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PROMOTING COGNITIVE READING STRATEGIES ON READING COMPREHENSION SKILLS ENHANCEMENT

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Abstract:
This research explored the relationship between the Grade 8 students' cognitive reading strategies and reading comprehension skills at Cordova National High School in Cebu, Philippines, for the school year 2025-2026 using a descriptive-correlational design. There were 215 respondents who were chosen using simple random sampling. They were asked to answer the survey questionnaires, gathering information about their cognitive reading strategies, and their reading comprehension skills were assessed using the standardized reading skills assessment tool. The results showed the respondents had very good cognitive reading strategies, and most of them were independent readers. On the other hand, there was no significant association between the cognitive reading strategies of the respondents and their reading comprehension skills. The results provide significant insights into the importance of utilizing cognitive reading strategies that would reinforce reading comprehension among students. Thus, it is highly recommended that the school administrators and teachers develop programs that will enhance the cognitive reading strategies of the students to address the concerns about the reading comprehension skills of the students.

Keywords: cognitive reading strategies, reading comprehension skills, Grade 8 students

1. Introduction

Reading is one of the basic foundations of education and mental growth as it allows students to acquire information, develop understanding, establish ideas, and participate in advanced thinking. The absence of this skill makes students encounter difficulties in acquiring subject knowledge and in enhancing reasoning and problem-solving abilities (Kuhfeld *et al.*, 2022; Relyea *et al.*, 2023). Moreover, reading enhances vocabulary expansion, builds background knowledge, and improves the capacity to understand instructional content in educational settings and everyday situations (Catts & Hogan,

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2021). Because of these, reading should not be considered a simple academic requirement because it fosters academic achievement and lifelong learning.

In addition, students' ability to read influences their educational experience and future opportunities because this can be utilized to follow instructions, gain concepts, and interact with new ideas throughout all subjects. As students' progress in their educational experiences, the complexity of texts increases, and the vocabulary related to specific subjects becomes more challenging. These changes necessitate the students to move from basic word recognition to interpretative and analytical text processing to acquire subject matter and utilize knowledge in different contexts (Catts & Hogan, 2021; Main, 2023). When reading helps understanding, students can more effectively build meaning, analyze arguments, and apply knowledge across different subjects.

Furthermore, the ability to interpret words and read them is important, but this is not enough for learning. Students need to understand the meaning of what they read. Hence, reading comprehension is necessary for better understanding and knowledge acquisition. Understanding entails combining textual details with existing knowledge, drawing conclusions, assessing comprehension, refining main ideas, and judging the significance of information (Bernardo & Mante-Estacio, 2023; Ghimire, 2025). In secondary education, the cognitive requirements of reading require that students employ these abilities to identify central concepts, think of underlying arguments, and integrate information from various sources. Reading strategies focusing on comprehension and knowledge development result in greater learning improvements than methods concentrating mainly on decoding (Catts & Hogan, 2021; Relyea *et al.*, 2023).

Though reading comprehension is important to learning, most students demonstrate deficiencies in this area that hinder their academic advancement. Studies revealed prevalent understanding challenges and inconsistent reading comprehension skills after the COVID-related interruptions in education (Relyea *et al.*, 2023). In the Philippines, the results of PISA 2022 indicate that average reading performance falls significantly short of the Organization for Economic Co-operation and Development (OECD) average, with only a small percentage of students attaining the minimum proficiency levels required for independent learning (OECD, 2023). The students' limited reading comprehension is associated with diminished performance in mathematics and science and with a decreased ability to gain from standard classroom teaching (OECD, 2023). These trends have raised alarms among educators, particularly in the Department of Education (DepEd) and policymakers, regarding ways to enhance literacy throughout various grade levels.

Educators and researchers have recognized a cognitive reading strategy is one of the essential elements that aid comprehension. Cognitive reading strategies involve active mental processes that readers utilize to comprehend text. This encompasses forecasting content, linking text to existing knowledge, summarizing sections, expanding on concepts, explaining unclear segments, forming mental pictures, and tracking understanding during reading (Vicente & Baldera, 2024). Research indicates that increased application of these techniques is positively linked to improved reading

comprehension among various groups of learners (Ghimire, 2025; Vicente & Baldera, 2024). For those learning English as an additional language, cognitive strategies can somewhat balance restricted language skills and assist learners in deriving meaning from complicated texts.

In the Philippine public high school setting, numerous challenges still persist in terms of the reading comprehension of students because teachers observed that students read only when directed to do so and that they engage less in a deeper understanding of reading techniques on their own (Dinoro *et al.*, 2023). In schools, instructional time usually focuses on decoding, vocabulary practice, or superficially addressing numerous topics, with inconsistent explicit strategy teaching observed (Heguerra & Cacho, 2025). Thus, DepEd has introduced literacy intervention programs, teacher training initiatives, and policy measures that highlight essential reading and understanding as components of the MATATAG and associated efforts to enhance educational results (DepEd, 2024; OECD, 2023). These programs aimed to address the reading comprehension deficiencies of learners across all grade levels.

With these, the researcher wants to investigate the impact of cognitive reading strategies on the reading comprehension abilities of Grade 8 students in a public high school in the Philippines. Conducting this study can provide significant insights that can enhance classroom teaching by specifying which strategies to prioritize, assist teacher development by identifying deficiencies in strategy instruction, and inform school leaders and policymakers on resource allocation to improve comprehension results. In the end, enhancing students' use of strategies and understanding abilities leads to improved performance in all subjects and greater educational equity.

2. Theoretical Background

This research is anchored on the following theories: Schema Theory by Barlett (1995), Metacognition Theory by Flavell (1976), and Information Processing Theory by Atkinson and Shiffrin (1968). These theories outlined the dynamics of the variables underlying the development of the reading comprehension skills of the students. These theories also explain how reading comprehension skills are developed based on the cognitive strategies used by the students when reading.

Moreover, this study is also supported by the following legal bases, which strengthen the foundation for why there is a need to conduct the study. Firstly, the Republic Act no. 10533, also known as the Enhanced Basic Education Act of 2013, mandated the implementation of the K-12 program, which became the basis of all the DepEd initiatives in ensuring that the learners are provided with high-quality education. On the other hand, DepEd Order no. 034 s. 2025 enumerates the Supplemental Guidelines on the Implementation of the Literacy Remediation Program, which focuses on the enhancement of the literacy skills of learners across all grade levels, which includes emphasizing the enhancement of the reading comprehension skills of high school students through strategic intervention programs.

Schema Theory states that comprehending a text involves not just decoding words, but also linking new information to pre-existing mental structures known as schemas. Schemas are structured frameworks of understanding in the brain that assist people in interpreting, forecasting, and incorporating new information (Meylani, 2024). When readers come across a passage, they actively connect the ideas given with their existing knowledge. The relationship between text and existing knowledge enhances understanding, draws inferences, and improves memory retention.

In reading, schemas function as mental frameworks that direct understanding. When students have well-formed and pertinent schemas, they are more inclined to understand meaning, deduce implicit information, and assess content critically. On the other hand, an absence of a suitable schema can lead to misinterpretations or superficial understanding. Schema Theory emphasizes that understanding is an active construction of meaning, influenced by both the text and the reader's background knowledge (Jehan *et al.*, 2023).

Moreover, Schema Theory proposes that understanding weakens when new data fails to align with an established schema. Cognitive reading techniques such as rereading, summarizing, or clarifying challenging sections assist students in modifying or rebuilding schemas to incorporate new concepts, a vital skill for adolescents facing complicated academic texts. The theory highlights that understanding involves not only identifying words but also constructing meaning. Techniques like inferring and concluding prompt students to look deeper, linking clear information with underlying knowledge held in their schemas. This advanced processing is essential in high school as texts become increasingly abstract and subject-specific (Wang & Yin, 2023).

Metacognition Theory proposes that the learner's recognition and management of their own cognitive processes, which includes two main aspects: metacognitive knowledge, which refers to recognition of one's cognitive processes and the strategies to control them and metacognitive regulation, which refers to the capability to plan, monitor, and assess one’s cognitive tasks. In reading, metacognition enables learners to recognize their understanding and modify strategies when comprehension weakens (Pahrizal *et al.*, 2025).

In the context of reading, the theory indicates that proficient readers not only decode text but also actively choose and implement cognitive strategies like predicting, summarizing, questioning, and clarifying. They check if these strategies are effective and modify them to enhance the understanding results. Consequently, metacognition changes reading from a passive task into an active, self-directed process (Efklides & Metallidou, 2020).

Metacognition Theory explains why certain Grade 8 students understand texts more effectively than their peers. Individuals with high metacognitive awareness understand which cognitive strategies to apply based on the nature of the text or assignment. For example, they might opt for summarization while going over lessons or visualization when perusing narrative texts. Studies indicate that this awareness has a positive correlation with performance in comprehension (Muhid *et al.*, 2020). This theory

also states that learners who can assess their understanding are more inclined to recognize confusion and utilize methods to enhance comprehension. For instance, if they do not understand a paragraph, they may reread or look for contextual hints. This is consistent with research indicating that self-monitoring techniques are essential indicators of reading comprehension achievement in secondary education (Didion & Toste, 2022).

The Information Processing Theory (IPT) perceives the human mind as operating like a computer, with information being received, processed, stored, and retrieved. IPT suggests that learning takes place in three main phases: sensory memory, working memory, and long-term memory. Sensory memory temporarily retains incoming stimuli, working memory engages with this information, and long-term memory preserves it for future access (Atkinson & Shiffrin, 1968).

This model indicates that understanding relies on how well learners encode, arrange, and access information from texts. Due to the limited capacity of working memory, readers need to employ strategies to handle cognitive load, remember essential concepts, and merge new information with existing knowledge (Sweller *et al.*, 2019). Consequently, processing information is not instinctive but requires intentional strategies to enhance comprehension.

IPT emphasizes that techniques like summarizing, predicting, questioning, and elaborating assist students in minimizing cognitive overload and concentrating on significant aspects of a text. For Grade 8 students, utilizing these strategies aids the movement of information from working memory to long-term memory, improving comprehension results (Lu *et al.*, 2022). Nevertheless, reading comprehension requires creating meaning through the arrangement of textual information and its integration with existing knowledge. IPT states that students using techniques such as graphic organizers or visual imagery experience enhanced encoding, leading to better retention and comprehension of intricate texts (Cain, 2022).

In the aspect of the legal bases, Republic Act No. 10533, referred to as the Enhanced Basic Education Act of 2013, established the K to 12 basic education system in the Philippines. This legislation increased fundamental education from the earlier 10 years to 12 years by incorporating Kindergarten and Senior High School. The primary goal is to improve the curriculum so that Filipino students gain mastery of essential competencies and skills required for lifelong learning, further education, and job opportunities (Congress of the Philippines, 2013). The Act focuses on learner-centered, research-informed, and competency-driven methods, prioritizing the development of fundamental literacy and numeracy skills vital for advanced learning.

A key aspect of R.A. 10533 is its emphasis on a curriculum that is suitable for development and based on the principles of constructivism, inquiry, and reflective learning (Orbeta & Paqueo, 2020). These principles emphasize the necessity of teaching students not just to read but also to understand, analyze, and utilize the knowledge they gain. Consequently, the law subtly emphasizes the importance of cultivating reading comprehension abilities, which form the basis for achievement in various fields of study.

Besides, the law requires the implementation of a spiral progression method in essential learning domains, such as English and Filipino, in which literacy and comprehension abilities are consistently advanced from one grade to the subsequent one (Perez *et al.*, 2020). For Grade 8 students, this advancement indicates that their reading comprehension abilities should evolve from merely decoding words to encompassing the understanding of intricate texts and utilizing advanced cognitive reading strategies. This directly corresponds with the study's emphasis, as understanding and strategy application are anticipated skills at this educational level.

Additionally, the Act emphasizes the significance of teacher quality and instructional resources as crucial to the learning experience. Educators should incorporate methods that enhance reading comprehension and critical thinking, whereas teaching resources need to be crafted to captivate students and encourage profound understanding (Ignacio *et al.*, 2022).

DepEd Memorandum No. 034, series of 2025, offers additional guidelines for executing the Literacy Remediation Program (LRP), designed to tackle literacy deficiencies in learners. The memorandum details program scope, curriculum design, educator training, progress assessment, and resource distribution to guarantee that students who struggle with reading obtain focused assistance in essential skills like decoding, vocabulary, and basic comprehension. Through organized remediation sessions, ongoing evaluations, and skill development programs, the initiative guarantees timely intervention to avert academic difficulties in upper grade levels (DepEd, 2024).

While the program is aimed at early grade learners, its principles are closely connected to the emphasis of this study on the cognitive reading strategies and comprehension skills of Grade 8 students. The memorandum underscores the significance of organized strategy teaching, ongoing evaluation, and remediation centered on comprehension, aligning with the study's focus on providing students with cognitive resources to grasp and remember educational material. This study explores how Grade 8 students cultivate and use cognitive reading strategies, furthering the aims of national literacy policies and tackling gaps that continue after the early grades. Research findings might also offer evidence to back policy improvements, guaranteeing that literacy programs are maintained throughout basic education and are not restricted to just primary grades.

2. Purpose of the Study

This research explored the relationship between the Grade 8 students' cognitive reading strategies and reading comprehension skills at a public high school in Cebu, Philippines, for the school year 2025-2026. Specifically, it sought to answer the following sub-problems:

1. What is the respondents' level of cognitive reading strategies during the:
   1.1 Pre-reading phase,
   1.2 While-reading phase, and

1.3 Post-reading phase?
2. What is the level of reading comprehension skills of the respondents?
3. Is there a significant association between the cognitive reading strategies and the reading comprehension skills of the respondents?

3. Materials and Methods

This research observed the appropriate procedures, data handling techniques and treatment to ensure valid and reliable results.

3.1 Research Design

This study utilized a descriptive correlational research design to guide the collection, analysis, and interpretation of data. Stangor and Walinga (2019) define correlational research design as those that examine two or more important variables and examine whether there is a relationship between them or between two or more variables. Moreover, according to Quaranta (2017), descriptive correlational research is appropriate for describing connections between variables without any assumptions about causality. This approach is appropriate for this study because the focus of interest is on whether there is a relationship between the students' cognitive reading strategies and their reading comprehension skills.

3.2 Research Respondents

The respondents of this study were the Grade 8 students of a public high school in Cebu, Philippines, who are officially enrolled for the school year 2025-2026. Most of these students are observed to have difficulties in reading comprehension despite the interventions implemented by the school to enhance their comprehension skills. Thus, it is important to look into their strategies in reading so that the interventions crafted will be aligned with their needs. The distribution of the respondents is presented in Table 1.

Table 1: Profile of the respondents

Profile	**f**	**%**
Age		
15 and above	12	5.58
14	61	28.37
13	140	65.12
12	2	0.93
Total	**215**	**100.00**
Gender		
Female	124	57.67
Male	91	42.33
Total	**215**	**100.00**

There were 215 respondents who were chosen from the 458 Grade 8 students distributed to the eleven sections. The respondents will be chosen using simple random sampling to give an equal chance to every student of being selected in every section. The Slovin's formula was used to determine the appropriate sample size, setting the margin of error at 0.05. This formula is appropriate to use when the study observes a 0.05 margin of error in the results of the study.

3.3 Data Collection Tools

This research utilized a two-part survey questionnaire to assess the variables investigated in this study. Part I elicited information on the profile of the respondents in terms of their age and gender. Part II utilized a survey questionnaire adopted from Gustanti and Ayu (2021), which measured the respondents' cognitive reading strategies, which are categorized into three phases: pre-reading, while-reading, and post-reading. The respondents will answer the statements using the five-point Likert scale, namely: 5-Strongly Agree, 4-Agree, 3-Undecided, 2-Disagree, and 1-Strongly Disagree. Moreover, the respondents' reading comprehension skills were assessed using the Phil-IRI assessment tool.

3.4 Data Gathering Process

To gather the data needed for this research, the researcher submitted a transmittal to the Schools Division Superintendent asking permission for the conduct of the study. Once approved, the researcher oriented the school principal to the research environment about the researcher's intention to conduct the study in their school. A date was set and agreed upon by both parties when the data gathering was conducted.

After getting the approval of the school principal, the researcher informed the teachers of the concern and conducted an orientation about the research. Afterwards, the researcher had an orientation to the respondents on what the study is about and how the respondents will answer the survey questionnaire. Informed consent was secured before the respondents were allowed to participate in the data-gathering process. The researcher gave the respondents enough time to answer the questionnaire. The researcher assured the respondents that all information would be kept confidential. On the other hand, the researcher asked for the assistance of the respondents' adviser to retrieve the data on their reading comprehension skills assessment.

Once the respondents are done answering the survey questionnaire, the researcher sorts out all the necessary information. The data collected served as the foundation for analyzing the variables of the study.

3.5 Data Analysis

The data gathered were processed and handled according to the ethical standards and protocol. Descriptive and inferential statistics were used to treat the data with the aid of a statistician. Frequency count was used to systematically organize and summarize the demographic data collected from the student respondents and provide a clear count of

how many students fit into each defined category. This allowed the researcher to make a more detailed analysis of how demographic factors relate to the main variables of this study and to shed light on the relationships between student characteristics and their educational experiences. The percentage was calculated to show the distribution and relative frequency of respondents in a given category within the sample population. This method made it easy for researchers to compare categories and detect patterns, giving a broad picture of how the students represent these categories. The weighted mean was used to calculate the average score of the responses describing the cognitive reading strategies of the respondents, which helped determine the level of the cognitive reading strategies of the respondents. Standard deviation was used to measure the variation of a set of data values. This means how much individual data points deviate from the mean of the dataset. A lower standard deviation indicates that the data points lie closer to the mean; a higher standard deviation means there is more spread or variability. Lastly, the chi-square test was used to test the significance of the association between the respondents' cognitive reading strategies and reading comprehension skills.

4. Results and Discussion

This section presents the results of the data gathered based on the study's objectives, which include the respondents' cognitive reading strategies and reading comprehension skills. Moreover, the results of the test of association between these variables are also presented here.

4.1 Level of Cognitive Reading Strategies of the Respondents

This section presents the level of reading strategies of the respondents during the pre-reading, while reading, and after reading phases. This provides essential insight into how learners actively process and construct meaning from texts. The following table presents the distribution of the respondents' cognitive reading strategies, serving as a basis for analyzing their relationship with reading comprehension.

4.1.1 Pre-Reading Phase

The pre-reading phase provides essential insight into how learners prepare themselves to engage with texts. Pre-reading strategies such as activating prior knowledge, predicting content, setting reading purposes, and surveying text features enable students to approach reading tasks with readiness and direction, enhancing their ability to construct meaning once they begin reading (Thomas & Vannatta Reinhart, 2014).

Table 2: Respondents' level of cognitive reading strategies during the pre-reading phase

S/N	Indicators	WM	SD	Verbal Description
1	Reading the title and imagining what the text might be about	3.79	1.06	Very Good
2	Looking at illustration/pictures and trying to guess how they are related to the text	3.84	1.05	Very Good
3	Skimming the text quickly to get the gist	3.14	1.14	Good
4	Reading the first line of every paragraph to understand what the text is about	3.87	1.08	Very Good
5	Thinking about previous knowledge on the topic of the text	3.77	1.04	Very Good
	Aggregate Mean	**3.68**		**Very Good**
	Aggregate Standard Deviation		**1.07**	

Legend: 4.21-5.00-Excellent; 3.41-4.20-Very Good; 2.61-3.40-Good; 1.81-2.60-Fair; 1.00-1.80-Poor

Table 2 presents the respondents' level of cognitive reading strategies during the pre-reading phase, with an overall weighted mean of 3.68 and a standard deviation of 1.07. The variability indicated by the standard deviation implies that individual responses differ considerably. The verbal description interpreted as very good indicates strong engagement when it comes behaviors upon preparing to read. This suggests that participants consistently apply pre-reading strategies that facilitate their reading tasks.

Item 4 possesses the highest weighted mean among the indicators, with a weighted mean of 3.87 and a standard deviation of 1.08, signifying that respondents need to look out for context clues in order to understand the meaning. On the other hand, item 3 observed the lowest weighted mean of 3.14 with a standard deviation of 1.14, which exhibits mixed responses among the students. This implies that students value previewing what they read, that make skimming less practiced due to limited familiarity and thought as inefficient in academic contexts.

Study by Ven *et al.* (2023) confirms that readers who engaged in examining the head and initial sentences demonstrate better understanding of texts than skimming. However, the study of Hakemulder and Mangen (2024) found that skimming is increasingly adopted in reading environments that value technology. Thus, promoting a balanced approach to cognitive strategy improves reading capability and supports the learning process.

4.1.2 While-Reading Phase

While-reading phase is the phase where respondents are able to conceptualize ideas, questions, and inferences from texts processing information critically, detect inconsistencies, and incorporate new learning (Hattan *et al.*, 2024). Assessing the degree to which respondents use these strategies in determining the students' ability to understand texts.

Table 3: Respondents' level of cognitive reading strategies during the while-reading phase

S/N	Indicators	WM	SD	Verbal Description
1	Reading without looking up every unknown word in the dictionary	2.93	1.22	Good
2	Using a dictionary for the important words	3.64	1.16	Very Good
3	Guessing the meaning of a word from the context	3.58	1.09	Very Good
4	Guessing the meaning of a word from the grammatical category	3.47	1.05	Very Good
5	Remembering a new word by thinking of a situation in which the word might be used	3.70	1.14	Very Good
6	Skipping some of the unknown words	2.92	1.29	Good
7	Rereading a sentence	3.80	1.12	Very Good
8	Considering the other sentences in the paragraph to figure out the meaning of a sentence	3.67	1.11	Very Good
9	Reading without translating word-for-word	3.16	1.26	Good
10	Having a picture of the events in the text in mind	3.62	1.07	Very Good
11	Thinking aloud during the reading	3.47	1.19	Very Good
12	Paying attention to words or phrases that show how the text is organized	3.62	1.15	Very Good
13	Taking notes on the important points of the text	3.79	1.07	Very Good
14	Making guesses about what will come next based on the information already given in the text	3.50	1.10	Very Good
15	Relating the text to background knowledge about the topic to remember important information	3.86	1.00	Very Good
	Aggregate Mean	**3.51**		**Very Good**
	Aggregate Standard Deviation		**1.13**	

The data in Table 3 reveal that respondents demonstrate an overall very good level of cognitive reading strategies during the while-reading phase, garnering an aggregated weighted mean of 3.51 and an aggregated standard deviation of 1.13. This suggests that learners apply strategies that facilitate understanding while engaging with reading, reflecting strong metacognitive awareness and strategic reading behaviors.

The indicator with the highest weighted mean is item 15, with a weighted mean of 3.51 and a standard deviation of 1.00, underscoring the importance of relevance when it comes to reading literacy. Conversely, the lowed weighted mean of 2.92 and a 1.00 standard deviation is item 6. This suggests that readers prioritize including prior knowledge and back-to-back reading for clarity as they are less inclined to ignore unfamiliar vocabulary.

The findings are consistent with Dori *et al.* (2018) study that found that strategies such as rereading and contextual guessing align with the level of metacognitive thinking. However, low engagement in skipping unknown words contrasts with the study of Haverkamp *et al.* (2023) such that reading contexts in the digital medium are often done by reading to maintain reading flow. Thus, this implies that instructional practices should reinforce strategies that integrate prior knowledge and encourage monitoring, rereading, and note-taking actively.

4.1.3 Post-Reading Phase

The post-reading phase provides important insight into how learners consolidate and extend their understanding of texts. This phase is essential for reinforcing comprehension and long-term retention, allowing students to critically assess what they have read, which draw connection to wider contexts and prepare for future application of knowledge (Seban *et al.*, 2025).

Table 4: Respondents' level of cognitive reading strategies during the post-reading phase

S/N	Indicators	WM	SD	Verbal Description
1	Classifying the words according to their meanings	3.83	1.06	Very Good
2	Classifying the words according to their grammatical categories	3.62	1.09	Very Good
3	Summarizing the main ideas	3.69	1.16	Very Good
4	Rereading the text to remedy comprehension failures	3.40	1.11	Good
5	Rereading the text to remember the important points	3.91	1.13	Very Good
	Aggregate Mean	**3.69**		**Very Good**
	Aggregate Standard Deviation		**1.11**	

Table 4 indicates that respondents have a very good standing when it comes to cognitive reading strategies during the post-reading phase, presenting an aggregate weighted mean of 3.69 and an aggregate standard deviation of 1.11. This suggests that learners actively engage in reflective strategies after reading, which is important for strengthening understanding and enhancing retention.

Item 5 got the highest weighted mean of 3.91 and a standard deviation of 1.13, indicating that students reread texts to remember the important points. This highlights the importance of repetition in reinforcing memory and comprehension. Meanwhile, the lowest weighted mean goes to item 4 with 3.40 and a standard deviation of 1.11 indication that students do not tend to reread the text to remedy comprehension failures. This suggests that respondents are less inclined to revisit texts to address misunderstanding.

Bogaerds-Hazenberg *et al.* (2021) emphasizes that the role of post-reading strategies, such as repetition and summarization improve comprehension and retention. However, Spjeldnæs and Karlsen (2024) report that rereading in a digital environment is common among readers. Nevertheless, fostering a balanced set of post-reading strategies prepares learners with tools for better understanding and engagement.

Table 5 presents the overall summary of respondents' cognitive reading strategies across the three phases: pre-reading, while-reading, and post-reading. The cognitive reading strategies of the respondents got a grand mean of 3.63 with a grand standard deviation of 1.10, describing the respondents as very good in terms of their level. This indicates that respondents consistently engage cognitive strategies throughout the reading process, demonstrating strong metacognitive awareness and active engagement with texts.

Table 5: Summary on the respondents' level of cognitive reading strategies

Components	WM	SD	Verbal Description
Pre-reading	3.68	1.07	Very Good
While-reading	3.51	1.13	Very Good
Post-reading	3.69	1.11	Very Good
Grand Mean	**3.63**		**Very Good**
Grand Standard Deviation		**1.10**	

All three phases got a verbal description of very good, with the indicators having a 3.69 weighted mean for pre-reading, with a standard deviation of 1.11. Then, while-reading with 3.51 and a standard deviation of 1.13, and the post-reading with 3.68 and 1.07 standard deviation. These results reveal that respondents are most engaged in reflective strategies after reading, enhancing comprehension and retention. Otherwise, it suggests that although readers employ monitoring strategies, they may encounter challenges in sustaining these strategies during active reading (Duke & Cartwright, 2021).

The findings are consistent with studies emphasizing the importance of post-reading strategies in consolidating understanding and improving recall. The strong performance in pre-reading and post-reading highlights the role of schema activation and summarization in comprehension, according to Hattan *et al.* (2024). Meanwhile, Paul *et al.* (2024) suggest that readers increasingly rely on real-time monitoring strategies in digital contexts. Ultimately, these findings underscore the need for integrated reading strategy instruction to sustain comprehension and critical thinking.

4.2 Level of Reading Comprehension Skills of the Respondents

The reading comprehension skills of the respondents are explained in this section. Reading comprehension encompasses processes such as idea generation, making inquiries and inferences, drawing conclusions, and integrating information with prior knowledge of the text (Bruggink *et al.*, 2022).

Table 6 reveals that among 215 respondents, 64.19% are classified as Independent readers, 34.88% fall under the Instructional level, and only 0.93% are at the Frustration level. This distribution indicates that the majority of respondents can comprehend texts, while a considerable minority requires guided support to achieve full understanding. The least amount at the frustration level suggests that severe comprehension difficulties are rare within the sample. The dominance of the Independent level implies that most respondents possess adequate vocabulary and metacognitive strategies to process texts without assistance.

Table 6: Reading comprehension skills of the respondents

Reading Comprehension Skills	f	%
Independent	138	64.19
Instructional	75	34.88
Frustration	2	0.93
Total	**215**	**100.00**

The results are consistent with research indicating that most learners in higher education contexts achieve independent reading levels, while a smaller proportion requires scaffolding to comprehend complex texts (van de Pol *et al.*, 2019). Studies by Fernandez and Guilbert (2024) emphasize that metacognitive strategy instruction significantly reduces the proportion of readers at instructional and frustration levels, supporting the current findings. However, the near absence of frustration-level readers, Novita *et al.* (2022) contrasts with reports in multilingual contexts where comprehension challenges are more prevalent. Hence, promoting balanced reading interventions ensures equal opportunity for development and enhances academic performance across diverse learner profiles.

4.3 Test of Association between the Variables

This portion presents the test of the association between the variables of cognitive reading strategies and reading comprehension skills in Grade 8 students using the Chi-square test. This tool will be used to test the significance of the association between the respondents' strategies in reading and comprehension skills.

Table 7: Test of association between the variables

Variables	**x^2 - value**	**df**	**p - value**	**Decision**	**Result**
Reading Attitudes and Reading Comprehension Skills	1.321	3	0.724	Do not reject Ho	Not Significant

*significant at p<0.05 (two-tailed)

It is shown in Table 7 that the Chi-square test of independence yielded a computed x^2 – value of 1.321 with 3 degrees of freedom and a p-value of 0.724. Since the p-value is higher than 0.05 significance, the null hypothesis is not rejected. This indicates that there is no statistically significant association between cognitive reading strategies and the reading comprehension skills of the respondents. In practical terms, the use of cognitive strategies, as reported by students, seems not to influence their comprehension performance within the results from the data gathered in this study.

This finding contrasts with several studies that emphasize the positive impact of cognitive strategies on comprehension. For instance, Castells *et al.* (2022) argue that strategies such as summarizing, questioning, and inferencing are critical for constructing meaning from text. Similarly, Teng and Zhang (2021) highlights that metacognitive and cognitive strategies enhance engagement and comprehension, particularly in adolescent readers. The absence of significance in this study may be attributed to factors such as inconsistent application of strategies, lack of explicit instruction, or reliance on rote reading practices rather than strategic reading (Urban *et al.*, 2023).

Educational interventions should therefore focus on instruction and modeling of strategies, ensuring that students understand when and how to effectively apply them. Schools should integrate strategy-based reading programs that combine teacher scaffolding with opportunities for independent practice. As Carter *et al.* (2024) note,

comprehension development is multifaceted, requiring alignment between strategy use, motivation, and text complexity. In conclusion, while cognitive strategies are theoretically beneficial, their effectiveness depends on proper implementation and learner motivation.

5. Conclusion

The study concludes that Grade 8 students demonstrate commendable approaches in cognitive reading strategies and generally achieve independent comprehension levels. However, the absence of a significant relationship between strategy use and comprehension underscores a critical gap, indicating that strategies alone do not guarantee improved understanding unless taught effectively. This finding emphasizes the need for explicit instruction and guided practice in cognitive strategies to ensure their effective implementation in reading tasks. Teachers should support strategy use, model metacognitive processes, and provide opportunities for reflective application. Furthermore, interventions should address motivational factors and complex issues in texts to make the most of the benefits of strategy-based instruction. Ultimately, enhancing comprehension requires a rounded approach that combines cognitive strategies with structured teaching, learner engagement, and diverse reading materials. Such integration will foster deeper understanding, critical thinking, and literacy skills.

6. Recommendation

According to the findings, integrating explicit teaching of cognitive reading strategies into the curriculum and highlighting when and how to apply them effectively must be applied in schools. Providing teacher training for professional development programs will equip teachers with skills to model and scaffold strategy use during reading instruction. Furthermore, access to varied texts, including informational and narrative genres, promotes flexible strategy application. Parents should also engage through workshops and resources that encourage supportive reading practices at home. Thus, establishing continuous assessment mechanisms to track the effectiveness of strategy-based programs and adjust approaches based on learner needs.

Conflict of Interest Statement

The author declares no conflict of interest.

About the Author

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