

Reading Competencies of Learners

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Abstract

This study aimed to assess learners' reading competence and its impact on their academic performance at Mabini Central Elementary School during the School Year 2025–2026 in one of the districts in the Negros Island Region. This study aligns with Sustainable Development Goal 4: Quality Education, which promotes inclusive and equitable education. To determine the 114 respondents from the two sections, purposive sampling was used through a standard questionnaire. Frequency count, percentage, independent-samples t-test, and Pearson's r were used as statistical tools, with the Statistical Package for the Social Sciences (SPSS) software utilized to analyze the data. The results revealed that the majority of respondents were female learners, had fewer siblings, had parents with lower educational attainment, and came from families with lower monthly income. In terms of reading competence, learners demonstrated an independent level, with Literal Comprehension obtaining the highest performance among the four areas assessed. The learners' reading competence when grouped according to sex, number of siblings, parents' educational attainment, and family monthly income remained at an independent level, with Literal Comprehension obtaining the highest mean among the areas. Furthermore, the comparative analysis showed that that Literal Comprehension, Critical and Evaluative Reading, and Application and Integration was significant only to the number of siblings. With these results of the study could offer valuable insights to school leaders, educators, parents, and other individuals involved in education, assisting them in designing programs based on evidence that help improve students' reading competencies.

Keywords: *Reading Competence, Reading Comprehension, and Reading Skills*

Introduction:**Nature of the Problem**

Reading is a fundamental skill that supports learners' academic success and overall development by enabling them to understand texts, interpret information, and apply knowledge across subject areas. Strong reading competence helps learners follow instructions, analyze content, and accomplish academic tasks, while weak comprehension may hinder lesson understanding and academic performance. In Grade 4, learners transition from learning to read to reading to learn, making reading proficiency increasingly important for acquiring knowledge and preparing for higher-level academic demands. Learners with reading difficulties may struggle with lesson content and assignments, affecting their overall academic achievement (García & Cain, 2022).

Reading literacy is therefore essential to quality education and meaningful classroom participation. However, challenges in reading proficiency remain evident both locally and internationally. Dequita (2024) found that learners demonstrated moderate reading skills in comprehension and fluency, while Philippine results in international assessments such as PISA indicated performance below the global average in reading (OECD, 2023). Despite initiatives such as the National Reading Program, many learners continue to experience difficulties in reading comprehension, emphasizing the need for sustained instructional support and targeted interventions to strengthen elementary learners' reading competence (DepEd, 2023).

This study aligns with Sustainable Development Goal 4: Quality Education, which promotes inclusive and equitable education. This motivated the researcher's observation of reading difficulties among Grade 4 learners in one of the districts in the Negros Island Region, highlighting the need for assessment and intervention. Despite existing research, there is limited localized evidence on how reading competence affects academic performance at this level.

Thus, the study aims to assess learners' reading competencies. The findings are expected to guide a targeted teaching intervention plan to improve literacy and learning outcomes.

Current State of Knowledge

Reading competence is a multidimensional skill involving decoding, vocabulary, fluency, comprehension, inference, evaluation, and the integration of information from written texts (Hoover & Tunmer, 2020; Petscher et al., 2020). It is particularly important among Grade 4 learners as reading increasingly becomes a primary means of acquiring and applying knowledge across subjects. Effective literacy instruction that integrates phonics, vocabulary, comprehension strategies, guided reading, feedback, and independent reading can strengthen learners' reading development and academic performance (Hattie, 2023; Balansag, 2025). Family engagement and supportive learning environments likewise contribute to literacy development by providing meaningful opportunities for reading and learning (Epstein, 2019; Ahmed et al., 2025).

Reading comprehension encompasses several levels of understanding. Literal comprehension enables learners to identify information explicitly presented in texts, while inferential comprehension requires them to draw conclusions and interpret information that is not directly stated (Duke et al., 2021; Afflerbach et al., 2022). Higher-order comprehension involves

evaluating ideas, integrating information, and applying knowledge to new situations (Cain, 2022; OECD, 2023). Research suggests that learners may demonstrate stronger performance in literal and inferential comprehension than in application and integration, emphasizing the need for instructional activities that promote critical thinking, problem-solving, reflection, and evidence-based responses (Duke et al., 2021; Shanahan, 2023).

Learners' reading competence is also influenced by individual and family characteristics. Although girls have generally demonstrated slightly higher reading performance than boys in several large-scale assessments, differences vary according to motivation, text type, and task demands; thus, reading instruction should be responsive to individual needs rather than based on gender assumptions (OECD, 2023; Heilmann et al., 2023; Höli et al., 2025). Family characteristics, including parental education, socioeconomic conditions, number of siblings, and access to learning resources, may also influence literacy development. However, research indicates that parental involvement, shared reading, availability of reading materials, and a literacy-rich home environment can be more influential than demographic characteristics alone (Nag et al., 2024; Ahmed et al., 2025; Zhang et al., 2025).

International and local studies further emphasize the importance of targeted interventions and appropriate instructional approaches. Structured reading rehabilitation, explicit phonics instruction, repeated reading, interactive reading, peer-assisted learning, and technology-supported materials have been associated with improvements in decoding, fluency, vocabulary, and comprehension (Jumao-as et al., 2025; Abelardo, 2024; Salvador & Lumba, 2021; Day et al., 2024). In the Philippine context, reading competence remains a significant concern, with local studies reporting challenges particularly in inferential and critical comprehension (Manalo, 2023; Bohol, 2024; Famoso et al., 2025). These findings highlight the need for structured, differentiated, and assessment-based instruction that addresses learners' specific literacy needs.

The Department of Education recognizes reading as a fundamental competency for learning across the curriculum and promotes assessment-based instruction to identify learners' strengths and areas for improvement (DepEd, 2020, 2023, 2024). Tools such as the Philippine Informal Reading Inventory (Phil-IRI) provide information on learners' word recognition, fluency, and comprehension, which can guide teachers in planning appropriate interventions (DepEd, 2018). Local research also shows that parental support, active participation in reading activities, suitable instructional materials, and positive home learning environments contribute to better reading performance (De Ramos, 2022; Delos Reyes, 2022; Acheron, 2024). Thus, collaboration between schools and families is essential in strengthening learners' literacy development.

Guanzon et al. (2024), in their study *Creating Language-Rich Environments: The Influence of Transformational Leadership in Early Childhood Education*, examined the role of educational leadership in promoting literacy development among young learners through an integrative literature review. The study emphasized that transformational leadership can support literacy instruction by encouraging innovative teaching strategies, teacher professional development, family engagement, and the creation of language-rich learning environments. It further highlighted the importance of differentiated instruction and meaningful literacy activities in addressing learners' diverse developmental needs. These insights are relevant to the present

study because they establish the importance of supportive instructional environments in developing foundational reading skills. However, the study focused on educational leadership and literacy development rather than directly measuring learners' competencies in specific reading comprehension domains.

Similarly, Ducay et al. (2025), in their study English Language Learning Anxiety and Self-Efficacy of Learners in Modular Learning, investigated English language learning anxiety and self-efficacy among 262 Grade 8 learners in Western Visayas. Using a descriptive-correlational design, the researchers found that learners experienced moderate language learning anxiety and low self-efficacy, with a significant negative relationship between the two variables. These findings underscore the importance of considering learners' confidence and emotional experiences when developing language-learning support programs. Although the study did not directly assess reading comprehension, it provides supplementary evidence that language learning involves factors beyond instructional materials and academic tasks. Taken together, the two studies highlight the importance of supportive learning environments and learner-related factors, while the present investigation addresses a more specific gap by assessing elementary learners' reading competencies across distinct comprehension domains and examining differences according to their demographic characteristics.

Overall, the literature establishes that reading competence is shaped by the interaction of foundational reading skills, higher-order comprehension abilities, instructional quality, learner characteristics, family support, and access to literacy resources. While learners may develop adequate basic comprehension, greater attention is needed to critical evaluation, application, and integration of information, particularly as they progress through the elementary grades (DepEd, 2024; Alcantara, 2024; Labordo, 2024). The reviewed studies therefore support the use of differentiated, learner-centered, and assessment-based interventions to address reading difficulties and strengthen overall reading competence among elementary learners.

Theoretical Underpinnings

This study is anchored on Gough and Tunmer's (1986) Simple View of Reading Theory, which explains that reading comprehension is the product of two essential components: decoding and linguistic comprehension. Decoding refers to the ability to recognize and interpret written words, while linguistic comprehension involves understanding the meaning of language. Both skills must develop together for effective reading comprehension. When either component is weak, learners may experience difficulty understanding academic materials. Recent studies emphasize that strengthening word recognition, vocabulary, oral language, and background knowledge is essential to improving reading proficiency and academic performance (Kim, 2024; Petscher et al., 2020; García & Cain, 2014; Foorman et al., 2020).

The theory provides a framework for understanding the reading competence of learners and their ability to comprehend texts across subject areas. It supports the assessment of reading skills in literal comprehension, inferential comprehension, critical and evaluative reading, and application and integration. Since learners increasingly depend on written materials for academic learning, strong reading comprehension is essential for understanding instructions, textbooks, assessment questions, and other educational resources (RAND Reading Study Group, 2002; Petscher et al., 2020). Thus, the Simple View of Reading Theory serves as the primary

theoretical foundation for examining learners' reading competence and identifying areas that require targeted instructional intervention.

Objectives of the Study

This study aimed to examine the level of reading competence among Grades 1 and 2 learners in elementary schools in one of the districts in the Negros Island Region during the School Year 2026–2027, as a basis for developing an intervention plan. Specifically, it sought to determine the respondents' profile in terms of sex, number of siblings, parents' educational attainment, and family monthly income; assess their level of reading competence in literal comprehension, inferential comprehension, critical and evaluative reading, and application and integration; determine the learners' reading competence when grouped according to the identified profile variables; and ascertain whether significant differences exist in their reading competence when grouped and compared according to these variables.

Research Methodology:

This section presents the research design, study respondents, instrumentation, data-gathering procedure, data analysis and statistical tools, and ethical consideration.

Research Design

The descriptive research design was employed in this study to determine and describe the reading competencies of learners in one of the districts in the Negros Island Region. Without altering the variables under study, descriptive research is a suitable method for systematically characterizing the traits, circumstances, or behaviors of a population as they naturally occur (Siedlecki, 2020). The use of a descriptive design is appropriate because the study seeks to establish the current level of learners' reading competencies and identify areas for improvement. This research offers a thorough understanding of how reading competency affects Grade 4 learners' progress in reading competency through descriptive and relational analysis.

Study Respondents

The respondents of this study consist of one hundred fourteen (114) Grade 4 learners from one of the districts in the Negros Island Region for the school year 2026 – 2027 who were officially enrolled for the academic year 2025–2026. Purposive sampling was used as the sampling approach to ensure that everyone included in the study was relevant to its purposes. Purposive sampling is a non-probability sampling technique in which, instead of choosing participants at random, the researcher consciously selects them based on particular traits that align with the study's focus (Nikolopoulou, 2023; Bullard, 2024). This method produces information-rich data that directly answers the research questions by enabling the researcher to purposefully enroll learners whose reading competency levels are essential to comprehending the phenomena being studied (Ahmad & Wilkins, 2024). The study's use of purposive sampling ensures a targeted and relevant selection of respondents, enhancing the breadth and significance of the findings.

Instrument

The data-gathering instrument consisted of two parts: Part I covered the learners' profile, while Part II used a modified questionnaire adapted from the 2018 Philippine Informal Reading Inventory (Phil-IRI) Manual to assess reading competence through four age-appropriate passages, each followed by six multiple-choice questions. The instrument measured four areas: Literal Comprehension, Inferential Comprehension, Critical and Evaluative Reading, and Application and Integration. Each correct response was given one point, while an incorrect response received zero. To establish validity, the instrument was reviewed and contextualized by three qualified experts—a Public Schools District Supervisor, a School Principal, and a Master Teacher, all with advanced qualifications in Educational Management. Using the criteria of Good and Scates, the instrument obtained a mean validity rating of 4.92, interpreted as Excellent, indicating that it was appropriate and adequately measured the intended reading competence constructs. Reliability was established through a pilot test involving 30 Grade 4 learners from a comparable school, and internal consistency was assessed using Cronbach's alpha. The instrument obtained a reliability coefficient of 0.8378, interpreted as Good, confirming that the questionnaire was sufficiently consistent and reliable for assessing learners' reading competence.

Data Gathering and Procedure

After establishing the validity and reliability of the research questionnaire, the researcher prepared a formal letter to the Schools Division Superintendent requesting permission to conduct the study involving school heads. Upon receiving approval, the researchers proceeded with the administration of the questionnaire. To ensure the confidentiality of respondents' information, a statement regarding data privacy and ethical compliance was included at the beginning of the questionnaire.

Once the questionnaires were completed, they were collected and prepared for analysis. The responses were submitted to a statistician for proper examination, and the Statistical Package for the Social Sciences (SPSS) software will be employed to compute and organize the data. The results will then be presented using statistical tables and will be systematically discussed in accordance with the objectives of the study, providing clear insights into the research findings.

Data Analysis and Statistical Treatment

The study employed descriptive, relational, and analytical schemes aligned with its research objectives. A descriptive-analytical scheme using frequency counts and percentages was employed to determine the respondents' profiles in terms of sex, number of siblings, parents' educational attainment, and family monthly income. The same descriptive-analytical scheme, using the mean, was utilized to determine the learners' level of reading competence in terms of literal comprehension, inferential comprehension, critical and evaluative reading, and application and integration, as well as their reading competence when grouped according to the identified profile variables. Finally, a relational-analytical scheme using the independent-samples t-test was employed to determine whether significant differences existed in the learners' level of reading competence when grouped and compared according to the aforementioned variables.

Ethical Consideration

This study adheres to established ethical standards in educational research to ensure the integrity of the research process and the protection of all participants. Prior to data collection, informed consent was obtained from all respondents, including teachers, school heads, and other personnel involved. Participants were fully briefed on the purpose of the study, the nature of their involvement, and their right to withdraw at any point without penalty. Consent forms outlined the voluntary nature of participation and clarified that no incentives or coercive measures were used.

Confidentiality and anonymity were strictly maintained throughout the study. Personal identifiers were removed from all data sets, and responses were coded to prevent traceability to individual participants or institutions. Data were stored securely and accessed only by the researcher for academic purposes. Findings are reported in aggregate form to avoid disclosing any sensitive or identifiable information.

Results and Discussion:

This section presents, analyzes, and interprets the data gathered to carry out the predetermined objectives of this study.

Profile of the Respondents in Terms of Sex, Number of Siblings, Parents' Educational Attainment, and Family Monthly Income

Table 1

Profile of Respondents

Variables	Categories	Frequency	Percentage
Sex	Male	54	47.37
	Female	60	52.63
	Total	114	100
Number of Siblings	Few (less than 3)	58	50.88
	Many (3 or more)	56	49.12
	Total	114	100
Parents Educational Attainment	Lower (Elementary and High School)	85	74.56
	Higher (College)	29	25.44
	Total	114	100
Family Income	Lower (less than P13,000)	66	57.89

Higher (P13,000 and above)	48	42.11
Total	114	100

Table 2 presents the profile of the Grade 4 learner-respondents by sex, number of siblings, parents' educational attainment, and family monthly income. The sample included 52.63% women and 47.37% men, with an almost equal distribution between the two groups. The number of females was slightly higher than the number of males, but the difference was not large and is taken to mean that the respondents were reasonably representative of both sexes. Previous international assessments have shown that female learners tend to outperform male learners in reading literacy (OECD, 2023). Likewise, UNESCO (2024) tackled girls' reading, motivation, and learning behaviors.

In every education system participating in the Program for International Student Assessment (PISA), female students have better reading comprehension and higher reading interest (OECD, 2023). However, UNICEF (2024) stressed that gender inclusiveness must be observed in the implementation of literacy interventions because girls and boys must have equal access to learning the basics of reading. Similarly, the World Bank (2024) noted that tackling learning poverty requires offering targeted assistance to all learners, regardless of their gender, especially in low- and middle-income countries where many children struggle to master the basics of reading.

Regarding the number of siblings, 50.88% of the respondents had less than 3 siblings and 49.12% had 3 or more. While larger families may experience challenges such as divided parental attention, increased financial demands, and limited educational resources (OECD, 2023; UNESCO, 2024), family size does not necessarily correlate with students' academic performance or reading proficiency. Instead, parental involvement, literacy resources in the home, and supportive learning environments have a more significant role in the development of children's reading skills (Bronfenbrenner, 1979; Epstein, 2019). What is more, recent studies have indicated that students from larger families can attain similar reading outcomes when parents are actively involved in literacy-related activities and provide consistent academic support (UNESCO, 2024). Delos Reyes (2022) stated that learners who received organized reading instruction from their parents had better oral reading comprehension and fluency compared to those who did not receive any instruction.

In like manner, the World Bank (2024) reported that parental involvement and home learning environments are more reliable indicators of literacy success than family unit size alone. OECD (2023) showed that reading performance is less affected by the number of siblings but is more influenced by socioeconomic conditions, parental education, and access to learning resources. UNICEF (2024) also stressed the importance of opportunities for shared reading, responsive parenting, and supportive family relationships for children's literacy development, regardless of family size. Students from more supportive homes were found to have higher levels of reading competence (De Ramos, 2022), which suggests that family literacy is important to the development of elementary school learners' reading abilities. Alcantara (2024) found that

adapting reading tasks to the reading proficiency of the learners improved reading performance and decreased classroom dissatisfaction.

The results for the parents' educational attainments show that only 25.44% of the respondents had parents with higher educational attainment, whereas 74.56% of the respondents had parents whose highest level of education was elementary or high school. This result suggests that the majority of students grew up in homes with parents who may have had little formal schooling. Because parents with higher educational backgrounds are typically better able to provide academic guidance, participate in literacy-related activities, and create supportive home learning environments, numerous studies have shown a positive correlation between parents' educational attainment and children's literacy development and academic achievement (Davis-Kean & Sexton, 2020; Sénéchal & Young, 2021).

In the same vein, research has shown that parents' education increases children's growth in vocabulary, reading comprehension, and early literacy abilities through increased access to books, educational resources, and high-quality literacy experiences at home (Lonigan et al., 2022; Castles et al., 2024). The World Bank (2024) further pointed out that the education level of parents is highly correlated with their ability to support learning at home and children's basic learning outcomes. According to UNICEF (2024), parental education also improves children's learning readiness by encouraging positive parenting practices, education aspirations, and active participation in schooling. In line with these results, Epstein (2019) contended that parents' educational background affects how well home-school partnerships work, which in turn helps students succeed academically and develop their literacy.

For family monthly income, the results showed that 57.89% of respondents belonged to families earning less than ₱13,000 per month, and 42.11% had family incomes of ₱13,000 or more. This finding suggests that most of the students were from low-income families. Family income has long been known to be a key determinant of children's educational outcomes because it shapes children's access to educational opportunities, learning resources, and supportive home environments. Students from low-income families might find it difficult to develop their reading skills without access to books, digital technologies, high-quality preschool experiences, and other resources that improve literacy (Reardon, 2023; Sirin, 2021). Combining interactive digital storytelling with traditional reading instruction led to statistically significant improvements in vocabulary and reading comprehension (Santos and Mercado, 2023). Studies on interactive e-books and digital reading platforms show that learners exposed to technology-enhanced reading materials have better comprehension and vocabulary acquisition skills (Day et al., 2024).

Furthermore, Bradley and Corwyn (2022) clarified that children's cognitive and linguistic development is affected by socioeconomic disadvantage, stemming from a lack of educational opportunities and environmental stimulation. Duncan and Magnuson (2021) also found that family income shapes the quality of home learning environments and educational investments, which, in turn, affect children's academic achievement. Additionally, persistent economic hardship is associated with lower educational attainment and poorer literacy outcomes due to differences in access to high-quality learning experiences, according to the National Academies

of Sciences, Engineering, and Medicine (2023). These results suggest that students from low-income families may have greater difficulty reaching higher levels of reading proficiency.

According to the respondents' profile, the groups with the lowest percentages were students whose parents had completed college (25.44%), students from families earning ₱13,000 or more per month (42.11%), students who were male (47.37%), and students with three or more siblings (49.12%). These results imply that most Grade 4 students come from homes with low family income and low educational attainment, which may limit their access to literacy resources and academic support at home. Despite the marginal sex and number of sibling disparities, the findings stress that the reading ability and academic achievement of learners are not only dependent on demographic variables. Reading competence is one of the main focuses in the basic education curriculum for primary school learners (DepEd, 2023) due to the importance of reading competence in enhancing the learners' comprehension, critical thinking, and overall academic performance. The results showed that structured reading interventions can substantially enhance the reading comprehension and general reading ability of learners (Jumao-as et al., 2025).

Regardless of parents' educational background, family size, or economic status, the results emphasize the need to bolster school-based reading interventions, encourage family literacy programs, and improve parent engagement. To ensure that all students, especially those from less fortunate homes, have sufficient opportunities to improve their reading skills and enhance their academic performance, schools may also consider providing equitable access to reading materials, classroom libraries, and community-supported literacy initiatives. The study conducted by Dequita (2024) found that the learners had a moderate level of reading skills in both areas. Interestingly, the number of siblings did not significantly change their reading ability. But the education level of the parents and the income of the family had a significant impact. The results indicate that the development of reading skills in learners is affected by their abilities as well as the educational background and economic status of their families.

Descriptive Analysis in the Level of Reading Competence of Learners in the area of Literal Comprehension, Inferential Comprehension, Critical and Evaluative readings, and Application and Integration

Table 2

Level of reading competence of learners in terms of the areas

Areas	Mean	Interpretation
a. Literal Comprehension	7.82	High Level
b. Inferential comprehension	6.00	High Level
c. Critical and Evaluative Readings	3.22	High Level
d. Application and Integration	3.15	High Level

Overall Mean

20.20

High Level

Table 3 presents the level of reading competence of the Grade 4 learners in the four assessed areas: Literal Comprehension, Inferential Comprehension, Critical and Evaluative Reading, and Application and Integration. The learners obtained an overall mean of 20.20, interpreted as High Level. Literal Comprehension obtained the highest mean of 7.82, while Application and Integration had the lowest mean of 3.15 among the four areas.

The highest score of Literal comprehension indicates that learners were good at understanding the information that was stated explicitly. This skill provides an important basis for more complex processes of understanding (Duke et al., 2021; OECD, 2023). The high mean in inferential comprehension also shows that students are capable of inferring conclusions and meanings from information not directly expressed in texts. In contrast, Application and Integration had the lowest mean, but still at a high level, indicating that students need more opportunities to connect and apply knowledge across contexts. Reading comprehension is not just understanding information but also integrating with prior knowledge, evaluating concepts, and using meaning in new situations (Afflerbach et al., 2022; Cain, 2022).

The Results indicate that students possess a good base of reading proficiency, but higher-order comprehension, especially application and integration needs to be further strengthened through instruction. Teachers are able to foster deeper comprehension through contextualized reading assignments, text-to-self/text-to-world connections, problem-solving exercises, reflective questions, and evidence-based answers (Duke et al., 2021; OECD, 2023). In line with DepEd's focus on addressing specific literacy needs through appropriate interventions, the results also support the need for assessment-based, focused reading instruction. The results can therefore serve as a foundation for creating reading-improvement exercises that build on students' strengths and enhance their capacity to apply and transfer knowledge from texts.

Descriptive Analysis in the Level of Reading Competence of Learners in the area of Literal Comprehension, Inferential Comprehension, Critical and Evaluative readings, and Application and Integration when grouped according to Sex, Number of Siblings, Parents' Educational Attainment, and Family Monthly Income

Table 3

Level of reading competence of learners when grouped according to Sex

Areas	Male		Female	
	Mean	Interpretation	Mean	Interpretation
a. Literal Comprehension	7.74	High Level	7.90	High Level
b. Inferential comprehension	6.02	High Level	6.00	High Level
c. Critical and Evaluative readings	3.11	High Level	3.32	High Level

d. Application and Integration	3.02	High Level	3.27	High Level
Overall Mean	19.89	High Level	20.48	High Level

Table 3 shows the level of reading competence of learners, grouped by sex. The results showed that both male and female learners demonstrated a high level of reading competence in all four areas. Female learners obtained a slightly higher overall mean of 20.48 compared with males at 19.89. Females also obtained higher means in Literal Comprehension, with a mean of 7.90, while males had a slightly higher mean in Inferential Comprehension of 7.74. Lowest mean in both groups, Application and Integration, for males and females: 3.02 and 3.27, respectively.

Females generally perform better in reading literacy, as they consistently achieve higher scores (Heilmann et al., 2023). Steinmann et al. (2023) found that, across 63 educational systems, females outperformed males in nearly every country, despite variations in the size of the difference. Recent research also suggests that gender gaps in reading are related to reading behavior, with higher reading frequency correlating with better achievement (2026).

Both groups maintained high reading proficiency with minimal differences, suggesting gender should not be the sole factor in evaluating reading ability. While international assessments often show girls have an advantage (OECD, 2023), gender gaps vary across countries and contexts. Höli et al. (2025) also found that differences depend on reading motivation and text format, with variations across continuous, non-continuous, and mixed texts.

Therefore, rather than focusing solely on sex, learners' reading performance should be interpreted in relation to the particular reading tasks, motivation, learning experiences, and contextual factors.

The findings suggest that reading instruction should be given equally to male and female students, with a focus on specific areas of difficulty. Teachers may offer more opportunities for critical analysis, reflection, text-to-world connections, and practical application of information because males scored comparatively lower in critical/evaluative reading and application/integration. Gender differences in reading are influenced by text format, motivation, features, and tasks (Lepper et al., 2022). However, assumptions shouldn't be based solely on women's slightly better performance. Instruction should be assessment-driven, differentiated, and tailored to students' needs. Research shows that differentiated instruction effectively addresses variations in reading comprehension (Labordo, 2024; Diron & Baldonado, 2025).

Table 4

Level of reading competence of learners when grouped according to the number of Siblings

Areas	Few		Many	
	Mean	Interpretation	Mean	Interpretation
a. Literal Comprehension	8.03	High Level	7.61	High Level
b. Inferential comprehension	6.10	High Level	5.91	High Level
c. Critical and Evaluative readings	3.40	High Level	3.04	High Level
d. Application and Integration	3.36	High Level	2.93	High Level
Overall Mean	20.90	High Level	19.48	High Level

Table 4 shows the Level of reading competence of learners, grouped by number of Siblings. It showed that the overall mean demonstrated a high level of reading competence in all four areas. Learners with few siblings had a higher overall mean of 20.90 than those with many siblings, who had 19.48. The few-sibling group also obtained the highest mean in Literal Comprehension of 8.03 and the lowest mean in Application and Integration of 3.36.

This is consistent with Gurgand et al. (2024)'s findings that a larger number of siblings is negatively correlated with academic success, with the distribution of family resources between children accounting for the relationship. The link was less strong for wealthier families. Guo et al. (2026) used PISA 2022 data to show a nonlinear association between academic achievement and sibship size. Adolescents with one sibling performed better than only children and those with at least two siblings, but this association was moderated by family wealth. These suggest that family size, family resources available to the students and socio-economic circumstances may all influence the relationship between number of siblings and students' performance.

Lee & Moussa (2024) found that reading interactions among siblings were positively correlated with children's reading abilities, suggesting siblings can help create a home environment rich in literacy. Moreover, a 10-week sibling-shared reading intervention was found to improve children's reading comprehension, and the benefits were maintained at a 6-month follow-up (Li et al., 2025). This is not to say that having many siblings will necessarily lead to poorer reading skill. Instead, the quality of sibling relationships, shared reading experiences, access to literacy resources, and the overall home literacy environment may be more important than family size (Zhang et al., 2024).

The results suggest that students with many siblings may benefit from more individual reading time, particularly in Application and Integration where the difference between the two groups was greatest. For the younger students, schools and parents can provide peer-assisted activities, guided reading, structured home reading and the involvement of older siblings. The sibling-shared reading intervention resulted in significant improvement in children's reading comprehension. Research suggests that siblings can help to develop literacy-rich home

environments (Li et al., 2025). The findings suggest that students with many siblings might benefit from more individualized reading opportunities, especially in Application and Integration, where the difference between the two groups was largest. To support younger students, teachers and parents can offer peer-assisted activities, guided reading, structured home reading, and opportunities for older siblings to participate. A sibling-shared reading intervention greatly enhanced children's reading comprehension, and research indicates that siblings can support literacy-rich home environments (Li et al., 2025).

The results also imply that rather than relying solely on the number of siblings, interventions should take into account family circumstances, home literacy practices, and access to learning resources. Guo et al. (2026), who discovered that the relationship between sibling size and academic achievement was nonlinear and moderated by family wealth, corroborate this. Therefore, rather than assuming that family size alone determines reading competency, reading interventions should concentrate on learners' actual literacy needs and available learning resources. This is in line with the OECD (2023), which highlights that while socioeconomic status is linked to academic achievement, it is not deterministic, as underprivileged students can still exhibit academic resilience.

Table 5

Level of reading competence of learners when grouped according to parents' educational attainment

Areas	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
a. Literal Comprehension	7.88	High Level	7.66	High Level
b. Inferential comprehension	6.07	High Level	5.83	High Level
c. Critical and Evaluative readings	3.26	High Level	3.10	High Level
d. Application and Integration	3.16	High Level	3.10	High Level
Overall Mean	20.38	High Level	19.69	High Level

Table 5 shows the Level of reading competence of learners, grouped by parents' educational attainment. It shows that both groups of learners demonstrated a High Level of reading competence in all four areas. Learners whose parents had lower educational attainment obtained a slightly higher overall mean (20.38) than those whose parents had higher educational attainment (19.69). The lower-attainment group also obtained higher means in Literal comprehension (7.88), inferential comprehension (6.07), critical and evaluative reading (3.26), and application and integration (3.16).

The comparatively small difference between the two groups suggests that learners' reading proficiency may not be determined solely by parents' educational attainment. Home learning

environment, parental involvement, learning resources and literacy-related interactions may have a greater impact on children's academic development than on educational attainment alone (Ahmed et al., 2025). More specifically, Li et al. (2025) reported that socioeconomic status was associated with children's reading proficiency partly through the home learning environment including literacy opportunities and learning resources. Likewise, children's reading literacy was positively correlated with parental support and learning attitudes (Ahmed et al., 2025). The findings imply that parental education alone may be less critical than the quality of literacy experiences offered in the home.

Regardless of the parents' level of education, the results suggest that both groups should continue to receive equal reading instruction and support. By encouraging home reading, providing access to suitable reading materials, fostering parent-child conversations, and encouraging positive parental involvement in education, schools can enhance students' reading development. According to recent research, the family environment plays a key role in shaping children's reading abilities through the literacy atmosphere at home, the availability of learning materials, and the level of parental involvement (Nag et al., 2024). Likewise, Zhang et al. (2025) found that access to reading materials at home is associated with better reading outcomes for children, regardless of their family background. Recent findings from the Philippines also show that when parents actively participate in reading activities with their children, it leads to improved reading performance (Aceron, 2024).

Therefore, improving the home literacy environment, expanding access to reading materials, and giving students meaningful reading opportunities should be the main goals of reading interventions rather than parents' educational background. This strategy is in line with research demonstrating that encouraging home learning settings can support kids' literacy development in a variety of family and socioeconomic contexts (Li et al., 2025).

Table 6

Level of reading competence of learners when grouped according to Family Monthly Income

Areas	Lower		Higher	
	Mean	Interpretation	Mean	Interpretation
a. Literal Comprehension	7.74	High Level	7.94	High Level
b. Inferential comprehension	5.94	High Level	6.10	High Level
c. Critical and Evaluative readings	3.23	High Level	3.21	High Level
d. Application and Integration	3.11	High Level	3.21	High Level
Overall Mean	20.02	High Level	20.46	High Level

Table 6: Level of reading competence of learners when grouped according to Family Monthly Income. It showed that both groups of learners demonstrated a High Level of reading competence across all four areas. Learners from families with higher monthly income obtained a slightly higher overall mean (20.46) than those from families with lower monthly income (20.02).

The slightly better performance of students from wealthier households might suggest that financial resources can offer more access to educational resources and literacy opportunities. The home learning environment and access to educational resources are two ways that children's socioeconomic status is linked to their reading proficiency (Li et al., 2025). Similarly, variations in learning opportunities and parental support can affect children's academic development due to family socioeconomic conditions (Waters et al., 2025).

Research shows that socioeconomic status affects reading ability, in part, through the learning environment at home, particularly the availability of books and early reading experiences (Li et al., 2025). Similarly, access to literacy resources at home is associated with how well children develop their reading skills across various family contexts (Zhang et al., 2025). It also suggests that improving nearby factors, such as the home and school environments, could help lessen the negative impact of socioeconomic disadvantage on children's reading performance (Johnson et al., 2025).

Comparative analysis of the level of reading competence of learners

Table 7

Difference in the level of reading competence of learners in the area of Literal Comprehension when grouped and compared according to variables

Variable	Category	N	Mean	T-test	p-value	Sig. level	Interpretation
Sex	Male	54	7.74	-0.734	0.464		Not Significant
	Female	60	7.90				
Number of Siblings	Few	58	8.03	2.003	0.048	0.05	Significant
	Many	56	7.61				
Parents Educational Attainment	Lower	85	7.88	0.995	0.324		Not Significant
	Higher	29	7.66				
Family Income	Lower	66	7.74	-0.890	0.375		Not Significant
	Higher	48	7.94				

Table 7 presents the comparative analysis of learners' Literal Comprehension when grouped according to sex, number of siblings, parents' educational attainment, and family

monthly income. Using the independent-samples t-test at the 0.05 level of significance, the findings revealed no significant differences according to sex ($t = -0.734$, $p = .464$), parents' educational attainment ($t = 0.995$, $p = .324$), and family monthly income ($t = -0.890$, $p = .375$), as all p-values exceeded .05. Thus, the null hypotheses for these variables were accepted, indicating that male and female learners, learners with different parental educational backgrounds, and those from different income groups demonstrated comparable abilities in identifying and recalling explicitly stated information in texts.

In contrast, the number of siblings showed a statistically significant difference in learners' Literal Comprehension ($t = 2.003$, $p = .048$). Learners with fewer siblings obtained significantly higher mean scores than those with more siblings, resulting in the rejection of the null hypothesis. This finding suggests that family size may influence learners' access to individualized parental attention, academic supervision, literacy interactions, and educational resources. Consistent with Bronfenbrenner (1979) and Sénéchal and Young (2021), the home learning environment and family support can contribute to children's literacy development. However, the absence of significant differences according to parents' educational attainment and family income indicates that these demographic characteristics alone may not determine learners' literal reading performance.

Overall, the findings indicate that the number of siblings was the only demographic variable that significantly differentiated learners' Literal Comprehension, while sex, parents' educational attainment, and family monthly income showed no significant differences. This suggests that learners generally demonstrate similar abilities in understanding explicitly stated information regardless of most demographic characteristics. Schools should therefore continue providing systematic and equitable reading instruction, while giving additional literacy support to learners from larger families who may have fewer opportunities for individualized academic assistance at home. Strengthening guided reading, repeated reading, explicit comprehension instruction, and meaningful literacy activities may further enhance learners' foundational reading skills (Abelardo, 2024; Duke & Cartwright, 2021; Hattie, 2023).

Table 8

Difference in the level of reading competence of learners in the area of Inferential comprehension when grouped and compared according to variables

Variable	Category	N	Mean	T-test	p-value	Sig. level	Interpretation
Sex	Male	54	6.02	0.092	0.927		Not Significant
	Female	60	6.00				
Number of Siblings	Few	58	6.10	0.963	0.338	0.05	Not Significant
	Many	56	5.91				
Parents	Lower	85	6.07	1.058	0.292		Not Significant

Educational Attainment	Higher	29	5.83			
	Lower	66	5.94			
Family Income	Higher	48	6.10	-0.812	0.419	Not Significant

Table 8 presents the comparative analysis of learners' Inferential Comprehension when grouped according to sex, number of siblings, parents' educational attainment, and family monthly income. Using the independent-samples t-test at the 0.05 level of significance, the findings revealed that none of the demographic variables showed a statistically significant difference in learners' inferential comprehension. Specifically, sex yielded $t = 0.084$, $p = .933$; number of siblings, $t = 0.984$, $p = .327$; parents' educational attainment, $t = 1.060$, $p = .291$; and family monthly income, $t = -0.824$, $p = .411$. Since all p-values exceeded .05, the null hypothesis was accepted, indicating that learners' inferential comprehension did not significantly differ across the identified demographic groups.

Although slight variations in mean scores were observed, these differences were not statistically significant. Learners with fewer siblings obtained a marginally higher mean than those with more siblings, while learners from higher-income families had a slightly higher mean than those from lower-income families. Likewise, learners whose parents had lower educational attainment obtained a higher mean score (86.71) than those whose parents had higher educational attainment (83.21), while higher-income learners obtained a mean of 87.21 compared with 84.80 among lower-income learners. These findings suggest that sex, family size, parental educational attainment, and socioeconomic status alone may not determine learners' ability to infer meanings, draw conclusions, and make predictions from texts. Rather, reading exposure, vocabulary knowledge, learner engagement, opportunities for literacy practice, and quality of instruction may have greater influence on inferential comprehension (Cain & Oakhill, 2021; Kim et al., 2021; Mullis et al., 2023).

Overall, the results indicate that learners' Inferential Comprehension was relatively consistent across the demographic groups considered in the study. The absence of significant differences suggests that effective classroom instruction and meaningful literacy experiences can support the development of inferential reading skills regardless of learners' sex or family background. Thus, schools should continue implementing instructional strategies that promote inquiry, critical thinking, interpretation, and higher-order comprehension, while providing equitable opportunities for learners to engage in purposeful reading activities. Such approaches can help strengthen learners' ability to infer meaning, connect ideas, and draw conclusions from texts (Hattie, 2023; Shanahan, 2022; UNESCO, 2024).

Table 9

Difference in the level of reading competence of learners in the area of Critical and Evaluative readings when grouped and compared according to variables

Variable	Category	N	Mean	T-test	p-value	Sig. level	Interpretation
Sex	Male	54	3.11	-1.493	0.138		Not Significant
	Female	60	3.32				
Number of Siblings	Few	58	3.40	2.681	0.008		Significant
	Many	56	3.04				
Parents Educational Attainment	Lower	85	3.26	1.093	0.279	0.05	Not Significant
	Higher	29	3.10				
Family Income	Lower	66	3.23	0.135	0.893		Not Significant
	Higher	48	3.21				

Table 9 presents the comparison of learners' Critical and Evaluative Reading skills according to sex, number of siblings, parents' educational attainment, and family monthly income. The findings revealed no significant differences according to sex ($t = -1.493$, $p = .138$), parents' educational attainment ($t = 1.093$, $p = .279$), and family monthly income ($t = 0.135$, $p = .893$). Although female learners and those from lower-income families obtained slightly higher mean scores, these differences were not statistically significant. This suggests that critical and evaluative reading skills may be influenced more by effective classroom instruction, reading engagement, analytical activities, and opportunities to evaluate and discuss texts than by learners' sex, parental education, or socioeconomic background (Afflerbach et al., 2022; Shanahan, 2023).

In contrast, the number of siblings showed a statistically significant difference in learners' Critical and Evaluative Reading skills ($t = 2.681$, $p = .008$). Learners with fewer siblings obtained higher mean scores than those with more siblings, resulting in the rejection of the null hypothesis. This finding suggests that learners from smaller households may have greater opportunities for individualized academic assistance, parental attention, and literacy-related interactions at home. Family engagement and supportive learning environments can contribute to the development of higher-order reading and comprehension skills, particularly through meaningful parent-child educational interactions (Fan & Williams, 2021).

Overall, the findings indicate that the number of siblings was the only factor significantly associated with differences in learners' Critical and Evaluative Reading skills, while sex, parents' educational attainment, and family monthly income showed no significant differences.

The results highlight the importance of providing equitable literacy instruction that develops learners' abilities to analyze, evaluate, interpret, and reflect on texts regardless of their demographic or socioeconomic circumstances. Schools may also provide additional reading activities, guided discussions, and individualized support to learners who may have fewer opportunities for academic and literacy assistance at home.

Table 10

Difference in the level of reading competence of learners in the area of Application and Integration when grouped and compared according to variables

Variable	Category	N	Mean	T-test	p-value	Sig. level	Interpretation
Sex	Male	54	3.02	-1.797	0.075		Not Significant
	Female	60	3.27				
Number of Siblings	Few	58	3.36	3.240	0.002	0.05	Significant
	Many	56	2.93				
Parents Educational Attainment	Lower	85	3.16	0.454	0.651		Not Significant
	Higher	29	3.10				
Family Income	Lower	66	3.11	-0.724	0.471		Not Significant
	Higher	48	3.21				

Table 10 presents the comparison of learners' Application and Integration skills according to sex, number of siblings, parents' educational attainment, and family monthly income using an independent-samples t-test at the 0.05 level of significance. The results revealed no significant difference according to sex ($t = -1.797$, $p = .075$), parents' educational attainment ($t = 0.454$, $p = .651$), and family monthly income ($t = -0.724$, $p = .471$). Although female learners and those from higher-income households obtained slightly higher mean scores in some comparisons, the differences were not statistically significant. These findings suggest that learners' ability to apply and integrate information may be influenced more by meaningful literacy experiences, effective instructional strategies, and active engagement with texts than by sex, parental educational background, or family income (Graham et al., 2022; Pressley & Allington, 2023; Shanahan, 2023).

In contrast, a significant difference was found when learners were grouped according to the number of siblings ($t = 3.240$, $p = .002$). Learners with fewer siblings obtained higher mean scores than those with more siblings, leading to the rejection of the null hypothesis for this variable. This finding suggests that family size may influence the availability of individualized academic support, parental guidance, learning resources, and opportunities for literacy engagement at home. Since application and integration involve transferring, synthesizing, and

using information across contexts, supportive learning environments and meaningful literacy experiences may contribute to the development of these higher-order skills (Afflerbach et al., 2022; Duke et al., 2021; Castles et al., 2024; Sirin, 2021).

Overall, the findings indicate that number of siblings was the only demographic factor that showed a significant difference in learners' Application and Integration skills, while sex, parents' educational attainment, and family monthly income did not. The results emphasize the importance of providing equitable and effective classroom-based literacy instruction that develops learners' ability to apply, synthesize, and integrate information regardless of their demographic or socioeconomic background. Schools may also consider providing additional literacy support and individualized learning opportunities for learners who may have fewer opportunities for academic assistance at home.

Conclusion:

The study found that Grade 4 learners in one of the districts in the Negros Island Region were predominantly female, had three or more siblings, came from families with lower parental educational attainment, and had a monthly family income below ₱13,000. Overall, the learners demonstrated a high level of reading competence, with Literal Comprehension as the strongest area, followed by Inferential Comprehension and Critical and Evaluative Reading, while Application and Integration was rated at the instructional level, indicating the need for further support in applying, synthesizing, and connecting information from texts to real-life situations. When grouped according to demographic characteristics, female learners, those with fewer siblings, and those from higher-income families generally demonstrated higher performance in several reading areas, while learners from different parental educational backgrounds showed comparable overall competence. However, the number of siblings was the only demographic factor that showed a significant difference in reading competence, particularly in Literal Comprehension, Critical and Evaluative Reading, and Application and Integration, with learners having fewer siblings performing better than those with more siblings. No significant differences were found when learners were grouped according to sex, parents' educational attainment, and family monthly income, suggesting that reading proficiency may be influenced more by literacy support, learning opportunities, and instructional experiences than by demographic characteristics alone. Therefore, targeted and differentiated reading interventions are recommended, particularly to strengthen higher-order reading skills and support learners with varying backgrounds.

Recommendations:

Based on the findings of the study, school heads and teachers should prioritize instructional approaches that go beyond literal recall by integrating contextualized, inquiry-based, and task-oriented reading activities that strengthen learners' Application and Integration skills through real-world problem-solving, role-playing, reflection, and differentiated instruction. Given that many learners come from low-income households and larger families, schools should provide accessible reading hubs, remedial reading clinics, contextualized learning materials, self-



paced learning guides, and peer-tutoring opportunities to address possible limitations in home-based academic support. Parents, particularly those with multiple children, should be encouraged to establish structured home literacy routines, including dedicated reading time and sibling-supported reading activities, while Parent-Teacher Associations and barangay literacy programs may provide workshops to strengthen parents' capacity to support reading comprehension regardless of educational attainment. Finally, future researchers should examine other factors that may influence reading competence, such as teacher competence, classroom instructional strategies, learner motivation, and the home literacy environment, and conduct qualitative and longitudinal studies to further explore how sibling density affects reading experiences and determine whether targeted interventions can improve learners' Application and Integration skills from instructional to independent levels.

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