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Success Stories of Best-Practicing Elementary School Teachers in Handling Non-Readers in Davao City Division: An Interpretative Phenomenological Analysis

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ABSTRACT

This study employed Interpretative Phenomenological Analysis (IPA) to explore the best practices of elementary teachers in handling non-readers in the Davao City Division and how these teachers make sense of their experiences related to their best practices. The study involved seven elementary school teachers who experienced transforming non-readers into independent readers in the Davao City division. In an in-depth interview, each participant shared their best practices for transforming non-readers into independent readers. Through thematic analysis, four superordinate themes emerged: Upon reflecting on their practices, the teachers acknowledged the vital role of parent-teacher collaboration; the teachers highlighted the importance of devoting time to reading through reading sessions and remediation; the teachers emphasized the significance of boosting students' motivation through positive feedback and encouragement and; teachers recognized the importance of varied and appropriate reading materials.

KEYWORDS: Education; applied linguistics; best practices in handling non-readers; interpretative phenomenological analysis; elementary school, Davao city division, Philippines

INTRODUCTION

Teachers play a crucial role in shaping students' reading abilities, but their task becomes particularly challenging when dealing with non-readers (Davis et al., 2016). Each academic year, elementary teachers are confronted with the recurring concern of addressing the

needs of non-readers, who present a range of difficulties. These difficulties encompass poor decoding skills, limited vocabulary, and comprehension deficits, all essential components of the reading process (Libre III & Decano, 2021). In the study of Reyes et al. (2023), various challenges emerged for teachers in dealing with non-readers. These challenges include students' lack of motivation, parents' lack of cooperation, insufficient time dedicated to reading, scarcity of reading materials, and the need for teachers to exhibit patience. Another concern is the teachers' inadequate skills in teaching reading. Adao et al. (2023) found that teachers need to undergo capacity building since their background in teaching letters and sound recognition is inadequate.

The predicament of teachers worldwide regarding non-readers has worsened based on reports from various academic institutions and organizations. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) recorded that approximately 250 million children of primary school age cannot read or write (UNESCO, 2018). In many low-income countries, children lacking basic reading skills are more likely to drop out of school, further exacerbating the problem of non-reader students. In addition, UNICEF (2021) reported that 100 million additional students worldwide are experiencing reading challenges. From 460 million students in 2020, it increased to 584 million in 2021. The University of Virginia (2021) also noted a significant percentage of students who failed to reach the reading standard when comparing the reading scores from 2020 and 2021. It translates to 232,982 students scoring below the standard in 2021, a 25,765-student increase from 2020.

In the Philippines, findings from Philippine Informal Reading Inventory (Phil – IRI) have shown quite a concerning trend of non-readers that elementary school teachers have to deal with. The regional office in Benguet had 301 non-readers, 99 of whom were grade 4 students, 118 were grade 5 students, and 84 were grade 6 students (Phil Star, 2019). Several school division and elementary schools in Pangasinan posted their Phil-IRI results on their websites. Based on the data provided by the school's division of Dagupan last 2019, there were 330 non-readers in grades four to six. In the 2019 Phil-IRI results of Pogonsili Elementary School in Schools Division of Pangasinan, there were nine non-readers and 101 frustrated readers out of 135 grade four to six students. The 2020 Phil-IRI results of Aguilar Integrated School in Schools Division of

Pangasinan tallied 43 non-readers and 189 frustrated readers out of 442 grade four to six students.

Apart from Phil-IRI, Program for International Student Assessment (PISA) and Southeast Asia Primary Learning Metrics (SEA-PLM) also documented the alarming reading situation in the Philippines. In the 2018 global survey called Program for International Student Assessment, the Philippines had one of the lowest average reading performance scores among PISA-participating countries. Compared to the international average of 487 points, Filipino students only attained 340 points, placing the Philippines last among 76 countries (PISA, 2021; OECD, 2022). Additionally, Southeast Asia Primary Learning Metric (2021) national report presented that the average scores of the Philippines in reading are below compared to other participating countries.

The reports from different institutions and organizations show a deteriorating reading state in the country and globally. Addressing this issue and equipping students with strong reading skills can have transformative positive outcomes. Teachers' role in transforming readers into independent readers is essential since the ability to read is one of the most significant determinants of a student's success in education and modern society, and it is a primary tool for learning and a gateway to enhancing skills and knowledge across all disciplines (Libre III & Decano, 2021; Tomas et al., 2021). Rupley et al. (2009) emphasized teachers' profound importance and influence on how much students learn. When students become independent readers, they gain access to a wealth of knowledge, expand their vocabulary, and develop better comprehension skills, enabling them to excel in various subjects and become lifelong learners. Consequently, if teachers neglect to instill in students the fundamental skill of reading, a generation at risk of illiteracy emerges, posing a significant threat to the fabric of the country's social, political, and economic vitality.

Several studies have examined effective teaching strategies for non-readers. Davis et al. (2016) found various approaches, including process-oriented teaching to improve critical thinking, exercises, and worksheets to master reading skills, collaborative sharing of reading experiences, and encouraging creativity for meaningful outcomes. On the other hand, Yansyah (2018) conducted interviews with experienced reading teachers, highlighting the significance of reading aloud, drills, comprehension exercises, activating background

knowledge, silent reading, and group work for text comprehension. In the findings of Estrella (2022), 71 of the 79 respondents perceive the Marungko Approach as the best method to teach Reading. Additionally, Boltron and Ramos (2021) stated that it emphasizes the teaching of correct single sounds and the handling of these sounds into syllables or words; rather than the teaching of the alphabet. The names of the letters of the alphabet are not taught until all the sounds have been mastered in association with their form.

However, these studies do not provide results on the transformation of non-readers into independent readers through these practices. Addressing this gap, the current study aimed to identify the best teaching practices used by teachers who experienced transforming non-readers into independent readers. Furthermore, this study employed interpretative phenomenological analysis (IPA), a distinct method from the previous studies. Given the existing gaps in the literature, this study is warranted.

Objectives of the Study

This qualitative research employing interpretative phenomenological analysis (IPA) specifically aimed at exploring the success stories of best-practicing elementary school teachers in transforming non-readers into independent readers. The focus is identifying effective instructional practices, assessment methods, monitoring techniques, and feedback processes that drive reading improvement. Thus, purposely, the research questions discussed in this qualitative investigation sought answers about: a) the best practices of elementary school teachers in transforming non-readers into independent readers, and b) how these teachers make sense of their experience related to their best practice.

Theoretical Framework

As an anchor of this study, two theories/concepts relevant to transforming non-readers into independent readers were used. The Social Developmental Theory (Vygotsky, 1978 as cited by Davis, 2016), and the qualities of knowledge and practice of excellent qualities as explained by the concept of the International Reading Association (2000).

First, The Social Developmental Theory by Vygotsky (1978) as cited by Davis (2016) places significant emphasis on the crucial role of social interaction in cognitive development. Based on this

theory, individuals acquire knowledge and advance their development through engaging with individuals who possess greater expertise and understanding, such as teachers and parents (Vygotsky, 1978 as cited by Davis, 2016). This theory suits the study since teachers are trained professionals who spend most of their time with the students. Through scaffolding, teachers will support the non-readers until they can independently decode and understand the text. It, however, does not mean giving students the answer, accomplishing the work for them, decoding it for them, or diluting the information and learning it for them. The supports are designed to be temporary until they can execute the tasks independently.

Second, this study is also parallel to the concept of the International Reading Association (2000), which states that excellent reading teachers share several qualities of knowledge and practice; they: have an understanding of reading development, continually evaluate students' progress and connect the reading instruction to students' previous experiences; have various ways in teaching reading; use different materials and texts for students to read; use flexible grouping approaches; and have good coaching skills in reading. This concept suits the study because it encompasses several vital elements essential for instruction and support for non-readers. By incorporating these aspects into the study, researchers can investigate how teachers who possess these qualities and practices impact the reading development of non-readers.

METHODS

Research Design. This qualitative study employed interpretative phenomenological analysis (IPA). IPA generates an account of lived experience in its terms rather than one dictated by pre-existing theoretical ideas, and it acknowledges that this is an interpretative attempt because humans are sense-making beings (Smith & Osborn, 2015). Moreover, IPA is committed to examining a topic from its standpoint, employing an interpretative process involving the researcher and the participant. It is dedicated to conducting a meticulous examination of specific cases, initially providing a thorough account of each case before identifying patterns of convergence and divergence across cases.

Research Participants. The participants of this study were elementary public school teachers from grades three to six in Davao City who have been teaching in a public institution for at least five years. Seven participants from various public elementary institutions in Davao City participated in the in-depth interview. Moreover, these teachers experienced handling non-readers and successfully transforming the latter into independent readers. It means that not all elementary teachers are qualified to participate in the study.

Ethical Considerations. This study followed ethical guidelines, including those outlined by the university REC and submitted the research proposal for review by the review ethics committee to ensure it adhered to these standards and protected participants' rights and welfare.

Data Analysis. The analysis of qualitative data was conducted using the multi-stage approach of Smith et al. (2009), as cited by Pombrio (2015). The qualitative data analysis followed a multi-stage approach involving reading and re-reading interview transcripts, initial noting with two rounds of coding, development of emergent themes, and identifying patterns across cases, emphasizing the extraction of personal experiential themes and connections between cases (Pombrio, 2015).

Trustworthiness of the Study. In accordance with the criteria proposed by Lincoln and Guba (1989) and Shenton (2004) for trustworthy research, this study ensured credibility through expert validation of research instruments, confirmability and dependability by meticulous data collection and analysis, and transferability by thoroughly describing the research methods, participants, instruments, and procedures, thus enhancing the study's overall trustworthiness.

RESULTS

Participants' profile. Table 1 reflects the overview of the participants involved in the study. These are dedicated elementary school teachers in the Davao City division teaching grades three to six in a public institution. The selection process involved rigorous evaluation of the teachers' ability and track record to effectively transform non-readers into independent readers. Moreover, the

performance of these teachers was recognized by their colleagues and superiors, who provided recommendations for their inclusion in this research endeavor.

Table 1. Profile of the participants

CODE	District	Grade Level	Years in teaching	Level of education	Rank
Teacher 1	1	6	25 years	MA – SPED (ongoing) AB Language and Literature	Teacher II
Teacher 2	3	5	15 years	MAEd – English (ongoing)	Teacher III
Teacher 3	3	4	16 years	MAEd – English (ongoing)	Teacher II
Teacher 4	1	6	16 years	EdD Educational Management	Master Teacher II
Teacher 5	2	3	11 years	MAEd – Educational Management (ongoing)	Teacher I
Teacher 6	2	3	31 years	MAEd – Educational Management (CAR)	Master Teacher II
Teacher 7	3	6	8 years	BEED – Generalist	Teacher I

Teacher 1. This participant is an elementary school teacher in Davao City who teaches seven subjects to grade six students. She has a rank of teacher II and has a Bachelor of Arts degree with a specialization in Language and Literature. Currently, she is working towards her master's degree in Education, focusing on special education. Having been involved in teaching for a quarter of a century, she has fulfilled diverse responsibilities, including that of an

adviser, classroom teacher, reading coordinator, and research coordinator.

Teacher 2. This participant has been an elementary school teacher for 15 years in the 3rd district, Davao City. Currently, she teaches English and ESP subjects at the grade five level. She has a BSED – English degree, and MA – English units and ranks as teacher III. Aside from being a classroom adviser and subject teacher, she is also the reading coordinator, school paper coordinator, school LAC coordinator, and English coordinator.

Teacher 3. This participant is a teacher II in one of the elementary schools in District 3, Davao City Division. She has a Bachelor of Science in Education degree with a major in English and is currently pursuing a Master's degree in Education, specializing in English. With 16 years of experience in teaching, she has taken on various roles, such as adviser, classroom teacher, and reading coordinator. She has also taught eight subjects to grade 4 students.

Teacher 4. This participant is a graduate of Doctor of Education major in Educational Management and has been teaching at the elementary level for 16 years. She is currently handling grade four students in one of the public institutions in district one, Davao City. At present, she ranks as master teacher II, and apart from being a grade six subject teacher and classroom adviser, she is also a school paper coordinator.

Teacher 5. This participant has been teaching in the Department of Education for 11 years. She has earned units in Master of Education major in Educational Management. She is currently teaching all subjects at the grade III level in one of the schools in the 2nd district, Davao City Division. She is the grade level head, a subject teacher, and an adviser.

Teacher 6. This participant is the most seasoned of all participants in this study. She has been teaching for 31 years in one of the public institutions in Davao City, specifically in District 2, and currently ranks a master teacher II. She is a grade 3 adviser, a subject teacher, and a reading coordinator at her institution.

Teacher 7. This participant is the least experienced in this study. She has been teaching in a public elementary institution in Davao City for eight years and currently ranks as a teacher I. She is a graduate of Bachelor of Elementary Education – Generalist. Apart from being an adviser in grade 6, she is also a subject teacher and the reading coordinator of the school.

Report of Participant Findings. The participants in the study utilized Visayan, Tagalog, and English languages during the in-depth interviews, employing code-switching and code-mixing practices. There are no direct quotes in the results; instead, the researcher presented the data in a paraphrased form, capturing the participants' perspectives. It allowed for a comprehensive understanding of the themes and findings from the interviews without relying on specific quotes.

Teacher 1. This teacher provided insights on effectively transforming non-readers into independent readers. She highlighted several successful approaches, such as conducting regular assessments, integrating multimedia resources, fostering collaboration between parents and teachers, using relatable materials, and tailoring activities to individual student needs. Additionally, she also highlighted that to be successful in transforming non-readers into independent readers, teachers must be passionate about what they are doing.

Teacher 1: Personal Experiential Themes

- Conduct regular assessments to continuously monitor student progress
- Integrate a range of multimedia resources, including audio and visual aids
- Collaborate closely with parents and teachers to provide targeted support and interventions for non-readers,
- Select reading materials that are relatable and engaging to students
- Offer differentiated activities to non-readers
- Conduct daily reading sessions before class
- Emphasize the importance of motivation in the reading process

Teacher 2. This teacher not only recognized the significance of encouragement but also emphasized the crucial role of time in the reading process. Firmly believing that strategies alone would not yield effective results unless students were given dedicated time for reading, she made it a priority to allocate exclusive periods for this purpose. Understanding that non-readers required focused attention and consistent practice to develop their reading skills, she implemented a comprehensive remediation program. Within this program, Teacher 2 applied a range of strategies tailored to the individual needs of each non-reader, with the ultimate goal of transforming them into independent readers.

Teacher 2: Personal Experiential Themes

- Conduct Intensive 8-week reading remediation
- Utilize dictionaries as learning tools to enhance vocabulary
- Employ probing questions to enhance reading comprehension
- Conduct a reading session during the first period
- Involve parents in the reading process
- Inspire students to realize the importance of reading

Teacher 3. In the context of elementary education, Teacher 3 firmly believes that every teacher should embrace the role of a reading teacher. It is essential to foster a culture of encouragement and support encompassing all individuals involved in the reading process, including students, teachers, and parents. Similar to Teacher 2, Teacher 3 also shared the same approach of conducting an 8-week remediation program. After the 8-week period, teacher 3 conducted assessments to find out if there were significant gains. The program yielded remarkable results as no non-readers remained among the students upon completion of the intervention. Recognizing the importance of parental involvement, this teacher took proactive steps by inviting parents of other students to participate in reading sessions with non-readers. To augment this strategy, independent readers were also invited to assist in tutoring the non-readers which created a positive learning atmosphere.

Teacher 3: Personal Experiential Themes

- Implement an intensive 8-week reading remediation program
- Administer personalized one-on-one remedial sessions
- Implement Robust vocabulary instruction
- Select reading passages that align with the reading level
- Conduct differentiated instruction to non-readers
- Encourage parents to participate in teaching non-readers
- Conduct reading sessions every day
- Create a positive learning atmosphere to motivate students

Teacher 4. To ensure effective handling of non-readers, this teacher shared six best practices: Building foundational reading skills, contextualizing materials, monitoring and intervention programs, collaborating with parents and teachers, scheduling regular reading sessions, and motivating students. Teacher 4 departed from the traditional ABCD approach and adopted the Marungko Approach, a teaching method that facilitates the step-by-step learning of sounds and syllables. Through the implementation of this approach, the students were able to build a strong foundation in phonics, enabling them to progress confidently in their reading and language skills. Teacher 4 implemented regular monitoring, which enabled her to design interventions. She shared the collaborative efforts of teachers and parents to address the problems of non-readers, creating a comprehensive approach to address the challenges faced by non-readers.

Teacher 4: Personal Experiential Themes

- Build strong foundational skills using Marungko Approach
- Select materials that are appropriate for each student's reading level
- Implement regular monitoring, using data to provide timely and effective interventions
- Support non-readers through collaborative efforts of teachers and parents
- Establish a dedicated time for reading every Monday
- Provide encouragement and recognize student's improvement

Teacher 5. For Teacher 5, consistency through reading drills, appropriate strategies for phonemic awareness, vocabulary, and comprehension, an inclusive classroom, motivated students, and support from other students and parents are the key elements to effectively handle non-readers. Teacher 5 recognized that transforming a non-reader into an independent reader is gradual, requiring both time and consistent effort. To address this, she implemented a practice of dedicating specific time in the mornings solely for reading activities. During this dedicated time, she could focus exclusively on reading instruction, employing various strategies, techniques, and resources tailored to the specific needs of her non-readers. Recognizing the diverse reading levels within her classroom, Teacher 5 implemented differentiated instruction to cater to the individual needs of her students effectively.

Teacher 5: Personal Experiential Themes

- Implement a daily routine of reading drills in the morning
- Establish strategies for phonemic awareness, vocabulary, and reading comprehension.
- Apply differentiated instruction based on the level of the students.
- Motivate students to read by utilizing a structured staged-based approach
- Implement a point-based peer tutoring system to allow students to support each other's reading development
- Collaborate with parents to monitor and track progress

Teacher 6. Direct Instruction System (DIS) in Teaching Reading has proven to be an invaluable tool for Teacher 6, as it has significantly eased her ability to address the needs of non-readers. With the implementation of DIS, she has experienced a remarkable improvement in handling non-readers, enabling her to provide them with effective instruction and support. Teacher 6 strongly gave reading a greater emphasis and treating it as a separate subject in the curriculum. From her perspective, reading is the gateway to acquiring other forms of knowledge and deserves special attention. She created an environment where students could concentrate solely on developing their reading abilities. This approach acknowledged the

importance of reading as a foundational skill by prioritizing it within the classroom.

Teacher 6: Personal Experiential Themes

- Categorize students into groups based on their reading abilities.
- Allocate time for reading for non-readers
- Employ the Direct Instruction System in Teaching Reading
- Incorporate relevant words to build vocabulary and comprehension
- Reinforce non-readers' progress through positive feedback
- Establish a strong partnership with parents through Project Pair

Teacher 7. Color coding techniques and monitoring checklists are the unique practices that Teacher 7 employed in the reading process. She used a specific approach to ensure effective learning when teaching non-readers by introducing the letter sounds before simple words. This progression allowed the non-readers to gradually develop an understanding of how to blend sounds and build the skills they need to read more complex words by starting with simple sounds.

This teacher strongly emphasized the power of positive feedback in the reading process. Focusing on the positive aspects of their reading abilities instilled a sense of pride and belief in her non-readers' potential. In addition, she provided reading passages to the parents and required them to have a reading session with the students at home. Parents need to be actively involved in the reading process and provide a conducive learning environment at home.

Teacher 7: Personal Experiential Themes

- Focus on building a strong phonemic awareness
- Apply scaffolding to enhance vocabulary and comprehension.
- Use color-coding techniques for reading materials that align with the student's reading level.
- Create a checklist to monitor student's progress
- Acknowledge improvements in students by providing constructive feedback.
- Establish collaboration between the student and teacher
- Engage parents in the reading process to promote active involvement

Report of All Participant Findings. Upon completion of thematic analysis and interpretation of results, four super-ordinate themes emerged. These super-ordinate themes can be linked to the research questions of the study and can be connected to the literature about the best practices of elementary school teachers in handling non-readers.

Super-ordinate Themes

1. Upon reflecting on their practices, the teachers acknowledged the vital role of parent-teacher collaboration.
2. Upon reflecting on their practices, the teachers highlighted the importance of devoting time to reading through reading sessions and remediations.
3. Upon reflecting on their practices, the teachers emphasized the significance of boosting students' motivation through positive feedback and encouragement.
4. Upon reflecting on their practices, the teachers recognized the importance of varied and appropriate reading materials.

In presenting the four super-ordinate themes, the information included specific data from the in-depth interviews.

Upon reflecting on their practices, the teachers highlighted the vital role of parental-teacher collaboration in transforming non-readers into independent readers. All participants in the discussion unanimously recognized and emphasized that the task of transforming a non-reader into an independent reader should not rest solely on the shoulders of teachers. It was collectively acknowledged that this endeavor requires a collaborative effort involving various stakeholders, including teachers, parents, and students. In the study, all teachers involved parents in two ways: Assistance and Monitoring. It means that parents were engaged in conducting reading sessions at home while also monitoring their children's progress in reading.

The teachers implemented strategies to ensure parents actively support their children's learning at home. Each teacher had a unique approach to encourage parent participation.

Effective parent-teacher collaboration is crucial in addressing the needs of non-readers and helping them acquire the skills necessary for independent reading. When parents and teachers work together, they can create a supportive and consistent learning environment for the student. Parents have a unique perspective on their child's interests, home environment, and daily routines. Their involvement and engagement greatly enhance the learning process. By encouraging reading at home, parents can reinforce what is being taught in the classroom and cultivate a love for reading in their children. Teachers, on the other hand, possess professional knowledge and expertise in teaching. They can assess the student's reading abilities, identify specific areas of difficulty, and implement targeted strategies to address those challenges. Through open communication with parents, teachers can share information about the student's progress, offer guidance on effective reading strategies, and suggest activities that can be done at home to support the student's reading development.

Collaboration between parents and teachers also enables a comprehensive approach to intervention. They can jointly develop individualized reading plans and set goals for the student, regularly monitoring progress and adjusting strategies as needed. This shared responsibility ensures that the child receives consistent support and guidance at school and home, leading to improved reading skills.

Upon reflecting on their practices, the teachers highlighted the importance of devoting time to reading through reading sessions and remediations. Teachers understood that relying on regular time and expecting to transform a non-reader into an independent reader is nearly impossible. Based on what they shared during the in-depth interviews, teachers allocated a different time to focus on reading. They emphasized the significance of morning reading sessions. They provided focused attention and extended reading periods by conducting reading remediation in the morning before regular classes. This approach allowed for 1 to 2 hours of daily reading practice, which proved effective in helping students become independent readers.

Incorporation of reading drills and dedicated reading time during the first period enhanced concentration and prioritization of reading skills. To add, implementation of an 8-week reading intervention program specifically designed to address the needs of non-readers also proved to be a successful strategy with non-readers successfully transitioning to independent.

Upon reflecting on their practices, the teachers emphasized the significance of boosting students' motivation through positive feedback and encouragement. All the participants recognized that no matter how effective the strategy, it would be arduous if the non-reader lacked the motivation to learn. So, all teachers made sure that they encouraged and motivated the students by fostering a supportive and inclusive classroom atmosphere where students felt valued and respected. Usually, non-readers lack attention from parents at home, and the teachers' attention fills that gap for them. They utilized positive feedback as a means to motivate their students. They implemented positive reinforcement strategies, including praising and acknowledging their students' efforts and accomplishments. The teachers successfully boosted their students' self-esteem and cultivated a sense of fulfillment within them by providing commendations and celebrating their achievements. All teachers viewed their role not only as educators but also as a source of support and encouragement. Even small expressions of affirmation and praise were seen as significant.

Upon reflecting on their practices, the teachers recognized the importance of varied and appropriate reading materials. The teachers in this study shared the varied materials they used to transform the non-readers into independent readers. They emphasized that when choosing reading materials, it has to be relatable and appropriate for their level. Even if the students can decode, if they don't understand what they're reading, they will have a hard time grasping it. To illustrate, Grade 5 students with grade 2 skills must be given materials suited for grade 2 students like giving passages from the Philippine Informal Reading Inventory (Phil-IRI) suitable for grade 2. But it should not be too easy because there would not be much to learn, and it should not be too difficult because they would lose interest in reading. These teachers also used other materials like multimedia resources such as audio and video aids. Non-readers learn more quickly when they have something to see.

Summary. Based on the personal experiential and super-ordinate themes extracted from the participants, transforming non-readers into independent readers is a joint effort of teachers, parents, and students. Each of them plays a vital role in the reading process. Teachers serve as facilitators in the classroom, providing structured instruction and appropriate reading materials. They provide expertise shared with the parents through consultations, orientations, and training. They employ various strategies for phonemic awareness, vocabulary development, and reading comprehension.

On the other hand, parents serve as the teachers' partners. They support and reinforce reading instruction in the classroom by allocating specific time for reading at home. They can collaborate with teachers to share insights and observations about their student's reading progress. Lastly, the student's active participation is essential in the process. They have to be motivated, engaged, and willing to exert effort to enhance their reading skills. They must adhere to the instruction of their teachers and parents to achieve a positive outcome and ultimately transform them into independent readers.

DISCUSSION

From the personal experiential themes of the seven participants, four super-ordinate themes emerged. The discussion of

the four super-ordinate themes amplifies the information presented through the literature review and the theoretical underpinnings.

Vital role of parent-teacher collaboration. The results of this study reinforced the importance of collaboration between teachers and parents in the reading process. Teachers acknowledged that parents must play an essential role in transforming non-readers into independent readers. Usca et al. (2016) asserted that teachers and parents must be actively involved in the reading process. It was evident in the practices shared by teachers that they ensured to involve parents of non-readers in assisting and monitoring their students, providing them with reading materials to use at home. This approach aligns with Ahmad et al. (2020), who emphasized the crucial role of parental involvement in fostering and sustaining students' reading habits. Parents substantially impact how quickly the students learn to read and acquire basic literacy skills (Vasylenko, 2017). Heick (2020) also noted that the most influential factors in developing lifelong readers start and end at home. Home is the place where students come from long before they step into the classroom, and it is where they will return when their time in the classroom is over.

These superordinate themes uphold several studies that presented evidence supporting the positive outcomes of parental involvement in the reading process. Parental involvement in the reading process and their attitudes and behaviors help primary school students develop their reading interests, skills, and ability to reach higher reading levels (Usca et al., 2016). In the study conducted by Marasigan et al. (2019), it was found that students achieved higher reading levels when parents actively participated in the reading process. Similarly, the findings of Ahmad et al. (2020) showed that parents' reading with their children has a positive impact on their child's educational attainment. Another study by Lumapenet and Andog (2017) revealed that parents' reading assistance significantly influences their children's oral and silent reading abilities. Additionally, a study by Geske and Ozola (2020) demonstrated that fourth graders whose parents were actively involved in reading promotion activities achieved higher reading achievements. The act of reading together and storytelling were found to be particularly significant.

However, studies also found that parental involvement is a challenging endeavor for some parents since they, too, need to gain the competence to be part of the reading process. Research suggests that many parents believe they are not competent enough to instruct their students (Mcgraw-Hill, 2019) adequately. Parents usually find it difficult to teach their children to read because some of them struggle to read the text (Laurito, 2022). To fill this gap, some teachers in this study, conducted orientation and programs to provide parents with the necessary knowledge and skills to assist and monitor the students. One of the more mainstream or traditional forms of communication with parents, parent-teacher conferences can be a simple way to meet elementary parents. Teachers may utilize conference time to provide families with easy-to-implement tools and ideas for at-home involvement (Mcgraw-Hill, 2019). Moreover, in support of the practices of the teachers in this study, Tinapay et al. (2021) recommended that institutions should provide orientations for parents about the importance of their involvement in the reading process and should conduct workshops for parents that will give them insights about the proper strategies that they may be used in guiding their children to achieve independent level.

The reading teachers in this study recognized the crucial link between home and school. They involved the parents in developing the reading skills of their students. They were aware that establishing contact with parents would enable them to gain ample information about the diverse needs of their students and can apply strategies to meet those needs. They even went to the extent of providing orientation to parents they know have limited knowledge of how to coach their children in their reading endeavors. It was a consuming but excellent strategy, an additional burden on the part of the teacher. However, going the extra mile undoubtedly paid off as they were able to convert the non-readers to independent readers. The degree of their success can be traced to different claims of the authors mentioned above, underscoring the importance of home-school partnerships in developing students' reading literacy.

The importance of devoting time to reading through reading sessions and remediations. The results of this study proved that to transform non-readers into independent readers, there has to be a time that focuses on reading. It supports the study of Emefa et al. (2020), who recommended that teachers allocate more

reading time. During this time, the teachers can provide guided reading to a small group of students. Guided reading is an instructional approach often used in elementary classrooms designed to promote independent reading. It provides an opportunity for teachers to support small groups of children within the same reading levels. The texts are carefully matched to the children so they can successfully apply their strategies to overcome the challenges in the text and read it independently (Young, 2019). It is in line with the study of Oostdam et al., (2015), who stated that guided reading affects students' reading fluency.

Additionally, the results of the study suggest that teachers were conducting one-on-one reading sessions with non-readers on a different schedule, focusing solely on reading. This approach supports Neitzel et al. (2021), as cited by Miles et al. (2022), who highlighted the effectiveness of individual instruction in the reading process, stating that it is more effective than group instruction. In the study of Adapon and Mangila (2020), the Department of Education-Zamboanga del Sur also implemented a program that provided students with one-on-one reading assistance. This program, called The Care for the Non-Readers (CNR) Program, was implemented during the 2013-2014 school year. It is a division-wide reading initiative that offers beginning and developmental reading sessions aimed at giving pupils and students who struggle with reading and writing the opportunity to catch up through specialized one-on-one reading assistance from a reading teacher. The study concluded that the program was very effective in enhancing the reading levels of students.

The reading teachers clearly understood the importance of consistent and targeted practice in fostering independent reading levels. Their unwavering commitment to this goal was evident through the diligent allocation of dedicated reading sessions. By creating a structured and supportive environment, the teachers allowed students to develop their reading skills at their own pace. Additionally, the teachers recognized that some students required extra assistance to bridge the gap between their current reading level and the desired independent reading level. To address this, they provided targeted remediation, tailoring their approach to address the individual student's specific needs and challenges. This personalized approach ensured that non-readers received the necessary support and resources to make significant progress in their reading abilities.

Furthermore, the teachers went above and beyond by implementing one-on-one instruction for non-readers. They understood that these students needed personalized attention and guidance to overcome difficulties and establish a strong foundation in reading. This individualized approach further enhanced the students' progress. Undeniably, the commitment of the teachers to nurturing independent reading skills was a challenging task that demanded their time, effort, and energy beyond expectations. However, this practice has proven highly effective, transforming non-readers into independent readers.

The significance of boosting students' motivation through positive feedback and encouragement. This super-ordinate theme aligns with one of the effective practices for teachers in handling non-readers, as identified in the study conducted by Davis et al. (2016). The study revealed that moving away from traditional teaching methods and encouraging learners to engage in more creative and meaningful activities is an effective approach. The teachers in the study implemented encouragement and positive feedback to motivate students as part of their best practices. They acknowledged that even the most effective strategies would not fulfill their intended purpose without motivation. Motivation is considered an essential factor in enhancing reading comprehension (Ahmad, 2017; Emeffa et al., 2020). It is consistent with the study of Turner et al. (2017), which stated that students need an extra push to be in the right direction.

Several studies reported that lack of motivation is detrimental to the reading process. Vasylenko (2017) emphasized that by the end of first grade, most children face substantial decreases in their motivation to learn to read if they cannot master reading skills and keep up with their peers. The lack of motivation to read is a common factor contributing to readers' struggles and low achievement. When students lack motivation, they tend to spend less time engaging in reading activities, resulting in slower progress than their peers with stronger reading motivation (Le Cordeur, 2011). In the study of Adapon and Mangila (2020), this issue is particularly evident in the Philippines, where education is hindered by a general lack of motivation and inspiration, especially in reading education. Educators have observed that children today often show little interest in reading books, novels, and other materials, and their reading interests are

often diverted towards less meaningful or nonsensical activities, which is especially noticeable among younger children aged five and above.

The reading teachers emphasized the importance of motivation through encouragement and positive feedback in the reading process. As a result, the students developed a positive attitude towards reading and a willingness to engage in reading activities, thanks to their teachers' support, appreciation, and recognition. Acknowledging the students' hard work and progress, irrespective of their current reading level, helped foster a sense of accomplishment and motivation to continue improving. Ultimately, this method proved successful in transforming non-readers into independent readers. The teachers' statements in the study reflect the shared success experienced by students and educators.

Upon reflecting on their practices, the teachers recognized the importance of varied and appropriate reading materials. This super-ordinate theme supports one of the findings from the study conducted by Davis et al. (2016). Based on their study, one of the effective practices is to involve learners in exercises or worksheets that facilitate the mastery of required reading skills through visual and manipulative media. This is congruent with the study of Louise (2018), who stated that television is one of the technologies being used by educators to disseminate knowledge. Kayalar (2016) emphasized that television could be effectively utilized within the classroom to facilitate student learning.

Furthermore, the study of Jaucian (2017) provided evidence of teachers actively incorporating television technology into their instructional practices. Daling (2016) highlighted the efficiency and effectiveness of new teachers in utilizing instructional technology due to their exposure to modern trends and proficiency in ICT knowledge and skills. These findings collectively suggest that integrating television as a teaching tool in the classroom has the potential to enhance the learning experience. When leveraged by knowledgeable and skilled educators, television technology can effectively support instruction and foster improved student engagement and understanding.

On the other hand, teachers in this study emphasized the importance of teachers determining the students' proficiency level to select appropriate materials that suit their individual needs and

interests. Kumler and Linden (2014) found that combining suitable reading materials and teaching competence effectively enhanced reading skills. Yansyah (2018) stated that the reading process starts in the mind of readers with an idea about the meaning of the text. Meaning is initiated from the knowledge that the readers have already had. Teachers who are top-down oriented claim that activating students' prior knowledge is the central key to inferring meanings in the text.

The reading teachers acknowledged the benefits of incorporating technology, such as television, into the learning process, as it allowed the students to both learn and enjoy simultaneously. This approach capitalized on the skills of young teachers who possess knowledge of how to integrate technology into instruction. They also recognized that non-readers face diverse challenges and possess different reading levels. Therefore, in order to address these challenges effectively, they emphasized the importance of utilizing a range of varied and appropriate reading materials. The teachers carefully selected reading materials matching the students' reading levels, ensuring they were neither easy nor difficult. By providing texts that were accessible yet challenging enough, the teachers fostered a sense of confidence and motivation in their students. Consistent assessment and monitoring of the student's reading levels were required to implement this approach successfully. As a result, the teachers found this to be effective, as they were able to transform non-readers into independent readers.

The results of this study provide valuable insights into teachers' best practices for transforming non-readers into independent readers. By recognizing the importance of parent-teacher collaboration, dedicating time to reading sessions and remediation, fostering motivation through positive feedback, and utilizing varied reading materials, teachers helped non-readers overcome the challenges and ultimately achieved independent reading levels.

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Classroom Management of Teachers, Social-Emotional Competence, and Mathematics Learning Strategies of Students

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ABSTRACT

Most secondary school students struggle to understand basic mathematical ideas and one potential reason for this problem is the failure to use appropriate strategies in learning mathematics. This study aimed to determine the influence of the classroom management of mathematics teachers and social-emotional competence on mathematics learning strategies of Grade 10 students. The study used adapted questionnaires. The descriptive correlation method was utilized in the research. Data were gathered from Grade 10 students at three selected public schools in Buhangin District, Davao City. These data were analyzed using the mean, standard deviation, and linear regression analysis. Both the two independent variables, classroom management of mathematics teachers and social-emotional competence, yielded a significant relationship to the mathematics learning strategies of students. Moreover, the mathematics learning strategies of Grade 10 students were influenced by the classroom management of mathematics teachers and the social-emotional competence of students.

Keywords: Education, mathematics, descriptive-correlation, Philippines

INTRODUCTION

Mathematics learning strategies are a person's approach to a task that outlines how a person organizes and employs a collection of skills to learn the material or to do a specific activity more quickly and effectively, either in or out of the classroom (Saraswathy & Nagavalli, 2016). However, most secondary school students struggle

to understand basic mathematical ideas (Ayotola & Adedeji, 2019), and one potential reason for this problem is the failure to use appropriate strategies in learning mathematics (Anthony, 2018). In fact, in Lithuania, the study of Kliziene et al. (2022) shows that 12 percent of the students at the fundamental level found that implementing the strategy in problem-solving was the most challenging phase based on their conduct of diagnostic tests of cognitive abilities (DTCA). Further, the failure of the students to utilize cognitive, metacognitive, multimedia, and effort management strategies in learning mathematics have contributed to their struggles in grasping mathematical information (Mousoulides & Philippou, 2018), and they have problems coming up with new ideas for the same math problem (Liu & Koirala, 2018).

The use of learning strategies is encouraged and supported by research findings and curriculum materials as a key component of successful mathematics learning. Nevertheless, despite such promotion, some students from the United States, Italy, and the United Kingdom currently exhibit passive, dependent learning behaviors rather than active, self-regulated ones (Anthony, 2018). Further, in Taiwan, the report of TIMSS revealed that seventy-four percent of 8th graders have no confidence in learning mathematics due to poor learning strategies (Liu & Lin, 2012). Furthermore, Sa'ad et al. (2014) made their study in Nigeria and came out with findings that students' poor learning strategies were some of the causes of negative attitudes toward mathematics. Unfortunately, because students lack the necessary strategic learning strategies, they become ill-equipped to handle the high cognitive expectations of a constructivist learning environment (Cardelle-Elawar, 2018).

In the Philippines, most Filipino students find difficulty in learning math and this problem may include inappropriate strategies for learning mathematics. As Perez (2020) pointed out, involvement in the practical work approach to learning mathematics, self-practice, and the use of computers and videos available on YouTube are a few other learning strategies teachers should have looked into. Unfortunately, many students never tried using the said strategies; instead, they spent the majority of their free time playing video games. On the other hand, Tacadena (2021) highlighted that other students may also desire to use different mathematics learning strategies, but they need the resources such as a computer and an internet connection. Still, other students exert little effort in learning

mathematics since they lack knowledge of using mathematics learning strategies.

In Davao City, many students have unfavorable impressions of mathematics since they lack conceptual understanding. Most students fear this subject due to this perception, and 21st-century math students enter math classrooms with a major lack of proficiency and dependability in manipulating, simplifying, and applying for numbers in algebra and a negative attitude (Bongcac, 2021). One apparent reason for this problem is the lack of students' knowledge and utilization of the different strategies in learning mathematics (Gurat, 2018) and students who failed to apply suitable strategies in learning mathematics resulted to undesirable attitudes toward mathematics subject (Sullano, 2020).

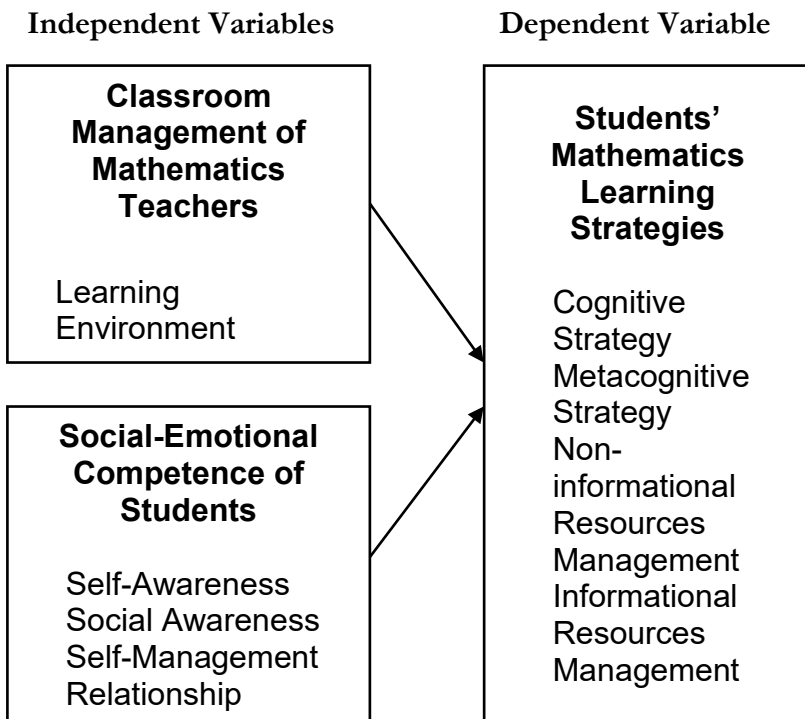
On the one hand, a classroom is where the learners gain knowledge of their contributions, which they can utilize to shape their social identities (Chalak & Fallah, 2019). Accordingly, effective classroom management has become one of the most critical elements in creating a positive learning environment (Tacadena, 2021). It is almost only possible to learn in a structured and orderly classroom. A teacher should always begin every class with a well-planned lesson (Schroer, 2002). To develop various learning strategies, it is significant to focus on the value of grouping and collaborative learning (Özreçberoglu & Çağanağa, 2017).

On the other hand, educators' and researchers' attention was drawn to social-emotional learning (SEL), which has developed a significant component of primary education (Zhou & Ee, 2012). According to the report of Collaborative for Academic, Social, and Emotional Learning or CASEL (2017), It is connected to five fundamental competencies: the capacity to comprehend and regulate emotions, nurturing empathy, and compassion for others, making sound decisions, creating meaningful connections, and handling challenging circumstances with grace. When students acquire social-emotional competence (SEC) because of SEL, they will be able to self-regulate their learning and self-monitor their behavior which could develop good learning strategies in mathematics (Wilson et al., 2001; Zins et al., 2004).

Despite the extensive literature cited above, there are only few studies conducted in Davao City about classroom management of teachers, social-emotional competence, and their relationship to students' learning strategies in mathematics. Further, most of the

studies highlighted in the literature focus on elementary teachers' classroom management skills as a predictor of students' social-emotional competence, such as the study of Poulou et al. (2021); there is not so much on the secondary level. Furthermore, some authors utilized mixed-methods research design, such as the study of Belbase et al. (2021), and qualitative research design, such as the study of Özreçberoğlu and Çağanağa (2017), which is different from the study presently conducted by the researcher. Following the **Social Learning Theory** by Vygotsky (1962) and **Classroom Management Theory** by Froyen and Iverson (1999), this study aims to determine the influence of classroom management of teachers and social-emotional competence on the mathematics learning strategies of students in Public High Schools in Davao City.

Figure 1. Conceptual Framework of the Study



METHODS

Research Design. This study utilized a descriptive correlational design to determine whether teachers' classroom management and students' social-emotional competence had a substantial impact on students' learning strategies for mathematics.

Research Locale. This study was conducted among the public junior high schools in Davao City, particularly in Buhangin District: Schools A, B, and C. The choice of these schools is prompted by the fact that they have a large number of Junior High School student population. These public institutions offer educational programs, including Senior High School, from grades 7 to 12. In like manner, they employ a face-to-face learning modality completely.

Research Respondents. The respondents of this study were the 204 grade 10 students at the selected schools in Davao City. Cluster sampling was used in selecting the respondents. The respondents covered from the following schools namely: School A with 63 students; School B (79) students; and School C (62) students. On the other hand, students from other grade levels will be excluded from this study.

In this study, only students enrolled in the school year 2022-2023 from the three selected public schools in Buhangin District, Davao City that attends their face-to-face class are included in the study since these schools have a more significant number of grade 10 students than the number of students from other secondary schools. Since the participation is voluntary, only those who have submitted their signed Assent Parent's Consent Form and Informed Consent (ICF) were chosen to participate.

Research Instruments. This study utilized questionnaires that were divided into three parts which were all adapted from published research available online. The first part of the questionnaire deals with the classroom management of mathematics teachers followed by the students' social-emotional competence. Further, the last part included students' mathematics learning strategies in Davao City public high schools. The questionnaire contains (5) indicators for classroom management of teachers as perceived by the students, (5) indicators for social-emotional competence, and (4) indicators for mathematics learning strategies of students.

The questionnaires underwent for pilot test for reliability. The computation of classroom management reliability test using Cronbach alpha is 0.718, for social-emotional competence is 0.793, and for mathematics learning strategies is 0.936, which means that questionnaires are in a high internal consistency. Thus, the whole test is reliable. The 5-point Likert Type was used.

The statistical techniques used to total and analyze the information obtained from the questionnaires are the mean, standard deviation, person product-moment correlation, and multiple regression analysis.

Data Collection. During the data gathering, the researcher underwent steps as follows: A letter from the dean of the Graduate School was requested to seek authorization to undertake the study titled classroom management of Teachers, social-emotional competence, and Mathematics learning strategies of students. Upon approval of the permission letter, the researcher formally requested ethical clearance from the REC before administering the instruments to the study's target respondents. Once REC had released the ethical clearance, the researcher forwarded the letters and other documents to the School's Division Superintendent of Davao City to formally request approval to perform the study. In a separate request letter addressed to the principal of the three participating schools, the researcher personally sent it to them, attaching the approved request letter from the SDS and an endorsement letter from the Graduate School Dean. On the one hand, the intended respondents have received official notification that they are participating in the study. An informed Consent Form (ICF) and Assent Form have been disseminated to the respondents for them to accomplish with their parents or guardians. They were informed of the study's goals and their significant contribution to the research. It was also highlighted to the respondents that participation is not compulsory, and data gathering will be done face-to-face. The data were encoded, tabulated, and analyzed according to the study's objectives.

RESULTS AND DISCUSSION

Correlation of Classroom Management of Mathematics Teachers and Social-Emotional Competence to Mathematics Learning Strategies of Students

Illustrated in Table 1 were the results of the test on the significance of the relationship between classroom management of mathematics teachers and mathematics learning strategies of students. It shows that classroom management of mathematics teachers has a significant moderate positive relationship with the mathematics learning strategies of students ($r = .46, p < .05$). Hence, as the level of classroom management of teachers increases, the level of the mathematics learning strategies of students also increases.

Table 1
Correlation of Classroom Management of Mathematics Teachers and Social-Emotional Competence to Mathematics Learning Strategies of Students

Independent Variables	Mathematics Learning Strategies		
	r	p-value	Remarks
Classroom Management	.46	.00	Significant
Social-Emotional Competence	.61	.00	Significant

The findings of the study corroborate with the result of the study of Jain and Sharma (2017) reported how the classroom management of teachers affects the mathematics learning strategies of students in different cultural contexts. Further, based on the result of the study of Berger and Karabenick (2018), teachers' classroom management is linked to using different mathematics learning strategies, such as problem-solving in mathematics and involvement in self-regulated mathematics learning. Furthermore, the findings of this study are parallel with the result of the study of Sunbul and Geban (2018), which reported that classroom management practices significantly correlated with mathematics learning strategies. The study emphasized the importance of positive teacher-student relationships, clear expectations and guidelines, and active student participation in the learning process in promoting successful mathematics learning strategies. Likewise, this finding confirms what Rimm-Kaufman and Sawyer (2018) and Stein et al. (2019) stated that effective classroom management practices of teachers are essential for promoting students' involvement in mathematics learning

strategies, engagement, perseverance, and deep understanding of mathematical concepts.

Moreover, the table 1 also shows that social-emotional competence has significant moderate positive relationship with the mathematics learning strategies of students ($r = .61, p < .05$). Hence, there is a tendency that as the level of social-emotional competence of students increases, the level of the mathematics learning strategies also increases.

The findings validate the study by Durlak et al. (2019) found that school-based social-emotional learning programs positively impacted students' mathematics learning strategies. The results further reveal that establishing a better relationship and maintaining favorable social relationships with the students encourage the students to involve in cognitive and metacognitive strategies in learning mathematics. In the same vein, the result of the study of Götz et al. (2017) reported that students with high levels of social-emotional competence employ learning strategies for mathematics more effectively and engage with peers, parents, and other adults, and are frequently related with self-regulation techniques. Further, existing evidence suggests that students' social-emotional competence can positively impact their social interactions, attitudes to learning, and use of strategies in learning mathematics (Götz et al., 2017).

Influencers of Mathematics Learning Strategies of Students

Table 2 presents the linear regression analysis to determine the significance of the combined influence of classroom management of mathematics teachers and social-emotional competence on the mathematics learning strategies of Grade 10 students. As gleaned in the table, the overall computed r^2 value of 0.39 indicates that the combined influence of the classroom management of teachers and the social-emotional competence of students have contributed significantly to the variability of students' mathematics learning strategies by 39.0 percent of the total variability. Therefore, the difference of 61.0 percent can be attributed to other variables or factors not covered in this study.

Table 2
Significance of the Influence of Classroom Management of Teachers and Social-Emotional Competence on Mathematics Learning Strategies

Variables	Mathematics Learning Strategies			
	β	t	P-value	Remarks
Classroom Management	.14	2.10	.04	Significant
Social-Emotional Competence	.53	7.71	.00	Significant
<i>Holistic Model</i>				
R ²	.39			
F-value	64.06			
P-value	.00			
Remarks	Significant			

**Significant at $p < 0.05$*

Moreover, results in Table 2 indicate that classroom management of mathematics teachers significantly influenced the mathematics learning strategies of students, as evident by the beta coefficient value of 0.14 ($p < 0.05$). This means that for every unit increase in classroom management of mathematics teachers, there would be a 0.14 increase in the mathematics learning strategies of students. This denotes that classroom management of mathematics teachers has a positive contribution to the mathematics learning strategies of Grade 10 students.

This supports the Social Learning Theory of Vygotsky (1962) who pointed out that people learn through observation and imitation of others' behaviors and the interpretation of social cues in their environment. In the context of mathematics education, classroom management strategies and practices employed by teachers can influence the learning strategies of students. For instance, modeling effective classroom management strategies can encourage students to imitate these behaviors and integrate them into their own learning strategies. Teachers who provide a positive and supportive classroom environment can help students feel more comfortable asking questions.

Also, the results in Table 5 indicate that social-emotional competence significantly influenced the mathematics learning strategies of students, as evident by the beta coefficient value of 0.53 with ($p < 0.05$). This means that for every unit increase in classroom management of mathematics teachers, there would be a 0.53 increase in the mathematics learning strategies of students. This denotes that social-emotional competence has a positive contribution to the mathematics learning strategies of Grade 10 students.

The findings confirm the Classroom Management Theory by Froyen and Iverson (1999). According to the theory, positive behaviors of students in using strategies for learning mathematics may be developed by reinforcing students to do well in math class as a form of positive classroom management. In the context of mathematics education, in teaching students to acquire mathematical strategies, teachers need to focus on the student as a whole, including their social-emotional well-being, and the teacher needs to be socially and emotionally competent to figure out the negative influences the student might have as they learn mathematics.

Lastly, the statement of Meece et al. (2018) and Pekrun et al. (2019) that both classroom management and social-emotional competence are important factors in promoting high levels of mathematics learning strategies for students. They suggest that effective classroom management can create a positive learning environment that promotes engagement, persistence, and a deep understanding of mathematical concepts, while social-emotional competence can help students regulate their emotions, form positive relationships, and engage in effective learning strategies. Together, these factors can create a powerful learning environment that supports students' academic success in mathematics.

The empirical results helped shape the conclusions. The study concludes that there was a significant relationship between the classroom management of teachers and the mathematics learning strategies of students, and there was also a significant relationship between social-emotional competence and the mathematics learning strategies of students. This indicated that the increase in the levels of classroom management of mathematics teachers and social-emotional competence led to an increase in mathematics learning strategies of Grade 10 students. The study also found that both classroom management of teachers and social-emotional competence of students predicted the mathematics learning strategies. This implies

that both classroom management of teachers and social-emotional competence of students influenced the mathematics learning strategies of Grade 10 students.

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Language Enjoyment and Anxiety as Determinants of English Language Proficiency of Public Senior High School Students

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ABSTRACT

This research aimed to investigate the levels of language enjoyment (LE), language anxiety (LA), and English language proficiency (ELP) among public senior high school students in Santa Maria, Davao Occidental, Philippines. Furthermore, the study also examined the relationship between LE and LA with ELP, as well as the significant influence of LE and LA on ELP. The respondents of the study were two hundred seventy Senior High School students drawn out from the total population using stratified random sampling. To collect the relevant data, two adapted survey questionnaires to measure the level of language enjoyment and language anxiety and a standardized language proficiency test were administered to the respondents. The major findings of the study indicated that the level of LE among public senior high school students was low, while the level of LA was high. Additionally, the students' level of ELP was found to be average. The results further revealed a positive relationship between LE and ELP, indicating that higher levels of enjoyment are associated with better English language proficiency. Conversely, an inverse relationship was observed between LA and ELP, suggesting that higher levels of anxiety are associated with lower English language proficiency. Furthermore, the study found that both LE and LA significantly influenced ELP, emphasizing the importance of addressing both dimensions of enjoyment and anxiety in the language classroom to improve language proficiency among learners.

KEYWORDS: Education, English, language enjoyment, language anxiety, English language proficiency, descriptive-correlational, Philippines

INTRODUCTION

English language proficiency (ELP) encompasses the comprehensive ability to comprehend, communicate, and utilize the English language effectively in various contexts, enabling individuals to engage meaningfully and confidently in English-speaking communities. Ying and Wong (2020) purported that due to globalization and the internationalization of English, the importance of improving English language proficiency (ELP) has become increasingly crucial. However, recent studies (Manuel, 2022; Sijali, 2016) show that despite the prevalent global utilization and significance of the English language, the proficiency of non-native speakers in English has frequently fallen short of satisfactory levels.

On a global scale, according to a 2016 study conducted by Indonesia's Ministry of Education and Culture, the English language proficiency levels of students in Indonesia present a significant problem. The study revealed that 17.5% of students were able to meet the government's minimum English language proficiency standard, indicating a relatively low level of proficiency among Indonesian students (Kemdikbud, 2016). Furthermore, the study highlighted a disparity between students from urban and rural regions, with urban students exhibiting higher levels of English language competence compared to their rural counterparts. One of the main factors contributing to students' low proficiency was identified as the limited proficiency of teachers in the English language.

Nationally, the English language proficiency levels of students in the Philippines present a significant problem, stemming from the disparity between the nation's official language policy and the actual language practices of many Filipinos (Gonzalos, 2016). While English is considered one of the official languages and widely utilized in government, business, and education, the primary language used by Filipinos often differs. This inconsistency and lack of coherence in English language teaching pose challenges in assessing Filipino students' English language ability (Gonzalos, 2016). Moreover, a 2018 study by ETS highlighted the English proficiency problem among Filipino students. They scored the lowest in reading and writing skills compared to peers in 10 Asia-Pacific nations. The study emphasized the influence of socioeconomic background, with higher socioeconomic students performing better. Lack of trained English teachers and resources were identified as obstacles to improvement.

Likewise, the EF English Proficiency Index, based on the 2018 TOEIC test by Hopkins International Partners, showed a decline in language skills among Filipino graduates. They had lower proficiency than high school students in Thailand. This decline in English proficiency affects the global competitiveness and employability of Filipino graduates.

In Davao City, the English proficiency levels of secondary students have been examined by Gamutin and Cabuelo (2017) in their study focusing on the mastery of English as a second language. The findings of the study indicate that students in Davao City exhibited an average level of language proficiency, with reading and writing skills being relatively stronger compared to listening and speaking skills. This suggests that students may face challenges in effectively understanding and expressing themselves in English when it comes to oral communication (Gamutin & Cabuelo, 2017). The study suggests that efforts and interventions are necessary to address these challenges and provide students with the necessary support and resources to enhance their English language proficiency, particularly in the domains of listening and speaking.

The existing literature sheds light on an important concern regarding learners' English language proficiency (ELP). To address this issue, studies have focused on investigating the role of learners' emotions, as it is widely acknowledged that positive and negative emotions have a significant impact on language acquisition and can influence language learning results. For instance, Al-Seghayer and Fahad (2015) conducted research in Saudi Arabia that supports the crucial role of emotions, particularly positive emotions like enjoyment, in the process of language acquisition. According to their study, when students experience enjoyment while learning English, they exhibit higher levels of motivation, engagement, and performance in language learning tasks. Therefore, recognizing and nurturing positive emotions, such as enjoyment, can contribute to the creation of a supportive and effective language learning environment, ultimately leading to enhanced language learning outcomes.

On the other hand, anxiety, a negative emotion, has also been studied in relation to ELP. Language anxiety (LA) refers to feelings of nervousness, apprehension, or fear that arise in situations involving language use (Oxford, 2011; Mercer, 2011; Dörnyei, 2009). It can be influenced by cross-cultural factors, such as perceived disparities in social norms, values, and beliefs (Kim, 2011). Jing and

Yang (2018) conducted a study in China examining the link between learners' anxiety toward the English language and their motivation to learn. The findings revealed that language anxiety negatively impacted learner motivation, and students experiencing higher levels of anxiety were less driven to study English.

Although extensive research has explored various factors influencing English language proficiency (ELP) among learners, there remains a significant gap in the literature regarding the specific impact of positive or negative emotions in language learning on ELP (Cabaltica & Arcala, 2021; Camacho et al., 2017). The lack of existing studies on language enjoyment and anxiety underscores the importance of conducting this study. Previous literature has predominantly focused on either negative or positive psychology in language learning, neglecting the distinct constructs of language anxiety and language enjoyment. Investigating both of these factors is crucial for understanding the relationship between positive and negative psychology and its impact on English language proficiency. The delineated gap then propelled the researcher to pursue this investigation.

This study aimed to examine the influence of language anxiety (LA) and language enjoyment (LE) on the English language proficiency (ELP) of senior high school students. By specifically considering affective variables that may affect language learning, this research seeks to fill the gap in understanding the significance of positive and negative emotions in language acquisition.

METHODS

Research Design

This study utilized a quantitative research approach specifically a descriptive-correlational design with the aid of adapted questionnaires used in gathering the needed data from the respondents. In this study, language anxiety and language enjoyment are the predictors of students' English language proficiency. This study involved the measurement of three variables, namely: language anxiety, language enjoyment, and English language proficiency, using validated survey instruments and examining the relationships among these variables.

Research Locale

The study was conducted across four secondary schools, which are referred to as School A, School B, School C, and School D for the purposes of this research. These schools are situated in two districts, namely Santa Maria East District and Santa Maria West District, both falling under the jurisdiction of the Schools Division of Davao Occidental, Santa Maria. It is noteworthy that these four schools are the exclusive public secondary national schools providing senior high school programs in the said division.

The aforementioned schools were selected as the study's locale due to their unique status within the Division of Davao Occidental, Santa Maria. As newly established senior high schools, they have not yet been included in previous studies and surveys regarding language proficiency. The researcher's objective was to assess the current language proficiency levels of senior high school students and explore the connection between language proficiency, language anxiety, and language enjoyment.

Research Respondents

This study identified 270 Senior High School respondents. Respondents were from the four secondary schools of Santa Maria, Division of Davao Occidental and were selected using stratified random sampling. Drawn out from each school were 184 students from School A, 42 students from School B, 29 students from School C, and 15 students from School D.

Participants included in the study were Grade 11 Senior High School students who were able to take up English subjects during the previous and current semester; and were bona fide students from the four secondary schools of Sta Maria, Division of Davao Occidental. Subjects included must also use English as a language medium during the conduct of the survey. The researcher, moreover, was only able to collect data with surveys in English. Subjects who failed to meet the inclusion criteria were not included in the study to maintain the accuracy and relevance of the results.

Data Gathering Procedures

Preceding all the other processes, the researcher sought for a letter of endorsement from the University of the Immaculate Conception Graduate School Dean for the approval of the conduct of the study. Moreover, as soon as the University of the Immaculate Conception (UIC) Research Ethics Committee (REC) had issued the ethics compliance certificate, the researcher then secured an endorsement letter from the University of the Immaculate Conception Graduate School Dean addressed to the Schools Division Superintendent of the Division of Davao Occidental. The researcher then observed the basic processes that follow:

As the Schools Division Office of Davao Occidental received the endorsement letter from the Graduate School, the former then responded through a letter of approval sent to the researcher. Subsequently, the researcher furnished a letter of request to the School Principal of the schools in the intended research locale. After receiving confirmation, the researcher personally communicated with the school principals of each school to set the schedule for the implementation of the survey.

Upon the schedule of the survey, the researcher ensured to orient the parents of the respondents and secure a signed consent form before seeking affirmation from the senior high school students who were the respondents of the study. The agreement between the researcher and respondents was formally acknowledged through a signed Assent Form and the informed consent form (ICF) signed by the respondents' parents.

During the orientation, the ICF was also secured from the parents of the respondents while questions and clarifications about the administration of the survey questionnaires were entertained. Meanwhile, the Assent Forms were given to the respondents during the orientation and before the administration of the survey.

Finally, completed survey questionnaires were gathered personally by the researcher to come up with accurate and reliable results.

Statistical Tools

The following statistical tools were used in the computation of data:

Mean. This statistical tool was used to determine the level of language enjoyment, language anxiety and English language proficiency of Grade 11 students.

Standard Deviation. This statistical tool was used to determine how far each score lies from the mean.

Pearson Product Moment Correlation (r). This statistical tool was used to determine the significant relationship between language enjoyment and English language proficiency; and between language anxiety and English language proficiency of Grade 11 students.

Regression Analysis. This statistical tool was used to determine the significant influence of language enjoyment and anxiety on the English language proficiency of Grade 11 students.

RESULTS AND DISCUSSION

Level of Language Learning Enjoyment of the Public Senior High School Students

The data in Table 1 presents the level of language learning enjoyment of public senior high school students. Presented in the table are the three indicators of language enjoyment with corresponding mean, standard deviation, and description. The results show that the grand mean is equivalent to 2.25 with a standard deviation of 0.32. The standard deviation ranges from 0.80 to 1.14 signifying that the students' consistency of responses about LE varies marginally.

The table further indicates that the students' LE is low implying that the respondents rarely experienced enjoyment in their English language classes. The low level of students' LE denotes that the students have less appreciation for their teachers in their English class and also, they rarely manifest personal and social enjoyment in their English classes. Hence, regularly utilizing activities that encourage students to use the language without restrictions and to establish good relationships with co-learners and teachers are ways to increase enjoyment levels.

Table 1
Level of Language Learning Enjoyment of Public Senior High School Students

INDICATORS	Mean	SD	DESCRIPTION
1.1 Teacher Appreciation	2.39	0.63	Low
1.2 Personal Enjoyment	2.16	0.53	Low
2.3 Social Enjoyment	2.19	0.52	Low
Overall Mean	2.25	0.32	Low

By observing closely, it can be pointed out that among the three indicators of LE, *teacher appreciation* got the highest category mean of 2.39. Although the indicator scored the highest mean, it was still described as low which means that the respondents rarely show appreciation towards their teacher in their English class while the category *personal enjoyment* obtained the lowest mean which is equivalent to 2.16.

The overall findings of this study aligned to the results of Dewaele and MacIntyre (2014) that students tend to have lower levels of positive emotion in the language classroom as compared to its counterpart. According to their results, this could point out to students' lack of interest in learning foreign languages. Relatedly, this result aligned to the indicators, personal enjoyment and social enjoyment, that scored the least mean score in this study. You and Dörnyei (2016) further elucidated the results of this study by pointing out that students were not innately interested in learning the language but rather learns it mainly as a prerequisite to higher education.

Further, it can be indicated from the results when students appreciate teachers and when teacher appreciate students, it shows a good teacher-student relationship and can help in increasing language enjoyment. This promotes a more conducive and positive learning environment for language learners. Agreeably, the findings supported the results of Xing (2019) where it has been discovered that students who were able to establish a good rapport with their teachers are more motivated and engaged in language learning. This implication also aligns with the conclusions of Saif and Alqahtani (2020) and Gao

and Zhang (2018) who also investigated the role of language enjoyment in language learning.

In addition, research on language learning has proven that language classrooms cannot produce successful learners without having at least some form of student and social engagement (Mohammad Hosseini et al., 2022). Hence, the level of students' social involvement and enjoyment in learning tasks determines whether learning is successful. In the context of the presented results, it can be inferred that language classrooms lack meaningful exchanges during learning tasks or its importance may have been overlooked during language classes.

Aside from teacher appreciation and social enjoyment, the data also suggests that students may possess low intrinsic motivation, perseverance, and interest in learning the language as related to their personal enjoyment. The conclusions of Dewaele and MacIntyre (2014) and Dewaele and Alfawzan (2018) posited that when learners enjoy and find satisfaction in learning the language, learners better attend to, process, and acquire a target language. In comparison to the results of the studies mentioned, the student-respondents of this study have low self-perception and low intrinsic motivation which resulted to low language enjoyment.

Level of Language Learning Anxiety of the Public Senior High School Students

Presented in Table 2 is the level of language learning anxiety of senior high school students. Language learning anxiety is described in terms of four indicators namely *speaking anxiety*, *writing anxiety*, *reading anxiety*, and *listening anxiety*. The finding reveals that the overall average of students' learning anxiety is equivalent to 3.75 described as high with a standard deviation of 0.35. The standard deviation ranges from 0.85 to 1.18 indicating that the responses of the students marginally vary. The results implies that the students' anxiety in learning the English language is often manifested.

Notably, among the four indicators of language learning anxiety, *writing anxiety* obtained the highest mean equivalent to 3.81 described as *high*. This means that the anxiety in making written output is experienced by the students oftentimes.

Two indicators of language learning anxiety obtained the lowest mean scores which are reading anxiety and listening anxiety

with a mean score of 3.73 described verbally as high. Although the indicators got the lowest mean, both are described as high which means that the students often experience anxiety in accomplishing tasks related to their receptive skills.

Table 2
Level of Language Learning Anxiety of Public Senior High School Students

INDICATORS	Mean	SD	DESCRIPTION
2.1 Speaking Anxiety	3.75	0.46	High
2.2 Writing Anxiety	3.81	0.44	High
2.3 Reading Anxiety	3.73	0.44	High
2.4 Listening Anxiety	3.73	0.45	High
Overall Mean	3.75	0.34	High

The general findings of this study agree to the findings of Labicane (2022) where she found out that Filipino students have higher levels of anxiety across the four macro skills. However, her results presented that among the macroskills, Filipino learners experienced the highest level of apprehension in terms of speaking. On contrary, this study revealed that the indicator to contribute the most to language anxiety is writing. The differences in the results may be influenced by the level and age of the respondents since Labicane (2022) investigated the language anxiety level of college students.

Additionally, the findings point to the importance of mitigating anxiety among learners in the language classroom. In a study by Dewaele and Li (2020), it has been discovered that anxious students tended to have difficulty in establishing connections in the language classroom. Thus, higher anxiety suggests that teachers need to assist learners in decreasing anxiety by creating a warm and encouraging learning environment. Essentially, according to Meşe & Sevilen (2021), when teachers fail to create a positive learning space to reduce learning anxiety, students are not motivated to engage in learning.

As described previously, the indicator having the highest mean score under language anxiety is writing anxiety. This finding entails that oftentimes, the students experience anxiety when given

written language tasks. Azizah and Budiman (2017) posited that the primary and most defining stride for accomplishing proficiency is being capable of producing high-quality academic writing. However, due to the challenges that they encountered in writing, the majority of language learners may feel strained or discouraged, eventually causing them to discharge themselves from even trying to write due to anxiety (Miri & Joia, 2018). Therefore, students who suffer high levels of writing anxiety may also suffer in their language learning process (Al-Sawalha & Chow, 2012). Since the writing anxiety level of the student-respondents is high, it can be concluded that they are apprehensive and anxious about writing syllabi and other academic papers. The feeling of apprehension for writing tasks among students is heightened by the lack of linguistic proficiency. This is associated to the results of Rabadi and Rabadi (2020) wherein it has been found out that high level of writing anxiety identifies poor linguistic knowledge as the main cause.

The second highest as identified in the table above is speaking anxiety. Clearly, language anxiety hinders learners' performance and competence in communicating with other speakers, as anxiety disturbs their focus and interferes with their aptitude and ability not only in comprehending what is said in the target language, but also in producing ideas, as well retrieving the appropriate lexis (Tóth, 2006). The findings run parallel to the results of several studies on language anxiety that negative perception towards English and negative self-assessment (Liu & Jackson, 2008) and being corrected when speaking (Mak, 2011), all contribute to speaking-in-class anxiety. Moreover, since it was determined by Sadighi and Dastpak (2017) that the speaking anxiety of learners actually originate from their fear of making mistakes because of poor vocabulary and inadequate awareness and knowledge of grammatical rules and systems, it can be inferred that students fear making language errors and are nervous when using the language during speaking activities.

Furthermore, there are two indicators that obtained the least mean scores: reading anxiety and listening anxiety. These two indicators are both receptive language skills, hence, it requires complex thought processes and comprehension. In connection, reading can be identified as a challenge for language learners because it requires more than just decoding texts; it necessitates problem-solving and context awareness (Nasrollahi, 2014). In the same way, Tayşi (2019) contends that listening comprehension can also cause

high levels of anxiety, particularly when the listener is unable to understand the material. Given that the two indicators are both receptive skills, lacking the necessary processing skills can be a learning obstacle for both foreign and second language learners, causing language anxiety levels to increase.

Level of English Language Proficiency of Public Senior High School Students

Presented in Table 3 are the levels of students' English language proficiency in terms of *listening, reading, written production and interaction*, and *spoken production and interaction* skills. The overall proficiency level which is equivalent to 56.67 described as *average* indicates that the senior high school students have sufficient proficiency in the English language. Yet, this implies that there is still room for improvement as indicated in the proficiency level of the students. Thus, teachers should employ approaches that can hasten language proficiency to equip students with the necessary skills before they are promoted to the next level.

Among the indicators of English language proficiency, *spoken production and interaction* obtained the highest level of 69.01 described as *proficient*. This means that the students are found to be able to deliver oral language tasks and are capable of speaking fluently during language classes. On the other hand, the indicator *reading* got the lowest level of proficiency equivalent to 44.14 described as *average*. This indicates that students can do regular reading tasks but may still improve their reading proficiency through frequent practice to be able to comprehend higher-level reading tasks. The table further shows that the indicator *listening* had a level of 48.43 described as *average* and *written production and interaction* had a level equivalent to 65.10 described as *proficient*.

The findings of this study corroborate to the results of Leyaley (2016) where she revealed that the English language proficiency of Filipino freshmen college students is Early Intermediate. This confirms that students in the Senior High School level can communicate and use the target language in terms of reading, listening, spoken production and interaction, and written production and interaction.

The results highlight that among the other indicators, *spoken production and interaction* is found to be high and is described as

proficient. This finding can be associated with the students' efficient communication methods and strategic competence. Aligning to the study by Li et al. (2020), it has been discovered that students who spoke more fluently were more likely to employ efficient communication techniques. This may be the reason why even with high speaking anxiety, students were able to perform better during the spoken production and interaction task. The result then occurs to be contrary to the results of Liu and Li (2019) that lower levels of social anxiety were linked to speaking proficiency levels. Nonetheless, since the schools practice the target language during classes, it can also be pointed out as the reason why students' speaking proficiency is relatively higher. This then agrees with Kim et al.'s (2018) assertion that speaking proficiency is higher among students who have more opportunities to practice speaking, particularly with native speakers.

Table 3
Level of English Language Proficiency of Public Senior High School Students

Indicators	Mean	SD	Descriptive Level
Listening	48.43	12.84	Average
Reading	44.14	14.47	Average
Written Production and Interaction	65.10	19.64	Proficient
Spoken Production and Interaction	69.01	18.69	Proficient
OVERALL	56.67	13.84	Average

The language proficiency indicator having the second highest mean is *written production and interaction*, indicating that students have proficient writing skills and are able to meet the criteria set in the scoring rubric. As mentioned, students have a proficient level of spoken production, suggesting that they are proficient in vocabulary as it is the most important component of productive language skills. These results further align with a study by Nation and Webb (2011) where they discovered that vocabulary knowledge strongly predicted writing proficiency in both first- and second-language learners. Hence, the findings of this study validated the mentioned study along with a

study by Ghonsooly and Rezaei (2011) that showed a significant correlation between vocabulary knowledge and writing ability.

The third indicator which is *listening* got a mean score of 48.43 with a descriptive level of average. This result indicates that students have sufficient proficiency in decoding and discriminating information, but it may change relatively depending on the material's difficulty. Studies by Vandergrift and Tafaghodtari (2010) and Goh and Kwang (2017) have shown that listening comprehension is a predictor of overall language competency and academic achievement in language acquisition. Thus, it is crucial to identify the factors that influence listening ability and explore effective teaching strategies that could enhance students' listening skills to improve them from average to proficient.

The indicator with the lowest mean is *reading* with a mean of 44.14. Therefore, this indicates that among the four language skills, reading may be the least mastered skill. Students' proficiency level may be average, but when higher-level texts are used, this can pose a problem for the students. Language proficiency in reading is described by the Common European Framework of Reference for Languages (CEFR) as the capacity to comprehend variety of texts, from simple to complicated, and to extrapolate knowledge, arguments, and opinions (Council of Europe, 2018). When students lack any of these skills, they may not be able to proceed with more difficult language tasks.

Correlation between Variables

Table 4 presents the results in testing the significance of the relationship between LE and ELP as well as LA and ELP of the senior high school students. Significance was tested at $\alpha = 0.05$ level.

The analysis reveals that LE has an *r-value* of 0.265 with a corresponding *p-value* of 0.000 while LA has an *r-value* of -0.637 with a corresponding *p-value* of 0.000. These findings indicate that there is a significant relationship between LE and ELP as well as LA and ELP. Therefore, language learning enjoyment and anxiety are related to the English language proficiency of senior high school students.

Table 4
Correlation of Variables

Variables paired with English Language Proficiency of Public Senior High School Students	R	p-value	Remarks
Language Learning Enjoyment	0.265	0.000	Significant
Language Learning Anxiety	- 0.637	0.000	Significant

**Significant at 0.05*

Furthermore, the results signify a direct relationship between LE and ELP which means that the low level of language enjoyment among students is correlated with the average level of students' English language proficiency. On the other hand, there is an indirect relationship between LA and ELP signifying that the high level of students' anxiety in language learning is correlated to the average level of students' proficiency in English.

The findings also denote that since the language enjoyment of the students is low, English language proficiency poses a risk to drop from average to low relatively. The overall perception of students' language enjoyment can be determined by their teacher appreciation, personal enjoyment, and social enjoyment. Nonetheless, the results validated the outcomes of Huang and Chen (2021) and Dewaele and Li (2020) in which they found that there is a link between language learners' enjoyment and their teachers. The abovementioned posited that when teachers foster positive environments, students enjoy learning the language and tend to perform better.

Conversely, since the language anxiety level of the students is high, their English language proficiency is low. These findings then refute the results of Camacho et al. (2017) in their study conducted in the University of the Immaculate Conception, that there is a positive significant relationship between language anxiety and language proficiency. On the other hand, the results affirm the findings of Jugo (2020) where she indicated a significant negative association between language anxiety and English proficiency.

Influencers of English Language Proficiency of Public Senior High School Students

The result of the regression analysis is shown in Table 5. The data reveal that the two independent variables, language learning enjoyment and language learning anxiety, could significantly influence the English language proficiency of public senior high school students ($p < 0.05$). This means that both language learning enjoyment ($\beta = 0.115$) and language learning anxiety ($\beta = -0.700$) have a causal relationship with the English language proficiency of public senior high school students.

Given this positive causal relationship along with the descriptive results, which show a low level of language learning enjoyment and an average level of English language proficiency, the data implies that the decreased change in the level of English language enjoyment is directly causing a decrease change of about 11.50% in the level of English language proficiency of public senior high school students. On the other hand, the negative causal relationship along with the descriptive results, which shows high level of language learning anxiety and average level of English language proficiency, indicates that the increased change in the level of language learning anxiety is directly causing a decrease change of 70% in the level of English language proficiency of public senior high school students. Moreover, the data suggests that between the two independent variables, language learning anxiety is considered the best predictor of the English language proficiency of public senior high school students based on beta standardized coefficient value.

Table 5
Influencers of English Language Proficiency of Public Senior High School Students

Individual Predictors	Standard Coefficient Beta	T	p-value	Remarks
Language Learning Enjoyment	0.115	2.060	0.040	Significant

Language Learning Anxiety	- 0.700	-	0.000	Significant
		12.549		
Holistic Model				
Predictors Combined	R²	F	p-value	Remarks
	0.415	94.831	0.000	Significant

**Significant at 0.05*

More evidently, the overall p-value (< 0.05) with an F value of 94.831, as shown in the holistic model, implies that the English language proficiency of public senior high school students is significantly predicted by the combined independent variables (language learning enjoyment and language learning anxiety). However, the R² value of 0.415 signifies that only 41.50% of the variance of English language proficiency of public senior high school students is influenced by the combined independent variables (language learning enjoyment and language learning anxiety). Thus, it infers that other combined factors equivalent to 58.50% could significantly influence the English language proficiency of public senior high school students not covered in this study.

Both language enjoyment and language anxiety significantly influence English language proficiency. Put simply, while these were intended to characterize positive and negative emotions in the language classroom, it is highly indicated that they are not “two ends of one continuum.” Therefore, these two should not be considered opposites of one and the same emotional state (Dewaele & MacIntyre, 2016). In the language classroom, Botes et al. (2020) highlighted that a language learner can simultaneously experience both language enjoyment and language anxiety.

Thus, LE and LA co-exist in the language classroom. Boudreau et al., (2018) have investigated the influence of these two variables to language proficiency and found out that these emotions have both converging and diverging courses from time to time in language learning context.

Nonetheless, the biggest influencer to language proficiency is language anxiety. Oteir and Al-Otaibi (2019) in their systematic review of language anxiety presented that high levels of anxiety interrupt information from entering the learners' cognitive processing

systems, resulting in an altered or hindered language acquisition processes. Hence, when learners are apprehensive during language classes, it can greatly impact their language proficiency. Further, since language anxiety is considered an affective variable, it is bound to affect other constructs of cognition like self-confidence, attitudes, and personality.

CONCLUSIONS

The results of this study revealed that the level of language enjoyment of public senior high school students is low. Further, this result indicates that the language enjoyment of students is rarely evident as indicated in their teacher appreciation, personal enjoyment, and social enjoyment. Hence, it can be concluded that the students find their language classes, even in the company of peers and teachers, less enjoyable.

Additionally, it was found out that the level of language anxiety of public senior high school students is high. This result indicates that the language anxiety of students is oftentimes evident as indicated in their speaking anxiety, writing anxiety, reading anxiety, and listening anxiety. Hence, during language classes, students feel apprehensive when asked to perform in terms of speaking, writing, reading, and listening.

Relative to language enjoyment and anxiety, the level of English language proficiency of the students is average. This result simply indicates that public senior high school students display an average level of English proficiency considering the four macro-skills: listening interaction, reading interaction, spoken production, and written production. This projects that they can carry out language tasks with average proficiency. However, they need to develop reading as it is the indicator to have the lowest mean score.

Basing from the results, language enjoyment has a positive significant relationship with the English language proficiency of SHS students. On the other hand, language anxiety has a significant negative relationship with the English language proficiency of SHS students. It can be concluded from the results that when students' level of language enjoyment is low, their English language proficiency is also low. In contrast, when students' level of language anxiety is high, their English language proficiency is low.

Lastly, the English language proficiency of public senior high school students is significantly predicted by the combined independent variables, language enjoyment and language anxiety. Moreover, between the two independent variables, language learning anxiety is considered the best predictor of the English language proficiency of public senior high school students based on beta standardized coefficient value.

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Does Gamification Significantly Improve Mathematics Achievement among Junior High School Learners?: Evidence from a Meta-Analysis

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ABSTRACT

National and international standards have measured mathematics achievement among junior high schools and the results were very low. This research employed a systematic review and meta-analysis to determine if gamification significantly improves the mathematics achievement of Junior High School students compared to traditional instruction. In gathering data, the search approach in various online databases produced 157 studies, where only 15 studies, carefully selected based on their titles and abstracts, fit the inclusion criteria which the respondents were in junior high school, published between 2010 to 2022, and using a quasi-experimental design. These studies were systematically reviewed in a participant-intervention-comparison-outcome table. Further, Jadad's scoring was utilized by professional experts to ensure high-quality research output in which four studies qualified for meta-analysis. It was determined that the overall Standardized Mean Difference (SMD) of the four studies was statistically insignificant. However, the heterogeneity table revealed an accepted level of heterogeneity. The funnel plot showed no evidence of publication bias.

KEYWORDS: Education, gamification, quasi-experimental, systematic review, mathematics, Philippines

INTRODUCTION

Mathematics proficiency is the intertwining five strands of development of conceptual understanding, procedural fluency,

strategic competence, adaptive reasoning, and productive disposition (Kilpatrick et al., 2001, cited in Groves 2012). With this, the Organization for Economic Cooperation and Development (OECD) carries out the Program for International Student Assessment (PISA), an examination of students worldwide which administered a computer-based assessment for almost 80 countries in math, science, and reading. The Philippines only scored 353 compared to the OECD average score of 489 (OECD, 2018). This is the second lowest mathematics literacy behind 76 participating countries. Moreover, only 1 out of 5 Filipino students attained a Level 2 proficiency in mathematics, which is 26 points behind Indonesian students in mathematics. This means that Filipino students have low skills in conceptualizing math problems, lack investigation and modeling skills, and lag in advanced mathematical thinking and reasoning. Filipino learners are at the level of answering questions involving familiar contexts, can only determine the information and execute actions in accordance with explicit instructions, and can only perform actions that are always almost obvious (OECD, 2018). As a result, Filipino students' math performance is much worse than students in many other nations.

Further, the educational system in the country has widely been adapting to different learning tools other than conventional learning to improve its national performance and even international standards. One of the learning tools that has been used is gamification tools. The present generation is using gamification as a learning tool more frequently. As a result, several studies have been done nationally and internationally to determine whether gamification is helpful in many subject areas, including language, math, and science. This new learning system has been used in over 237,000 research that has been found in Google Scholar, over 28,819 studies in Bielefeld Academic Search Engine (BASE), about 34,400 articles in Semantic Scholar, and over 58,998 studies in ProQuest. There are almost 26,300 publications on gamification and mathematics education in Google Scholar, 709 entries in BASE, 294 articles in Semantic Scholar, and 9,535 articles in ProQuest. With the number of gamification-related publications being published, which are propagating and building up the research databases over time, these numbers are consistently rising. Most studies from the published research are experimental and frequently applied to students with varied levels of education. These studies often compare the

effectiveness of gamification with conventional teaching methods using independent variables of academic performance, engagements, and motivation or to target skill development.

Furthermore, many studies show a more positive impact of gamification in mathematics than conventional instruction. There is research examining the efficiency of gamification as a pedagogy in mathematics. Text, images, sound, and animation from multimedia sources serve an increasing student enthusiasm for studying through interactive math instruction (Udjaja et al., 2018). In addition, gamified STEM activities help the students learn and practice the mathematics material, leading them to consider the activities fun, thrilling, and competitive, indicating that they have high levels of intrinsic motivation (Asigigan & Samur, 2021). Students are more likely to have higher learning expectations if they have higher levels of internal motivation and a favorable attitude toward gamification. In the study conducted by Sutopo (2017), students can solve mathematics through mobile games. This supports the idea that online games are an essential tool to support learning. With this, it is evident that gamification as a learning tool can be successful in managing students' motivations in learning activities. Thus, it can help ensure that kids achieve success in both their academic and social lives (Lee & Hammer, 2016).

Additionally, due to the spread of the COVID-19 pandemic, online game-based learning has been incorporated to increase engagement among students during synchronous classes. A study conducted in one of the schools in the City of Biñan reveals that while students' attitudes about gamification in mathematics have not changed considerably, subject performance has improved significantly (Antonio & Tamban, 2022). Thus, students' performance in mathematics using gamification improves online distance learning. In support of the idea, Libradilla et al. (2015) found learning using gamification to be more engaging, interesting, and thrilling because of gaming aspects, including appealing color, images, music, and time element.

Moreover, online technology is an essential tool for learning in this generation. Amidst the relevantly low level of readiness in technology education, some schools in Mindanao, Philippines slowly embrace digital-based learning to provide quality education.

Specifically, the study conducted by Boldadora (2018) shows that in one of the schools located in Davao City, there is a significant increase in mathematics achievement using digital game-based learning. One of the most used game-based platforms in the region, namely, Kahoot! is considered for it is accessible and free of charge. According to Baguio et al. (2021), a group of Grade 8 students in one of the schools in Northern Mindanao that uses the platform showed improved test scores in Geometry, especially in formative assessments. It is evident that motivation is relevantly high. With this, it is concluded that gamification in math learning influences the achievement and motivation of online classes.

For years, numerous studies have demonstrated how effectively gamification has raised students' mathematics achievement levels. This learning tool has been used on many levels as integrated into education. However, mathematics achievement in Junior High School is still very low, contrary to the results of the studies about gamification. The goal of this study is to give researchers and practitioners a better understanding of how well gamification works as a method for teaching math. Therefore, this study aims to determine if gamification helps improve mathematics achievement among junior high school learners.

METHODS

Research Design. The study used systematic review and meta-analysis to determine whether using gamification as a learning tool would significantly enhance mathematical proficiency. The most vital type of evidence for combining results from well-conducted studies from various sources with comparable objectives is provided by this method. The systematic review was utilized to examine the data and assess whether gamification of learning would significantly increase student performance in mathematics. Therefore, this study focuses on the significant difference in the use of gamification in mathematics achievement between students in conventional learning.

Place of Study. The research was conducted at the University of the Immaculate Conception Davao City, library hub, internet cafes, workplaces, and public places with available high-speed Wi-Fi connection. The researcher utilized electronic databases

and the available resources in the ProQuest World Wide Web (e.g., Google Scholar, ProQuest, ERIC, PsycINFO, and PubMed) for more references to limit the time used for looking through the theses and dissertations. All the studies and the inclusion and exclusion criteria to be implemented in selecting the studies are set.

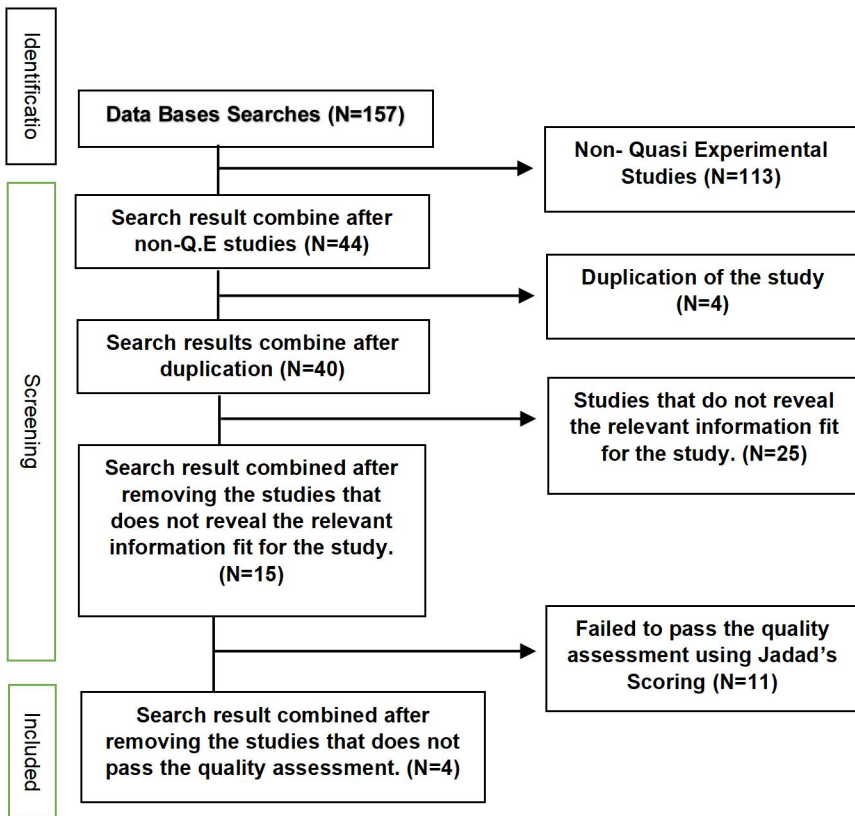
Data Sources and Selection. The purpose of this study is to accumulate an understanding of the status quo of the effectiveness of gamification used as a learning tool for mathematics proficiency at the high school level. The electronic databases used for this study are ProQuest Educational Research Journal, Springer Link, Open Access Journal, Education Resources Information Center (ERIC), Google Scholar, Education Journal, etc. Abstracts were deemed eligible for complete manuscript data extraction if they met all of the following requirements: they had to be quasi-experimental studies on the use of gamification to improve student achievement in mathematics; the authors had to have used an outcome variable to assess students' academic performance and achievement; the studies focus on the Junior High School students that utilize the use of the test for math achievement; and the studies had to have specifically measured the effectiveness of gamification; the independent variables were quantified and measured using appropriate assessment tools, and the dependent variable was also quantified or measured using grades or other assessment procedures that the authors used. The studies were published from 2010 to 2022 and included students in grades 7 to 10, which reflected the mean difference, p-value, t-value, and sample size of the data. Exclusion criteria were also established. These were non-quasi-experimental research, studies that were published twice and failed to provide the necessary data for the study are one of the exclusion criteria. Three experts assessed the quality of each paper to ensure quality outputs using Jadad's Scoring sheet. All papers that meet the inclusion criteria and pass the quality assessment were thoroughly examined in the current evaluation. The statistical information for each chosen study, including the title, authors, total sample size (n), p-value, t-value, and degree of significance, were organized using a coding sheet.

Data Synthesis and Analysis. The groups' means and SDs, and effect sizes, such as SMDs, Q-test, I-square test, forest plot analysis, and funnel plot analysis, were employed in the meta-analysis

phase of this study to combine the quantitative findings from the numerous reputable research investigations. Moreover, funnel plot, fail-safe N, and trim and fill methods were utilized for the publication bias of the paper.

RESULTS AND DISCUSSION

There were four studies included with multiple authors. Three (3) studies were authored by one (1) person, and one (1) study was authored by three (3) different individuals. Additionally, these studies were conducted in North America and Africa Regions with varying mathematics education.



The data in Table 1 shows the features of the included studies using the PICO (Participant, Intervention, Comparator, and

Outcome) table. These utilized quasi-experimental designs with varying sample sizes and participants. The most significant number of participants was 220, and the least number of participants was 71. The probability values were >0.05 for Study 1, <0.0005 for Study 2, >0.05 for Study 3, and 0.009 for Study 4.

Table 1.
Participant, Intervention, Comparator, and Outcome (PICO)
Profile of the Included Studies

Title of the Study	Participants	Intervention	Comparator	Outcome									
1. Mario Math with Millennials: The Impact of Playing the Nintendo DS on Student Achievement Author: Adam Gelman (2010) Place: Denver, USA Duration 9 weeks	Seventh Graders Experimental- 35 Control- 36	Mario Math: Brain Age 2 Nintendo DS	Traditional Teaching Method	It is not supported <table border="1"> <tr> <td>Group</td> <td>EG</td> <td>CG</td> </tr> <tr> <td>Mean Post-Test</td> <td>213.86</td> <td>218.14</td> </tr> <tr> <td>MD</td> <td colspan="2">-4.28</td> </tr> </table> that playing Brain Age 2 on the Nintendo DS has an impact on math aptitude or skill as determined by the MAP test.	Group	EG	CG	Mean Post-Test	213.86	218.14	MD	-4.28	
Group	EG	CG											
Mean Post-Test	213.86	218.14											
MD	-4.28												
2. The Effects of Digital Games on Middle School Students' Mathematical Achievement Author: Pilar Lisa Starkey (2013) Place: Africa Duration: 9 weeks	Middle School Students: 6 th , 7 th , and 8 th Graders Experimental- 84 Control- 84	Digital Games: Lure of the Labyrinth	Traditional Method	According to the <table border="1"> <tr> <td>Group</td> <td>EG</td> </tr> <tr> <td>Mean Post-Test</td> <td>82.60</td> </tr> <tr> <td>MD</td> <td>1.99</td> </tr> </table> study's findings, the treatment group, who played Labyrinth in addition to attending traditional classes, scored better in mathematics than the control group, which only attended traditional	Group	EG	Mean Post-Test	82.60	MD	1.99			
Group	EG												
Mean Post-Test	82.60												
MD	1.99												

				classes.	
<p>3. Effect Of Digital Game-Based Learning on Ninth Grade Students' Mathematics Achievement</p> <p>Author: DIXIE K. SWEARINGEN (2011)</p> <p>Place: Oklahoma, USA</p> <p>Duration: 7 weeks</p>	<p>Ninth Grades</p> <p>Experimental - 127</p> <p>Control- 93</p>	<p>Interdisciplinary massive multiplayer online game (MMOG)</p>	<p>Traditional without Intervention</p>		
				Group	EG
				Mean Post-Test	47.13
				MD	-0.07
				<p>Between the treatment and control groups, the mean post-test results did not show any statistically significant differences.</p>	
<p>4. The effects of modern mathematics computer games on mathematics achievement and class motivation</p> <p>Authors: Mansureh Kebritchi , Atsusi Hirumi, Haiyan Bai (2010)</p> <p>Place: USA</p> <p>Duration: 18 weeks</p>	<p>High School students: Grades 9 and 10</p> <p>Experimental – 117</p> <p>Control – 76</p>	<p>Dimension M</p>	<p>Conventional Instruction</p>		
				Group	EG
				Mean Post-Test	45.71
				MD	13.71
				<p>In the context of a public high school, the DimensionM games had a very favorable impact on pupils' mathematical achievement. On the district-wide math benchmark exam, pupils who played computer games performed noticeably better than those who did not.</p>	

Table 2 shows the meta-analysis of the included studies with its classification of standardized mean difference, standard error, variance, confidence interval, z-value, and p-value. This table illustrates the effectiveness of gamification in math achievement.

**Table 2. Forest Plot
Meta-Analysis of the Effectiveness of Gamification on in Math Achievement Forest Plot.**

Study Name	Statistics for each study						
	Std diff in mean s	Standard error	Variance	Lower Limit	Upper Limit	Z-value	p-value
Kebritchi et al. (2010)	-0.268	0.148	0.022	-0.558	0.022	-1.814	0.070
Gelman (2010)	0.093	0.238	0.056	-0.373	0.558	0.391	0.696
Starkey (2013)	-0.168	0.155	0.024	-0.471	0.135	-1.088	0.277
Swearingen (2011)	-0.078	0.137	0.019	-0.345	0.190	-0.569	0.570
Pooled	-0.137	0.079	0.006	-0.293	0.018	-1.731	0.084

It displays the forest plot for the standardized mean differences (SMDs) in the measurement outcomes between the experimental and control groups of the quasi-experimental studies assessing the effectiveness of gamification in mathematics achievement. The figure shows the relevant information, such as the effect size, standard error, and level of significance. Below are the discussions of the effectiveness of gamification in mathematics achievement:

Effect Size and the Null Effect Vertical Line. The four effect sizes in the meta-analysis using the standardized mean difference are shown in Table 2, ranging from -0.268 to 0.093, with 75% of the point estimate being negative. It means that three out of 4

studies showed favorability to gamification in mathematics achievement. These are the studies of Kebritchi et al. (2010), Starkey (2013), and Swearingen (2011), who have SMDs of -0.268, -0.168, and -0.078, respectively. On the other hand, the study of Gelman (2010) favors the use of the traditional method since it has an SMD of 0.093.

The four included studies showed different values of SMD. The study by Kebritchi et al. (2010), Gelman (2010), Starkey (2013), and Swearingen (2011) revealed that it crosses the line of no effect through 0.00, denoting that the result is not significant; in other words, the p-value is greater than 0.05. Overall, the meta-analysis showed a pooled value of -0.137 and a p-value of 0.084. Further, the junior high school students have no significant improvement in the post-test results. This means that gamification has no significant difference compared to traditional methods. Thus, gamification among junior high schools showed no significant improvement in their mathematical achievements.

SMDs and 95% Confidence Intervals of Individual Studies. Also, figure 4 reveals the SMDs of the four studies reviewed, as represented by the black boxes, with their corresponding 95% confidence intervals, represented by the "whiskers" on both sides of each black box. Thus, for example, Swearingen (2011) has a higher weight that embodies a more important black box means having a higher number of participants, establishing a "narrower" confidence interval. In contrast, Gelman (2010) had a smaller and broader whisker means a smaller sample size. Kebritchi et al. (2010) showed an SMD of -0.268 with a 95% confidence interval (CI) of -0.558 to 0.022. This included study yielded a z-value of -1.814 with a large standard error (SE) of 0.148. It has been found to be insignificant alongside its p-value of 0.070. Similarly, the study of Starkey (2013) (SMD=-0.168, CI [-0.471, 0.135], z-value = -1.088, SE = 0.155, p= 0.277), Swearingen (2011) (SMD=-0.078, CI [-0.345, 0.190], z-value = -0.569, SE = 0.137, p= 0.570), and Gelman (2010) (SMD=0.093, CI [-0.373, 0.558], z-value = 0.391, SE = 0.238, p= 0.696) revealed to be insignificant. Figure 4 shows that none of the included studies has significant results about the use of gamification in mathematics achievement.

The findings contradicted those that suggest that gamification integration has significantly improved math achievement. Yldrm and Sen's (2019) finding that gamification has a moderately positive effect on mathematics achievement is supported by Tokac et al. (2019), who found that game-based learning contributes to math achievement. However, not all studies have found a benefit to using video games for math instruction in terms of effect-size heterogeneity results.

Overall SMD. Four effect size values were analyzed using a pooled value model generated by Comprehensive Meta-analysis software. Under the pooled value, the overall SMD was found to be -0.137. The test of the null hypothesis yields a z-value of -1.731 and a corresponding p-value of 0.084. These statistics values were found to be insignificant. Further, this result indicates that the control group's outcome is slightly higher than the experimental outcome. The experimental has a higher post-test score than the control group. This means that the number of studies in this paper lacks to prove the effectiveness of gamification. Correspondingly, the 95% confidence interval is -0.293 to 0.018, indicating 95% certainty that the true SMD lies within this range of values. It is also evident from Figure 4 that the diamond at the bottom of the graph touched the line of no effect; hence, the overall results were statistically insignificant. Furthermore, the diamond is more to the left; thus, more episodes of outcome favor gamification.

SMD has been demonstrated to have several advantages over alternative effect size measures, such as the odds ratio or the raw mean difference. For instance, research by Lipsey and Wilson (2001) discovered that SMD was more resistant to violations of distributional assumptions and less susceptible to outliers than other effect sizes. Hedges and Olkin (1985) observed in another investigation that SMD was more powerful and effective at detecting treatment effects in meta-analyses than other effect sizes.

The Cochran's $Q = 1.955$ with $p\text{-value} = 0.582$ indicates that the individual studies' SMDs statistically evaluate the same effect size regarding the overall SMD. It suggests that there are indeed genuine similarities underlying the results of the studies. Since the power of Q , in this case, is not high due to the limited number of included studies, there is no hint of heterogeneity in this study. Therefore, there is an

acceptable heterogeneity in the four included studies. Moreover, as revealed in this study, this collection of studies has established an $I^2 = 0.000$. There is a very low value of I^2 , which means there is acceptable heterogeneity in the included studies in this meta-analysis. In this study, the CMA software generated that the true effect sizes between 4 studies were dispersed at 0.000 in terms of the scale of the effect size.

A relatively small number of studies ($n=4$) were included in this analysis. Two studies are adequate for a meta-analysis, according to Ryan (2016) in the Cochrane Handbook for Systematic Reviews of Intervention, assuming that they can be meaningfully pooled and that their findings are sufficiently similar. Farhad (2022) agreed that two studies are enough to conduct a meta-analysis, however, limiting the included studies could be biased and produce outliers. It was also claimed that the assessment of heterogeneity allows one to understand what is "sufficiently similar." The heterogeneity table provides sensitivity analysis between studies. Table 7 showed that there was at least a minimal amount of heterogeneity among the included studies, indicating that the significance of the results and similarity of these studies was insufficient. As a result, the small number of included studies influenced the computation parameters within the studies.

Consequently, Von Hippel (2015) pointed out that I^2 has a considerable bias when there are few studies, and that the bias is positive when the fraction of heterogeneity is low, but frequently negative when it is high. There is no evidence of the study's heterogeneity because only four (4) papers were included in the meta-analysis. Additionally, according to Huedo-Medina et al. (2006), results from I^2 should be regarded cautiously when the number of included studies is limited, specifically less than 20, due to its low statistical power. The I^2 value of 0.000 indicates a minimal number of included studies in the meta-analysis, which implies a minimum level of heterogeneity. Therefore, the result of a very low value of I^2 is associated with the few numbers of included studies in this analysis,

The use of gamification as a learning approach in mathematics insignificantly improves the mathematics achievement level of students in different math contexts. The meta-analysis

involving the deliberately selected studies has established that gamification or digital game-based learning with different applications such as Mario Math: Brain Age 2 Nintendo DS, Lure of the Labyrinth, Interdisciplinary Massive Multi-Player Online Games (MMOG), and Gamified Classroom will not elevate the mathematics performance of the students. The findings of the systematic review and meta-analysis revealed an insignificant difference between instruction with gamification and those with pure traditional methods of teaching. With most studies favoring the use of gamification, it was still determined that there are not enough studies supporting the effectiveness of the use of gamification. Therefore, the integration of gamification in mathematics classrooms has no significant impact on the achievement of junior high school students.

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Communicative Competence and English Language Exposure as Predictors of Writing Skills of Senior High School Students

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ABSTRACT

This quantitative study employing descriptive correlational design aimed to investigate the communicative competence and English language as predictors of writing skills of senior high school students in Tagum City Division. The 307 respondents were purposively chosen through stratified random sampling. Sets of survey questionnaires were adapted for communicative, English language exposure and writing skills. A modified rubric was used to rate the writing proficiency of the respondents. Data were analyzed using Mean, Standard Deviation, and Pearson r , and Linear Regression Analysis. The result revealed that communicative competence and English language exposure of the learners has a moderate level, while low for the level of the writing skills. Furthermore, the findings of the study showed a significant and positive correlation between the communicative competence and writing skills of the senior high school students and English language exposure and writing skills of the senior high school students.

Keywords: English, education, communicative competence, English language exposure, quantitative research, correlational design, Philippines

INTRODUCTION

Writing skill is an intelligent instrument for grammar, vocabulary, and pronunciation in language components and language skills (Khazrouni, 2019). Further, it is a complex and

multidimensional skill that requires the assimilation of various cognitive, linguistic, and social processes (McNamara & Allen, 2019). Thus, it serves an essential part in learning English as a Foreign Language (EFL) for the reason that it is vital to guarantee the academic achievement of the learners (Aliyu, 2020). However, in the Philippines setting the findings of Pablo and Lasaten (2018) in the context of the Senior High Schools' writing skills, divulged the prevalent difficulty they encountered which are in the content and the absence of a variety of ideas, as well as the connectives for the organization of thoughts.

Meanwhile, the study of Sarwat et al., (2021) in Pakistan found that from 155 students, majority of them were unable to write grammatically with precise English paragraph construction, this is due to students' lack of proficiency in English grammar, syntax, tenses, as well as their limited vocabulary, including creative and originality of ideas, weak organizational structure, writing anxiety and the dependence on first language; because of these factors students' writing skills is poor.

Even in the study conducted by Saavedra and Barredo (2020) in one of the Divisions in Zamboanga Peninsula revealed that students' poor writing skills were attributed to these factors such as, due to inadequate vocabulary in the intended language, difficulties in organizing and expressing thoughts, students' belief that writing is a challenging task, a lack of passion and enthusiasm towards writing, spelling difficulty, sentence construction, and correct grammar composition.

Similarly, in the local setting of Kapalong, Davao del Norte, a study by Erellana (2021) found that students struggle in their writing performance. Students scored low in expression in word choice and basic sentence structure with a mean of 2.35 and standard deviation of 0.64. Furthermore, the study also significantly revealed low score in language conventions, showing students' difficulty in grammar, spelling, capitalization, and punctuation described with the mean of 2.32 and standard deviation of 0.80.

It is important to note that writing skills should be enhanced in order to acquire the ability needed for an effective and concise writing. The role of communicative competence and English language exposure in writing development cannot be underscored by the academe in general and English language pedagogy and research in particular. Therefore, students' writing issues are a big challenge

for teachers to address especially because this skill is remarkably difficult to acquire as well as to develop.

Meanwhile, communicative competence, defined as the ability to use language appropriately and effectively in various social contexts, has been identified as a crucial factor in second language writing development (Canale & Swain, 2019). According to Canale and Swain (2019), communicative competence comprises four interrelated components: grammatical competence, sociolinguistic competence, discourse competence, and strategic competence. The literature indicates that several studies have examined the relationship between communicative competence and writing skills among second language (L2) learners. For instance, Hadiani & Permata (2019) investigated that communicative competence plays a vital role in the development of the writing skills of the students.

Moreover, communicative competence and English language exposure (ELE) has also been identified as a crucial factor in second language writing development. English language exposure refers to the extent to which learners are exposed to English language input and output in various contexts, such as school, home, and community. A number of studies have investigated the role of ELE in L2 writing development. For instance, Shamsudin et al., (2020) examined the impact of ELE on the writing skills of Malaysian EFL learners and found that learners who had higher levels of ELE performed better in writing tasks than those with lower levels of exposure.

To address these challenges, the researcher posited that it was crucial to investigate the role of communicative competence and English language exposure as predictors of writing skills among senior high school students in the local setting, upholding the reality of the problem in writing skills of second language learners on global and national scales. This research was conducted with the aim to contribute to the understanding of the complex factors that shape second language writing skills and provide insights for educators, policymakers, and practitioners on how to improve the writing skills of senior high school students.

METHODS

Research Design

This study utilized a quantitative research design to address the research problem. The quantitative approach was deemed the most appropriate method to utilize and consider, given the nature of the research problem. In particular, this study used descriptive and correlational methods to analyze the data. Descriptive statistics were used to summarize the data and identify patterns and trends, while correlational analysis was used to examine the relationships between variables.

In addition, descriptive and correlational research methods were used by the researcher in a non-experimental quantitative study in which the researcher evaluated three variables and determined their correlation. Neuman (2014) defined descriptive research as a type of research that involves collecting and analyzing data to describe and summarize a phenomenon, without making any causal inferences or predictions. Further, descriptive research contains the gathering of data to test the null hypothesis and to establish correlations between two or more variables in the same population (Asgari, 2010). Therefore, this design was fit to be used in this study since it aimed to determine if there was a relationship between communicative competence, English language exposure, and the writing skills of senior high school students.

Research Locale

This study was conducted in Tagum City, Davao del Norte, Philippines. Three schools in this locality were chosen and assigned with the initials A, B, and C for confidentiality purposes.

Research Respondents

The respondents for this study were 307 senior high school students—enrolled for the academic year 2022–2023 at public schools in the Division of Tagum City which were identified through stratified sampling.

In general, there were 1200 students from school A, 96 students from school B, and 225 students from school C. The sample was identified using the Raosoft online sample size calculator, with a 95% degree of confidence and a 5% margin of error. Hence, it was determined that this study had to have 241 learners from school A,

20 from school B, and 46 from school C, with a total number of 307 respondents.

The aforementioned schools were selected as the study's locale due to their unique status within the Division of Tagum City. The two schools known for its huge population and the other one has the least population in the entire secondary public school in Tagum City. The researcher's objective was to assess the Communicative Competence and English Language Exposure as Predictors of Writing Skills of Senior High School Students.

Participants included in the study were Grade 11 Senior High School students who were able to take up English subjects during the previous and current semester; and were bona fide students from the three secondary schools of Tagum City Division. Subjects included must also use English as a language medium during the conduct of the survey. The researcher, moreover, was only able to collect data with surveys in English. Subjects who failed to meet the inclusion criteria were not included in the study to maintain the accuracy and relevance of the results.

Statistical Tools

The quantitative investigation results were subject to review, analysis, and interpretation in accordance with the following statistical tools.

Mean. This statistical tool was applied to measure and determine the level of communicative competence, the level of English language exposure, and the writing performance of senior high school students. Research Questions 1, 2, and 3 were answered by the outcomes of this statistical instrument.

Standard Deviation. A data set's dispersion in relation to its meaning was measured by a standard deviation. This statistical tool was utilized to establish if the scores were evenly distributed or close to the mean. To answer the Research Questions 1, 2, and 3, this tool has been utilized.

Pearson r. This statistical tool was utilized to assess the significant relationship between communicative competence and writing performance and English language exposure and writing performance. This statistical tool was specifically addressing Research Topics 4.1 and 4.2.

Linear Regression Analysis. This was utilized to ascertain the significance of communicative competence and English language

exposure on the relationship writing performance of senior high school students. This specifically aimed to respond to Research Question 5.

Data Gathering Procedure

In this descriptive-correlational study, the quantitative data were gathered through series of adapted questionnaires. After completing the preliminary stages of the research, the researcher sought permission to conduct the study. The proposed research manuscript was submitted to the Research Ethics Committee (REC) for careful consideration and examination, and the researcher obtained an endorsement letter from the Dean of the Graduate School Program of the University of the Immaculate Conception. Once this process was completed, the researcher sent a letter to the Division of Tagum City, addressed to the superintendent, requesting approval to carry out the study. The principal or head of each school chosen to participate in the study received a copy of the authorization from the researcher. After approval, the principal of each school was provided with a copy of the signed letter, granting access to the respondents. This process ensures that the study was conducted ethically and with the necessary permissions and approvals.

Upon obtaining the permission needed for the conduct of the study, the researcher coordinated with the respondents' class advisers, who will act as the study's gatekeepers to perform the research study. To ensure privacy and security, the researcher and adviser obtained a confidentiality agreement guaranteeing that all data and personal information were kept private. The respondents were requested for their informed consent or informed assent before the data-gathering process begins. Moreover, a virtual or face-to-face orientation to the researcher's study was promptly conducted. During orientation, the researcher set a schedule that everyone will be able to adhere to ensure that students' classes and parents' work schedules has not been disrupted as much as possible. Meanwhile, for those participants who were not able attend virtually or face-to-face due to extenuating circumstances still, they were able to receive a message through email containing an attachment of the goals and purpose of the study for fair dissemination of information of the research study. As proof of evidence that participants will join voluntarily, all forms will be signed either by scanning or some other kind of method.

During the conduct of the study, the questionnaires were distributed and handled by the researcher directly. The allotted time was less than one hour or sixty minutes single session to administer the research question of administration. In the acknowledgement/informed consent, this was noted, and it was reflected in the informed consent/assent. Meanwhile, upon obtaining the informed assent and consent and the approval of the request, the researcher conducted the study using the adapted questionnaires. To acquire the respondents' data, the researcher asked for the assistance of the assigned gatekeepers of every school. To protect the identity of the respondents, the gatekeepers were requested to sign a confidentiality agreement as part of the protocol. Perhaps, prior to the administering of the survey questionnaires, the researcher notified the gatekeepers for the gathering of the respondents' ethical data. Discrete coding was utilized to administer the questionnaires in a way to ensure proper and complete anonymity and the highest level of confidentiality for the respondents' data or information.

The secrecy of the information of the respondents were given more emphasis which was why no specific name or identity will be shown in the research study whether in reports, presentations, or the future publication. All study data or information for electronic copies were kept in a password-protected folder or locked files for electronic copies. Additionally, only the researcher will have access to the files. Furthermore, to avoid illegal access, use, or disclosure to anyone else or the public, the data collected after the research project was kept on file for three (3) years before being securely erased, unless otherwise mandated by law. Finally, in data retrieval, all possible raw scores were checked, tallied, and compiled in a Microsoft Excel spreadsheet. After that, the spreadsheet data was then submitted to the graduate school statistician to analyze the retrieved data and find solutions to the problem that arises and as indicated in the first chapter of the research study.

RESULTS AND DISCUSSION

The Level of Communicative Competence of Senior High School Students

Table 1 reveals the level of communicative competence of senior high school students. Four indicators of CC were presented on

the table with corresponding mean; these indicators include grammatical (linguistic) competence, discourse competence, sociolinguistic competence, and strategic competence. Results show that the overall mean is 47.00 with moderate descriptive value. This implies that the communicative competence of the senior high school students is sometimes manifested. Furthermore, the four indicators' mean range from 35.97 to 55.88 in which it is also describe as moderate.

The study of Terogo, et al. (2018) found that the overall mean of the communicative competence of the respondents is moderate. The results indicated that the students are moderately competent in communicative competence.

Table 1
Level of Communicative Competence of Senior High School Students

Indicators	Mean	Descriptive Level
Grammatical Competence	55.88	Moderate
Discourse Competence	41.26	Moderate
Sociolinguistic Competence	35.97	Low
Strategic Competence	49.58	Moderate
OVERALL	47.00	Moderate

It means that the main idea or topic sentence is either, not in the right place and there is no reference to topic in the last sentence or unclear. The penmanship of the student is generally neat, but is difficult to read, with some erasures or smudges. Less than three grammatical mistakes and less than three mistakes in capitalization, punctuation, and end marks can be found in each sentence.

Among the four indicators of communicative competence, grammatical (linguistic) competence obtained the highest mean of 55.88 with moderate descriptive value. This implies that the communicative competence of the senior high school students is sometimes manifested.

The results coincide in the study conducted by Maguddayao (2017), that among the four components of the communicative competence, grammatical (linguistic) competence obtained the highest mean with moderate descriptive value. This implies that majority of the mistakes made by the participants were deletions,

distortions, and phonological and lexical problems. Some mistakes that were made involved intrusions.

Contrary to grammatical competence, among the four indicators of communicative competence, sociolinguistic competence has the lowest mean which is 35.97 with low descriptive value. This implies that the communicative competence of the senior high school students is rarely manifested.

This finding lends support to the study conducted by Atay et al., (2009) and Sen, (2020) that sociolinguistic competence obtained the lowest mean among the four components of the communicative competence. Which revealed that respondents are aware of their limited understanding of intercultural communication, use of appropriateness of language with respect to, topic, setting and the relationship among interlocutors. Thus, it also requires understanding of the one's attitude especially in expressing their emotions, beliefs, and knowledge in a social and cultural appropriateness and acceptability of linguistic behavior. Similarly, Terogo, et al. (2018) found sociolinguistic competence being the lowest among the other communicative competence indicators, it indicates that this competence is not often practiced language skill amongst the students.

The Level of English Language Exposure of Senior High school Students

Table 2 reveals the level of English language exposure of the senior high school students. Four indicators of ELE are presented on the table with corresponding mean and standard deviation; these indicators include exposure at home, with friends, in school, and on media. Results show that the overall mean is 2.99 which described as moderate. This implies that the English language exposure of senior high school students is sometimes manifested. Furthermore, the four indicators' SD range from 2.20 to 3.67 in which it is also describe as moderate.

This finding concurred in the study of Domingo (2020) in which it reveals that the respondents are moderately exposed to the English language. This implies that learners were exposed mostly to English language learning when they are at school or when utilizing different media compared to when they are at home or communicating with friends or peers.

Notably, among the four indicators of English language exposure, exposure in *school* obtained the highest category mean of 3.67 with SD of 0.91, with high descriptive value which means that the English language exposure of senior high school students is often manifested. Therefore, school is the linguistic environment of the students where they are extensively exposed to.

Table 2
Level of English Language Exposure of Senior High School Students per Indicator

Indicators/Statements	Mean	Sd	Description
2.1 Home	2.20	0.74	Low
2.2 Friends	2.49	0.82	Low
2.3 School	3.67	0.91	High
2.4 Media	3.58	0.70	High
Overall Mean	2.99	0.55	Moderate

Meanwhile, a study conducted by Domingo (2020), found that the items in the category *school* provide students high exposure to the English language. This implies that students are heavily exposed to the English language, particularly at school, mainly because English is employed as the medium of instruction and students are required to use English in conversation.

According to Domingo (2020) in his study, English language exposure is important for second language learning and proficiency. School obtained the highest mean always because this environment of language exposure, teachers often speaks English and students' activities in school are often conducted in English. Therefore, high exposure to the language gives greater chances for the learners to speak and be proficient in the target language.

In contrast, the category that obtained the lowest mean of 2.20 and having a standard deviation of 0.74 is at *home* with descriptive low value. This means that the English language exposure

of senior high school students is rarely manifested. For this reason, the students can be considered passive in English language learning when at home, if English language in the family is not prevalent then the exposure is low.

This finding also confirmed the result of the study of Tuan (2017) which revealed that students rarely encountered or heard English in their home. Similarly, a study by Domingo in 2020 discovered that out of the four indicators of ELE, the home indicator had the lowest average.

Thus, it can be said that talking in English, engaging in activities where English is used and conversing with family in English can help the learner achieve high proficiency in acquiring and developing the target language to be applied anywhere especially in the academe.

The Level of Writing Skills of Senior High School Students

Presented in table 3 is the findings of the level of writing skills of senior high school students. Five indicators of writing skills are presented on the table with corresponding mean and standard deviation; these indicators include content, organization, vocabulary, grammar, and mechanics. The overall mean of the level of writing skills of senior high school students is 1.88 with SD of 1.01 that signifies very low, which means that the writing skills of senior high school students is very poor. Furthermore, the five indicators' SD range from 1.05 to 1.15 in which it is also describe as low. This implies that the writing skills of senior high school students is poor.

This finding lends support to the study conducted by Totto and Ramos (2021), it reveals that students' academic skills in reading and writing were poor. Moreover, the result of the study also agrees with the findings cited by Sarwat, et al. (2021), that the core problems of students' English writing are due to poor command over English grammar, syntax and tenses, and insufficient vocabulary as well as the lack of creativity in writing ideas, having writing anxiety, weak in structural organization and dependence on L1 that results to learners' poor writing skill in English. Hence, the five indicators of writing skills are factors that can affect the skills of the students in terms of writing composition.

Table 3
Level of Writing Skill of Senior High School Students
Correlation between Variables

Indicators	SD	Mean	Descriptive Level
Content	1.15	2.03	Low
Vocabulary	1.08	1.88	Low
Grammar	1.09	1.84	Low
Mechanics	1.07	1.78	Very Low
OVERALL	1.01	1.88	Low

Presented in table 4 is the significant relationship of communicative competence and English language exposure to the writing skills of the senior high school students. Tested at the alpha level of significance of correlation, it is interpreted that CC has significant relationship with the p-value of 0.004 and ELE p-value of 0.003 to writing skills among the Senior High School students.

The results of this study harmonized to the study of Salvador (2023), reveals that there is a significant relationship of the students' level of communicative competence in their writing and oral skills. On the same manner, Hadiani and Permata (2019) affirm that developing students' communicative competence in terms of writing skill requires several supports that can aid the students' need to enhance their language ability in all the competence areas.

In this study, it further implies that the higher the extent of exposure of the Senior High School respondents to English language at home, with friends, in school, and media, the greater chances that proficiency of writing in English in the areas of content, organization, vocabulary, and grammar were developed. However, according to Domingo (2020), if the learner is exposed only to classroom activities, dialogue and drills, thus they may acquire extensive mastery of communication skills in the classroom only, however, learners may still remain at a loss in other areas particularly in social discourse. Moreover, the result of this study aligned to the findings of (Muñoz & Cadierno, 2021) that the augmented exposure to FLs through audiovisual, internet, and social media allows for the possibility of extensive learning languages, specifically English language, and outside the classroom context.

Table 4
Correlation of Variables

Variables paired with Writing Skill of Senior High School Students	r	p-value	Remarks
Communicative Competence	0.164	0.004	Significant
English Language Exposure	0.167	0.003	Significant

**Significant at 0.05*

Generally, the findings of this study coincide with the theory of Krashen (1981) who espoused that the language environment a person is exposed to are contributory factors to acquisition. Furthermore, as this research proved the connection between these independent variables, it also argued the relationship of these variables to writing skill. Anchondo (2018) states that the development of learners’ communicative competence can be enhanced through proper language exposure. Magno et.al, (2016) asserts that this was also correlated in their investigation that extensive exposure to the language promotes language learning.

Influencers of Writing Skill of Senior High School Students

The result of the regression analysis is shown in Table 5. The data revealed that the two independent variables, communicative competence, and English language exposure, could significantly influence the writing skill of senior high school students ($p < 0.05$). This means that both communicative competence and English language exposure have a causal relationship with the writing skill of senior high school students.

Given this causal relationship along with the descriptive results, which show moderate levels of communicative competence and English language exposure and low level of writing skill, the data implies that the decreased change in the level of communicative competence and English language exposure is directly causing a decrease change in the level of writing skills of senior high school students. Moreover, the beta standardized coefficient value of 0.147 with p-value of 0.010, suggests that between the two independent

variables, English language exposure is considered the best predictor of the writing skill of senior high school students. With the aid of thorough English language exposure, the learner can acquire advancement to the second language (Al-Zoubi, 2018) and therefore every learner learns language by communicating and interacting in the authentic language environment.

More evidently, the overall p-value (< 0.05) with an F value of 7.683, as shown in the holistic model, implies that the writing skill of senior high school students is significantly predicted by the combined independent variables (communicative competence and English language exposure). However, the R^2 value of 0.048 signifies that only 4.80% of the variance of writing skill of senior high school students is influenced by the combined independent variables (communicative competence and English language exposure). This accounts for a small effect size, for that matter. Thus, it infers that other combined factors equivalent to 95.20% could significantly influence the writing skill of senior high school students not covered in this study.

Table 5
Influencers of Writing Skill of Senior High School Students

Individual Predictors	Standard Coefficient Beta	t	p-value	Remarks
English Language Exposure	0.147	2.601	0.010	Significant
Holistic Model				
Predictors Combined	R²	F	p-value	Remarks
	0.048	7.683	0.000	Significant

**Significant at 0.05*

Somehow, some of the 95.20% significant influence that does not cover in this study supported in the stipulated findings of

Anyiendah (2017) that another challenges that cause a great factor on the writing skills of the learners is the lack of their interest. Since, writing skills development is always challenging it is also always an interesting task engagement for the learners., When students are interested, they are well motivated. According to Gbollie & Keamu (2017), motivation is crucial to enhance students' learning outcomes. However, some of them zone out and feel lack of interest because they have to elaborate and apply proper grammar, correct punctuations, appropriate vocabulary, correct spelling, and proper sentence construction to come up with a good piece of writing in which they are insufficient with for this reason they feel less motivated, this may cause hinder of learning process as they are not interested in proceeding with their task.

CONCLUSIONS

The level of communicative competence of senior high school students is moderate. Further, the result indicates that students' communicative competence is sometimes manifested which further implies that the students have an average ability in terms of grammatical, discourse, and strategic in the use of English. However, there is a need to develop upon the ability of students in sociolinguistic competence.

The level of English language exposure of senior high school students is moderate. Further, the result indicates that students' English language exposure is sometimes manifested which further implies that students are exposed to an environment where they can learn English with friends, in school, and on media as sources of language inputs. Nevertheless, there is a need to improve the experience of students in learning English at home.

The level of writing skills is low. This result simply indicates that when senior high school students are writing in English, they display poor level of writing skills considering the five indicators: content, organization, vocabulary, grammar, and mechanics. This projects that they cannot carry out writing activities in English proficiently.

Communicative competence has a significant relationship to writing skills among senior high school students. It can be concluded that students have a greater chance to develop their writing skills when there is an adequate learning under grammatical competence,

discourse competence, sociolinguistic competence, and strategic competence. On the other hand, English language exposure has a significant relationship to writing skills among senior high school students which implies that when students are well expose at home, with friends, in school, and on media, the more likely they will have a greater chance they can write proficiently.

Communicative competence and English language exposure have combined influence on writing skills of senior high school students. English language exposure is considered the best predictor of the writing skills of senior high school students.

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Determinants of the Chinese Language and Reading Comprehension of Junior High School Students

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ABSTRACT

This study aimed to investigate the level of English proficiency and foreign language learning motivation (FLLM) among Junior High School (JHS) students. Furthermore, this research probed whether the English proficiency and foreign language learning motivation significantly correlate with the Chinese language listening and reading comprehension (CLLRC) of JHS students. The current study was conducted using quantitative method, specifically the descriptive-correlational approach. Through a census or complete enumeration, two hundred sixteen JHS students under the Special Program in Foreign Language (SPFL) in the province of Davao del Sur served as the respondents. An adapted and expert-validated questionnaires were used to gather the data. The findings revealed a high level of English proficiency and foreign language learning motivation. Contrary, the Chinese language listening and reading comprehension was found to be low. However, the results indicated that the respondents passed the Chinese test based on the Youth Chinese Test (YCT) guidelines. Furthermore, the results revealed a significant correlation between English proficiency, foreign language learning motivation and Chinese language listening and reading comprehension of the JHS students.

Keywords: Education, English, Chinese Mandarin, motivation, language learning, quantitative research, Davao del Sur, Philippines.

INTRODUCTION

Chinese Mandarin as Foreign Language has ascended its way in the global scene in recent years as a result of China's rise as a major economy in the world (Alshammari, 2020; Kandambi, 2020; Chen et al., 2017). However, despite the fact that Chinese as a Foreign Language (CFL) has established its global relevance (Lam, 2020), Chinese language learners worldwide still struggle in the classrooms as CFL continue to face various challenges (Constantino, 2021; Alshammari, 2020; Spencer, 2015). Particularly, issues on Chinese language listening (Osborne 2020; Liu, 2020; Fong & Ho, 2017; Wen, 2009) and reading comprehension (Zhou, 2017; Rai et al., 2014; Lau & Chan, 2003) were found to be the common problem in CFL classes.

Researchers worldwide have documented several issues in CFL. In United Kingdom, Hu (2010) identified the challenging areas faced by CFL learners which to mention were pronunciation, words, aural reception, oral production, recall and grammar. A closer look in England, CFL met difficulties although implementing the said language has already gone beyond a trial period. Lam (2020) suggests developmental trends of Chinese Mandarin in England such as appropriate teaching approaches and strategies to non-native Chinese learners to sustain learners' motivation to address the challenges. In Nigeria, Eze and Ejiofor (2019) exposed various challenges students experience when studying CFL. The results of the study revealed that in terms of Chinese reading comprehension, 58% of the respondents claimed of having problem with Chinese grammar, 46% claimed of having poor grasp of Chinese culture and 46% of the total respondents agreed that stress and anxiety affected their comprehension. These issues attributed to reading skills are perceived to hamper the reading comprehension of the students. In Saudi Arabia, Alshammari (2020) also identified that the greatest barriers to implementing CFL are learner factors such as learners' motivation, ability, cultural issues, and perceptions about difficulties in language acquisition.

Drawing in the Philippine context, more Filipinos are becoming interested in studying Chinese language as its practical and implicational value in Philippine society increased (Xu & Wang, 2019). With this significance, the Department of Education (DepEd) included foreign language education through the Special Program in

the Foreign Language (SPFL). The Commission on Higher Education (CHED) also released a Memorandum Order stipulating the inclusion of foreign language courses as an elective in higher learning institutions. However, the FL program has encountered challenges over the years. Constantino (2021) revealed a decline in the number of Filipino learners of Mandarin advancing to higher levels each year which highlights the challenges and difficulties that the students met while learning Chinese Mandarin. Constantino further revealed that among the macro skills, listening has the second difficulty rate of 39.3% prompting listening a challenge while 10.7% to reading. Meanwhile, a related study conducted by Baello and Cultivo (2021) showed that 11% of the teacher respondents agreed that reading comprehension is difficult to teach demonstrating issues in the field. With the figures mentioned above, this suggests that teachers and curriculum designers are facing a challenge on devising an intervention that would address this problem.

Tracing issues locally, concerns on CFL specifically on listening and reading comprehension among Chinese learners were observed. Teachers in the province of Davao del Sur expressed concern about the students' performance in Chinese classes because most students manifested lack of comprehension to simple phrases and sentences. The local teachers have also expressed concern over the low scores the learners get in listening and reading comprehension assessments. Teachers added that learners may not be able to advance to the next year level under the same program if learners remain poor in comprehension as they are required to meet certain grades.

With the aforementioned problems, researchers investigated factors that could be related to Chinese language listening and reading comprehension. Kandambi (2020) found that lack of motivation of students to learn Chinese language, and the lack of teaching methods to motivate the learners were found to have caused several educational dilemmas. Rahman et al. (2022) also linked English to learning CFL. They observed that most of the international students learning a third language use English to bridge and learn another language. Furthermore, they also discovered from their study that learning Chinese as a third language is significantly influenced by the factors relating to motivation, fluency in the lingua franca (English in the case of their respondents), attitude, and behavioral control. Similarly, Fang and Baker (2018) stressed that

proficiency in English might be necessary for studying the target language because it is often used as a lingua franca when learning Chinese.

Studies on the correlation between English proficiency, foreign language learning motivation to Chinese language listening and reading comprehension of Junior High School in the Philippines need in-depth attention because the researcher has not found any locally existing study on the said variables. Hence, this study intends to address the gap in the area of CFL and develop our understanding of the relationship among these variables as well as to provide understanding among language teachers about the significance of the aforementioned correlation and encourage them to consider these factors in the field of language education.

METHODOLOGY

Research Design

This research study utilized the quantitative research method specifically descriptive-correlational approach. Furthermore, this method is utilized to investigate relationships between variables in order to objectively test theories. In this research, descriptive-correlational method is the suitable design to be employed because the study aimed to describe the English proficiency, foreign language learning motivation and the Chinese language listening and reading comprehension of the students using numerical data that was statistically analyzed. Further, it aimed to determine whether the English proficiency and foreign language learning motivation significantly correlate with the Chinese language listening and reading comprehension of junior high school students.

Research Locale

This study was conducted in the province of Davao del Sur. Six public schools were selected because these schools offer Special Program in Foreign Language - Chinese Mandarin to junior high school students governed by the Department of Education. To observe anonymity, the schools were coded as schools A, B, C, D, E and F.

Research Respondents

The study had 216 Grade 7 students enrolled in the school year 2022-2023 as respondents. They were determined using Census or also known as complete enumeration. Relatively, this sampling strategy is suitable for the study because it aimed to gather data from all Grade 7 students in the province of Davao del Sur. In such case, among public secondary schools in the said Province, the school A, B, C, D, E and F are the existing schools that offer Special Program in Foreign Language - Chinese Mandarin to junior high school students governed by the Department of Education.

Students were chosen as respondents since they qualified with the criteria set by the researcher. The following inclusion criteria were considered during the conduct of the study. First, respondents must be enrolled to Special Program in Foreign Language specifically Chinese Mandarin in the school year 2022-2023 regardless of age, gender and section in the public school of Davao Del Sur, Philippines. Students from other year levels are excluded. Second, the schools where the respondents are currently enrolled are willing to participate in the research. Learners who failed to enroll in SPFL - Chinese Mandarin program from the beginning of the school year and just happened to shift to the said program after a month or more were excluded from the study as they already missed Chinese Mandarin lessons. Moreover, selected respondents were informed for their right to decide whether or not to participate in the survey. The option to withdraw from the study at any point was also informed to all the respondents.

Data Gathering Procedure

The researcher obtained ethical approval from the Research Ethics Committee and permission from the graduate school dean before conducting the study. After being granted with the requests, the researcher then obtained authorization from the DepEd Davao del Sur Division Office and Digos City Division Office. Upon the completion of these important steps, the researcher then sought an approval from the principals of the selected schools.

After securing all the necessary authorizations, the researcher asked permission from the respondents to carry out the study following the proper protocol and guidelines given by the DepEd Davao del Sur Division Office and Digos City Division Office. The respondents were informed of study objectives and procedures. They

were also given informed consent. By then, the researcher administered the questionnaire and assisted the respondents in answering the questionnaires. Since full in-person classes are already allowed, the test was conducted in full face-to-face adhering all the rules given. Health and safety protocols were also observed upon the administration of the tests for the safety of the respondents. The researcher then informed the respondents that they must complete the questionnaire to assess English proficiency, Foreign Language Learning Motivation survey and Youth Chinese Test I which will focus on listening and reading comprehension, all of which were answerable in less than an hour each section. Finally, completed survey questionnaires were gathered personally by the researcher. The information and data from the tests were handled by the researcher with the utmost confidentiality and importance.

Statistical Tools

The following statistical tools were used in the computation of data:

Mean. This statistical tool was used in determining students' English Proficiency, Foreign Language Learning Motivation and Chinese language listening and reading comprehension of the junior high school students.

Standard Deviation. This was used in determining how spread out, how far or how close the students' responses is in relation to the mean.

Pearson Product Moment Correlation (r). This was used in determining any significant relationships of English Proficiency and Foreign Language Learning to Chinese language listening and reading comprehension of the junior high school students.

Multiple Regression Analysis. This was used for finding the significant influence of students' English Proficiency and Foreign Language Learning Motivation to their Chinese language listening and reading comprehension of the junior high school students.

RESULTS AND DISCUSSION

Level of English Proficiency of Junior High School Students

Table 1 shows the level of English proficiency of the Junior High School (JHS) Students. Four indicators of English proficiency are presented on the table with the indicators including speaking,

listening, reading, and writing skills. Results show that the overall mean is 3.89 which is described as high. It is interpreted that the English proficiency of the JHS is oftentimes evident. This result concurs with the findings of Andes' (2019) who revealed that students' language proficiency levels in listening, speaking, reading, and writing were all described as outstanding. However, the high level of English proficiency found in the current study does not align with the findings of Fernandez (2020) which showed that the grade 7 participants were only in the level of approaching proficiency in terms of their English proficiency. Also, it contradicts Jugo's (2020) findings which revealed that the majority of Filipino undergraduate respondents had a low rating in English proficiency test, while some got a very low score. Only very few among the respondents scored high to very high. The respondents' mean marked score is 40.98 indicating an average performance on the English proficiency exam.

Table 1
Level of English Proficiency of the Junior High School Students

Indicators	Mean	SD	Description
1.1 Speaking	3.73	0.721	High
1.2 Listening	4.10	0.651	High
1.3 Reading	4.06	0.621	High
1.4 Writing	3.67	0.580	High
Overall Mean	3.89	0.53	High

The general findings of this variable indicate interconnection among the four indicators as shown in the close results in terms of mean scores, thus, it run parallel to the previous study of Nam (2018) in which he stated that language is seen as a whole entity composed of four basic language skills; writing, speaking, reading, and listening skills that are linked and interconnected to each other. Nam further added that the development of a specific language skill is the outcome of efficient collaboration with other skills.

In a similar lens, Lumettu and Runtuwene (2018) also highlighted that to be proficient in English entails being skilled in four language skills: listening, speaking, reading, and writing, which

cannot be separated since the advancement of one skill contributes to the improvement of the others.

Level of Foreign Language Learning Motivation of Junior High School Students

The data in Table 2 presents the level of Foreign Language Learning Motivation (FLLM) of junior high school students. Shown on the table below the indicators namely, desire for career and economic enhancement, desire to be a global citizen, desire to communicate and affiliate with foreigners, desire for self-satisfaction in learning, self-efficacy, and desire for cultural integration with its corresponding mean and standard deviation. The results revealed a high level of FLLM with an overall mean score of 4.12 described as high. This denotes that the FLLM of the JHS students is oftentimes evident. This coincides with the findings of Cai and Lynch (2017), who conducted a study among Grade 9 students learning Chinese as a foreign language and found that the respondents' overall level of motivation for learning Chinese as a foreign language was high.

Furthermore, it also matches with the findings of Aatif (2022) in the study of Arab learners' motivation to learn a foreign language. He discovered that respondents have favorable views and motivations to study Chinese language. He also revealed that the integrative orientations of the respondents are higher than their instrumental orientations. The result of the present study also run parallel to the findings of Quintos (2022) when she revealed that Filipino learners of foreign language specifically Korean language agreed to be motivated as indicated on the six components of foreign language learning motivation developed by Gonzales (2010).

Table 2
Level of Foreign Language Learning Motivation of the Junior High School Students

Indicators	Mean	SD	Description
2.1 Desire for Career and Economic Enhancement	4.43	.477	Very high
2.2 Desire to be a Global Citizen	4.40	.449	Very high
2.3 Desire to Communicate and	4.27	.507	Very high

Affiliate with Foreigners			
2.4 Desire for Self-satisfaction in Learning	4.00	.597	High
2.5 Self-efficacy	3.71	.636	High
2.6 Desire for Cultural Integration	3.88	0.682	High
Overall Mean	4.12	0.425	High

Level of Chinese Language Listening Comprehension of Junior High School Students

Presented in Table 3 is the level of Chinese Language Listening Comprehension of junior high school students. The table presented a unidimensional finding of the level of Chinese Language Listening Comprehension of Junior High School students. Because it is a unidimensional variable, only Chinese language listening comprehension is indicated. As depicted in the table, the Chinese language listening comprehension obtained an overall mean score of 68.40 described as low. This signifies that the Chinese language listening comprehension of the junior high school students is in intermediate level.

The low score affirms the claim of Osborne (2020) who stressed that listening comprehension appeared to be one of the most challenging areas in Chinese as Foreign Language learning. Also, Cui's (2021) research on Grade 7 students learning Chinese as a Foreign Language in Thailand found that students' Chinese listening achievement measured using the Youth Chinese Test was only satisfactory. This group of students were taught using a monolingual teaching method in their CFL class. The scores of the respondents suggested a passing rate but did not demonstrate high proficiency in Chinese listening comprehension.

Table 3
Level of Chinese Language Listening Comprehension of Junior High School Students

Domain	Mean	SD	Description
Chinese language listening comprehension	68.40	14.463	Low

Similarly, the result of this current study implies that the students' Chinese language listening comprehension is only adequate for passing the standardized exam and is interpreted as intermediate. Despite being considered adequate, the results indicate that the students' Chinese language listening comprehension requires intervention in order to exceed the borderline passing score.

Level of Chinese Language Reading Comprehension of Junior High School Students

Presented in Table 4 is the level of Chinese language reading comprehension of junior high school students. Similar to listening, the Chinese language reading comprehension part is also unidimensional, there is no indicator being specified, but the Chinese language reading comprehension. As depicted in the table, the Chinese language reading comprehension obtained an overall mean score of 69.22 described as low. The result shows that the Chinese language reading comprehension of the junior high school students is in intermediate level. The findings of this study indicating the low level of Chinese language reading comprehension of the students

Table 4
Level of Chinese Language Reading Comprehension of Junior High School Students

Domain	Mean	SD	Description
Chinese language reading comprehension	69.22	17.730	Low

support Zhang’s (2021) assertion that reading Chinese as a second or foreign language is a rigorous mental activity that causes the learners difficulties in learning the language. She further emphasized that it is challenging for learners of Chinese as a foreign language to develop Chinese reading comprehension because some foreign language readers have poor word processing skills. The study of Eze and Ejiofor (2019) in Nigeria exploring the problems that students met in learning Chinese as second/foreign language showed the different difficulties students face in Nigeria when studying CFL. According to the study's findings, 58% of respondents claimed to have difficulty understanding Chinese grammar, 46% claimed to have a limited understanding of Chinese culture, and 46% of all respondents agreed that stress and anxiety had an impact on their ability to comprehend Chinese text. These reading-related problems are considered to hinder the students' ability to comprehend what they read.

In the same way, the results of this study reveal that the Chinese language reading comprehension of the junior high school students is only in the intermediate level and does not manifest high proficiency in Chinese.

Correlation between Variables

Presented in Table 5 is the test of relationship of English Proficiency and FLLM with Chinese language listening and reading comprehension of Junior High School students. The result show that both of the independent variables have significant and positive relationship with the Chinese language listening and reading comprehension ($p < 0.05$). In particular, there is a significant and positive relationship between English proficiency and Chinese language listening and reading comprehension of Junior High School students (r -value of 0.277, $p < 0.05$). This suggest that the increase in English proficiency would also likely increase the Chinese language

Table 5
Correlation between Variables

Independent Variables	r	CLLRC p-value	Remarks
English Proficiency	. 277	.000	Significant
FLLM	.284	.000	Significant

listening and reading comprehension among JHS students. This result run parallel to the study of Osborne (2020), who found that English proficiency and the frequent usage of English in the educational environment has a substantial influence on learning Chinese as Foreign Language. The numerous techniques and strategies devised by CFL learners in the process of CFL learning indicated the positive influence performed by their metalinguistic awareness. Further, it also agrees to the discovery of Hoti et al. (2011) on the impact of English language skills on third language acquisition (foreign language) when they found that learners' English skills positively influenced the learners' foreign language listening and reading skills along with the contribution of their reading skill in the local language of instruction.

Additionally, the result agrees with Hammarberg (2001), who claimed that a learner's high previous language proficiency influences their level of metalinguistic awareness, which may have an impact on their acquisition of a foreign language. Therefore, it may be inferred that previous language proficiency influences the acquisition of a foreign language. In the context of this study, English proficiency is a significant factor that impacts on Chinese as foreign language specifically the listening and reading comprehension of learners.

In the same way, the foreign language learning motivation has a significant and positive relationship with Chinese language listening and reading comprehension of Junior High School students (r -value of 0.284, $p < 0.05$). This indicates that the increase in foreign language learning would also likely increase the Chinese language listening and reading comprehension among JHS students. This result agrees with the results of a study conducted by Cai and Lynch (2017) among Thai students showed a significant relationship between learners' motivation for learning a foreign language and Chinese listening and reading, and writing skills of the learners.

Determinants of the Chinese Language Listening and Reading Comprehension

Table 6 determined the influence of English proficiency and foreign language learning motivation on the Chinese language listening and reading comprehension. The results revealed that both English Proficiency and FLLM are significant predictors of the Chinese language listening and reading comprehension.

In particular, English proficiency has positive and significant influence on Chinese language listening and reading comprehension of the JHS students ($\beta = .194, p < 0.05$). Thus, for every unit increase in English proficiency, there is a corresponding increase in the Chinese language listening and reading comprehension by .194, presuming all other factors remain constant. This denotes that English Proficiency positively contributes to the CLLRC. Similarly,

Table 6
Significant Influence of Independent Variables

	Standardized Coefficients Beta	t	p-value	Interpretation
English Proficiency	.194	2.755	.006	Significant
FLLM	.206	2.922	.004	Significant

R = .335
R Square = .112
F = 13.481
p value = .000

foreign language learning motivation has positive and significant influence on Chinese language listening and reading comprehension of the JHS students ($\beta = .206, p < 0.05$). Accordingly, a rise in foreign language learning motivation is expected to improve students' Chinese language listening and reading comprehension by 0.206.

The significant influence of English proficiency and FLLM to the CLLRC as established in the results supports Gardner's (2010) socio-educational model which claimed that both cognitive and affective components are involved in learning a second or foreign language. In this study, the English proficiency is viewed as the cognitive element that contributes on the language acquisition of the learners. Meanwhile, the foreign language learning motivation is regarded as the affective factor. It can be implied that learners who are very motivated to learn a foreign language and who have high level of linguistic proficiency are perceived to learn a language efficiently.

Meanwhile, the model explains 11.2 % of the variance of Chinese language learning and reading comprehension. This means that 88.8 of the variance of Chinese language learning and reading comprehension can be attributed to other factors aside from English proficiency and foreign language learning motivation. The study of Zhang (2021) found that Chinese reading is essentially a language-based, cognitively restricted and personalized activity involving a variety of factors such as linguistic, psychological, textual, contextual, and background aspects.

CONCLUSIONS

The results of this study show that the junior high school students have a high level of English proficiency across all four domains namely; speaking, listening, reading, and writing skills. This implies that the junior high school students enrolled in Chinese Mandarin class are highly proficient in English language indicating that the students are capable of communicating very well using the English language. Similarly, the results also show that the level of the foreign language learning motivation of the junior high school students is high. This implies that the junior high school students have high orientation toward the goal of acquiring a foreign language.

Contrary to the mentioned variables, the level of the Chinese language listening and reading comprehension of the junior high school students is found low and interpreted to be under intermediate level. However, the respondents' mean score is considered to have passed the test based on the Youth Chinese Test (YCT) guidelines. Passing the YCT test implies that the learners can already comprehend and apply some of the most commonly used Chinese phrases and words in communicative settings, as well as demonstrate the capacity to advance one's Chinese language learning.

Additionally, the findings revealed that English proficiency and foreign language learning motivation have significant relationship with the Chinese language listening and reading comprehension. It further indicates that the two variables; English proficiency and foreign language learning motivation are factors that affect Chinese language listening and reading comprehension. Hence, the current findings approve Gardner's socio-educational model (2010), and Language transfer of Selinker (1972). It can be concluded that both

English Proficiency and FLLM are significant predictors of the Chinese language listening and reading comprehension.

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Singapore Model and Mathematics Achievement of Students in Word Problem: A Quasi-Experimental Study

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ABSTRACT

This study was carried out to provide empirical data on the effect of teaching Junior High School students to solve Word Problems using the Singapore model method. This study employed a non-equivalent control group design, a quasi-experimental method. The participants were two heterogeneous sections of Grade 7 students from one of the private schools in Davao City. The instrument used in this study is a 26-item teacher-made test with 13 items for each of the following topics: Work Problems and Mixture Problems. This instrument was used in the pre-test and the post-test. The pre-test and post-test mean scores of the experimental and control groups were used to summarize, translate, and analyze the collected data. The t- test was used to determine the significant difference between the Singapore Model Method and Procedural strategy groups. The results show that the post-test mean score of experimental group and control groups is very high, which means that the students' academic achievement in word problem is very satisfactory. There is a significant difference between the experimental and control group's post-test mean gain scores. Their performance improved as anticipated, but the experimental group outperformed the control group due to significantly different mean gain scores. The study unequivocally established that the Singapore Model strategy has a favorable effect on participants' achievement in solving mathematical word problems.

KEYWORDS: Education, mathematics, procedural strategy, Singapore Model, quasi-experimental, Philippines

INTRODUCTION

Mathematics achievement is a requirement for academic success in the contemporary age. It is necessary for success in a wide range of fields (Pandey, 2017). Word problems contribute to students' overall math achievement (Hsiao, 2015). However, poor mathematics achievement, particularly in word problems, has been a worldwide concern for modern academic system (Daroczy et al., 2015). It has been remarked that over the years, secondary school students have frequently failed to acquire problem-solving skills and display mathematical thinking (Yeh et al., 2019). The learners' poor mathematics performance in word problems is evident in the Program for International Student Assessment (PISA), which reported that only 2.4 percent of participating countries acquired problem solving abilities and more than 50 percent fall below the Organization of Economic Cooperation and Development math score when it comes to depicting situation mathematically (OECD, PISA 2018).

Furthermore, in South Africa, according to TIMSS, between 68 and 90 percent of African learners failed to meet the low international threshold in mathematics (Reddy et al., 2016). Consequently, in Indonesia, students' achievement scores in mathematics are extremely low, with only 2 percent achieving proficiency in solving math problems (Ajisuksmo & Saputri, 2017). Standardized test results and research by international organizations over the years have shown that high school students struggle with mathematics, especially word problems, which causes them to lag behind in their mathematics achievement (Nicolasa & Ematab, 2018).

Similarly, in the Philippines, the K-12 education system aims to instill in Filipino learners the rational reflection and worded problem-solving skills. This is obtained through the teaching of relevant skills and the provision of a rigorous curriculum and

mathematical tools (Rodriguez & Abocejo, 2018). However, centralized assessments show that high school students need a long way to go before their critical thinking and problem-solving abilities have improved (Basri & Abdur, 2018). In the 2017 to 2018 Global Competitiveness Report, the Philippines' mathematics achievement in word problems needs to improve, ranking 76th out of 137 countries (World Economic Forum, 2018). In addition, Trends in International Mathematics 2019 reveals that the Philippines performed significantly beneath any other nation on worded math problems (Tadalan, 2021).

Moreover, according to Dinglasan and Patena (2013), Filipino students thrive in acquiring knowledge but underperform in subjects requiring higher order thinking skills. In the National Achievement Test (NAT, 2018), the Department of Education (DepEd) revealed that the average of high school students is 39.95 percent in problem solving (Gonzales, 2019). This further shows that learners performed way below the mean percentage score (MPS) of 75 percent. Inferentially, the patterns of student achievement in mathematics, notably in solving word problems, have been deteriorating for over two decades, with no improvement in the investigated nations (Guinocor et al., 2020).

A post-test in mathematics was administered by the Center for Learning and Assessment Development-Asia (CLAD) in one of the private schools in Davao City in May 2021. Clad Asia fostered timely and high-quality standards-based assessment tools anchored in the new K-12 curriculum to assist schools in evaluating students' performance in accordance with the DepEd-mandated standards and competencies. Results revealed that grade 7 students of S.Y 2020-2021 got an average of 6.26 which means they are in the beginner stage or the students demonstrate a low level of achievement in worded problems (CLAD, 2021).

Despite the extensive literature on word problem solving strategies; one notable work that addressed strategy is the use of cognitive tools in solving algebraic problems to improve math proficiency (Morin et al., 2017). There have been few studies on the effects of teaching word problem solving using Singapore model

method. The research investigations indicated above revealed a dearth of literature on Singapore model method teaching methodology. Studies on teaching techniques' effects on senior high school and college students were also a focus of research, and there was limited literature on teaching strategies in junior high school that specifically used the Singapore model. It has also been observed that few studies on the Singapore model method have been conducted in the country, particularly in Davao City.

In this context, the researcher sees a need to fill the gap by conducting a study to evaluate the efficacy of Singapore model method in developing students' mathematics achievement in word problem. The finding of the study will enable students choose the best approach to solving word problems, which will help students' academic achievement and ability to become globally competitive graduates. It is further presumed that carrying out this research will benefit the institution, teachers, and, most importantly, the students who are the primary reason for studying word problem solving strategies, as the results may serve as the basis for training to reinforce the best method to solving word problems, as well as chances for mathematics teachers to assist themselves build their word problem skills in the classroom.

Theoretical Framework

This study is anchored on **Johann Heinrich Pestalozzi** (1825) and **Jerome Bruner's constructivist theory** (1966) and Jean Piaget's **Cognitivist Theory** (1972). Constructivism is a modern educational theory that is closely followed by the Department of Education. Constructivism is also explicitly stated in the Philippine Curriculum Guide for Mathematics Education. Johann Pestalozzi's Theory of Learning (1825) states that children should be taught in a non-restrictive environment and also be given the tools they need to solve problems and come up with solutions on their own (Hopkins, 2013). His theory also states that a child's first experiences influence their developing thoughts, so it is important for teachers to give their students activities that will let them use their senses. Pestalozzi stresses the significance of exposing learners to objects to which they

can most easily relate before moving on to the presentation of abstract and remote concepts to the learner. In relation to the study, the Singapore model strategy is an action that create and promote the problem representation part of constructivist theory. This will entail the use of tangible materials that are relevant to the things that can be found in the learner's environment. As the students will participate in a series of worded problem devised by a professional adult, they will learn by hands- on approach. Students will thus be able to formulate their own solutions using a variety of senses and use concrete tools to solve worded problems. Thus, students' exposure to manipulatives, active exchange of ideas, and supportive environment accelerated their math enthusiasm and achievement. Furthermore, Piaget's cognitivist theory (1972) viewed mental abilities as a continuous conflict of a very complex organism to thrive and adapt in a very challenging environment. Furthermore, human intelligence develops through adaptation and organization. The framework shows that all cognitive structures are interrelated and must be integrated into the system. Thus, Piaget's analysis implies adapting education to the learner's development.

METHODS

Research Design

This study employed a quantitative research design, particularly the quasi-experimental design. The objective of quantitative research is to conduct in-depth analyses of observable events through the collection of measurable data and the use of statistical, mathematical, or computational methods. Consequently, a quasi-experimental design as introduced by Campbell and Stanley (1966), cited in Coryn and Hobson (2011), was utilized in this study. Prior to the application of the intervention, a quasi-experimental design identifies two groups with nearly identical characteristics. This method will entail manipulating variables to establish a cause-and-effect relationship (McLeod,2019). The primary goal of this research design is to compare the effects of two experimental treatments. The researcher used a Pretest and Posttest Group design, which is an experiment with a control group that does not receive treatment and a separate group that does receive treatment. This design was utilized

because the study will involve applying and assessing the effectiveness of the Procedural strategy and Singapore model Method in students' Mathematics Achievement, and because both the experimental and control groups will naturally be assembled as a section before the experiment. A posttest, which measures the outcome of the variable, is used to compare the groups. A pretest measures the dependent variable before any treatment has been applied. The experimental group and the control group comprised the participants in this study. This design utilized identical pre-test and post-test instruments for both the Procedural Strategy and Singapore Model Method groups, with the exception that treatment assignment is not random. The experimental group received the Singapore Model Method, while the control group received the Procedural Strategy. After the experiments, a comparison was performed between the experimental and control groups.

Place of the Study

This research was conducted at one of Davao City's private schools. To ensure anonymity, this school will be coded as School A. School A was founded in 1981 as a private, nonsectarian institution. It obtained government recognition and was authorized to issue diplomas to graduates of kindergarten, elementary, junior high, and high school. In addition, the institution received approval from TESDA to offer Technical-Vocational courses and permission from Commission on Higher Education (CHED) Region XI to operate four-year programs. Currently, the school offers various Senior High School tracks, including ABM, HUMMS, and STEM. The study's location was chosen because there have been few studies in the area on the effects of teaching word problem solving using two variables: procedural strategy and the Singapore model method, despite the fact that the area is classified as one of the most populated cities in the Philippines. Thus, the study was conducted to evaluate the efficacy of a procedural strategy and the Singapore model method in developing students' mathematics achievement in word problem.

Respondents

The respondents of the study consist of Grade 7 students in one of the private schools in Davao City. The respondents were split into two groups, with the control group implementing the procedural strategy and the experimental group implementing the Singapore model method, which was identified through draw lots. The respondents were assigned by their junior high school class advisers based on their academic performance and behavior in Grade 6. The sample used in the research is divided into two sections, with thirty-one students in each section identified as the participants in the study. The 2 sections were Grade 7 Section A, and Grade 7 section B. The Procedural strategy group was composed of Grade 7 Section A. Grade 7 Section A has 14 boys and 13 girls. The Singapore Model Method group are Grade 7 Section B. Grade 7 Section B has 15 boys and 15 girls.

Statistical tools

The statistical tools that were used in the analysis and interpretation of the data and in determining the efficacy of the variables of the study. **Mean**, this was used to describe the level of mathematics achievement of the respondents in the topics “Motion Problems”, “Age Problems”, “Work Problems”, “Mixture Problems” and “Geometric Problems”. **Standard Deviation**, this was used to compute the spreading of the given data. A high standard deviation indicates that the data is dispersed across a wider range of values, whereas a low standard deviation indicates that the data is closer to the mean value. **T-test**, this was used to determine if there was a considerable rise in the same group of students' test scores at two different times. A paired t-test was used, in which two distinct groups that were linked were tested. This method will assist the researcher in determining whether the procedural strategy and Singapore model method have had a positive influence on the academic achievement of learners. **Effect size** assisted the researcher in determining the significance of the relationship between the procedural and Singapore model methods, as well as the difference between the two groups.

RESULTS AND DISCUSSION

Pretest Mean Scores of the Experimental and Control Groups

Table 1 exhibits the pretest mean scores for the experimental and control groups. The pretest mean score of the control group, which is the procedural strategy, is 11.00 or 42.31 percent of correct answers, described as moderate, implying that the academic achievement of learning of the students in mixture and work problem is satisfactory. This demonstrates that the student at this level has developed the fundamental knowledge, skills, and core understanding in word problem and can transfer this understanding through authentic performance tasks with little guidance from the teacher or with some assistance from peers.

Table 1

Pre-test Mean Scores of the Experimental and Control Groups

Groups	Mean	Percent of correct answer	SD	Description
Control (Procedural Strategy)	11.00	42.31	3.62	Moderate
Experimental (Singapore Model Method)	10.57	40.00	3.35	Low

Further, the pretest mean score of the experimental group, which is the Singapore Model Method, is 10.57 or 40.00 percent of correct answers, described as low, implying that the academic achievement of learning of students in mixture and work problem is fairly satisfactory. This demonstrates that the respondents at this level

possess the minimum knowledge, skills, and core understanding in word problem but needs help throughout the performance of authentic task. This is acceptable because respondents were only exposed to these topics on the basis of basic computational mathematical skills and had insufficient knowledge of worded problems. Further, the standard deviation of the control and experimental group is 3.62 and 3.35, respectively, indicating that experimental group has more clustered responses than control group.

The outcomes coincide with the study of Bersano (2016) when she discovered that the Mathematics achievement of the students in word problem in terms of pretest before exposure to instructional strategies is low. He stated that the students at this level have the fundamental knowledge, abilities, and understanding of the subject but require assistance while carrying out real-world tasks. It also supports the study of Villaver (2014), when she showed that mathematics achievement of the students in mixture and work problems before exposure to Singapore model usually ranges from low to moderate level of learning, indicating that their learning achievement in word problems was at a minimal level and required assistance from peers and teachers to complete the task.

Significance of the Difference in the Pretest of Experimental and Control Groups

The difference between the Pre-test Mean Scores of the experimental (Singapore Model) and control group (Procedural) is tested under an alpha of 0.05 significance level. The p-value of 0.654 presented in Table 2 is greater than 0.05, implying that there is no significant difference between the experimental and control group's prior knowledge of Mathematics word problems, specifically in work and mixture problems, before the conduct of the study. Further, this demonstrates that the Procedural Strategy group and the Singapore Model Method group have comparable levels of knowledge and understanding and level of comfort in the topics of Work Problems and Mixture Problems before the conduct of the study.

Table 2**Significance of the Difference in the Pretest of Experimental and Control Groups**

Groups	t	p-value	Remarks
Control (Procedural Strategy)			
Experimental (Singapore Model Method)	0.451	0.654	Not Significant

The findings are parallel with the result of the study of Osman et al. (2018), who investigated the mathematics achievement of the students in word problem using Singapore Model Method. They found out that the pretest achievement of the students in the procedural and Singapore model has no significant difference. In addition, the results of this study concur with what Bulac (2019) found out in his study that there was no significant difference in students' mathematics achievement in mixture and work problems between the pretest results of the two groups. He also stated that the experimental and control groups have roughly the same level of knowledge and comprehension in the word problem topics. Thus, prior to the implementation of the strategic instruction, both groups had low proficiency in mathematical problems.

Post-test Mean Scores of the Experimental and Control Groups

Table 3 illustrates the mean scores of the experimental and control groups after the Singapore Model Method and Procedural strategy were implemented. It reveals that the control group has a mean score of 17.78 or 68.39 percent correct answer, which is labeled as high, implying that the students' academic achievement in word

problem is very satisfactory. It shows that the respondent at this level has mastered fundamental abilities and core concepts in word problem and can independently transfer them through a real-world performance task. In addition, the standard deviation is 3.62, showing quite disperse responses.

This outcome corroborates to the study of Bishara (2018), who claim that the Procedural strategy assists students in performing even the most difficult mathematical procedures through extrapolation, simulation equations, teamwork, and inquiry - based learning, which improves their academic achievement in solving worded problems. Further, Chua et al. (2019) support this finding by claiming that a procedural strategy is an effective method for completing a sequence of actions to solve a problem, which includes the ability to adapt a known procedure transfer to word problems.

Table 3

Post-test Mean Scores of the Experimental and Control Groups

Groups	Mean	Percent of correct answer	SD	Description
Control				
(Procedural strategy)	17.78	68.39	3.62	High
Experimental				
(Singapore Model Method)	20.37	78.33	3.35	High

Similarly, Table 3 reveals that the experimental group has a mean score of 20.37 or 78.33 percent of correct answer, described as

high, indicating that the academic achievement of the students' learning is very satisfactory. This demonstrates that the respondent at this level has developed fundamental knowledge, skills, and core understanding in word problem and can independently transfer them through an authentic performance task. In addition, the standard deviation is 3.35, showing quite disperse responses.

The finding concurs with the statement of Yeap (2012), who revealed that using Singapore Model Method in the classroom aids and directs students as they solve word problems and elevates students' math achievement levels. Also, the findings are in accordance with the study of Matzin et al. (2020), who assert that students can better understand abstract mathematical relationships when they are presented with visual images and illustrations. They reported that when students can envision the question, and use illustrations to help them understand new concepts, their understanding of the question greatly enhances and perform better on work and mixture problems.

Significance of the Difference between the Post-test Mean Scores of the Experimental and Control Groups

Table 4 shows the post-test mean scores for the experimental (Singapore Model) and control groups (Procedural). The difference in Post-test Mean Scores between the experimental and control groups is tested at the alpha 0.05 level of significance. The result yielded a t value of -3.075, indicating that the scores of the control group is lower than the experimental group. Further, it exemplifies that the p-value of 0.003 is less than the 0.05 level of significance. This would imply that the difference between the post-test mean scores of experimental and control group after the experiment is significant. Furthermore, this demonstrates that the experimental group performed significantly better than the control group on the posttest. The Singapore Model intervention or treatment appears to have had an effect on posttest scores, with higher scores in comparison to the control group.

sessions for a week, the students' academic achievement scored higher when using Singapore model method. They point out also in their study the importance of using Singapore model method in order to help students gain confidence and competence in using this method, which is required for solving word problems in higher mathematics.

Significance of the Difference between the Pre- test and Post-test Mean Scores of the Control Group

Table 5 shows the difference in mean scores of students in the control group who were exposed to the procedural strategy. The results indicate that the t value is equivalent to -7.710, indicating that the scores of students in pre-test is lower compared to the post-test. It means that there is a significant change in the scores of the control group from the start to the end of the study. A significant difference between the control group pre-test and post-test mean scores exist ($p < .05$). The significant difference in mean scores suggests that the control group's intervention or treatment had a significant impact. Further, this demonstrates that the control group students differed in their pre-test and post-test achievement scores in word problems particularly in mixture and work problems. Thus, this implies that the mathematics achievement of the students in word problem increases after the intervention of procedural strategy.

Table 5

Significance of the Difference between the Pre-test and Post-test Mean Scores of the Control Group

Control Group	t	p-value	Remarks
Pre-Test	-7.710	0.000	Significant
Post-Test			

Moreover, the results concur with the study of Bottge (2012), which evaluated the effects of procedural strategy, anchoring

instruction, and applied problems on the analysis and formulation of problems for students who scored averagely and poorly on the tests. He observed that the pretest and post-test of the students varies significantly after the intervention of procedural strategy. In addition, he reported that the outcome suggests that procedural strategy improves the academic achievement of the student. Furthermore, Ciubal and Tan (2018) stressed that a procedural strategy is a powerful technique that can carry out a series of operations to address a challenge, including the capacity to apply a trial-and-error technique to word problems. They added that procedural strategy consists of the abilities, tactics, production, and starting steps necessary to address a specific challenge. Their study led to the conclusion that using a procedural strategy improves the quality of mathematics instruction, resulting in higher student mathematics achievement.

Significance of the Difference between the Pre-test and Post-test Mean Scores of the Experimental Group

Table 6 shows the difference in mean scores of students in the experimental group who were exposed to the Singapore Model Method. Table 6 results indicate that the t value is equivalent to -16.190, indicating that the scores of the student in pre-test is lower than the post-test scores. It denotes a substantial improvement in the scores of experimental group from the beginning to the end of the study.

Table 6 Significance of the Difference between the Pre-test and Post-test Mean Scores of the Experimental Group

Experimental Group	t	p-value	Remarks
Pre-Test	-16.19	0.000	Significant.
Post-Test			

Further, there is a significant difference between the pre-test and post-test mean scores of experimental groups ($p < .05$). The significant difference in mean scores indicates that the intervention or treatment administered to the experimental group had an effect. Furthermore, this demonstrates that the experimental group students differed in their pre-test and post-test achievement scores in word problems particularly in mixture and work problems. Thus, it suggests that the Singapore Model Method had a significant impact and led to the improvement of the mathematics achievement of the students in word problems particularly in work and mixture problems.

The results jibe with the study of Adhikari and Ishikawa (2021), who discovered that the pre-test and post-test scores of the students differed significantly after implementing Singapore Model Method in the classroom. They added that the students' mathematics achievement in word problems in the topic's mixture and work problems after the intervention lesson using the Singapore Model Method is higher than before the intervention lesson in terms of knowledge, comprehension, and academic performance

Mean Gain scores of the Experimental and Control Groups

The mean gain scores for the control and experimental groups are shown in Table 7. The control group has a mean gain score of 6.78 with standard deviation of 4.22, while the experimental group has a mean gain score of 9.80 with standard deviation of 3.32, which implies that the students in the experimental group who were exposed to the Singapore model improved their learning achievement in word problems more than students in the control group. The mean gain score is the average difference between the pre-test and post-test scores, and it reflects the students' overall progress.

Table 7**Mean Gain Scores of the Experimental and Control Groups**

Groups	Mean	Standard Deviation
Control (Procedural Strategy)	6.78	4.22
Experimental (Singapore Model Method)	9.80	3.32

Also, the responses of experimental group are more clustered compared to control group. The elevated mean gain score in the experimental group indicates the Singapore model was more effective in improving students' learning than the procedural approach utilized in the control group. This difference in mean gain scores indicates that the experimental group's instructional methods, techniques, or curriculum had a positive impact on the students' learning outcomes.

The findings are accordance with the study of Thirunavukkarasu & Senthilnathan (2014), who highlighted that Singapore model method is more effective than procedural method in enhancing the learning of mathematics word problem at the Secondary level. They had found in their research that because the Singapore model consistently uses one variant, students know what kind of picture to draw. This method is beneficial for students to use when solving complex word problems. Also, they added that the Singapore model has taught them not only to solve math problems but also to represent them symbolically- the mainstay of algebraic reasoning. Also, Spencer and Fielding (2015), clarified that the Singapore Model is an effective method for students to convey their ideas, show learners all of the components of a word problem, and gain a more fundamental understanding of word problems compared to the procedural strategy.

Significance of the Difference between the Mean Gain Scores of the Experimental and Control Groups

The data in Table 8 demonstrates the difference between the mean gain scores of control and experimental groups and uncovers that the mean gain scores of control and experimental groups have a computed t-value of -2.92, indicating that the score of procedural group is lower compared to the experimental group. Further, the difference between the mean gain scores of experimental and control groups is significant ($p < .05$). This demonstrates that the mean gain scores of experimental group differed significantly in the mean gain scores of control group before and after the experiment. Hence, the findings of the study imply the effectiveness of using Singapore model Method as an innovative approach in improving student's mathematics achievement in word problem particularly in work and mixture problem.

Table 8

Significance of the difference between the Mean Gain Scores of Experimental and Control Groups

Groups	t	p-value	Remarks
Control (Procedural Strategy)	-2.92	0.005	Significant
Experimental (Singapore Model Method)			
Effect Size (Cohen's d)	0.80		Large effect

The finding is congruent with the study of Abdullah et al. (2014) who found that the experimental group performed significantly differently from the control group on the post-test mean gain score. They asserted that the Singapore Model approach improved student achievement, reasoning skills, learning strategies, problem-solving strategy recognition, and mindsets toward resolving

mathematical word problems. They emphasized that the Singapore model enables students to interpret problem through bar modelling and then apply it, changing their behavior and gaining valuable experience while also improving their ability to solve mathematical problems such as mixture and work problem.

CONCLUSIONS

Based on the foregoing findings, the researcher has made the following conclusions: The pretest mean score of the control group, which is the procedural strategy is described as moderate, implying that the academic achievement of learning of the students in mixture and work problem is satisfactory. While the pretest mean score of the experimental group is described as low, implying that the academic achievement of learning of students in mixture and work problem is fairly satisfactory. There is no significant difference between the pre-test mean scores of the experimental and control group. The post-test mean score of experimental group is high, which means that the students' academic achievement learning is very satisfactory. Also, the post-test mean score of control group is high which implies that the students' academic achievement in word problem in the control group are also very satisfactory. There is a significant difference between the post-test mean scores of control and experimental group after the experiment. There is a significant difference between the pre-test and post-test mean scores of students in the control group. The improvement in the mathematics achievement, as shown in the pre-test and post-test mean scores, were from satisfactory to very satisfactory for the topics work and mixture problems. There is a significant difference between the pre-test and post-test mean scores of students in the experimental group. The improvement in the mathematics achievement, as shown in the pre-test and post-test mean scores, were from low to very satisfactory for the topics work and mixture problems. The mean gain score of experimental group is higher than the control group. There is a significant difference between the mean gain scores of experimental and control groups. Also, the significant difference between the Singapore Model Method

and the Procedural Strategy is revealed in the effect size, labeled as large effect, indicating that the Singapore model method is a more effective intervention compared to procedural strategy.

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The Post-Pandemic Challenges of College Students on the Use of English Language in Oral Reporting: A Qualitative Inquiry

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ABSTRACT

This qualitative inquiry aimed to unveil the lived experiences, coping mechanisms for the challenges, and insights of first-year college students on the use of the English language in oral reporting in a certain private tertiary academic institution in Davao City. Participants were selected through purposive sampling considering the set of inclusion criteria. With the utilization of the expert-validated researcher-made interview guide questions, themes were culled in understanding the phenomenon. The findings revealed the themes of the challenges of first-year college students: fear of making mistakes in pronunciation and grammar, inability to speak the English language with confidence, lack of oral reporting preparation, and lack of encouragement from teachers. For their coping mechanisms, the following themes surfaced: preparing an outline or script for moral reporting, employing personal strategies in using the English language, utilizing instructional materials in oral reporting, and staying optimistic amidst difficulties in oral reporting. Finally, on the insights drawn from the challenges, the following themes have emerged: giving importance to English language learning strategies, professing the right attitude in improving oral reporting skills, supporting student-centered initiatives, and considering oral reporting as a future advantage.

KEYWORDS: Education, first-year college students, oral reporting, college, qualitative, Philippines

INTRODUCTION

In the global setting, according to Xie (2020), 68.1% of students identified poor vocabulary and grammar understanding, a

lack of speaking confidence, and poor pronunciation as their key barriers to oral reporting skills. In the same manner, Escudero et al. (2020) that students have expressed complaints about oral reporting's disadvantages due to the lack of vocabulary for English language command, lack of confidence, and afraid of being criticized. In the Philippine setting, Amilda et al. (2020) claimed that students who struggle with oral reporting typically lack confidence. This lack of confidence becomes the main problem for the students, which negatively impacts their academic performance because English is not utilized when it is not essential and because it is poorly used in the country, especially in their homes and at school. Additionally, Espino et al. (2021) found that when students present oral reports, they lack spontaneity and confidence because they are not accustomed to speaking in front of large crowds on a regular basis. In the local setting, Torrevillas (2021) revealed that some of the students' struggles in oral reporting include weaknesses in question analysis, problems with thinking organization and stage fright, a lack of vocabulary, inadequate terminology, problems with word pronunciation, problems with sentence construction, and problems with subject-verb agreement norms as well. In a similar manner, Lukman (2021) asserted that low oral recitation, poor communication, and lack of confidence are also some of the current issues that students confront.

Purpose of the Study

The purpose of this qualitative study was to describe the challenges that first-year college students in the post-pandemic era have when reporting orally using the English language. I ensured the privacy and safety of the first-year college students so that I could learn new things that would be useful in the classroom and have practical applications. To understand the post-pandemic challenges of college students on the use of the English language in oral reporting, this study focuses on the following research questions: what are the post-pandemic challenges of first-year college students using the English language in oral reporting; what coping mechanisms do these students adopt to navigate their oral reporting experiences in the post-pandemic; and, what are the insights of the first-year college students as regards their experiences using the English language in oral reporting in post-pandemic.

Theoretical Underpinnings

This study is seen through the concept of Foreign Language Anxiety by Horwitz et al. (1986) which describes the trepidation, fear, and self-doubt that oral reporters feel when presenting to others. Foreign language anxiety can affect learners' performance and overall experience when it comes to oral reporting. Fear of making mistakes, worries about receiving a poor grade, and self-consciousness about one's linguistic ability are some of the causes of this anxiety. In connection with this study, the FLA of Horwitz et al. (1986) gives a deep understanding of the challenges faced by first-year college students in oral reporting. This study is also founded on the sociolinguistics-based Speaking Model developed by Hymes (2004) which offers a thorough lens for analyzing oral presentations. The paradigm places a strong emphasis on the performative, interactive, and contextual components of communication. Hymes' framework's elements—setting and scene, participants, ends, act sequences, key, instrumentalities, norms of interaction, and genres—offer helpful insights into how speakers adjust their language use, interact with the audience, and use particular strategies to accomplish their communicative goals during oral presentations. In line with that, the Speaking Framework of Hymes (2004) provides coping mechanism ideas for students to overcome challenges. To support the theories above, the Communication Accommodation Theory by Gallois et al. (2005) looks at how oral reporters modify their behavior and communication patterns to either converge or diverge with their interlocutors.

Research Design

A qualitative research design employing a descriptive phenomenological methodology was used in this investigation. Its goals are to comprehend the social environment and the reasons why things are the way they are, and to describe a lived experience of a phenomenon. As cited by Byrne (2001), people's personal experiences can reveal the truth and a deeper comprehension of existence. In order to examine and comprehend the complexity of a phenomenon or area of interest, this study used a purely descriptive phenomenological approach. Further, following the idea of Creswell and Poth (2016), I used this design to understand the meanings that college students attributed to their challenges in oral reporting. At the same time, as explicated by Patton (2023), this design was used to

describe how they made sense of their world as first-year college students. Following this process, the transcripts of the participants' stories and textual data were studied, and the oral narratives of their experiences were analyzed. A rich textual description was created from the participants' life tales and then interpreted for significance.

Research Site and Participants

This study was conducted in a private academic institution that offers Senior High School Program and Baccalaureate Degree Programs in Davao City. The participants of this study are 17 first-year college students who are bona fide students of the private academic institution in Davao City. The selection of participants for the in-depth interview (IDI) and the focus group discussion (FGD) was primarily based on the major inclusion criteria which are: within the age range of 18 to 30 years old, either male or female, experienced, and knowledgeable about the research topic or the phenomenon of interest. The exclusion and withdrawal criteria for the selection of participants were observed as well. Potential participants with speaking disabilities, age below or higher than the age range required, and students under the influence of alcoholic drinks during the conduct of the interview were not included. As the researcher, I employed purposive sampling, considered by Yin (2011) as the most important kind of non-probability sampling, to identify the primary participants. With that said, the participants for the in-depth interview were 10 first-year college students from each department and seven participants for the focus group discussion, each was currently enrolled under each college as their fields are expected to make use of the English language in terms of productive-speaking skills, specifically oral reporting. The following are the colleges present in this institution: College of Teacher Education, College of Nursing, College of Business Administration, College of Engineering, College of Criminal Justice Education, College of Hospitality and Tourism Management, College of Information and Communications Technology, and College of Human Kinetics. In consideration, students from each college who fit the inclusion criteria were invited to participate. Consequently, there were a total of seventeen (17) participants.

Data Analysis

The data analysis and interpretation in this study were carried out by starting with the classification of ideas, followed by the isolation of participants' significant experiences, then the association of their meanings, and lastly, the generalization of the combined themes. This flow was in accordance with Moustakas' (1994) Transcendental Approach which has four stages: epoche/bracketing, wherein the researcher does not enter the investigation with any preconceived notions, prejudices, and preconceived notions based on prior knowledge about the issue under research; phenomenological reduction/textural description, wherein the researcher uses iterative close reading techniques to isolate significant statements that relate to the experiences of the participants then group these claims into meaning units or organize the horizons and ideas into a cogent textual framework; imaginative variation/structural description, wherein through the use of the researcher's imagination, new approaches to the phenomenon, or shifting frames of reference, researchers try to deduce potential meanings; and synthesis/composite description of the phenomenon, wherein the researcher explains the core and significance of the perception of the phenomena as a whole by instinctively combining the basic textural and structural descriptions into a cohesive, composite statement.

Trustworthiness

To demonstrate the reliability of this qualitative content analysis, using concepts like credibility, confirmability, transferability, and dependability—adopted from Lincoln and Guba's (1985) model, which provides four criteria—was used. The goal of credibility is to bolster the claim that the investigation's results are important enough to pay attention to.

RESULTS

Post-Pandemic Challenges of the Students

Fear of Making Mistakes in Pronunciation and Grammar. The participants experienced the fear of making mistakes when it comes to pronunciation and grammar whenever they do oral reporting. Such challenge is attested by Hermes who says:

I feel awkward speaking in English because I feel that I will be laughed at by my classmates when I do not know how to pronounce the words.

Being challenged by stage fright is experienced by Hephaestus. He mentioned:

Well, in my case, I find it hard to use the English language in oral reporting because I am not used to having many people before me. It is like...I am afraid that I cannot meet their expectations.

Inability to Speak the English Language with Confidence. The inability to make use of the English language with confidence is much felt by the participants as they express their challenges. Artemis expressly uttered that she always experiences difficulty in speaking in front of the class. She said:

I struggle a lot about my confidence because I easily lose the drive to do reporting. So, if I commit mistake once, it is hard for me to go back.

Additionally, Andromeda shared her experience when she ran out of words when a student asked her a question about the topic. She said:

I felt like I was mute that time when my classmate asked a question about my topic but I was not able to prepare for it. I was so pale because I really do not know what I was supposed to say.

Lack of Oral Reporting Preparation. Gaea, in particular, described her experience of explaining her ideas to her classmates. She said:

I am not able to properly express my ideas when speaking the English language. So, if I already stutter, I do code-switch to Tagalog or Bisaya in order for them to understand me directly.

Just as other participants feel pressured when speaking the English language, Persephone finds it challenging to be spontaneous in the use of the English language and be conscious at the same time of correct pronunciation. She uttered:

If I do oral reporting, I feel challenged when I speak the English language because I have to be conscious about my pronunciation all the time to avoid being judged by my classmates. There are times that the word is already at the tip of my tongue but I cannot recall it because I did not have enough time to read.

Lack of Encouragement from Teachers. It was stressed by Ares that he felt he only uses the English language because the teacher required them when he stated:

All of us in the class use the English language in oral reporting so our points will not be deducted if we use our vernacular. It is like we only speak the language as a requirement, we do not almost say something if we were not asked.

Unlike any other oral reporters, Hera feels unmotivated due to the complexity of their topics but she cannot picture out the benefit of using the language in oral reporting. She explicitly highlighted the experience when she said:

I cannot find the connection as to why we need to speak English in oral reporting. We are already facing challenges understanding the topic, then reporting like that would only give us stress and trauma.

Coping Mechanisms of the Students

Preparing an Outline or Script for Oral Reporting. The participants shared that for them to be able to deal with their oral reporting challenges, they need to follow steps to efficiently deliver the topic. It was unanimously agreed by Aphrodite, Artemis, and Zeus when they stated:

For me, I read books related to my topic so I can share more knowledge when I report. (Aphrodite)

So far, summarizing the content is effective for me to internalize my discussion. (Artemis)

My strategy for that is to create an outline of keywords. From there, I study the keywords so I will be able to use my own words during the report. (Zeus)

Employing Personal Strategies in Using the English Language. They make it a hobby to practice using the language in rehearsing the discussion in advance. Andromeda, particularly, expressed her thoughts about how constant practice helped her ameliorate her oral reporting skills when she said:

I constantly practice speaking the English language so that I will get used to it. If I am already exposed on the language, it would be easier for me to communicate my ideas in English.

It is also mentioned that self-talking as a practice is an effective technique in communicating ideas to the class. In fact, Athena revealed that this is what they do when they stated:

I set my schedule first so that I would really spend time rehearsing my report in front of the mirror because it is effective on my part.

Utilizing Instructional Materials in Oral Reporting. One of the participants, Zeus, shared his technique which involves multimedia integration on how to effectively cope with the challenges in oral reporting. He said:

In order for my classmates to easily understand me, I explain the topic deductively. I start with the general ideas down to the specific ones. Of course, everything is arranged in chronological order in my PowerPoint presentation so they will be guided as well.

In connection with the above-mentioned scheme, another participant under the pseudonym of Apollo also shared his way of using multimedia in his oral reporting. He specifically pointed out the use of presentations features when he said:

I use animations in my PowerPoint presentations because they add an impact on my confidence while reporting. That is because I can feel that my classmates are amazed by them so they listen.

Staying Optimistic Amidst Difficulties in Oral Reporting. It can be surmised that the participants strive to overcome their struggles by believing in themselves. In particular, Hera mentioned that ignoring her classmates' questions intended to annoy her helps her in staying focused on the discussion. She uttered:

If I feel that my classmates would just throw some unnecessary questions at me, I would just ignore them and keep my focus on the discussion instead.

Similarly, one participant expressed how avoiding distractions in the presence of his classmates had helped him continue with his oral reporting. Hades, as a goal-oriented student, specifically uttered:

In our class, we are all close friends which is why they tease me when I report sometimes. They would give insensible comments on my examples so I disregard them to keep my focus. Then, I would read the keywords on the slides again until I am able to formulate ideas even if it is hard for me.

Insights of the Participants

Giving Importance to English Language Learning Strategies. To support this idea, it was substantiated by Aphrodite that more practice in using the English language is needed by undergoing training to become confident in oral reporting. She stated:

Maybe we just have to get used to speaking the English language to achieve spontaneity... to void stuttering in the future.

Zeus also added:

As a college student, I realized that it is essential to be exposed to the use of the English language during our younger years. Because if we will only be exposed now, we will have a hard time adjusting since our mother tongue is somehow developed.

Professing the Right Attitude in Improving Oral Reporting Skills. Poseidon, as an Engineering student, pointed out the necessity of building confidence in speaking the language. He said:

The culture that we have is different. If you report without confidence and with a non-modulated voice, my classmates will not listen to you. Almost all of them are perfectionists so if I report, I have to be confident.

Similarly, Artemis thinks that it is necessary to address the oral reporting barriers by peer learning. She uttered:

In our class in Purposive Communication, there are a lot of activities including public speaking. I have classmates who really struggle. So, our teacher had us in pair (peer tutoring) to help those struggling ones. You will feel happy once you see they improve. I think it is effective.

Supporting Student-Centered Initiatives. To specify a student-centered initiative, Ares shared his insight about having a club or organization since he thinks that it is helpful for students to have an avenue to experience literary events. He uttered:

For me, if we talk about student-centered activities, maybe our English club only applies to Education students.

I am not sure with the other departments. It is nice because if it is my vacant time, I can just go to our LRC. There are other members who can help you with your concern about the four macro skills. I can say that it is helpful since you are able ask many people.

As far as Persephone is concerned, literary week celebration is a good thing to have in supporting student-centered initiatives. She noted:

Last semester, there was a celebration of Education Day. We were able to experience literary events like extemporaneous speaking, jazz chant, storytelling, and debate. It was a nice experience since it is an eye-opener where you could say “so that is how it is done” or that is so nice, they are so great”. But this is only experienced by Education students, no other departments involved.

Considering Oral Reporting as Future Advantage. The participants mentioned that being used to speaking the language is a perk in their careers as the global standard increases. Gaea, as a BSIT student, mentioned:

There are a lot of opportunities for BSIT graduates now. Others have really good income because clients are international. That is why it is really a must to be accustomed to speaking the English language to easily get hired for work.

The aforementioned insight was agreed upon by Aphrodite, a BPE student, and a dancer. She highlighted her realization when she said:

We usually dance in other places, sir. So, it is normal that we meet many foreigners there. There was one time that a foreigner came and talked to me and I find it hard to respond because I am not used to speaking the English language. I also find it difficult to comprehend his statements because of his accent *laughs*. I felt like a dumb person that time. Because of that, sir, I realized that it is important that we improve our speaking skill using the English language and one of the ways to achieve that is through oral reporting.

DISCUSSION

The finding with the core idea *afraid of disappointing others* supports the claim of Xing and Bolden (2019) that for fear of disappointing them, the participants hid from their professors the language deficit problems they encountered. Although successful and fluent oral reporting is one of the ultimate aims of EFL learners, very little is done to actually help students learn to orally report in English as they are afraid to show their struggles to other people.

The finding of the study with the core idea *committing grammatical lapses in communication* coincides with the extrapolation of Kamlasi (2019) when he mentioned that despite the different classifications of teaching strategies employed, the students still commit grammatical lapses in terms of spoken English. As discussed in his findings, some of the errors are: misuse of verb tenses, pronouns, conjunction and articles, as well as the word order in adjectives.

The emerging theme with the core idea *lacks confidence in public speaking* confirms the assertion of Shabana and Syed (2020) that the majority of students feel anxious when reporting orally in English. The study's findings showed that a lack of active participation, peer

hesitancy, peer dread, fear of assessment and correction, teachers' reluctance, and a lack of cooperation are among the main factors that raise students' lack of self-confidence.

In addition, the result with the core idea *overthinking discrimination from classmates* confirms the claims of Amir et al. (2022) that students do not feel apprehensive about presenting in front of an audience because they are afraid that their message will not get conveyed and they will be misunderstood which may trigger discrimination inside the classroom.

The theme that emerged with the core idea *doing code-switching to be understood* also supports the claim of Al-Nofaie (2010) that students are not exposed to adequate English because they start learning it in the last year of primary school. Further, Leung and Valdes (2019) claimed that new discoveries like code-switching, as a way to cope with the scenario, are sometimes referred to as "translanguaging" in the study of multilingualism because it was noted that students tend to code-switch to their vernacular once they have a hard time expressing their ideas using the English language.

The theme with the core idea *pressured by questions asked* furthers the research of Oflaz (2019) and Riasati (2019), who found that oral reporting fear is a result of English language school exercises that involve classmates asking reporters questions which has been connected to students' hesitation to utilize English. This occurs while they are still fully learning a foreign language. Additionally, if the students are pressured, it will impede the development of their language abilities.

The emerging theme with the core idea *less exposure on the use of English language* supports Tahmasbi et al.'s (2019) assertion that current English teaching practices in Iranian schools are structural in character because earlier attempts to engage students and promote involvement in class activities failed. As a result, textbooks frequently ignore the demands of students and are structurally focused; an undue emphasis is placed on learning grammar and vocabulary.

The theme with the core idea *using the English language only as a requirement* also parallels the claim of Yadav et al. (2019) who looked at whether regular exposure to oral reporting tasks in a virtual setting could reduce public speaking anxiety (PSA). The results revealed significant improvements in both self-reported and physiological measures if the students are required for exposure. In this sense, the

role of the students' professors played a salient role in their English-speaking development.

The theme with the core idea *reading some books* corroborates the idea of Al Zoubi (2018) that reading books to summarize the topic can be a very useful strategy for students as an initial step to enhancing oral reporting skills. Planning the report can greatly benefit from the knowledge, suggestions, and viewpoints that can be found in books. Students can learn more about the subject, find real-world examples, and examine various writing styles by immersing themselves in pertinent literature.

The theme with the core idea *making outlines for lessons* also fits the idea of Kelsen and Liang (2018) that people who have done their homework are better able to plan their presentations, organize their thoughts, and foresee difficulties. It offers a strong framework for conveying a message that is coherent and unambiguous. Effective preparation involves doing extensive research on the subject, acquiring pertinent data, and comprehending the requirements and preferences of the audience.

The theme that emerged with the core idea *practice speaking in advance* conforms to the claim of Rao (2018) that through persistent practice, careful planning, and helpful criticism, confidence can be developed. Regular practice helps speakers improve their fluency and familiarity with the language, which boosts their confidence in verbal communication.

The theme with the core idea *exercise by self-talking in front of the mirror* also supports the findings of Bailey et al. (2021) that self-talk can be a very useful strategy for learning a subject in advance of oral reporting. Speaking out loud helps people to explain their own thinking, strengthen their understanding of the issue at hand, and spot any knowledge gaps that need to be filled.

The emerging theme with the core idea *following presentation templates provided* also vouches for the statement of Houlden and Veletsianos (2020) that it can be beneficial to use presentation templates to make oral reporting simple. Using templates ensures a logical flow and cogent structure throughout the presentation and facilitates the structuring of ideas.

The finding with the core idea *making use of presentation animations* validates the claim of Culala (2022) that templates can remind people to include crucial components including an introduction, primary ideas, supporting evidence, and a conclusion,

making sure that nothing crucial is missed with the help of animations and transitions.

The emerging theme with the core idea *keeping focused on the discussion or presentation* coincides with the idea of Mauranen (2018) that for oral reporting to be precise, succinct, and compelling, the presenter must maintain attention. People might use a variety of techniques to stay focused. Additionally, reducing distractions like overly animated hand gestures or pointless movements enables people to focus on their message.

The finding of the study with the core idea *avoids being distracted by the comments of classmates* confirms the statement of Singh and Kaur (2019) that for oral reporting obstacles to be overcome and presentations to be delivered successfully, distractions must be avoided. People can overcome the difficulties of oral reporting by deliberately reducing internal and external distractions, resulting in a focused, interesting, and powerful presentation.

The emerging theme with the core idea *needing more exposure to the English language* coincides with the viewpoints of Yadav et al. (2019) that the development of oral reporting skills requires more exposure to the English language. Exposure to various linguistic situations is a key to developing language ability.

The theme that emerged with the core idea *practicing and mastering the foundations of the English language* also confirms the notion of Boetje and van-Ginkel (2020) that when it comes to oral reporting, the value of practice cannot be understated in terms of acquiring the language's fundamentals. Additionally, practice enables people to improve their sense of rhythm, tempo, and intonation, which improves the impact and engagement of their delivery.

The theme that emerged with the core idea *practicing speaking the English language even outside the school* also substantiates the extrapolation of Diehl et al. (2019) that for students to learn how to use the English language, they must be required to speak it. Regular speaking exercises give students beneficial chances to express themselves, improve their fluency, and develop their confidence in speaking English. This includes speaking the language with family and friends.

The result with the core idea *initiating English Only Policy in classrooms* also corroborates the claim of Clement and Murugavel (2018) that their participants stressed the significance of English

training through requiring students to use the English language to enhance the abilities needed to carry out their tasks.

The emerging theme with the core idea *creating organizations to facilitate helpful activities* affirms the explication of Elnadeef and Abdala (2019) that by fostering a supportive atmosphere for practice, criticism, and skill improvement, English clubs and organizations offer invaluable assistance for oral reporting. These organizations give students a venue to participate in debates, discussions, and public speaking exercises, allowing them to improve their oral communication abilities in a motivating and encouraging environment.

The theme that emerged with the core idea *promoting the use of English language by institutionalizing literary week celebration across departments* coincides with the decipherment of Hussein and Albakri (2019) that an institution-wide literary celebration can significantly improve oral reporting abilities by giving students a bright and encouraging platform to share their talents and practice public speaking.

The theme with the core idea *learning the English language to be prepared for the future* supports the claim of Gewertz (2018) that only 41% of employers surveyed by the American Association of Colleges and Universities think that recent college graduates are competent oral reporters, despite the fact that oral reporting is regularly listed as a highly wanted skill.

The theme with the core idea *being used to speaking the language is a perk in the career* also corroborates the inference of Smith (2022) that oral reporting proficiency has become more significant in academics as a marker of a student's achievement not only in college but also after graduation.

Implications for Educational Practice

While many institutions have transitioned to face-to-face instruction the moment it was allowed, most of the students have struggled to adapt to the environment in the post-pandemic setting. Thereby, revealing their challenges in the previous parts of this study. It was discussed that students felt frightened when they perform oral reporting in front of the class. As their coping mechanisms for the encountered challenges, they make outlines for the lessons to aid them in their performance to be confident. Based on their first-hand experiences, they expressed their realizations that they need more

exposure to the English language to boost their confidence in speaking the language. In consideration, the academic council of the higher education institution may design instructional programs through differentiated activities such as regular oral presentations, debates, or even oral recitations where students are given opportunities to express their ideas orally in English. Additionally, individualized strategies may be encouraged such as the exploration of diverse perspectives to promote a student-centered environment. Finally, this may entail giving students regular oral report assignments that necessitate them to summarize, evaluate, and interpret the details based on their unique perceptions.

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Mediating Effect of Burnout on the Relationship Between Grit and Turnover Intentions among the Private Tertiary School Teachers in Region XI: A Convergent Design

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ABSTRACT

This study aimed to investigate the mediating effect of burnout on the relationship between grit and turnover intention of private tertiary schoolteachers in Region XI. A convergent mixed-methods design was utilized. Private tertiary schoolteachers who were at least three years already in the service in Region XI were selected using purposive sampling technique. Adapted survey tools and interview guide questions were used to gather the essential data. The statistical tools used were mean, standard deviation, Pearson Product Moment of Correlation, and the Sobel z-test. Colizzi's method was utilized to elucidate the qualitative data. The findings revealed that private tertiary schoolteachers' level of burnout and turnover intention were low, and their level of grit was high. Moreover, the relationship among these variables was significant. Also, the mediating effect of burnout on the relationship between grit and turnover intention was significant, although it was just partial. The lived experiences of teachers were explained further by the themes revealing personal, work, and client-related burnout; positive dispositions on the teaching profession; underlying reasons for low level of attrition; and invigorating grit and strength as reasons to stay. Furthermore, the impact of these experiences on their beliefs and attitudes included: staying is beneficial, adhering commitment to excellence, and demonstrating positivity in all circumstances. Finally, the quantitative findings corroborate with the qualitative findings.

KEYWORDS: Education, leadership, burnout, grit, turnover intention, convergent design, mediation, phenomenology, Philippines.

INTRODUCTION

Faculty turnover has been a growing concern for many academic institutions. Turnover refers to the situation where an employee like a teacher ceases to become a member of an organization, (Ngo-Henha, 2017) and this has been found to be accounted to the intention of employee to quit their work. In fact, several literatures have reported that the intention to leave is one of the immediate precursors of employee turnover, and the latter positively increases with turnover intention (Park, 2018; Zhou and Volkwein, 2004; Xu, 2008; and Hassan and Hashim, 2011). Thus, problems on actual turnover behavior are being signaled by turnover intention. According to the horizon's workforce consulting report, 65% of faculty have considered resigning from their institutions and almost 45 of which have considered quitting from teaching profession (English, 2012).

This circumstance has posed threats to the wellbeing of an organization. In fact, the faculty turnover can significantly impair not only the financial aspect of the school but also the students, department, and the institution in general (Kim, Twombly, & Wolf-Wendel, 2012). Globally, there is a bleak scenario when it comes to teacher staffing and turnover. In fact, the federal data from the National Center on Education Statistics (NCES) in United States has shown dramatic increases in turnover among public and especially private schools. Regardless of the year started, about one-third of public school teachers had left and within 10-year time about half had gone. Data are even worse and higher in the private school turnover (McFarland et al., 2019). This is also evident in some countries. Like in Australia, 16 % of teachers changed schools or leave teaching every year (Redding and Henry, 2018). In Utah, during school year 2016-2017, 9% of teachers moved to a new school (Dodson, 2018). The same is also happening in England where 9.9 % of teachers left

the workforce during school year 2016-2017, compared to the 9.2 % of the work in 2010-2011(Worth, 2018). Also, the 26 districts of Philadelphia have reportedly lost at least 25% of their teachers for four years straight (Calefati et al., 2019).

In the Philippines, the same scenario is also evident. Last October 5, 2015, the Manila Bulletin had released news from the Philippine Institute for Development Studies encompassing the undeniable need for the recruitment of teachers to replace teachers who are expected to leave the profession. The country is expecting a constant turnover of teachers that could be due to low salary, workloads, lack of challenge and other personal circumstances (Braid, 2015).

This circumstance has been felt in Region XI as well. Different private and public schools have been experiencing a remarkable high rate of turnover among their teachers. The implementation of K-12 curriculum mandated by the government has worsen the inducement of the teachers to transfer to other schools. This has caused some schools shortage of teachers and problem of hiring competent teachers. In fact, different educational institutions have also felt this as teachers and instructors in basic education and college department had chosen to resign.

Further, turnover has always been a global educational conundrum that affects not only school administrators but most especially the quality of education (Dela Cruz, 2016). This actual turnover behavior among teachers has been found to have a positive relationship with teachers' intention to leave. Thus, the subsequent reports on excessively high employee turnover indicate a serious research problem on turnover intention.

Moreover, turnover intentions among teachers are also related to other variables. It is commonly associated with job satisfaction (Josonov-Vrgovic & Pavlovic, 2014; Abate, 2016; Palahi et al., 2016; Duan et al., 2019) and administrative support and student behavior (Josonov-Vrgovic & Palvovic, 2014; and Tehseen & Hadi, 2015). In fact, the Philippine government had released provisions

that intend to provide aids to teachers especially those who are being affected by the K to 12 transitions.

One of these aids is the joint guidelines on the implementation of the labor and management component of Republic Act (R.A) number 10533 or also known as the Enhanced Basic Education Act of 2013. The guidelines ensure the protection of the rights, interest, and welfare of teachers; and to optimize employment retention of teachers in higher education institutions (HEIs) in the K to 12 transitions. These aids include expanded government assistance to students and teachers in private education which also encompasses other financing arrangements considered in Rule VI of the R.A. 10533, facilitation of possible loan assistance, and facilitation of possible loan amortization of HEIs (DOLE-DEPED-TESDA Joint Guidelines, (2014).

Whereas, these government provisions only dealt with limited economic aspects of the total work equilibrium. The provisions have not come across and considered other dispositional traits like the grit and burnout aspect in the line of work of teachers especially of those in higher education institutions who are being greatly affected by the K to 12 transitions. Legal provisions and mandates by the different educational sectors in the Philippines did not focus on protecting teachers' welfare that will especially boost their work perseverance and address work-related exhaustion.

In addition, various attempts to reduce the employee turnover intention of organizations were initiated. In fact, the study of Swe and Lu (2019) showed an effort to reduce the employee turnover in Myanmar by improving the employee engagement. The same effort has also been initiated by Kim (2017) through an action research that addressed employee turnover through intervention strategies. These studies were conducted to strengthen the work-related aspect of the employees to reduce their turnover intention. However, these attempts failed to look into other factors that may intervene on the relationship of the explored variables and also failed to explore qualitatively and holistically the studied phenomenon.

More so, despite these attempts and efforts, the status of turnover intention has remained bleak, especially in the teaching field.

Consequently, many studies have explored aspects of grit, burnout, and turnover intention as some of the many aspects of educational leadership. Turnover intention has been widely studied as a single variable or as a variable influencing another variable, but limited literature examined this aspect among college teachers' lives and its connection with teacher burnout and grit, especially in the midst of the K-12 transition in the region.

Grit as a non-cognitive and non-economic constraint will help teachers to emulate a degree of passion to surpass difficulties that will arise in achieving goals (Perez, 2015) and will also contribute to the lower turnover intention among teachers (Shin, et al., 2018). Meanwhile, burnout as a psychological constraint is a response of negative emotions because of exposure to stressful work environment (Chowdhury, 2018). This constraint has been found to cause diverse forms of job withdrawal and one of which is the turnover intention. Thus, grit and burnout are found to be associated with turnover intentions.

Since teachers carry with themselves an indispensable role in building a better society through a responsive education; and that their non-economic satisfaction like the socio moral factors and dispositional traits will greatly affect their effectiveness in rendering their service in the educative process are some of the reasons that urge the researcher to pursue this study (Dela Cruz, 2016). In addition, the researcher considers this study as incomparable and unique because this study will try to explore how one psychological trait like burnout intervenes on the relationship of another different psychological traits grit and turnover intentions, which most of the studies have not yet explored especially in the context of a private educational institution.

Worldview And Theoretical Lens

To address the existing problems in turnover, pragmatism as a worldview was utilized in this study. Pragmatism is a philosophical tradition that promotes the development of theory directly from practice (Christ, 2013). As a pragmatist, I did not see the world as one and only unity. Second, I did not base the truth in duality between realities independent of the mind or within the mind; rather

I based it on what works at the time. Finally, I looked to the “what” and “how” to research based on the intended path of where they want to go with it.

On a different note, this study was anchored on the theory of Job Embeddedness of Holtom and Inderrieden (2006); the proposition of Hetherington and Blechman (2014); the proposition of Guchait et al., (2016); and Self-theories of Dweck (2000). The Job Embeddedness and the proposition of Hetherington and Blechman were used to guide the link between grit and turnover intention; meanwhile, the proposition of Guchait, et al., (2016) was used to guide the association between burnout and turnover intention; and Self-theories was used to guide the relationship between grit and burnout.

METHODS

Research Design

In this study, the researcher employed mixed methods, specifically explanatory sequential research design. This is an evolving research technique that promotes the systematic synthesis or mixing of quantitative and qualitative data within a single study or ongoing investigation or inquiry (Creswell, 2013). The explanatory sequential approach is a two-phase mixed methods design that explains and enriches the quantitative findings; thus, it elaborates the quantitative results by collecting qualitative data from participants chosen from the respondents of the quantitative phase. Sometimes, there are insufficient arguments that quantitative or qualitative may not be resolved by it, and sometimes each provides different pictures (Creswell, 2017).

In the quantitative phase, the researcher specifically used the descriptive correlation approach to address the problems in the study and achieve its purpose. This approach measures two or more relevant variables and assesses a relationship between or among them (Schmitz, 2012). The relationship among parental involvement, vocabulary learning strategy, and reading motivation was described

and examined. The survey method was employed using adapted survey questionnaires with a five-point Likert scale.

Meanwhile, in the qualitative phase, the researcher used a phenomenological approach. Typically, interviews were conducted with a group of individuals who have first-hand knowledge of an event, situation, or experience. Phenomenology is the most appropriate approach to use because the researcher wants to understand the lived experiences of the junior high school students in secondary public schools in Region XI (Creswell, 2017).

Place of the Study

The study was conducted purposively in public secondary schools in Region XI. The locale is also known as the Davao Region in the Southern part of Mindanao, shown in Figure 3. It is situated in the Southeastern portion of Mindanao and comprises five provinces: Davao de Oro, Davao del Norte, Davao del Sur, Davao Oriental, and Davao Occidental. It is the most populous city in Mindanao and the third largest city in the Philippines. The Davao region is one of the most important economies on the island and the third most important urban center in the Philippines. Region XI surrounds the Davao Gulf, bounded on the north by the provinces of Surigao del Sur, Agusan del Sur, and Bukidnon; on the east by the Philippine Sea; and on the west by the Central Mindanao provinces.

Participants

The respondents of the quantitative phase were the 365 junior high school students of the five public secondary schools in Region XI who are officially enrolled for S.Y. 2021–2022. For multiple linear regressions, Bujang et al. (2017) suggested a minimum sample size of 300 or more to generate an approximation of estimates with parameters in a survey. The researcher employed stratified random sampling in selecting the participants from purposively selected schools in Region XI with grade level as the basis for stratification.

In the qualitative phase, the researcher purposively selected 10 junior high school students who were drawn from the quantitative strand respondents for the IDI and 7 junior high school students for the FGD. A total of 17 public junior high school students were invited as participants. Inclusion criteria used are as follows: bonafide junior high school students who are enrolled for S.Y. 2021-2022 in public secondary schools.

Data Analysis

Pearson-r, and regression analysis were used to analyze the quantitative data of this study. The Pearson r was used to determine the significance of the relationships between Vocabulary Learning Strategy and Parental Involvement; Parental Involvement and students' Reading Motivation; and Vocabulary Learning Strategy and students' Reading Motivation. The mean was used to determine the level of parental involvement, vocabulary learning strategy, and reading motivation of students. A standard deviation was used to measure how spread out the respondents was. Multiple regression was used to predict the value of students' reading motivation based on parental involvement and vocabulary learning strategy. Finally, medgraph using the Sobel z-test was used to prove the mediation and to strengthen if parental involvement significantly mediates the relationship between vocabulary learning strategy and students' reading motivation. While the data from the IDI and FGD was analyzed using thematic analysis.

Trustworthiness of the Study

To establish the trustworthiness of the study, the researcher followed the four proposed criteria in evaluating interpretive research work by Lincoln and Guba (1985), which are as follows: credibility, transferability, dependability, and confirmability. Trustworthiness of this study was addressed through a thorough collection of data by survey and in-depth interview and was supported by FGD for triangulation.

RESULTS

Quantitative Results Level of Vocabulary Learning Strategy, Reading Motivation, and Parental Involvement

Vocabulary Learning Strategy. Table 1 shows the level of vocabulary learning strategy of the students. It shows that the overall mean of vocabulary learning strategy is 3.72 which is described as high. It means that the vocabulary learning strategy of the students is oftentimes manifested. In addition, the overall standard deviation is 0.19 which is less than one denoting that the respondents have ratings that are practically almost the same.

Table 1

Level of Vocabulary Learning Strategy, Reading Motivation, and Parental Involvement

Main Variables/Indicators	S.D	Mean	Descriptive Level
Vocabulary Learning Strategy	0.22	3.72	High
Reading Motivation	0.19	3.57	High
Parental Involvement	0.19	3.57	High

Reading Motivation of the Students. Reading motivation of the students in public secondary schools got an over-all mean of 3.57 described as high. It means that the reading motivation of the students is oftentimes observed. The over-all standard deviation of 0.19 indicates a negligible variation of responses of the students.

Parental Involvement. As shown in the table, parental involvement obtained an overall mean score 3.57, descriptively rated as high. The standard deviation value of 0.19 indicates that the responses of the respondents, on average, were 0.28 away from the mean.

Mediating Effect of parental Involvement on the Relationship between Vocabulary Learning Strategy and Reading Motivation of the Students

As shown on Table 3, that vocabulary learning strategy has a significant positive strong relationship with the reading motivation of the students with a p-value of .000 that is less than .05 level of significance (two-tailed) ($r = .68, p < .05$). It means that as the level of the vocabulary learning strategy of the student's changes, their reading motivation also significantly changes. Similarly, the result shows that the relationship between vocabulary learning strategy and parental involvement has a significant positive strong relationship with a p-value of .00 that is less than alpha set at .05 ($r = .60, p < .05$). This means that if the level of vocabulary learning strategy of student's changes, the level of parental involvement also significantly changes. This leads to the rejection of null hypothesis of no significant relationship between vocabulary learning strategy and parental involvement. Lastly, the result shows parental involvement has a significant positive strong relationship with the reading motivation of the students with a p-value of .000 that is less than .05 level of significance (two-tailed) ($r = .63, p < .05$). It means that as the level of the parental involvement changes, student's reading motivation also significantly changes.

Table 2
Correlation among Vocabulary Learning Strategy (IV), Reading Motivation (DV), and Parental Involvement (MV)

Variables	r-value	p-value	Interpretation
Vocabulary Learning Strategy (IV) and Reading Motivation (DV)	<i>0.680*</i>	<i>0.000</i>	<i>Significant</i>
Vocabulary Learning Strategy (IV) and Parental Involvement (MV)	<i>0.600*</i>	<i>0.000</i>	<i>Significant</i>
Parental Involvement (MV) and Reading Motivation	<i>0.630*</i>	<i>0.000</i>	<i>Significant</i>

(DV)

******Correlation is significant at the 0.05 level (2-tailed).

Meanwhile, the mediating effect of parental involvement on the relationship between vocabulary learning strategy and reading motivation of the student in secondary public schools were tested based on the Baron and Kenny (1986) four steps test. In this model, linear regression analysis was used to test the influence among variables. Meanwhile, multiple linear regression analysis was used for mediating test.

In Table 3, these are categorized as Steps 1 to 4. In step 1, vocabulary learning strategy as the independent variable significantly predicts reading motivation of the students with a p-value of .000 that is less than .05 level of significance (two-tailed) ($B=0.671$, $p<0.05$). In step 2, vocabulary learning strategy significantly predicts parental involvement, the mediator, with a p-value of .000 that is less than .05 level of significance (two-tailed) ($B=0.923$, $p<0.05$). In step 3, parental involvement significantly predicts reading motivation of the students with a p-value of .000 that is less than .05 level of significance (two-tailed) ($B=0.403$, $p<0.05$). Because the three steps (paths a, b and c) are significant, further mediation analysis through medgraph is warranted, involving the Sobel z test to assess the significance of mediation effect. Further, as gleaned in step 4, the effect of vocabulary learning strategy on reading motivation was found to be significant after mediated by parental involvement. Therefore, partial mediation took place since the effect was found to be significant at 0.05 level.

Table 3
Data Entry for the Different Paths

Independent Variable	(IV)	Vocabulary Learning Strategy
Dependent Variable	(DV)	Reading Motivation
Mediating Variable	(MV)	Parental Involvement

STEPS

1. Path A (IV and DV)	
Reading Motivation regressed on Vocabulary Learning Strategy	
B (Unstandardized regression coefficient)	.671
<i>e</i> (Standard error)	.040
Significance	.000
2. Path B (MV and DV)	
Reading Motivation regressed on Parental Involvement)	
B (Unstandardized regression coefficient	.403
<i>e</i> (Standard Error)	.028
Significance	.000
3. Path A (IV and MV)	
Parental Involvement regressed on Vocabulary Learning Strategy	
B (Unstandardized regression coefficient	.923
<i>e</i> (Standard Error)	.069
Significance	.000
4. Combined Influence of MV and IV on DV	
Reading Motivation regressed on Parental Involvement and Vocabulary Learning Strategy	
Parental Involvement	
B (Unstandardized regression coefficient)	.220
Se (Standard Error)	.030
Beta (Standardized regression coefficient)	.345
Vocabulary Learning Strategy	
Beta (Standardized regression coefficient)	.477
Total R Square	.544

Moreover, the result of the computation of mediating effects is shown in Figure 5. The Sobel test yielded a z-value of 6.48 with a p-value of 0.000, which is significant at 0.05 level. This means that the partial mediation accounted for by reading attitude on the relationship of vocabulary learning strategy and reading motivation of the students is significant. In addition, the causal relationship

between vocabulary learning strategy and reading motivation has been increased from a significant coefficient correlation value of 0.477 to 0.680, which is still significant, at the inclusion of parental involvement, the mediator variable.

Lastly, the figure shows the results of the computation of the effect size in the mediation test conducted between the three variables. The effect size measures how much of the effect of vocabulary learning strategy on the reading motivation of the students can be attributed to the indirect path. As shown in the figure, The ratio index obtain a value of 0.299 indicating that about 29.90 percent of the total effect of the independent variable on the dependent variable goes through the mediator variable, and about 70.10 percent of the total effect is either direct or mediated by other variables not included in the model.

Significance of Mediation

Significance

Sobel z value 6.48
 $p = .000$

95% Symmetrical Confidence Interval

Lower .030

Upper .069

Unstandardized Indirect Effect

a*b .200

Se .050

Effect Size Measures

Total: .668

Direct: .468

Indirect: .200

Indirect to total ratio .299

Standardized Coefficients

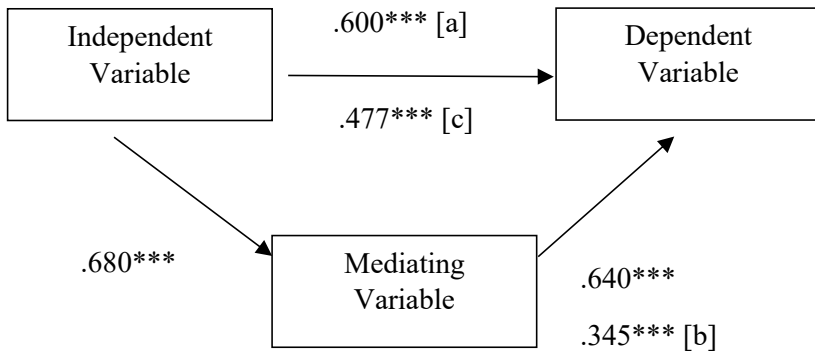


Figure 5. Mediation Model

Qualitative Results

Presented in Table 4 is the profile of the participants who were involved during the in-depth interview and focus group discussion. There were ten informants on IDI and seven participants in FGD. For the number of students per school, School Alpha had 5 participants, School Beta had 4 participants, School Gamma had 3 participants, School Delta had 3 participants, and School Epsilon had 2 participants- a total of 17 participants. The informants and participants were Grade 9-10 students from 5 public national high schools in Davao Region. There were eleven females and six male junior high school students. To protect the identity of the participants, the researcher made use of Student Number codes.

Standpoints of the Participants on the Quantitative Results Regarding the Status of the Independent, Dependent, and Mediating Variable

Table 5 presents the standpoints of the participants on the quantitative results regarding vocabulary learning strategy, reading motivation, and parental involvement. The essential themes generated are as follows: confirmed high ratings of vocabulary learning strategy, reading motivation, and parental involvement.

Table 5

Standpoints of the Participants on the Quantitative Results Regarding the Status of the Independent, Dependent, and Mediating Variable

Level	Essential Theme	Typical Reason
<p>Vocabulary learning Strategy</p> <p><i>(Independent Variable)</i></p>	<p>Confirmed High Rating of Vocabulary Learning Strategy</p>	<p>Students are taking notes for the new learned unfamiliar words.</p> <p>Students are using internet to learn new words from peers online.</p> <p>Internet was used to clarify the meaning of new learned words.</p> <p>Using online dictionary help enhanced students learning of newly learned words.</p> <p>Teachers assisted students to clarify the meaning of unfamiliar words.</p>
<p>Reading Motivation</p> <p><i>(Dependent Variable)</i></p>	<p>Confirmed High Rating of Reading Motivation</p>	<p>Perceiving themselves as good readers increase students' motivation in reading.</p> <p>The availability of reading materials enhance their reading motivation.</p> <p>Teachers were able to arouse students' learning motivation and interests, enhancing their consciousness of participation in classroom activities.</p> <p>Students are motivated to read to get good grades.</p>

		Students read articles to have something to say during social gatherings.
Reading Motivation <i>(Mediating Variable)</i>	Confirmed High Rating of Reading Motivation	Parents actively participated in school-related activities. Parents continually communicated with teachers regarding students' academic status. Parents talk with teacher about student's performance

Confirmed High Rating of Vocabulary Learning Strategy. The participants expressed that they oftentimes utilized strategies that make their learning easier and more effective and can be used or transferred to other situations related to language learning. As they pointed out, using vocabulary learning strategies help them learn new vocabulary without the presence of their teacher. Hereunder are thee shared narratives of the participants: Student 1 shared how she was able to use vocabulary learning strategies to improve her vocabulary skills. She stated:

Usually I write words, especially unfamiliar words, when I am reading books or e-books. I make a list and then look up the meaning of that word or words so that I know what they mean. (IDI_P001_1-12)

Using electronic mediums such as internet and other online software provide students opportunities to learn from distance. Through online interactions, students were able to interact with different students from different places with different backgrounds. Through their communication process they could learn new words which help them improve their vocabulary skills. Student 4 shared the instances where she was able to use internet to learn new words. She revealed that:

Yes ma'am, most of the students now share their opinions online. Based on their opinions, I sometimes

encountered new words, and then there were times when I used those words that I read online whenever I wanted to express my opinion. Especially those highlighted words. (IDI_P004_24-31)

Confirmed High Rating of Reading Motivation of the Students. The internalized reason for reading which pushes students to learn an English language are affected by several factors. Hence, most of the respondents voiced their experiences on what motivates them to engage in reading activity. Student 2 highlighted that being a good reader motivates her to engage more time on reading different materials. With conviction, she said:

Usually, based on my observation of my environment before the pandemic, my classmates in our section are good readers because if my teacher asks a question regarding the reading activities, they can answer it. I've even got a challenge with myself to read, and I need to be a good reader to understand the discussions with the teacher and to widen my comprehension. (IDI_P002_97-112)

Confirmed High Rating of Parental Involvement. In this study, participants believed that the emotional and physical presence of the parents and being consistently presence for the students in times of their academic needs encouraged them to do well English class.

During FGD, Student 5 shared her experiences with her parents. With a smile, she said:

Yes ma'am, I will agree, because if there are activities in school they will really attend, it is either my mother or my father. It depends on who is available with them. If my mother is busy, my father will be the one to attend. If my father is busy, my mother will be the one to attend. Sometimes, if there is a

parent's day celebration, both will attend. (FGD_P005_246-258)

Standpoints of the Participants on the Quantitative Results

Shown in Table 6 are the standpoints of the participants on the mediating effect of parental involvement on the relationship between vocabulary learning strategies and reading motivation of the students. The table further reveals essential themes: confirmed relationship between vocabulary learning strategies and reading motivation and confirmed mediating effect of parental involvement on the relationship between vocabulary learning strategies and reading motivation of the students.

Table 6

Standpoints of the Participants on the Mediating Effect of Parental Involvement on the Relationship Between Vocabulary Learning Strategy and Reading Motivation of the Students

Mediating Model	Essential Theme	Typical Reason
Significant Relationship of Vocabulary Learning Strategies and Reading Motivation of the Students	Confirmed Relationship of Vocabulary Learning Strategy and Reading Motivation	Utilization of vocabulary learning strategies promote independent learning resulting to enhance reading motivation. Self-directedness increase students motivation in learning. Students using vocabulary learning strategy are willing to read.
Significance on the Mediating	Confirmed Mediating	The mediating model is reliable.

Effect of Parental Involvement on the Relationship Between Vocabulary Learning Strategies and Reading Motivation of the Students

Effect of Parental Involvement on the Relationship Between Vocabulary Learning Strategies and Reading Motivation of the Students

The influence of vocabulary learning strategy on the reading motivation can be enhanced through parental involvement.

In the absence of parental involvement, vocabulary learning strategy can contribute to student's reading motivation but to a lesser degree.

The intervention of parental involvement increases student's interest to use vocabulary learning strategies to improve reading motivation.

Confirmed Relationship between Vocabulary Learning Strategies and Reading Motivation. The participants of this study confirmed the relationship between vocabulary learning strategy and reading motivation of the students as an essential theme, the following are the shared narratives of the participants: Student 2 expressed his view on the model particularly the relationship between vocabulary learning strategy and reading motivation of the students. In his word he said:

I also agree, ma'am, for me to learn to be on my own without relying on my parents. That way, if there is no one who will teach you, you will shine even more. You will improve yourself without relying on anyone.
(IDI_P002_468-474)

Confirmed Mediating Effect of Parental Involvement on the Relationship between Vocabulary Learning Strategies and Reading Motivation. Given the standpoints of the participants from the in-depth interview and focus group discussion, the participants confirmed the mediating effect of parental involvement on the relationship between vocabulary learning strategies and reading motivation of the students. The following are the shared views of the participants.

Yes, ma'am, I agree that we really need the support of our parents since they serve as my motivation. When it comes to my studies, it is already my hobby to ask them if I have read something. If I find a word which I didn't understand, my mother will tell me you should do this for you to understand it. That is why I feel motivated to learn and read.
 IDI_P001_522-531

Data Integration of Quantitative and Qualitative Results

Illustrated in Table 7 is the joint display of data and information gathered for both quantitative and qualitative results or mixed methods design, specifically the explanatory sequential approach.

Table 7
Joint Display of Quantitative and Qualitative Results

Research Area	Quantitative Results	Quantitative Results	Nature of Integration
Level of Vocabulary Learning Strategy, Reading Motivation, & Parental	-Vocabulary Learning Strategy of the Students acquired a mean score of 3.72 described as high. This	-Participants confirmed the high rating of vocabulary learning strategy in quantitative	-Connecting, merging (Confirmation)

<p>Involvement</p> <p>1.1. Level of Vocabulary Learning Strategy</p>	<p>means that vocabulary learning strategy is oftentimes manifested. (Refer to Table 1)</p>	<p>phase. Results of IDI and FGD indicates that students are using internet to search meaning for unfamiliar words.</p> <p>(Refer to Table 5)</p>	
<p>1.2 Level of Reading Motivation</p>	<p>-Reading motivation of the students acquired a mean score of 3.57 described as high. This means that reading motivation is oftentimes observed. (Refer to Table 1)</p>	<p>-Participants confirmed the high rating of reading motivation in quantitative phase. Results of IDI and FGD indicates that the availability of reading materials enhance their reading motivation. (Refer to Table 5)</p>	<p>-Connecting, merging (Confirmation)</p>

1.3 Level of Parental Involvement	<p>-Parental involvement of the students acquired a mean score of 3.57 described as high. This means that reading motivation is oftentimes evident. (Refer to Table 1)</p>	<p>-Participants confirmed the high rating of parental involvement in quantitative phase. Results of IDI and FGD indicates that parents continually communicated with teachers regarding students academic status. (Refer to Table 5)</p>	<p>-Connecting, merging (Confirmation)</p>
<p>2. Mediating Model</p> <p>2.1 Relationship Between Vocabulary Learning Strategy and Reading Motivation</p>	<p>There is a significant relationship Vocabulary Learning Strategy and Reading Motivation ($r=0.680, p<0.05$). (Refer to Table 2)</p>	<p>-Participants have agreement on the support of the relationship between Vocabulary Learning Strategy and Reading</p>	<p>-Connecting, merging (Confirmation)</p>

		Motivation. (Refer to Table 6)	
2.2. Mediating effect of parental involvement in the relationship between vocabulary learning strategy and reading motivation	- Significant ($p < 0.05$) partial mediating effect of parental involvement on the relationship between vocabulary learning strategy and reading motivation ($z =$ 6.48) (Refer Computation in Figure 5)	- The majority of informants/ participants expressed their positive ideas on the support of TBLT to ELE in influencing ATLEL. (Refer to Table 6)	-Connecting, merging (Confirmation)

Level of Students’ Reading Motivation. For the level of reading motivation, it is revealed that the mean of the eleven indicators ranges from 2.32 to 3.78 which denotes high level of reading motivation. The qualitative data confirms the quantitative data as the informant showed positive response on the following domains: availability of reading materials, positive self-concept, getting high grades, and social interaction. Thus, the nature of integration is connecting-merging-confirmation.

Level of Parental Involvement. For the status of parental involvement, it is shown that parental involvement acquired an overall mean of 3.57 which indicates a level of parental involvement. The qualitative data confirms the quantitative data as the informants showed the presence of parental involvement in the core ideas or

typical reasons generated from their responses, hence connecting-merging-confirmation is the nature of integration.

Relationship between Vocabulary Learning Strategy and Reading Motivation of the Students. The significant relationship between the independent variable with the dependent variable which is confirmed by the data gathered in the qualitative phase of the study. The participants express their ideas on the importance of the vocabulary learning strategy to students' reading motivation, hence connecting-merging-confirmation is the nature of integration.

On the mediating Effect of Parental Involvement on the Relationship Between Vocabulary Learning Strategy and Reading Motivation of the Students. There is partial mediation of parental involvement on the relationship between vocabulary learning strategy and reading motivation of the students. The qualitative data confirms the quantitative data since the informants expressed their ideas on the help of parental involvement vocabulary learning strategy influencing students' reading motivation.

DISCUSSION

The level of vocabulary learning strategy acquired a high descriptive rating. This finding supports the view of Wilsom and Conyer (2018) that vocabulary learning strategies could serve as learning tools for students in order for them to to acquire vocabulary and make them become responsible for their own learning.

The level of reading motivation obtained a high descriptive rating. This finding is congruent to the view of Hussain et al. (2020) that motivation is a factor that pushes students to engage in reading activity. It plays a crucial role in learning achievement. Mahadi and Jafari (2012) noted that applying several motivational strategies in learning would bring positive results on students. Likewise, Alhamdu (2015) pointed out that motivation is considered important in reading engagement that affects results of reading achievement and school success.

The parental involvement among the schools in Region XI acquired high descriptive rating. This finding is congruent to the result of the study of Durisic and Bunijevac (2017) that parental

academic support is an effective tool that encourage children's and adolescents' achievement in many ways.

There is a significant relationship found between vocabulary learning strategy and reading motivation of the students. This suggests that a change in the status of between vocabulary learning strategy may affect the reading motivation of the students. This conforms the proposition of Wong (2015) that vocabulary learning strategy is an important factor to reading motivation and comprehension development since readers need to learn the meaning of unfamiliar words to enable them to fully understand the plot of a story or to better comprehend what they read.

There is a significant relationship between vocabulary learning strategy and parental involvement. Lastly, parental involvement has a significant relationship with the reading motivation of the students. Wang and Sheikh-Khalil (2014) found that parental involvement is associated with motivation to read, while Jung and Zhang (2016) found indirect effects of parental involvement on academic achievement through educational aspiration. Also, Núñez et al. (2015) found both direct and indirect effects of parental involvement in homework at different school levels and found different associations according to different school levels.

Through medgraph (Jose, 2003) the mediation model was generated. The model denotes that vocabulary learning strategy influence students' reading motivation with the inclusion of parental involvement. However, if parental involvement is removed, there is still a relationship but not that strong. Therefore, this is partial mediation since the mediating variable, which is parental involvement is only responsible for a part of the relationship between vocabulary learning strategy and reading motivation. Since, it is only partial mediation that took place, it could not be concluded that parental involvement is the main factor that contributed on the influence of vocabulary learning strategy on the reading motivation of the students. As to the claim of Jose (2003), full mediation rarely happens, thus, the findings of the current study is reasonable.

The participants confirmed the high rating for vocabulary learning strategy as acquired in the quantitative results of the study. According to them, the use of internet and online dictionaries allows them to search meanings for the unfamiliar words, thus, increasing their vocabulary. With these affirmations of the participants on the status of their vocabulary learning strategy, it could be said that these

practices describes high level of vocabulary learning strategy since it agrees to the views of various authors (de la Garza & Harris, 2017; Dörnyei & Kubanyiova, 2014; Kalmari, 2017) that vocabulary learning strategy could help students to become autonomous learners so that students will take more responsibility for their learning.

The high rating of student's reading motivation in the quantitative results is supported by the participants in relation to positive self-concept, availability of materials, teacher's assistance, grade factors, and social interaction. The students highly agreed that they read English language just as the form of their responsibilities in reading classes. The above-mentioned perceptions characterized high level of reading motivation since it agrees to the view of several authors (Alhamdu, 2015; Carroll & Fox, 2017; Hussain et al., 2020; Lai, 2013) that motivated students tend to engage in learning activities that help them to learn and achieve the learning goal because they will pay attention and use the time effectively during teaching and learning in the class.

The high rating of parental involvement in the quantitative results is supported by the participants' narratives acquired based in-depth interview and focus group discussion. These views describe high level of parental involvement since it is parallel to the views of various authors (Chen, 2021; Delgado, 2020; Durisic & Bunijevac, 2017; Langevine, 2020) that parental involvement is an effective tool that encourage children's and adolescents' achievement in many ways.

During the in-depth interview and focus group discussion the informants confirmed the quantitative result that confirmed relationship between vocabulary learning strategy could influence the reading motivation of the students. The result supports the anchored proposition by Wong (2015) that vocabulary learning strategy is an important factor to reading motivation and comprehension development since readers need to learn the meaning of unfamiliar words to enable them to fully understand the plot of a story or to better comprehend what they read.

The participants' standpoints confirmed the mediating effect of parental involvement on the relationship between vocabulary learning strategy and reading motivation of the students. This view is congruent to the view of Kalaycı and Öz (2018) that students with involved parents are more likely to have better strategy in learning new words, higher grades and test scores, attend school regularly,

have better social skills, show improved behavior, and adapt well to school.

CONCLUSIONS

The high level of reading motivation of the students indicates that students oftentimes felt the push factor that leads them to reading activity. For them, the availability of reading materials and assistance of teachers enhance their reading motivation. The high level of parental involvement indicates that the emotional and physical presence of the parents, and being consistently dependable for the students in times of their academic needs is oftentimes evident. This shows that parental involvement is an effective tool that encourages children's and adolescents' achievement in many ways. The result showed that there is a significant relationship between vocabulary learning strategy and reading motivation of the students. This means that a change in vocabulary learning strategy corresponds to a change in reading motivation of the students. Parental involvement significantly and partially mediates the relationship between vocabulary learning strategy and reading motivation of the students. Since it is partial mediation, it could not be claimed that parental involvement is the reason of the relationship between vocabulary learning strategy and reading motivation of the students. This implies that parental involvement is only one of the reasons. The quantitative results were further substantiated by essential themes that emerged during the thematic analysis of the qualitative data, generally confirming the results of the quantitative aspects of the study. The confirmation of the quantitative findings by qualitative results during the integration of the results provided concrete evidence of essential themes that emerged in both phases. This also provided an in-depth understanding of the students' reading motivation with essential themes that emerged. The themes identified helped strengthen and explain the profoundness of the level of the variables under the study as well as the mediating role of parental involvement on the relationship between vocabulary learning strategy and reading motivation of the students.

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Human Resource Practices and Work Environment As Contributory Variables to Employee Morale

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ABSTRACT

This study was a response to the apparent dearth of studies into human resource practices and work environments as predictors of employee morale among multi-purpose cooperatives in Region 11, Philippines. Employee morale is crucial for the overall success and well-being of an organization. It refers to the level of enthusiasm, satisfaction, and overall emotional well-being of employees in the workplace. Studying the influence of human resource practices and work environments on employee morale in cooperatives is beneficial not just to the participants and the cooperatives but also to society as a whole, since cooperatives are practical vehicles for promoting self-reliance and harnessing people's power towards the attainment of economic development and social justice. With the use of survey questionnaires and appropriate statistical methods, findings showed that the level of human resource practices and the work environment were very high, while employee morale was at a high level. Results further exhibited that human resource practices and the work environment in their individual capacities can significantly influence employee morale. Additionally, the results showed that the work environment best predicts employee morale.

KEYWORDS: Business management, employee morale, human resource practices, work environment, multi-purpose cooperative, quantitative, Philippines

INTRODUCTION

Employee morale is a key factor in institutional success (Noor & Ampornstira, 2019). Employee morale plays a major role in setting a healthy work place and achieving high productivity (Fard et al., 2010). Employee morale is important in an organization since it improves productivity, performance, creativity, reduces number of leave days, pays higher attention, provides safe workplace and improves quality of work (Millet, 2010).

Low morale can gradually destroy employees' commitment, adversely affect the product or service they offer, and alienate the clients and customers they serve (Millett, 2010). Blankenship (2014) reported that failure to improve morale issues in the workplace may result in the following: decreased productivity, high rates of absenteeism and conflict, employee turnover, loss of competitive advantage in the market, etc. Lee et al., (2012) found that low morale is one of the biggest trends and issues of the Illinois Park and Recreation Association (IPRA) members. Low productivity and loss of competitiveness are outcomes of low morale and may sometimes lead to further undesired symptoms such as absenteeism and sabotage (Shaban et al., 2017).

Therefore, addressing the employee morale of the multipurpose cooperatives can lead to its organizational success and to the attainment of its overall purpose of being a practical vehicle for promoting self-reliance and harnessing people power towards the attainment of economic development and social justice (Republic Act 6938, also known as the Cooperative Code of the Philippines) which will not only be beneficial to the participants, but also to the society as a whole.

The dearth of published studies on the influence of human resource practices and work environments on the employee morale of multi-purpose cooperatives in Region XI prompted the researcher to conduct the study. This is a source for investigating the relationship between human resource practices, work environment, and employee morale in any multi-purpose cooperative.

Study Objective. The objective of the study was to determine the influence of human resource practices and work environments on the employee morale of multi-purpose cooperatives in Region XI.

METHODS

Research Design. The researcher used a correlational research method to determine any relationship between human resource practices and employee morale; and between work environment and employee morale. A correlational research design describes and measures the degree or association (or relationship) between two or more variables or sets of scores (Creswell, 2014). A correlational research design allows for evaluation of variables, which may affect the outcome.

Research Locale. The study was conducted in different Cooperative Development Authority (CDA)- registered multi-purpose cooperatives in Davao region, in municipalities and cities of the said region. Specifically, this study was conducted in 10 multi-purpose cooperatives in Region XI.

Sampling and Respondents of the Study. There were 400 regular employees of multi-purpose cooperatives in Region XI who participated in this study. These employees came from different multi- purpose cooperative that are registered with the CDA. The sample size was based on the maximum sample of 400 using Slovin's formula with a margin of error of .05. Purposive sampling was employed to select the research participant. This method is a sampling technique in which researcher relies on his personal judgement when choosing employees of population to participate in the study (Fraenkel & Wallen, 2010).

Research Instrument. In order to generate the quantitative data, the researcher used a set of survey questionnaire. It was adopted from the studies of Parilla (2013), Manu (2015), and Turner (2013). The survey questionnaires consist of four parts which were answered by the employees of multi-purpose cooperatives in Region XI being the target respondents of this study.

Part I focuses on the demographic profile of the respondents; Part II, focuses on the human resource practices; Part III focuses on the work environment; Part IV focuses on the employee morale. Quratulain and Khan (2015) supported the use of surveys responded by participants to measure variables in a correlational research design. They stated that a quantitative method incorporates scientific methods measured numerically to explain social phenomena.

Furthermore, a pilot test was conducted to test the validity of the instrument.

Data Gathering Procedure. After obtaining the necessary approvals, the researcher made use of enumerators to coordinate with the supervisors or heads of the office in securing an informed consent from the participants as well as during the administration of the survey questionnaires. Questions and clarifications related to the survey were entertained. The survey questionnaires were administered personally by the enumerators. The respondents were given enough time to answer the survey questionnaires on their vacant period. The answered survey questionnaires were retrieved by the enumerators for analysis.

Data Analysis. The researcher analyzed and interpreted the data using the identified statistical tools: mean, standard deviation, Pearson-r, regression analysis in order to determine the contribution of human resource practices and work environment towards employee morale.

Ethical Consideration. To ensure that the respondents were protected in this study, it was submitted to the University of Immaculate Conception Research Ethics Committee (UIC-REC) for full board review on the ethical aspects of the investigation. A strict adherence to the principles of respect for persons, beneficence and justice were considered. Specifically, this study sought to abide with the 10 dimensions of research ethics that include social value, informed consent, vulnerability issues, risk-benefit ratio, privacy and confidentiality of information, justice, transparency, qualification of the researchers, adequacy of facilities and community involvement.

RESULTS AND DISCUSION

Table 1 reveals the status of human resource practices through descriptive statistics of the means and standard deviations. The overall human resource practices of multi-purpose cooperatives in Region XI, in terms of job orientation, compensation and fringe benefits, working condition and motivation, as evaluated by respondents, got a very high overall mean of 4.49. This indicates that human resource practices in multi- purpose cooperatives in Region XI are very highly practiced. In addition, the standard deviation of human resource practices is 0.43 which denotes that there is consistency of responses and homogeneity of results. Table 1 also shows that *Work Environment* has a *very high* descriptive level with a total mean score of 4.32. This means that the *work environment* in multi-purpose cooperatives, as rated by the respondents, is *highly conducive*. In addition, the standard deviation of work environment is 0.49 which denotes that there is consistency of responses and homogeneity of results.

Table 1.
Status of Human Resource Practices, Work Environment and Employee Morale

Latent Variables / Observed Variables	SD	Mean	Descriptive Level
Human Resource Practices	0.43	4.49	Very high
Job Orientation	0.47	4.60	Very high
<i>Compensation and Fringe Benefits</i>	0.59	4.40	Very high
<i>Working Condition</i>	0.53	4.42	Very high
<i>Motivation</i>	0.53	4.52	Very high
Work Environment	0.49	4.32	Very high
Physical Work Environment	0.51	4.32	Very high
Psychological Work Environment	0.55	4.34	Very high
Social Work Environment	0.53	4.35	Very high
Administrative Work Environment	0.58	4.27	Very high
Employee Morale	0.53	4.19	High
Workload	0.55	4.17	High
Employee Recognition	0.70	4.16	High
Staff Camaraderie	0.68	4.34	Very high
Staff Professional Development	0.69	4.30	Very high
Residential Climate	0.66	4.23	Very high
Leadership Style of the Supervisor	0.62	4.30	Very high
Stress	0.75	3.73	High
Job Satisfaction	0.62	4.26	Very high

It is also presented in Table 1 that *Employee Morale* has a *high* descriptive level with an overall mean score of 4.19. This means that the employee morale in multi-purpose cooperatives in Region XI, as rated by the respondents, is positive. In addition, the standard deviation of *Employee Morale* is 0.53 which denotes that there is consistency of responses and homogeneity of results.

Table 2.
Correlation between Human Resource Practices, Work Environment and Employee Morale

Variables Paired with Employee Morale	r	p-value	Remarks
Human resource practices	.70	.00	Significant
Work Environment	.82	.00	Significant

Table 2 shows the correlation between human resource practices and employee morale and between work environment and employee morale. Correlation is necessary as prelude to regression needed to determine the influence aspect. It can be observed that there is a significant correlation between human resources practices and employee morale and between work environment and employee morale ($p < .05$) with r value ranging from .70 to .82. The result therefore warrants the use of regression analysis.

In Table 3, the multiple regression analysis on the influence of human resource practices and work environment on employee morale are presented. This is to describe the statistical relationship between the two independent variables and the dependent variable.

It is also presented in Table 3 that the human resource practices and work environment on its individual capacity can significantly influence the employee morale ($p < .05$). The beta coefficient implies that a unit increase in human resource practices can lead to 0.15 increase in employee morale. Also, for every unit increase in work environment can result to 0.70 increase in employee morale.

Table 3. Multiple Regression Analysis on the Influencers of Human Resource Practices and Work Environment on Employee Morale

Variables	Standard Coefficient Beta	p-value	t	Remarks
Human resource practices	.15	.00	3.51	significant
Work Environment	.70	.00	16.24	significant
<hr/>				
r ² = .683				
F= 448.67				
p= .00				

As a model, the r² of .683 connotes that 68.3% of the variation of the employee morale can be attributed to the combined influence of human resource practices and work environment. This result implies that other variables equivalent to 31.7% that may significantly influence employee morale was not covered in this study.

Result shows a very high level of human resource practices with the indicators job orientation, compensation and fringe benefits, working condition, and motivation. This means that indicators of this variable are very highly practiced in multi-purpose cooperatives. This supports Jafir (2012) findings that HR Practices results in different outcomes like improved employee morale.

This result is also similar to the idea of Anand and Balu (2018) that human resource practices have a huge impact on employee morale. Additionally, the study of Jacobs (2014) revealed that if a manager is trying to increase job satisfaction, job performance, and ultimately employee morale, the most direct approach to doing this is to work on the intrinsic, motivating factors. Giving the employee encouragement and recognition helps him or her feel more valued within the organization, as well as giving them a sense of achievement and responsibility.

Also, the result shows a *very high* level of work environment. This means that the employees of multi-purpose cooperatives strongly agree that the working environment of the multi-purpose cooperatives is highly conducive. Furthermore, this means that the work environment plays an essential role in motivating employees to carry out their assigned tasks, as employees operating surroundings significantly influence their productivity and overall job satisfaction.

The result supports the study of Arunchand and Ramanathan (2013), which found that employee morale describes the overall outlook, attitude, satisfaction, and confidence that employees feel at work. When employees are positive about their work environment and believe that they can meet their most important needs at work, their employee morale gets boosted.

Moreover, the result shows a high level of employee morale. This means that the employees agree that their perception of the multi-purpose cooperative is positive. Furthermore, it means that when an employee feels good and satisfied about his or her work environment, he or she will have high employee morale. These findings are consistent with those of Leblebici (2012), who indicated that a positive atmosphere and comfortable physical environment in workplaces are important elements in maintaining and improving employee morale.

The results of the study further revealed that the work environment is the best predictor of employee morale, as evidenced by the statistical results. This implies that employee morale is high if they are provided with a good working environment. The working environment includes the physical, psychological, social, and administrative aspects of the work environment.

The findings are in consonance with the study of Raziq and Maulabakhsh (2014) that businesses need to realize the importance of a good working environment for maximizing the level of job satisfaction, as satisfied employees are reported to have high morale.

CONCLUSIONS

The study participants manifested a very high level of human resource practices and work environment, and a high level of

employee morale. This indicates that employees of multi-purpose cooperatives in Region XI have observed the measures of the variables most of the time. When correlated, it was found that, in aggregate and singular capacity, human resource practices and the work environment had a significant statistical relationship with employee morale. It is likewise concluded that the best predictor of employee morale is the work environment, as supported by the high beta coefficient value.

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Equity Drivers, Service Quality, And In-Store Experience of Shoppers

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ABSTRACT

Poor in-store experiences can have a negative impact on customer retention and can lead to negative social media reviews, customer walkouts, and a propensity to purchase products from competitor stores. The study aims to measure the influence of equity drivers and service quality to in-store experience of shoppers in Region XI, Philippines. A five-point Likert scale questionnaire instrument was adapted in the study among 320 shoppers in the five cities of the region including Davao City, Digos City, Panabo City, Tagum City, and Mati City. Purposive sampling with snowball sampling were used in the selection of survey participants. The data were analyzed using Mean, Standard Deviation, Pearson r , and Regression Analysis. The study revealed that the levels of equity drivers, service quality, and in-store experience of shoppers are high, which means that these are evident as experienced by the respondents. Results further showed that equity drivers and service quality in their combined capacity significantly influence in-store experience. Moreover, the findings indicated that service quality was the best predictor of in-store experience. The data revealed a high rating in all the indicators of in- store experience.

KEYWORDS: Business management, service level, retail industry, quantitative design,

INTRODUCTION

Every interaction and experience a customer have with a certain business impacts their desire to continue with or move on from that business. As such, shoppers have an overwhelming amount of choice, so if they had a disappointing experience, they might never go back to that store. Accordingly, they might even tell their friends about the bad experience so that they stop shopping there (Deshwal, 2016). Additionally, poor in-store experiences can have a negative impact on customer retention and can lead to negative social media reviews, customer walkouts and propensity to purchase products from competitor stores. After walking out on a retailer, most customers would not return and would switch to another company after a poor experience. This will result to retailers' financial detriment that affects the success of the business (Garaus & Wagner, 2019). Similarly, the study of Soomro and Kaimkhani (2017) revealed that one of the biggest challenges retailers face is that customers are now more than ever, more demanding and impatient. With more options now available to the modern consumer, they are more likely to find another store if they have an unsatisfactory experience.

On the other hand, the importance of strong customer experience plays a vital role in retailing industry, as best in-store experience has repeatedly been associated with customer commitment and customer engagement behaviors (Roy, et al., 2020). In addition, proper management of in-store experience can turn customers into advocates, upon which long-term competitive advantage and profitability can be achieved.

Today, more companies are realizing that competitive advantage lies in creating an engaging customer experience (Martinez & Casielles, 2017). These factors may affect customer's shopping time, willingness to pay more for the same product, and loyalty to the retailer are without a doubt, the backbone on which retail businesses survive (Jain, et al., 2017). Surviving in the competitive retail industry means increasing employment stability, more job offerings and incentives to the employees.

Service quality represents a critical part of the retail industry. If perceived service matches or exceeds customer expectations, the

customer is satisfied with the service delivery. Further, the current factors necessary to continually exceed consumer expectations are the total in-store experience. It can be achieved by improving the retail store environment to exceed customers' needs by providing a pleasant and exciting in-store experience (Ogruk, 2018). As such, study results indicate that customers' positive perception of in-store service is the main determinant of the in-store customer experience, more so than ambience cues and store display. Moreover, Beidenbach and Marell (2010) also mentioned that when customers perceive that sales personnel are friendly, knowledgeable, conversing, interacting and providing suitable assistance, that is, when sales team performance exceeds expectations, this leads to the creation of a positive and memorable shopping experience.

The researcher focused on the study of in-store experiences of shoppers with equity drivers and service quality as independent variables and uses correlational research method as the research design. Furthermore, the researcher has not come across a similar study that is based specifically on the retail store shoppers in Region XI. On the other hand, the findings of the study will be shared with various groups and organizations most especially with the retail store's management during business forums. The copies of the study will be disseminated to local, national, and international conferences for publication. In addition, the results of the study will be shared with the SME's business owners and managers. A copy of the study will also be given to the library of the University of Immaculate Conception. Further, the findings of the study will be relevant to the retail stores to find strategies that will address issues and challenges. Best in-store experience of shoppers will result to higher profit for retail stores and create to more job opportunities.

METHODS

Research Design. This research is a quantitative study using correlational research design. A correlational research method was used to determine if there is relationship between equity drivers and in-store experience and between service quality and in-store experience. As such, Creswell, (2013) indicated that correlational

research design has used a correlation statistical test to describe and measure the degree of association between two or more variables or sets of scores.

Research Locale. The study was conducted in key cities in Davao region specifically Davao City, Digos City, Panabo City, Tagum City and Mati City. Those cities were considered premier cities in terms of the most number small and medium scale retail stores. The researcher has chosen the five big cities since they have the large number of populations among other cities in the Davao Region. Specifically, this study was conducted to 6 stores in Davao City, Panabo City, Tagum City, Digos City, and Mati City which were chosen based on the following criteria: duly DTI registered, operating for more than three years, and considered small-medium scale enterprise as per DTI index, and offers patronage card to its customers.

Research Respondents and Sampling. 320 shoppers in Region XI rated the survey questionnaire equity drivers, service quality and the in-store experience of shoppers. As cited by Hair, et. al (2013), business studies with population of 300 individuals as participants are acceptable. Moreover, these participants were considered as regular shoppers that possesses patronage card in the retail store. Furthermore, purposive sampling with snowball sampling were used in the selection of survey participants.

Research Instrument. in collecting the data to determine the correlation between equity drivers, service quality, in-store experience, this study administered a survey questionnaire which was distributed by the researcher personally and some thru Google form. The equity drivers questionnaire was adapted from Allaway, Whipple, and Ellinger (2016) and from Alauddin (2016) for the service quality. Additionally, the questionnaire on in-store experience was adapted from the study of Terblanche and Boshoff (2004).

The questionnaire was administered to the shoppers of retailing stores. Information about the demographic profile of the participants was asked. The profile of the participants includes the name of the retail stores where they shopped, sex, age, and educational level.

Part 1 was designed to rate equity drivers which measured by service level, product quality and assortment, programs for rewarding patronage, effort expended in keeping customers, prices, layout, location, and community involvement. Part II focused on the service quality which measured by reliability, responsiveness, assurance, empathy, and tangibles. Part III concentrated on in-store experience which measured by merchandise value, internal store environment, personal interaction, merchandise variety, and complaint handling.

The adapted survey instrument that was used to gather information from the participants was subjected for reliability and validity tests. Survey instrument was validated by internal and external validators for refinement and to ensure that all the items in the questionnaire are appropriate. Further, survey questionnaire underwent pilot testing to ensure its reliability and validity.

Data Collection. the procedure of collecting data started from getting an approval from the University of Immaculate Conception Graduate School Dean. After which sought approval from the University of Immaculate Conception Research, Publication, and Innovative Center. Then, sent letter to DTI to ask for the confirmation that five selected places of the study were considered premier cities in terms of the number of retail stores and list of the medium and large- scale retail stores. Afterwards, consent letters were sent by the researcher to the retail stores management to ask permission to include them in her study. Additionally, the researcher tapped gatekeepers or enumerators in every city to help her identify respondents. Enumerators used snowball sampling as an approach to help them in the data collection. Further, the researcher sent letter of request to the respondents through email to participate in this study by answering the questionnaire in google form. The respondents answered the four (4) parts of the survey questionnaire to measure the influence of equity drivers and service quality to in-store experience of shoppers in Davao region. There were three weeks period considering that the questionnaires were sent through email since its pandemic and the internet connectivity was also be given a consideration. Further, after the survey was completed the data from the respondents were forwarded to the statistician for the data

analysis. However, personal distribution of the questionnaires was done following the proper protocol to respondents within Davao City. For the Face-to-Face data gathering, the researcher provided alcohols and ballpens to the participants to avoid the spread of the virus. Also, the researcher made sure to follow the Inter Agency Task Force protocols including the proper wearing of face masks and social distancing to avoid the risk of the Covid 19. Additionally, any questions or clarifications on the questionnaires were entertained. The answered questionnaires were retrieved, collated, tabulated, and subjected to statistical treatment.

RESULTS AND DISCUSSION

This section dealt with the result of the quantitative data gathered from the survey administered among retail store customers. These includes the presentation of the levels of equity drivers, service quality, and in-store experience of shoppers in retail stores, correlation of the variables and regression analysis results.

STATUS OF EQUITY DRIVERS, SERVICE QUALITY, AND IN-STORE EXPERIENCE

Presented in Table 1 is the status of equity drivers, service quality, and in- store experience of shoppers in Davao region. The table shows that the overall mean of equity drivers, service quality, and in-store experience are 4.08, 4.01, and 4.05, respectively with a descriptive level of high.

Table 1. Status of Equity Drivers, Service Quality, and In-store Experience

Latent Variables / Observed Variables	Standard Deviation	Mean	Descriptive Level
Equity Drivers	0.50	4.08	High
Service Level	0.59	4.14	High
Product Quality and Assortment	0.56	4.07	High
Programs for Rewarding Patronage	0.54	4.13	High
Effort Expended in Keeping Customers	0.80	4.14	High
Prices	0.64	4.11	High
Layout	0.67	4.00	High
Location	0.65	4.27	Very High
Community Involvement	0.79	3.76	High
Service Quality	0.54	4.01	High
Reliability	0.64	3.95	High
Responsiveness	0.60	4.03	High
Assurance	0.58	4.09	High
Empathy	0.67	4.02	High
Tangibles	0.57	3.95	High
In-store Experience	0.56	4.05	High
Merchandise Value	0.60	4.15	High
Internal Store Environment	0.65	3.90	High
Personal Interaction	0.66	4.01	High
Merchandise Variety	0.65	4.11	High
Complaint Handling	0.68	4.09	High

All had a descriptive level of high and had a standard deviation ranging from 0.50 to 0.80 which means less than 1, the typical standard deviation for Likert scale and denotes consistency of responses among 320 respondents.

For the first independent variable which is equity drivers, location has obtained the highest mean rating of 4.27 which means equity drivers are evident at all times. Further, other indicators service level, effort expended in keeping customers, programs for rewarding patronage, prices, product quality and assortment, layout, and community involvement have incurred means of 4.14, 4.14, 4.13, 4.11, 4.07, 4.00, and 3.76 respectively, and are rated as high which implies that equity drivers are evident most of the times.

Moreover, in the second independent variable which is service quality, assurance has obtained the highest rating of 4.09 among the five domains which connotes that service quality is often manifested. Additionally, the indicators responsiveness, empathy, reliability, and tangibles have gained a mean rating of 4.03, 4.02, 3.95, and 3.95 respectively which is interpreted as service quality is often times manifested.

Further, for the dependent variable which focuses on the in-

store experience of shoppers, the indicator merchandise value has the highest mean of 4.15 and is rated as high which connotes that in-store experience is often satisfactory. Hence, all of the indicators internal store environment, personal interaction, merchandise variety, and complaint handling have a mean rating of 4.11, 4.09, 4.01, and 3.90 respectively which are identified as high which implies that in- store experience is often satisfactory.

In addition, the findings of the study shows a very high level of equity drivers in terms of location which means that equity drivers are evident at all times. As such, indicators service level, product quality and assortment, programs for rewarding patronage, effort expended in keeping customers, prices, layout, and community involvement got a high level which implies that these strategies are evident most of the times when shoppers go to retail stores.

Moreover, for service quality, the result shows an overall high level of service quality in terms of reliability, responsiveness, assurance, empathy, and tangibles which implies that service quality is often times manifested when shoppers go to retail store.

Further, the findings of the study show an overall high level of in-store experience in terms of merchandise value, internal store environment, personal interaction, merchandise variety, and complaint handling which implies that in-store experience is often satisfactory when shoppers go to retail store.

SIGNIFICANCE ON SINGULAR AND COMBINED INFLUENCE OF EQUITY DRIVERS AND SERVICE QUALITY ON IN-STORE EXPERIENCE

The influence of equity drivers and service quality of retail stores is obtained through the regression analysis. However, before the conduct of regression analysis, the need for the correlation analysis is mandatory; hence the correlation is reflected in Table 2. Based on the results, there is a significant relationship between equity drivers and in-store experience of shoppers ($r = 0.873$, $p < 0.05$).

Subsequently, service quality is significantly related to in-

Table 2

Correlations between Variables

Variables	r-value	p-value	Sig. Level
Equity Drivers & In-Store Experience	.873*	.000	Significant
Service Quality & In-Store Experience	.885*	.000	Significant
Equity Drivers & Service Quality	.853*	.000	Significant

store experience of shoppers as in its r – vale 0.885 ($p < 0.05$).

The significance of the relationship of equity drivers and service quality to in-store experience allow the use of regression analysis.

Influencers of In-Store Experience

Shown in table 3 the multiple regression analysis on the influence of the independent variables: equity drivers and service quality on in-experience of shoppers in retail stores in Davao region. The overall p-value ($p < 0.05$) denotes that both equity drivers and service quality can influence of in-store experience of shoppers. The B value of the independent variable: equity drivers and service quality are 0.485 and 0.540 respectively. This means that if the equity drivers and service quality increases to one point, in-store experience also increases by 0.485 and 0.540 beta regression analysis respectively. Between the two, service quality indicate a higher influence on in- store experience compared to equity drivers.

Lastly, the coefficient of determination of r-squared value is also shown in the table which is 0.835 or 83.50% of the in-store experience is explained by the independent variables, equity drivers and service quality.

Table 3
Regression Analysis on the Influence of Equity Drivers and Service Quality on In-Store Experience

		In-Store Experience			
(Indicators)		B	p	T	Sig.
(Constant)		-.092		-.878	.380
Equity Drivers		.485	.033	.061	.000
Service Quality		.540	.516	.981	.000
<i>R.</i>	.914				
<i>R</i> ²	.835				
F	825.215				
<i>p</i>	.000				

**p*<.05

The study revealed that service quality is the better predictor of in-store experience as evidenced by the statistical results. This indicates that service quality affects the in-store experience of shoppers in retail stores. The studies of Beidenbach and Marell (2010) stated that customers’ positive perception of in-store service is the main determinant of the in-store customer experience, more so than ambience cues and store display. Additionally, when customers perceive that sales personnel are friendly, knowledgeable,

conversing, interacting and providing suitable assistance, that is, when sales team performance exceeds expectations, this leads to the creation of a positive and memorable shopping experience (Ogruk, et al., 2018). Furthermore, Motwani (2013) stressed that service quality has long been accepted as the most basic marketing tool for retailers to differentiate their retail offers, create competitive advantage and to enhance the customers' shopping experience.

CONCLUSIONS

All the domains of equity drivers, service quality, and in-store experience are evident in the retail stores. This is evidence on a high rating for the equity drivers, service quality, and in-store experience obtained from the respondents.

Statistical results have also revealed that service quality is the domain that better influence in-store experience as supported by high beta coefficient value. Additionally, all the domains: service level, product quality and assortment, programs for rewarding patronage, effort expended in keeping customers, prices, layout, location, and community involvement have a significant relationship with all the domains in in-store experience. It can be concluded that the service quality provided by the store employees are relevant to enhance the in-store experience of shoppers.

On the link of equity drivers and service quality with in-store experience, the shoppers revealed the importance of equity drivers and service quality that shape in-store experience. The participants were affirmative on the influence of their equity drivers and service quality experiences on in-store experience. They verbalized the importance of the two variables in shaping the in-store experience.

Finally, the researcher concludes that the theory and propositions are supported by the results of the study. The Service Quality Theory of Hirogaki (2014) revealed that level of customer service has been observed to significantly influence store loyalty and customer satisfaction. Consequently, Azhagan and Napoleon, (2017) mentioned that it also intricate set of factors that results in how the customers feel about the store. It is built through the experience of the customers that was obtained while shopping in a retail store. This image motivates the customers to buy or even

make them enter a store. As such, studies have shown that an increase or the existence of good service quality have positively affected the retail store.

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