obtained from the Department of Education (DepEd) Region X Office, school administrators, and the research adviser. All guidelines for accessing learners' school records were strictly adhered to during data collection. A master list of class enrollment was secured from the class adviser to ensure the accurate and compliant gathering of student information.

The data collection process prioritized a child-friendly and supportive environment. Testing sessions were conducted in familiar classroom settings to reduce anxiety, with each session lasting 40 to 60 minutes. Breaks were provided as needed to maintain the children's focus and comfort. Individual testing ensured that each learner received

adequate attention and support. Instructions were delivered clearly and encouragingly to help children understand the tasks and feel at ease.

Testing followed a structured sequence, beginning with Bisaya measures and transitioning to English measures in the following order: letter-sound knowledge, real word reading, pseudoword reading, rhyme choice, real word spelling, and pseudoword spelling. This organization facilitated consistency and minimized confusion during the sessions.

Data Analysis

Quantitative data from the two measures (Bisaya and English) were summarized using frequencies and percentages. Regression analysis was employed to examine the relationship between mother tongue phonological and orthographic skills (independent variables) and English reading and spelling skills (dependent variables). This method allowed the study to determine whether mother tongue skills significantly predict English literacy outcomes.

The results were interpreted based on the following guidelines:

- **p-value (< 0.05):** Indicates statistical significance, suggesting the relationship between variables is unlikely to occur by chance (significant at the 0.05 level).
- **Beta Coefficient (B):** Reflects the strength and direction of the relationship. A positive coefficient indicates a direct positive relationship, while a negative coefficient indicates an inverse relationship.
- **Standard Error (SE):** Represents the precision of the effect estimate. Smaller standard errors signify more accurate estimates, providing greater clarity on the predictor's role within the model.

Results and Discussions

Table 2 *Learners' proficiency level in Mother tongue and English letter-sound knowledge*

Proficiency levels	Grading scale	Mother Tongue		English	
		n	%	n	%
Advanced	90-100	68	85	71	88.75
Proficient	85 – 89	6	7.50	3	3.75
Approaching Proficiency	80 – 84	3	3.75	3	3.75
Developing	75 – 79	0	0	0	0
Beginning	Below 75	3	3.75	3	3.75
	Total	**80**	**100**	**80**	**100**

Table 2 shows the proficiency levels of Grade 3 pupils in their mother tongue (MT) and English letter-sound knowledge. Most pupils demonstrated advanced and proficient skills in both their mother tongue (85% and 7.5%, respectively) and English (88.75% and 3.75%, respectively). Only a small percentage of learners were at the approaching proficiency and beginning levels for both MT (3.75% each) and English (3.75% each). These findings suggest that the majority of pupils have developed the ability to independently and automatically recognize the sounds and letters of the alphabet in both L1 and L2.

Automatic recognition of letter-sound associations is essential for learning to read and spell, as it enables learners to decode and teach themselves new words (Baker et al., 2018; Kim & Petscher, 2011; Lervåg et al., 2009; Muter et al., 2004). Conversely, poor letter-sound knowledge can hinder reading fluency, accuracy, and comprehension, making it difficult for children to recognize words and understand texts (Huang, 2017).

Table 3 *Learners' proficiency level in Mother tongue and English rhyme choice*

Proficiency levels	Grading scale	Mother Tongue		English	
		n	%	n	%
Advanced	90-100	71	88.75	65	81.25
Proficient	85 – 89	0	0	0	0
Approaching Proficiency	80 – 84	2	2.5	3	3.75
Developing	75 – 79	0	0	0	0
Beginning	Below 75	7	8.75	12	15
	Total	**80**	**100**	**80**	**100**

Table 3 presents the proficiency levels of Grade 3 pupils in their mother tongue (MT) and English rhyme choice. The majority of pupils demonstrated advanced-level skills in rhyme choice for both MT (88.75%) and English (81.25%). A smaller proportion fell within the approaching proficiency and beginning levels in MT (2.5% and 8.75%, respectively) and English (3.75% and 15%, respectively). These findings indicate that most learners have developed the ability to recognize similar-sounding words in both their mother tongue and English.

Rhyming involves identifying similar-sounding words with different onsets but similar final parts, a foundational skill for recognizing word-sound structures (Cséfalvay & Lechta, 2013). Máčajová (2021) and Máčajová et al. (2017) highlights that rhyme detection reflects cognitive ability and supports reading acquisition by enhancing sensitivity to word-sound identity. Moreover, performance in rhyme-choice tasks is a strong predictor of future reading success (Grofčíková & Máčajová, 2020), emphasizing its importance in early literacy development.

Table 4 *Learners' proficiency level in Mother tongue and English real word reading*

Proficiency level	Grading scale	Mother Tongue		English	
		n	%	n	%
Advanced	90-100	46	57.50	37	46.25
Proficient	85 - 89	11	13.75	10	12.50
Approaching Proficiency	80 - 84	3	3.75	4	5
Developing	75 - 79	0	0	0	0
Beginning	Below 75	20	25	29	36.25
	Total	**80**	**100**	**80**	**100**

Table 4 presents the proficiency levels of Grade 3 pupils in their mother tongue (MT) and English real-word reading. A majority of pupils demonstrated advanced and proficient reading skills in their MT (57.50% and 13.75%, respectively) and English (46.25% and 12.50%, respectively). However, a notable number fell into the approaching proficiency and beginning levels for MT (3.75% and 25%, respectively) and English (5% and 36.25%, respectively). These results suggest that while many learners can independently recognize basic sight words, others still require assistance or struggle with simple word reading in both languages.

Word recognition, the ability to instantly and unconsciously pronounce words, is a critical component of early literacy development. Mastery of high-frequency or sight words enables learners to focus on understanding the text rather than decoding individual words (Garnett, 2011). Conversely, poor sight-word readers often struggle to sound out words, relying on guesses based on initial letters or visual cues (Massachusetts Department of Elementary and Secondary Education, 2020). Limited word recognition diverts cognitive resources to decoding, hindering comprehension. In contrast, fluent readers, who require minimal effort for word recognition, can dedicate most of their cognitive capacity to understanding the text (Pressley, 2002).

Table 5 *Learners' proficiency level in Mother tongue and English pseudoword reading*

Proficiency level	Grading scale	Mother Tongue		English	
		n	%	n	%
Advanced	90-100	59	73.75	58	72.50
Proficient	85 - 89	2	2.50	3	3.75
Approaching Proficiency	80 - 84	1	1.25	1	1.25
Developing	75 - 79	2	2.50	0	0
Beginning	Below 75	16	20	18	22.50
	Total	**80**	**100**	**80**	**100**

Table 5 presents the proficiency levels of Grade 3 pupils in their mother tongue (MT) and English pseudoword reading. A significant proportion of pupils demonstrated advanced and proficient decoding skills in their MT (57.50% and 2.50%, respectively) and English (72.50% and 3.75%, respectively). However, some pupils were categorized at the beginning level for MT (20%) and English (22.50%) pseudoword reading. These findings indicate that while many learners can independently decode pseudowords in both languages, others require assistance or struggle with this task.

Proficient reading involves combining decoding and sight recognition skills to read unfamiliar words that follow orthographic rules and patterns (Philippines National EGRA: English and Filipino, 2019). Research highlights that the ability to quickly decode pronounceable nonwords is a key factor distinguishing good readers from average ones, serving as a robust measure of phonological decoding ability in children (Shaywitz, 2013; Stanovich, 2000). Conversely, low pseudoword reading proficiency suggests difficulties in applying phonics rules to decode words, hindering the ability to read real words effectively (Groff, 2018).

Table 6 *Learners' proficiency level in Mother tongue and English real word spelling*

Proficiency level	Grading scale	Mother Tongue		English	
		n	%	n	%
Advanced	90-100	39	48.75	11	13.75
Proficient	85 - 89	10	12.50	3	3.75
Approaching Proficiency	80 - 84	4	5	6	7.50
Developing	75 - 79	0	0	0	0
Beginning	Below 75	27	33.75	60	75
	Total	**80**	**100**	**80**	**100**

Table 6 presents the proficiency levels of Grade 3 pupils in their mother tongue (MT) and English real-word spelling. Most pupils demonstrated advanced and proficient spelling skills in both MT (48.75% and 12.5%, respectively) and English (48.75% and 12.5%, respectively). However, some pupils were categorized at the approaching proficiency and beginning levels for MT (5% and 33.75%, respectively) and English (7.5% and 75%, respectively). These findings indicate that while many learners can independently and accurately spell real words in both languages, a notable number still require assistance or face challenges in this area.

Familiarity with the orthographic principles of L1 enables learners to easily understand sound-letter relationships, establish spelling rules, and use punctuation for clarity and effective communication. This proficiency allows them to process familiar words automatically, directly access their meaning or sound, and read fluently (Borleffs et al., 2019; Li et al., 2009; Fitzgerald & Shanahan, 2000). Additionally, adequate knowledge of orthographic principles supports accurate word recognition, proper spelling, and effective use of punctuation and grammar in written language (Ehri, 2005; Figueredo, 2006).

Table 7 *Learners' proficiency in Mother tongue and English pseudoword spelling*

Proficiency level	Grading scale	Mother Tongue		English	
		n	%	n	%
Advanced	90-100	54	67.5	40	50
Proficient	85 - 89	6	7.5	7	8.75
Approaching Proficiency	80 - 84	1	1.25	8	10
Developing	75 - 79	2	2.5	5	6.25
Beginning	Below 75	17	22.25	20	25
	Total	**80**	**100**	**80**	**100**

Table 7 presents the proficiency levels of Grade 3 pupils in their mother tongue (MT) and English pseudoword spelling. Most pupils demonstrated advanced and proficient levels, successfully spelling words that follow consistent spelling rules in MT (67.5% and 7.5%, respectively) and English (50% and 8.75%, respectively). However, a portion of learners fell into the beginning level for MT (22.5%) and English (25%). These findings suggest that while the majority have internalized orthographic rules in both languages, some still require assistance or struggle to apply these rules in spelling unfamiliar words.

Orthographic processing skills, which involve forming, storing, and accessing orthographic representations, are effectively assessed through tasks requiring learners to spell unfamiliar word-like letter strings (Burt, 2006). Research indicates that both word-specific and general orthographic knowledge are developed through repeated exposure to print, highlighting the importance of consistent practice in literacy development (Fletcher-Flinn et al., 2004).

Mother Tongue Phonological Skills and English Word Reading and Spelling Skills

Table 8 shows the relationship between mother tongue phonological skills and English word reading and spelling skills. It highlights the predictive value of mother tongue phonological skills on English literacy development.

Table 8 *Mother Tongue Phonological Skills as a predictor of English Phonological & Orthographic Skills*

Letter Sound Knowledge	Pseudoword Reading	.581	.101
	Real Word Spelling Pseudoword	.331	.082
	Spelling	1.282	.266
Rhyme Choice	Letter Sound Knowledge	1.396	.455
	Rhyme Choice	1.138	.071
	Real Word Reading	1.598	.330
	Pseudoword Reading	2.344	.458
	Real Word Spelling Pseudoword	1.511	.354
	Spelling	5.840	1.149
Real Word Reading	Letter Sound Knowledge	.918	.134
	Rhyme Choice	.228	.045
	Real Word Reading	1.017	.065
	Pseudoword Reading	1.399	.098
	Real Word Spelling Pseudoword	.858	.099
	Spelling	3.185	.295
Pseudoword Reading	Letter Sound Knowledge	.607	.093
	Rhyme Choice	.159	.030
	Real Word Reading	.716	.039
	Pseudoword Reading	1.051	.044

**Significant at 0.05 level of significance*

Table 8 presents the relationship between mother tongue (MT) phonological skills and English phonological and orthographic skills. The findings indicate that all components of MT phonological skills,

including letter-sound knowledge, rhyme choice, real word reading, and pseudoword reading, significantly predict English phonological and orthographic skills. This suggests that children with well-developed phonological skills in their MT are more likely to acquire strong foundational reading and writing abilities in English.

These results are consistent with Sun et al. (2021), which demonstrated that native language metalinguistic abilities exert both direct and indirect effects on English word reading. Their study underscores the critical role of phonological and morpho-semantic skills in the first language in facilitating literacy development in a second language.

Mother Tongue Orthographic Skills and English Word Reading and Spelling Skills

The table presented in this section examines the association between mother tongue orthographic skills and English word reading and spelling skills. The subsequent analysis and discussion explore the degree to which mother tongue orthographic proficiency is related to English word reading and spelling skills.

Table 9 *Mother Tongue Orthographic Skills as a predictor of English Phonological & Orthographic Skills*

Independent Variable	**Dependent Variable**	**Effect**	**SE**	**p**
Mother Tongue Orthographic Skills	*English phonological and orthographic skills*			
Real Word Spelling	Letter Sound Knowledge	.499	.107	.000
	Rhyme Choice	.171	.032	.000
	Real Word Reading	.693	.053	.000
	Pseudoword Reading	.987	.072	.000
	Real Word Spelling	.679	.062	.000
	Pseudoword Spelling	2.752	.119	.000

Pseudoword Spelling	Letter Sound Knowledge	.174	.035	.000
	Rhyme Choice	.058	.010	.000
	Real Word Reading	.228	.018	.000
	Pseudoword Reading	.333	.023	.000
	Real Word Spelling	.214	.022	.000
	Pseudoword Spelling	.948	.029	.000

**Significant at 0.05 level of significance*

Table 9 highlights the relationship between mother tongue (MT) orthographic skills and English phonological and orthographic skills. The results indicate that both components of MT orthographic skills, real word spelling and pseudoword spelling, significantly predict English reading and spelling proficiency. This suggests that strong orthographic skills in the MT enhance literacy development in English.

These findings align with the principle of cross-linguistic transfer, where proficiency in a first language (L1) supports second language (L2) learning (Durgunoğlu, 2002; Koda, 2005). However, transfer is not always positive; differences in orthographic systems can lead to negative transfer, where incorrect L1 patterns influence L2 spelling (Bassetti, 2006). Dich (2011) emphasizes that spelling varies across languages, requiring learners to meet language-specific orthographic demands. Positive transfer is most effective when L1 and L2 share orthographic traits, facilitating the development of similar skills and understanding (Bialystok, 2002; Figueredo, 2006; Geva, 2006).

CONCLUSION

This study investigated the predictive role of mother tongue (MT) phonological and orthographic processing skills on English reading and spelling. The findings led to the rejection of both null hypotheses, demonstrating that MT phonological skills predict English word reading and spelling, while MT orthographic skills also significantly predict these English literacy outcomes. These results align with previous research, underscoring the influence of MT literacy on second-language (L2)

phonological and orthographic processing.

The study reinforces the concept of cross-linguistic transfer, highlighting that higher literacy levels in the first language facilitate the transfer of skills to the second language.

The findings have practical and policy implications. Teachers are encouraged to design activities that leverage students' native language knowledge to support English literacy development. Policymakers should recognize the foundational role of the mother tongue in L2 acquisition, integrating it into education policies as a critical tool for learning rather than treating it as a standalone subject.

Future research should consider larger sample sizes and include multiple schools to enhance generalizability. Experimental and longitudinal designs are also recommended to explore causal and temporal relationships among the variables.

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CHALLENGES OF NOVICE TEACHERS IN LESSON DELIVERY: BASIS FOR MENTORING PROGRAM

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ABSTRACT

This study explored the challenges novice teachers at Tanay National High School face in lesson delivery, informing the creation of a mentoring program. Participants highlighted the need for differentiated instruction, structured communication to manage disruptive behaviors, and interactive strategies to engage underperforming students. The findings also revealed interpersonal challenges in building relationships with colleagues and parents, emphasizing the need for problem-solving skills to navigate school dynamics and resolve conflicts. Additionally, time constraints and heavy workloads were identified, underscoring the importance of task prioritization, work-life balance, and stress management. Novice teachers reported coping through enhanced instructional methods, proactive preparedness, and fostering work-life balance. Interviews

conducted during the second semester of the 2023–2024 school year provided insights into their experiences and strategies. The proposed Career Compass Mentorship Program (CCMP) addresses these challenges by offering targeted support in classroom management, interpersonal communication, and time management. By fostering collaboration between novice and experienced teachers, the CCMP aims to enhance professional growth, improve coping strategies, and promote better educational outcomes. Recommendations include implementing tailored mentoring initiatives and promoting effective coping mechanisms to support novice teachers' needs.

Keywords: novice teachers, challenging moments, coping strategies, mentorship program

INTRODUCTION

Novice teachers, defined as educators in the early stages of their careers with limited teaching experience, face numerous challenges in pedagogy, classroom management, and adapting to school culture. These "bumpy moments" often require immediate decision-making in response to unexpected classroom issues. The implementation of the K-12 Basic Education policy in 2012 brought a surge of novice teachers tasked with meeting new curriculum standards and addressing diverse learning needs. This transition heightened the reality shock many experienced, revealing gaps in their pre-service training. Additionally, the COVID-19 pandemic exacerbated these difficulties, requiring teachers to adapt to new learning modalities amid significant disruptions.

Recognizing the critical nature of the early years of teaching, this study explores the coping strategies employed by novice teachers to navigate their work environment. Grounded in Bandura's (1986) Social Cognitive Theory, the research examines how observational learning and modeling from experienced colleagues influence coping mechanisms.

The Transactional Model of Stress and Coping further guides the analysis of how teachers assess challenges and choose strategies based on stress perceptions. Additionally, Communities of Practice provides a framework for understanding how collaborative interactions support professional growth and resilience.

Despite extensive research on novice teachers in Western contexts, there is a lack of studies addressing the unique challenges within the Philippine educational system, especially considering recent curriculum changes and the pandemic's impacts. This study aims to bridge that gap by examining the experiences of novice teachers at Tanay National High School. Findings align with Sustainable Development Goal 4 (Quality Education) by contributing to inclusive and equitable education while informing mentoring programs that support novice teachers' professional growth and improve educational outcomes.

The study also holds personal significance for the researchers, who are deeply committed to supporting early-career educators. Having observed these challenges firsthand, they aim to uncover actionable insights for mentoring programs and support systems. By acknowledging their biases, the researchers strive to approach this work transparently and with genuine dedication.

Aligned with DepEd Order No. 43 (2017), this study defines novice teachers as those with 0–3 years of experience in the public school system but broadens the scope to include educators with up to 5 years of experience for a more comprehensive perspective. The qualitative approach is guided by philosophical assumptions that knowledge is constructed through lived experiences, emphasizing the subjective realities of individual teachers. Data were collected through interviews and focus groups to authentically capture the complexities of their professional journeys.

The findings hold educational, social, and psychological implications. Educationally, they inform mentoring programs to enhance professional development and teaching effectiveness. Socially, the study

promotes a supportive school community that fosters collaboration and work-life balance. Psychologically, it addresses feelings of inadequacy and burnout by identifying effective coping strategies, ultimately enhancing resilience among novice educators.

By understanding the strategies novice teachers use to overcome challenges, this study contributes to targeted interventions aimed at fostering resilience and professional growth. It underscores the importance of supporting novice educators as they navigate their critical early years, ensuring their success and well-being in the teaching profession.

Literature Review

Understanding the challenges faced by novice teachers is essential for designing effective support systems and interventions. A comprehensive review of existing literature explored the experiences and coping strategies of novice teachers across international, Asian, and Philippine contexts. It also examined sustainable programs aimed at enhancing professional development.

Internationally, novice teachers face significant challenges, including classroom management, curriculum implementation, and adapting to diverse student needs (Jiang et al., 2018). In Asia, novice educators bring preconceptions about best practices shaped by their training and early experiences (Goh et al., 2017). In the Philippines, the introduction of the K-12 Basic Education policy has increased the pressure on novice teachers to meet new curriculum standards while addressing varied learning needs, exacerbating the "reality shock" of transitioning from training to actual teaching (Iballa, 2021). The COVID-19 pandemic further intensified these challenges by necessitating rapid adjustments to new learning modalities.

Feelings of inadequacy and stress are common among novice teachers, especially during unexpected classroom incidents requiring immediate decision-making (Chaaban & Du, 2019). Limited practical

experience often compounds struggles with classroom management and instructional strategies (Tynjälä & Heikkinen, 2011).

Coping mechanisms play a vital role in helping novice teachers adapt to their work environments. Bandura's (1986) Social Cognitive Theory highlights the importance of observational learning, where novice teachers model effective practices observed in experienced colleagues, boosting their self-efficacy. The Transactional Model of Stress and Coping provides insight into how novice teachers evaluate challenges and select coping strategies, such as seeking peer support or professional development (Rees, 2015). Additionally, the Communities of Practice framework, developed by Lave & Wenger (1991), underscores the value of collaborative interactions among educators, enabling novice teachers to share experiences and refine their practices through formal and informal networks (Valdez & Dominado, 2020).

This study integrates Social Cognitive Theory, the Transactional Model of Stress and Coping, and Communities of Practice to provide a comprehensive framework for understanding novice teachers' experiences. Social Cognitive Theory guided the exploration of how observational learning influences coping strategies, as captured through interviews. The Transactional Model facilitated an analysis of how novice teachers assess challenges and choose stress-management strategies, particularly related to classroom management and workload. Communities of Practice illuminated how collaborative interactions among novice teachers foster professional growth and resilience. Together, these theoretical frameworks form a solid foundation for understanding the multifaceted experiences of novice educators navigating early career challenges within a supportive environment.

Research Questions

This study explored the challenges faced by novice teachers at Tanay National High School in lesson delivery, forming the basis for developing a mentoring program. Data were collected through interviews conducted during the second semester of the 2023–2024 school year. The study

sought to address the following research questions:

1. What are the major challenges faced by novice teachers during their first years of teaching?
2. What coping strategies do novice teachers employ to overcome challenging experiences?
3. What program can be proposed to help novice teachers address these challenges?

METHODS

Research Design

This study utilized a qualitative research methodology, adopting a phenomenological design to explore the lived experiences of novice teachers at Tanay National High School. This approach allowed for an in-depth examination of the challenges they faced and the coping strategies they employed. Semi-structured interviews were conducted to gather rich, detailed narratives, providing a comprehensive understanding of how novice teachers navigated the complexities of their early careers and developed resilience.

Participants and Sampling

This study employed purposive sampling to select participants who were novice teachers at Tanay National High School, specifically those with 3–5 years of teaching experience. This method was appropriate as it ensured the inclusion of individuals with relevant experiences and insights into the challenges faced by novice educators. Participants were chosen based on several criteria. First, teachers with permanent status were selected to ensure a stable teaching environment, which allowed for a more comprehensive exploration of their challenges and coping strategies. Second, substitute teachers were excluded to focus on educators with consistent classroom engagement, as substitute teaching often involves

varying levels of responsibility and may not accurately reflect the experiences of novice teachers fully accountable for their classrooms. Third, the inclusion of permanent teachers ensured that the data captured was directly aligned with the study's objective of exploring the specific challenges and coping strategies of novice teachers in full-time teaching roles, including classroom management, lesson planning, and relationship-building with students and colleagues.

The decision to include six participants was based on the qualitative nature of the study, which prioritized depth over breadth in understanding individual experiences. This sample size was sufficient to achieve data saturation, as no new themes or insights emerged after the initial interviews. The responses provided a thorough understanding of the common challenges and coping strategies faced by novice teachers, with consistent patterns across participants. This ensured that the sample effectively represented the population of novice teachers at Tanay National High School and met the study's objectives.

Validation and Administration of Instrument

The semi-structured interview guide was developed based on existing literature and expert consultations to ensure its relevance and validity in capturing novice teachers' experiences. A pilot test with a small group of novice teachers was conducted to refine the instrument, ensuring clarity and effectiveness in eliciting meaningful responses. The research instrument was validated by six experts, including the Principal IV, two Head Teachers, and one Master Teacher from Tanay National High School, along with the Principal of Tanay Senior High School and a Master Teacher from Sampaloc National High School. These experts evaluated the guide based on several criteria: (a) relevance, to ensure the questions effectively addressed the specific challenges faced by novice teachers and aligned with the study's objectives; (b) clarity, to confirm that participants could easily comprehend the questions, facilitating accurate responses; (c) cultural appropriateness, to verify that the language and context were suitable for the Philippine educational setting and respected cultural nuances; and (d) comprehensiveness, to confirm the guide covered a wide range of topics related to novice teachers' experiences, enabling a holistic understanding of

their challenges and coping strategies.

The finalized interview guide was administered to participants during scheduled interviews, creating a comfortable environment for open discussion. To accommodate participants' preferences, those opting for digital interviews received a soft copy of the interview form via email or messenger, while others completed a pen-and-paper version using a carefully designed Google Interview Form. This flexibility allowed participants to engage with the instrument at their own pace, enhancing the quality of their responses.

Data Collection

Data were collected through semi-structured interviews with novice teachers during the second semester of the 2023–2024 school year. Each interview lasted approximately 45 to 60 minutes, providing participants ample time to share their experiences in detail. The interviews followed a semi-structured format, guided by a core set of open-ended questions designed to elicit in-depth responses. Sample questions included: "*Can you describe some of the major challenges you have faced in your first years of teaching?*" "*What strategies have you found effective in coping with these challenges?"* and *"How do you perceive the support systems available to you as a novice teacher?"*

To ensure consistency, all participants were asked the same core questions, while allowing flexibility to explore additional topics that emerged during the conversation. This approach facilitated a comprehensive understanding of each participant's unique experiences within a structured framework for comparison.

Interviews were audio-recorded with participants' consent, transcribed verbatim, and anonymized to protect their identities. Transcripts were reviewed for accuracy and shared with participants for member checking, enabling them to confirm that their views and experiences were accurately represented.

Data Analysis

Thematic analysis was employed to analyze the interview data, primarily using inductive coding. In this approach, codes and themes emerged directly from the data rather than being predetermined by the research questions. Narrative analysis, utilizing vignettes, was also applied when a more nuanced understanding of individual experiences was needed, offering deeper insights into the participants' lived experiences as novice teachers. As themes were identified, they were continuously refined to capture the complexities of the challenges faced and the coping strategies employed.

The analysis followed a systematic process: (a) familiarization with data, where the audio-recorded interviews were transcribed verbatim and the transcripts were reviewed multiple times to ensure a comprehensive understanding of the content; (b) initial coding, involving the identification of significant phrases or sentences that reflected participants' experiences, ensuring all relevant data were captured; (c) theme development, where the initial codes were grouped into broader themes that represented shared experiences among novice teachers, with each theme carefully defined and supported by illustrative quotes; (d) reviewing themes, which involved refining the themes to ensure they accurately represented the data and aligned with the research objectives, while checking for consistency across different interviews; and (e) final analysis, where the themes were examined in relation to existing literature and theoretical frameworks to provide a deeper understanding of how novice teachers navigate their classroom experiences.

Trustworthiness

This study adhered to the pillars of trustworthiness as outlined by Lincoln and Guba (1985) to ensure the credibility and reliability of its findings. The study prioritized (a) credibility by incorporating member checking, where participants reviewed and confirmed their interview transcripts and interpretations to ensure their perspectives were accurately represented. It also addressed (b) transferability by providing detailed descriptions

of the participants, context, and findings, enabling readers to determine how these insights may apply to similar educational settings. To ensure (c) confirmability, the researchers maintained a reflexive journal to document their biases and assumptions, identifying how these factors could influence data interpretation. This approach ensured that findings were grounded in participants' experiences rather than the researchers' preconceptions. Lastly, (d) dependability was established by maintaining a comprehensive audit trail, documenting all stages of the research process from data collection to analysis. This transparency facilitated external scrutiny and ensured consistency and reliability throughout the study.

Ethical Considerations

To ensure the integrity and ethical conduct of the study, the researcher implemented measures to safeguard the rights, privacy, and confidentiality of participants, adhering to ethical standards throughout the research process. Strict confidentiality protocols were observed, including assigning each participant a code (e.g., "NT1" to "NT6") to indicate the order of participation while maintaining anonymity. The completed interview guide forms were not shared, and recorded interviews were accessible only to the researcher. Transcripts were prepared and analyzed using a thematic approach, further ensuring the protection of participants' privacy and confidentiality. By upholding these ethical considerations, the researcher safeguarded participants' rights, maintained their privacy, and ensured the integrity and ethical rigor of the study.

RESULTS AND DISCUSSION

Major Challenges of Novice Teachers

Participants in this study drew on strategies from their repertoire or intuition to address challenges. During the transition from preservice to in-service training, novice teachers identified three primary concerns: managing student behavior and addressing diverse needs, navigating interpersonal challenges, and handling time constraints and workload.

Managing Behavior and Diverse Needs of Students. A recurring theme in the responses is how participants manage student behavior and address diverse needs.

Participants highlighted the importance of differentiated instruction to address diverse learning needs. For instance, NT4 shared, "Determining students who are having a hard time understanding the previous lesson, and also those who cannot understand the lesson faster, I apply peer tutoring."

In a reading comprehension lesson, the teacher observed varying levels of understanding among students. NT4 noted, *"Sa tuwing gumagamit ako ng mga informal na tanong at group discussion, napansin ko na ang ilan sa aking mga estudyante ay nahihirapan habang ang iba naman ay mabilis na nauunawaan ang mga pangunahing ideya."* To address this, the teacher implemented a peer tutoring strategy, pairing stronger readers with those requiring additional support. During follow-up activities, proficient students guided their peers by discussing key themes, reinforcing their own understanding while offering targeted assistance to others.

NT4 emphasized that this collaborative environment allowed students who initially struggled to gradually articulate their thoughts and actively participate in discussions. This proactive approach underscored peer tutoring as an effective method for improving student comprehension and fostering engagement.

Dealing with Disruptive Behavior. NT2 sought to create an inclusive classroom environment where all students felt comfortable contributing. However, as the lesson progressed, some students began monopolizing discussions, limiting opportunities for quieter classmates to share their ideas. Reflecting on this challenge, NT2 remarked, *"As I try to cater to their needs, most of them exceeded their boundaries."* This prompted the introduction of structured turn-taking protocols and clear expectations for respectful communication during discussions.

contributing factors. Limited training in classroom management strategies may have hindered the ability to maintain control during discussions. Additionally, NT2's focus on fostering inclusivity could sometimes lead to difficulties in asserting authority when needed. Cultural influences also emerged as a possible factor; students from backgrounds where assertiveness is less emphasized may not fully understand the importance of balanced participation. Through reflection, NT2 identified opportunities to refine strategies for managing classroom dynamics and ensuring equitable participation.

Similarly, NT3 emphasized the importance of structure in fostering balanced participation. Assigning specific roles during small group discussions—such as facilitator, note-taker, and presenter—was highlighted as an effective approach. NT3 explained that this method empowers all students, encouraging even reserved individuals to participate, while mitigating dominant behaviors among more outspoken classmates. This strategy demonstrates how clear structure and intentional role assignment can help manage classroom interactions and promote inclusivity.

Engaging Underperforming Students. NT1 remarked, "It is challenging to ensure that my students are actively engaged in the discussion," emphasizing the difficulty of motivating all learners. To address this, NT1 incorporated interactive activities, such as role-playing historical figures, to make lessons more engaging. Acknowledging the challenge of building confidence among underperforming students, the teacher employed relatable scenarios and encouraged students to share personal connections to historical events. By providing positive reinforcement, NT1 fostered a supportive environment where every contribution was valued, promoting active participation.

The findings reveal that teachers recognize the limitations of a one-size-fits-all approach. While engaging students is vital, maintaining order and respect in the classroom is equally important. This dual challenge underscores the need for teacher training programs that focus on strategies for both fostering student engagement and ensuring classroom discipline.

These findings align with the study by Iballa (2021), which highlights the significant challenges novice teachers face as they transition from training to full-time teaching. Many feel overwhelmed by the demands of meeting new curriculum standards while engaging a diverse group of learners

Managing Interpersonal Challenges. Participants highlight the difficulties they face in managing interpersonal challenges and building positive relationships with various stakeholders, particularly colleagues and parents.

Building Relationships with Colleagues. Participants expressed difficulties in connecting with fellow teachers and navigating school dynamics. NT2 shared, *"A huge challenge for me as a newly hired teacher is how to connect with other people. Doing so makes me become a people pleaser just to fit in,"* highlighting the pressure to integrate into established social structures. NT2 added, *"I understand that my colleagues are also busy, both with their personal life and our profession. Teaching is indeed a very demanding profession. So I guess this is a great factor why my fellow teachers seem unapproachable sometimes."* This reflects the broader experience of novice teachers as they strive to balance the desire for acceptance with maintaining authenticity in their teaching and collaboration.

Seeking Guidance and Support. Participants often relied on more experienced colleagues for support. NT1 noted, *"When I struggle to follow school protocols, I usually ask my Department Chairman or Master Teacher for suggestions before making a decision."* These findings align with Valdez and Dominado (2020), who emphasize the essential role of collaboration in helping novice teachers make informed decisions and foster a sense of belonging within their school community. This collaborative environment is vital for supporting new teachers as they adjust to their roles.

Communicating with Parents. NT5 highlighted the importance of bridging the gap between home and school, stating, *"I realized*

that some learners are not receiving adequate support from their parents or guardians in terms of learning." To address this, NT5 created an exclusive group chat for the adviser and parents, enabling open communication where parents can ask questions and receive guidance on supporting their children's learning at home. This proactive approach ensures that challenges are promptly addressed, fostering a collaborative partnership between teachers and parents. Hill and Tyson (2020) similarly highlight the critical role of parental involvement in boosting student achievement, emphasizing consistent updates on student performance and providing resources to assist with learning at home. This reinforces the importance of strong school-family collaboration for fostering student success.

Resolving Conflicts. Addressing misunderstandings with colleagues was another challenge noted by participants. NT4 shared, *"For example, if there is something that my colleagues misinterpret, I will patiently explain that particular misunderstanding."* During a recent department meeting, NT4 presented a teaching strategy perceived by some as overly complex. To address concerns, NT4 explained the rationale behind the strategy, supported by specific examples of its success. This approach not only clarified misunderstandings but also fostered a collaborative environment where ideas could be freely exchanged.

These experiences illustrate the multifaceted nature of interpersonal challenges faced by novice teachers, supporting the findings of Sali and Kecik (2018), who reported that novice teachers encounter challenges in relationships with learners' parents and colleagues. The findings suggest that training programs for teachers should emphasize developing problem-solving skills through real-life scenario analysis. This approach aligns with current educational research, which advocates for practical training that equips teachers with the necessary skills to manage diverse classroom situations effectively and foster a more supportive educational environment.

Time Constraints and Workload. Participants emphasized difficulties posed by time constraints and heavy workloads, including prioritizing tasks, balancing work and personal life, and coping with stress and anxiety related to their responsibilities.

Prioritization of Tasks. Participants highlighted the difficulty of prioritizing tasks amidst heavy workloads. NT2, a second-year Filipino teacher, shared, *"How to efficiently organize and prioritize responsibilities, and how to effectively allocate time for work and personal activities."* This reflects her struggle to balance multiple responsibilities, such as lesson planning, grading, and student engagement, while transitioning from training to full-time teaching. In contrast, NT4, a fifth-year Social Studies teacher, stated, *"I strive hard to complete my responsibilities within work hours and avoid being a procrastinator."* With more experience, NT4 has developed effective time management strategies and can better anticipate challenges. This contrast illustrates how organizational skills evolve over time, with NT2's struggles highlighting the developmental process and NT4's approach demonstrating the benefits of experience.

Balancing Work and Personal Life. Novice teachers often devote excessive time to work, neglecting personal well-being. NT6 remarked, *"Wala na nga akong oras para makapag-gym sa dami ng trabaho,"* emphasizing the difficulty of achieving work-life balance. This tendency to prioritize professional responsibilities over personal health is common among new educators and underscores the need for improved time management strategies and support systems within schools. Findings from Skaalvik and Skaalvik (2020) reinforce the importance of work-life balance for teacher well-being, showing that teachers with higher self-efficacy experience less burnout and are better able to maintain a healthy equilibrium. By fostering an environment that encourages work-life balance, schools can support novice teachers in thriving both professionally and personally.

Overwhelm from Workload. The increasing demands of teaching

can lead to feelings of inadequacy and stress, especially as deadlines approach or unexpected duties arise. NT2 expressed, *"I easily get frustrated whenever there is a pile of work to do,"* highlighting how heavy workloads amplify stress and frustration. The commitment to delivering quality education, combined with the pressure of adjusting to new curriculum standards and protocols, exacerbates these feelings.

The challenges posed by time constraints and heavy workloads significantly impact the success of novice teachers. Many reports heightened stress and feelings of inadequacy due to the demands of lesson planning, grading, and adapting to new curriculum requirements. The implementation of the K-12 Basic Education policy has further intensified these pressures, as novice teachers strive to meet the diverse needs of their students (Iballa, 2021). This underscores the urgent need for effective coping strategies and robust support systems within schools. By addressing these challenges, educational institutions can foster an environment that prioritizes both the professional growth and well-being of novice teachers, ultimately leading to improved educational outcomes.

Coping Strategies to Overcome Challenging Experiences

Improving Instructional Strategies for Responsive Teaching. Novice teachers increasingly recognize the importance of inclusive approaches to enhance both student well-being and educational outcomes.

Adaptation of Teaching Methods. Participants emphasized the need to modify teaching methods to meet students' needs. NT1 shared, *"If I see that a specific rule/task is not effective for this section, I don't force it. I change it based on their capabilities and needs."* For instance, during a literary analysis lesson where many students struggled with the complexity of the text, NT1 incorporated multimedia elements, such as video clips and interactive discussions, to make the material more accessible. This flexibility not only improved comprehension but also fostered a collaborative classroom environment where students felt encouraged to share their thoughts.

By prioritizing student engagement over rigid methodologies, NT1 highlighted the importance of addressing diverse learning styles to create inclusive educational settings.

Differentiated Instruction. NT2 stressed the importance of tailoring teaching materials to students' needs, stating, *"Knowing the needs of the students is vital when crafting teaching materials to ensure its effectiveness."* During a narrative writing lesson, NT2 recognized varying skill levels among students and provided graphic organizers for some while facilitating peer discussions for others. This differentiated approach accommodated diverse learning styles and promoted collaboration. By adapting instructional materials to individual needs, NT2 demonstrated a commitment to inclusivity, which is crucial for enhancing student engagement and understanding.

Collaborative Learning. NT4 highlighted the value of fostering student collaboration, remarking, *"I try to note their behavior and movements while I discuss and encourage collaboration among them."* In a lesson on civic responsibilities, NT4 organized small group discussions where students analyzed community issues. This strategy created a supportive environment that encouraged students to share ideas and learn from one another's perspectives. By prioritizing collaborative learning, NT4 showcased an understanding of diverse social dynamics, an essential component of cultivating an inclusive and engaging classroom.

A study by Rees (2015) highlights that teachers who effectively adjust their instructional methods—such as tailoring approaches to meet diverse student needs, implementing differentiated instruction, and fostering collaborative learning—are more successful in boosting student engagement and improving learning outcomes. This aligns with Bandura's (1986) Social Cognitive Theory, which underscores the importance of observational learning in developing essential teaching skills. Through participation in communities of practice, novice teachers can exchange strategies and insights, fostering an environment that supports their

professional growth while enhancing the educational experiences of their students.

Preparedness and Being Proactive. In terms of social dynamics, preparedness and anticipation of challenges are highlighted as coping mechanisms putting emphasis on the importance of planning ahead, anticipating common problems, and seeking advice from colleagues.

Planning and Structuring Communication. Participants emphasized the importance of preparing what to say to avoid misunderstandings. NT1 emphasized this point by stating, "I structure what I will say first so that I won't say anything that I will regret. I don't speak in the heat of emotion."

NT1 narrated, *"Every time there is a parent-teacher conference, I prepare a clear outline of key points to discuss, including student progress and areas for improvement. By organizing thoughts beforehand, I was able to communicate effectively with parents, addressing their concerns while maintaining a calm demeanor."* This proactive preparation not only helped NT1 build trust with parents but also reinforced the confidence in handling potentially sensitive discussions.

Conflict Avoidance and Resolution. The desire to minimize conflict was a recurring theme among participants. NT2 noted, "As much as possible, I take precaution to avoid conflict because I easily get frustrated whenever someone has an ill feeling towards me."

During department meetings, NT2 often noticed rising tensions when differing opinions were expressed. Aware of the potential for conflict, NT2 proactively suggested a collaborative approach that encouraged team members to share their viewpoints openly while focusing on shared objectives. By diffusing potential disagreements and fostering constructive dialogue, NT2 contributed to an environment characterized by respect and understanding.

Pro-activity in Adapting to Changes. The importance of being proactive in response to shifts within the educational system was emphasized by NT5, who stated, "I value the importance of being proactive, especially with changes in the learning system. Like when new trends in teaching math concepts emerged, I took the initiative to prepare lesson plans and gather resources ahead of time."

This proactive preparation ensured that students received engaging instruction aligned with the updated standards. By embracing a forward-thinking mindset, NT5 not only facilitated a smoother transition for students but also demonstrated the adaptability necessary for fostering a positive learning environment.

Seeking Guidance and Learning from Experience. NT6, a MAPEH teacher, emphasized, "Napakahalaga na prepared ka. So paano mo magagawa un so kailangan mong maging teachable." NT6 shared an experience where, during a particularly challenging unit on physical education, he sought guidance from a more experienced colleague. By discussing lesson plans and classroom management techniques, NT6 gained valuable insights that informed their approach.

By remaining open to feedback and adapting based on shared experiences, NT6 demonstrated the importance of continuous professional development in managing the complexities of teaching.

Preparedness and Being Proactive. In navigating social dynamics, preparedness and anticipation of challenges emerged as key coping mechanisms, emphasizing the importance of planning ahead, anticipating common problems, and seeking advice from colleagues.

Planning and Structuring Communication. Participants underscored the value of preparing what to say to avoid misunderstandings. NT1 shared, *"I structure what I will say first so that I won't say anything that I will regret. I don't speak in the heat of emotion."* For example, NT1 described preparing a clear outline of key points for parent-teacher conferences, focusing on student progress and areas for improvement. This approach helped NT1 communicate effectively,

address parental concerns calmly, and build trust, reinforcing confidence in managing sensitive discussions.

Conflict Avoidance and Resolution. Minimizing conflict was a recurring theme among participants. NT2 remarked, *"As much as possible, I take precaution to avoid conflict because I easily get frustrated whenever someone has an ill feeling towards me."* During department meetings, NT2 noticed tensions arising from differing opinions. To mitigate conflict, NT2 proactively encouraged a collaborative approach, inviting team members to share their viewpoints openly while focusing on shared goals. This strategy diffused disagreements and fostered a respectful, constructive dialogue, contributing to a more understanding workplace environment.

Proactivity in Adapting to Changes. The importance of proactive adaptation to educational shifts was emphasized by NT5, who stated, *"I value the importance of being proactive, especially with changes in the learning system. Like when new trends in teaching math concepts emerged, I took the initiative to prepare lesson plans and gather resources ahead of time."* This preparation ensured that lessons were engaging and aligned with updated standards. NT5's forward-thinking mindset facilitated smoother transitions for students while showcasing adaptability, a crucial skill in fostering a positive learning environment.

Seeking Guidance and Learning from Experience. NT6, a MAPEH teacher, stressed the significance of preparation and teachability, saying, *"Napakahalaga na prepared ka. So paano mo magagawa 'yun? Kailangan mong maging teachable."* During a challenging unit on physical education, NT6 sought guidance from a more experienced colleague, discussing lesson plans and classroom management techniques. This collaboration provided valuable insights that informed NT6's approach. By remaining open to feedback and adapting based on shared experiences, NT6 demonstrated the importance of continuous professional development

in managing teaching complexities.

This aligns with the findings of Paula and Grinfelde (2018), which emphasize the critical role of effective support systems, such as mentoring, in reducing stress and uncertainty for novice teachers. Mentorship provides valuable assistance in helping educators navigate school traditions and internal policies while offering guidance on classroom management and curriculum development. Moreover, mentors equip novice teachers with essential skills in conflict resolution and strategic planning, enhancing their confidence and overall effectiveness in the classroom.

Work-Life Balance. Participants emphasized the importance of maintaining a healthy work-life balance by drawing boundaries between work and personal life. This includes doing school work at school, avoiding taking work home, enjoying weekends, and prioritizing recreational activities outside of work to avoid stress.

Setting Boundaries. The importance of establishing clear boundaries between work and personal time was a significant theme among participants. NT5 stated, "I make sure to set boundaries to establish a healthy work-life balance and prevent burnout at work."

After a particularly demanding week filled with grading students' outputs and preparing school forms prior to issuing grades, NT5 recognizes the need to disconnect from work-related tasks during the weekend. Dedicating time to family activities and personal hobbies helps recharge their energy and focus. This intentional separation between work and personal life not only reduces stress but also enhances NT5's overall effectiveness when returning to the classroom.

Time Management. Effective time management practices are essential for novice teachers to maintain a healthy work-life balance. NT2 noted, "Prioritize work when it's time for work... Set a schedule and make sure that rest is included in it."

This insight emphasizes the importance of planning to protect

personal time. NT2 elaborated, "*When managing a particularly busy week, I create a structured schedule that allocates specific times for work tasks as well as personal downtime. I think that works for me as an unmarried person."* By prioritizing tasks and including rest periods in her weekly plans, NT2 found she could stay focused during work hours while also enjoying relaxation and family activities.

Self-Care Practices. "Prioritize self-care or own well-being. This can include regular exercises, healthy eating, and adequate sleep," NT3 remarked. After a particularly stressful week, NT3 recognized the need to focus on her health. To implement this, she began jogging in the mornings and made healthier meal choices while ensuring she got enough sleep each night.

By prioritizing these self-care practices, NT3 found she had more energy and resilience to meet the demands of teaching. This commitment not only improved her mood but also positively influenced her interactions with students and colleagues.

Work-Life Balance. Participants emphasized the importance of maintaining a healthy work-life balance by setting boundaries between work and personal life. Strategies included completing school-related tasks at school, avoiding taking work home, enjoying weekends, and engaging in recreational activities to alleviate stress.

Setting Boundaries. Establishing clear boundaries between work and personal time emerged as a significant theme. NT5 shared, *"I make sure to set boundaries to establish a healthy work-life balance and prevent burnout at work."* After a demanding week involving grading and preparing school forms, NT5 consciously disconnects from work-related tasks during weekends. Dedicating time to family activities and personal hobbies helps recharge their energy and focus. This deliberate separation from work not only reduces stress but also enhances NT5's effectiveness upon returning to the classroom.

Time Management. Effective time management was highlighted as crucial for maintaining work-life balance. NT2 remarked, *"Prioritize work when it's time for work... Set a schedule and make sure that rest is included in it."* She explained how, during busy weeks, creating a structured schedule that allocates specific times for work tasks and personal downtime helped her stay organized. NT2 added, *"I think that works for me as an unmarried person."* This planning approach allowed NT2 to remain focused during work hours while enjoying relaxation and family activities during personal time.

Self-Care Practices. Participants also emphasized the role of self-care in achieving work-life balance. NT3 stated, *"Prioritize self-care or own well-being. This can include regular exercises, healthy eating, and adequate sleep."* Following a particularly stressful week, NT3 implemented self-care routines such as jogging in the mornings, choosing healthier meals, and ensuring sufficient sleep. These practices increased her energy and resilience, enabling her to better meet the demands of teaching. NT3 also observed that prioritizing her well-being positively influenced her interactions with students and colleagues, demonstrating the broad benefits of self-care.

Establishing clear boundaries between professional and personal lives is essential for novice teachers to maintain effective and sustainable teaching practices. Owens et al. (2018) concluded that strategies emphasizing mentoring and self-care play a critical role in mitigating workplace stressors and fostering work-life balance. By integrating these approaches, novice teachers can better navigate the complexities of their roles, ultimately enhancing their well-being and job satisfaction.

Suggested Program for Novice Teachers

Empowering Novice Teachers through the Career Compass Mentorship Program. Based on participants' responses, a comprehensive mentoring program, combined with targeted training sessions, can offer personalized guidance and practical skills to novice teachers. This approach fosters a supportive work environment that promotes growth and success in the teaching profession.

"One-on-one support/mentoring to have personalized support to cater to my individual needs such as peer support groups, professional development workshops, observation and feedback." (NT1) "Provide avenues where teachers can freely talk to mentors at any given time. Also, assigning mentors that really help them would be a great help." (NT2) "Providing continuous professional development." (NT3) "Seek for mentorship from experienced teachers, having a plan ahead, engage your students, keep learning and ask for feedback." (NT4)

"These training programs can provide novice teachers with essential skills and knowledge to effectively support their students' academic and socio-emotional development." (NT5)

"Dahil ako ay isang bagong guro, napakahalagang makapagprovide ang ating school ng mga seminars kung saan maaaring ma-improve pa ang aking kakayahan sa subject na aking itinuturo lalo na pagdating sa classroom management." (NT6)

To address these needs, the Career Compass Mentorship Program (CCMP) is designed to provide essential support to novice teachers through structured mentorship and comprehensive training. The program includes the following components:

I. Structured Mentorship Framework

Structured Pairing: Novice teachers will be paired with mentors based on subject area and teaching style to ensure compatibility and effective collaboration.

Mentorship Training: Mentors will receive training on coaching techniques, active listening, and providing constructive feedback to enhance their support capabilities.

Scheduled Meetings: Mentors and mentees will meet biweekly to discuss challenges, share insights, and set goals. These regular interactions will cultivate strong mentoring relationships.

II. Training Sessions

Workshops and Seminars: The program will offer workshops on key topics, including classroom management, differentiated instruction, and integrating technology into teaching. Additional sessions will focus on lesson planning, inclusive teaching techniques, and promoting socio-emotional learning.

Ongoing Learning Opportunities: Throughout the academic year, seminars will explore the latest trends in education, ensuring novice teachers stay informed about effective practices.

Regular Check-Ins: Monthly meetings will provide mentors and mentees the opportunity to review progress, address challenges, and refine strategies for improvement.

Feedback Mechanisms: A system for collecting participant feedback will ensure the program evolves based on their experiences and needs.

Online Resource Hub: An online platform will offer accessible resources, including lesson plans, recorded training sessions, and educational materials that teachers can access at their convenience.

III. Supportive Environment

Collaborative Peer Networks: Peer groups will enable novice teachers to share experiences, collaborate on solutions, and foster a sense of community within the profession.

Accessible Communication Channels: Open lines of communication will ensure that novice teachers can reach out to mentors as needed, enhancing the availability of support and guidance.

IV. Key Components for Success

Defined Goals and Expectations: Establishing specific,

measurable objectives for mentors and mentees will guide the mentoring process and ensure accountability. Regular assessments will allow for strategic adjustments.

Assessment and Feedback Systems: A framework for evaluating the program's effectiveness will be implemented. Gathering feedback from participants will inform ongoing enhancements to the program's structure and delivery.

Research conducted by Abance and Waking (2023) highlights the importance of a supportive environment for novice teachers, emphasizing that coping strategies developed during the early years of teaching significantly impact long-term success in the profession.

While this study provides valuable insights into the effectiveness of the Career Compass Mentorship Program (CCMP), it is important to acknowledge its limitations. A primary limitation is the small sample size, which may not sufficiently represent the broader population of novice teachers. This limitation could affect the reliability of the findings and their applicability to other educational contexts. Additionally, the study relies heavily on self-reported data, which may introduce bias as participants might present their experiences in a more favorable light. This reliance on subjective accounts raises concerns about the accuracy and objectivity of the results. Furthermore, the absence of triangulation—using multiple data sources or methods for cross-verification—limits the robustness of the conclusions. Without incorporating diverse perspectives, the findings may fail to fully capture the complexity of mentorship experiences.

In conclusion, the CCMP is designed to support novice teachers by integrating structured mentorship, comprehensive training, a supportive environment, clear goals, and robust evaluation mechanisms. By addressing these critical components, the program equips novice educators with

the tools necessary to thrive in their careers and contribute to improved educational outcomes.

Implications of the Findings

While this study focuses on the experiences of teachers at Tanay National High School, its findings offer valuable insights that could inform broader educational policy reforms, particularly in enhancing support for novice teachers in the Philippines. These findings could contribute to improving the Teacher Induction Program (TIP) established under DepEd Order No. 43, s. 2017, which aims to provide a systematic support framework for newly hired teachers, easing their transition into the profession.

Future discussions could explore how the study's outcomes might influence key aspects of teacher support, such as refining mentor selection processes, developing more comprehensive orientation programs, and designing tailored professional development initiatives. These initiatives could address the specific challenges faced by novice educators, thereby enhancing their professional growth and fostering a more effective and supportive teaching environment.

CONCLUSIONS

This study highlights the urgent need to address the challenges faced by novice teachers. Support from school administrators and experienced staff is crucial in fostering the confidence and effectiveness of new educators, which positively impacts student outcomes and contributes to a healthy school climate. Encouraging effective coping strategies is equally important, as these can alleviate the difficulties novice teachers encounter. Schools should actively foster environments that promote such strategies, leading to improvements in classroom management, teaching practices, and job satisfaction.

In response to these challenges, the development of robust mentoring and professional development programs tailored to the needs of novice teachers is essential. These initiatives offer critical guidance and

resources that enhance instructional quality and career growth, equipping new educators to thrive in their formative years.

Looking forward, future research should examine the long-term effects of mentorship programs on novice teacher retention. Additionally, exploring how various school contexts shape the coping strategies employed by novice educators can provide valuable insights for optimizing support systems and ensuring the sustained success of this key group in the teaching profession.

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