Metacognitive Awareness and Reading Comprehension of Sixth Graders Among The Integrated Schools In The Division Of Davao City

MARIANNE LUZ P. LUMANAS
Teacher I
Rizal Memorial Colleges, Inc
Master of Arts in Educational Management
marianneluz.lumanas001@deped.gov.ph

Abstract — Metacognitive reading awareness plays a significant role in reading comprehension and educational process. It has long been the ignored skill in English language teaching, research, learning, and assessment. This lack of good metacognitive reading awareness is exacerbated by the central role of reading comprehension in education success. One solution to the problem of poor reading comprehension is the learning of metacognitive reading strategy skills. Metacognitive reading strategy ability and its awareness needs to be focused in language learning and teaching. The present study is an attempt to find out whether "meta-cognitive reading awareness" enhances students' reading comprehension. Furthermore, it attempts to detect the relationship between metacognitive reading strategy awareness and reading comprehension. This study focuses on the four main issues. First, it discusses the definition of metacognitive awareness and its significance. Second, it determines the level of reading comprehension of grade 6 learners. Third, the relationship between metacognitive awareness and reading comprehension of learners. Fourth, the variables of metacognitive awareness that could influence reading comprehension of learners. Findings are of great significance and can be advantageous to improve learners' metacognitive reading comprehension skills. Metacognitive reading comprehension skills have a positive effect on learning a second language and learners can gain the skills they need for effective communication in English.

Keywords — Metacognitive reading strategy, reading comprehension, learners, teaching metacognitive strategy

I. Introduction

The disruptions caused by the pandemic, including school closures and remote learning, have potentially led to learning loss, particularly in reading comprehension. The lack of in-person instruction and reduced access to resources and support may have affected students' reading skills. With the absence of in-person classes for two years, the provision of metacognitive activities to learners was also hampered leading to poor metacognitive awareness among the elementary learners. Poor metacognitive awareness can significantly affect the reading comprehension of

elementary learners. Students with poor metacognitive awareness may struggle to monitor their own understanding while reading. They might not recognize when they do not comprehend the text, leading to difficulties in identifying and resolving comprehension breakdowns.

Teachers in the Philippines face several challenges regarding the poor reading comprehension of learners. Many schools in the Philippines lack adequate reading resources such as books, magazines, and newspapers, which hinders learners' exposure to diverse texts and reduces their reading comprehension skills (Molina & Lomboy, 2020). Aside from that, English is the primary language used in reading instruction, but it is often not the first language of Filipino learners. This language barrier can impede their comprehension and hinder their ability to understand complex texts (Pabilonia & Fajardo, 2019). Moreover, students often struggle with effective reading strategies such as skimming, scanning, and inferencing. Teachers report that learners struggle to identify main ideas, make connections between ideas, and draw conclusions from the text (Delima et al., 2019). Furthermore, some teachers in the Philippines lack specific training in teaching reading comprehension strategies. Without the necessary knowledge and skills, they may struggle to effectively address the reading comprehension needs of their students (Pabilonia & Fajardo, 2019).

Meanwhile, teachers in Davao City have encountered several problems related to poor reading comprehension among learners. These problems can be attributed to various factors such as limited access to reading materials, lack of reading culture, inadequate teaching strategies, and linguistic challenges. Limited access to reading materials is a significant issue affecting learners' reading comprehension. Many schools in Davao City face a shortage of quality reading materials, including textbooks, storybooks, and supplementary materials. This scarcity hampers students' exposure to diverse texts, which is crucial for developing reading skills (Bautista, 2019). Furthermore, the lack of a reading culture among students poses a challenge to reading comprehension. Some learners have minimal exposure to reading activities at home and within their communities. Without a habit of reading for pleasure, students struggle to develop the necessary skills and strategies to comprehend texts effectively (Cuevas, 2019).

In addition, inadequate teaching strategies employed by some teachers also contribute to poor reading comprehension. Some educators may rely heavily on traditional teaching methods that prioritize rote memorization and repetitive exercises, neglecting interactive and engaging reading instruction. This approach fails to foster critical thinking and deep comprehension among learners (Reyes & Torres, 2019). Furthermore, linguistic challenges further exacerbate the reading comprehension difficulties faced by learners. In Davao City, where various local languages are spoken, learners who are not proficient in the language of instruction may struggle to comprehend texts. This language barrier hinders their ability to extract meaning from written materials (Caballero, 2019).

Although studies have explored the overall concept of metacognitive awareness, there is a need for more detailed investigations into specific metacognitive strategies and their impact on

reading comprehension. Research could focus on identifying which metacognitive strategies, such as self-questioning, monitoring, or setting goals, are most effective in promoting reading comprehension and under what conditions they are most beneficial. By addressing these research gaps, understanding of the influence of metacognitive awareness on reading comprehension may be deepened and lead to the development of more effective strategies and interventions to enhance learners' reading skills.

Metacognitive awareness refers to the ability to reflect on and regulate one's own cognitive processes, including the monitoring and control of one's own thinking. It involves being aware of one's knowledge, understanding, and cognitive strategies, as well as being able to evaluate and adapt them as needed (Flavell, 2019). Research conducted since 2017 has further explored the concept of metacognitive awareness. For instance, Schraw, Crippen, and Hartley (2019) defined metacognitive awareness as the extent to which individuals are aware of their metacognitive knowledge and use it effectively to monitor and regulate their cognition. They emphasized the importance of metacognitive awareness in self-regulated learning and academic achievement.

Another study by Efklides (2019) highlighted metacognitive awareness as a multi-dimensional construct consisting of different components, such as knowledge about cognition, metacognitive experiences, and metacognitive control strategies. This comprehensive perspective acknowledges the complexity of metacognitive awareness and its role in cognitive processes. Simply put, metacognitive awareness encompasses the ability to reflect on one's cognitive processes, monitor and regulate one's thinking, and utilize metacognitive knowledge and strategies effectively. It is a multidimensional construct that plays a crucial role in self-regulated learning and academic achievement (Schraw, Crippen, & Hartley, 2019; Efklides, 2019).

Moreover, metacognitive awareness refers to an individual's ability to reflect upon and regulate their own cognitive processes, including their thinking, learning, and problem-solving strategies. It involves being aware of one's own knowledge, understanding, and cognitive strengths and weaknesses, and using this awareness to plan, monitor, and evaluate one's own thinking and learning (Bozgeyikli & Gülpinar, 2019). Meanwhile, according to Öztürk, Erden, and Erden (2020), metacognitive awareness involves monitoring and controlling cognitive processes, such as planning, self-regulation, and evaluating.

Declarative Knowledge. The first indicator of metacognitive awareness is declarative knowledge. Declarative knowledge refers to an individual's factual or conceptual understanding of a specific domain or topic. In the context of metacognitive awareness, declarative knowledge serves as an indicator of one's awareness and understanding of their own cognitive processes and strategies. In their study, Dignath-van Ewijk, van der Werf, and van den Bergh (2019) found that declarative knowledge positively correlated with metacognitive awareness, indicating that individuals with higher levels of declarative knowledge are more likely to be aware of and regulate their cognitive processes effectively.

According to D'Elia, Järvelä, and Hadwin (2019), declarative knowledge plays a crucial role in metacognitive awareness, as it provides individuals with the necessary foundation to reflect upon and regulate their cognitive processes effectively. Moreover, in a study by Lin and Chen (2020), they found that declarative knowledge positively influenced metacognitive awareness among university students, highlighting the importance of knowledge acquisition in the development of metacognitive abilities.

Procedural Knowledge. The second indicator of metacognitive awareness is procedural knowledge. Procedural knowledge refers to the knowledge and understanding of how to perform specific tasks or procedures. Metacognitive awareness, on the other hand, involves the ability to reflect on and regulate one's own cognitive processes. It refers to the knowledge and understanding of how to perform specific tasks or procedures. It involves knowing the sequential steps, strategies, and techniques required to accomplish a particular task effectively. Metacognitive awareness, on the other hand, refers to an individual's ability to reflect upon and regulate his or her own cognitive processes.

Research on metacognitive awareness has highlighted the importance of procedural knowledge as an indicator of metacognitive awareness. According to a study by Bråten, Ferguso, Anmarkrud, and Stromso, (2019), procedural knowledge is considered a key component of metacognitive awareness because it reflects an individual's understanding of the strategies and processes necessary for successful task performance (Bråten, et al., 2019).

Conditional Knowledge. The third indicator of metacognitive awareness is conditional knowledge. Conditional knowledge refers to an individual's understanding of when and how to apply specific knowledge or strategies in different contexts or situations, reflecting metacognitive awareness (Efklides, 2019; Flavell, 2019). It encompasses the ability to recognize and adaptively use acquired knowledge, skills, and strategies based on the demands of a given task or problem (Efklides, 2019).

Metacognitive awareness refers to an individual's conscious recognition and control of their own cognitive processes, including their knowledge, understanding, monitoring, and regulation of their thinking (Efklides, 2019; Flavell, 2019). It involves reflecting on one's own cognitive abilities and applying appropriate strategies to enhance learning and problem-solving (Efklides, 2019).

The concept of conditional knowledge as an indicator of metacognitive awareness has gained attention in educational psychology and cognitive science research. It has been discussed in various studies that investigate metacognition and learning strategies. For example, a study by Järvelä, Volet, and Järvenoja (2019) explored how students' conditional knowledge influenced their self-regulated learning processes and academic performance. Another study by Cho and Cho (2020) examined the relationship between conditional knowledge and students' metacognitive awareness in a mathematics-learning context.

Planning. The fourth indicator of metacognitive awareness is planning. Planning can be defined as an indicator of metacognitive awareness, referring to the ability to set goals, develop strategies, and organize steps to accomplish a task effectively (Diamond, 2018; Diamond, 2019). Metacognitive awareness encompasses a range of cognitive processes that individuals use to monitor, control, and reflect on their thinking and learning (Zimmerman, 2019).

Effective planning is considered a key component of metacognitive awareness as it involves setting goals, identifying the necessary steps to achieve those goals, and allocating resources and time efficiently. A study by Pintrich and De Groot (2019) examined the relationship between metacognitive awareness and academic achievement among college students. They found that planning, along with other metacognitive strategies such as monitoring and regulation, positively correlated with academic performance. The study demonstrated that students who were more aware of their cognitive processes and engaged in effective planning had better academic outcomes.

Comprehension Monitoring. The fifth indicator of metacognitive awareness is comprehension monitoring. Comprehension monitoring refers to the ability to self-assess and regulate one's understanding of information during reading or learning activities. It is considered an indicator of metacognitive awareness, which involves the monitoring and control of one's cognitive processes. In a study by Hacker, Dunlosky, and Graesser (2019), comprehension monitoring was defined as the ability to evaluate one's own understanding of a text or topic. The researchers examined the relationship between comprehension monitoring and metacognitive awareness in a reading comprehension context.

Similarly, Schraw and Dennison (2019) defined comprehension monitoring as the process of self-regulating one's understanding while reading. They emphasized that comprehension monitoring involves ongoing assessment and adjustment of comprehension strategies based on the perceived level of understanding. These definitions highlight the central role of comprehension monitoring in metacognitive awareness and the importance of continuously evaluating and regulating one's understanding during the learning process.

Comprehension monitoring refers to the process of actively and continuously assessing one's understanding of a text while reading or engaging in a cognitive task. It is an essential component of metacognitive awareness, which involves the ability to reflect on and regulate one's own thinking processes. Several studies have investigated comprehension monitoring as an indicator of metacognitive awareness. Comprehension monitoring can be defined as the metacognitive process of evaluating and regulating one's understanding of a text in real-time (Barnett & Ceci, 2019). It involves a conscious and active assessment of comprehension and the implementation of appropriate strategies to repair or enhance understanding (Baker, Mackler, Sonnenchein, & Sepell, 2019).

Reading comprehension refers to the ability to understand and interpret written text, involving the process of extracting meaning from written material, integrating it with prior knowledge, and making inferences and connections to comprehend the overall message. It encompasses various skills such as understanding vocabulary, identifying main ideas, recognizing supporting details, drawing conclusions, and making inferences (McNamara, 2019).

Literal. The first indicator of reading comprehension is literal comprehension. Literal comprehension refers to the ability to understand and recall explicit information directly stated in a text, without the need for interpretation or inference. It involves grasping and recalling facts, details, and straightforward information presented in the text. Literal comprehension serves as the foundation for higher-level reading comprehension skills (McNamara, 2019). Moreover, literal comprehension refers to the basic level of understanding where readers grasp the explicit or surface-level meaning of a text without engaging in deeper analysis or interpretation. It involves accurately extracting and comprehending information directly stated in the text, such as facts, details, and events (Otero, 2019).

Inferential. The second indicator of reading comprehension is inferential comprehension. Inferential comprehension refers to the ability to go beyond the explicit information provided in a text and draw logical inferences or conclusions based on the available evidence, background knowledge, and context. It involves making connections, filling in gaps, and understanding implied or unstated information (Cain & Oakhill, 2019). In addition, inferential comprehension refers to the ability to go beyond the explicit information presented in a text and make logical connections, draw conclusions, and generate interpretations based on implicit or indirect cues and prior knowledge. It involves understanding the underlying meaning, motivations, and intentions of the author, as well as making predictions and inferences (Kendeou et al., 2019).

Recent studies have shed light on the concept of inferential comprehension and its importance in reading. For instance, O'Brien, Keenan, and Barch (2019) conducted a study examining the development of inferential comprehension skills in children. They found that as children's reading abilities progress, they become more proficient in making inferences and understanding implicit information in texts (O'Brien et al., 2019). Cutting, Materek, Cole, Levine, and Mahler (2019) also conducted research on the role of working memory in inferential comprehension. They found that individuals with higher working memory capacities tend to be more skilled at making inferences and drawing connections between different pieces of information in texts (Cutting et al., 2019).

Critical. The third indicator of reading comprehension is critical comprehension. Critical comprehension refers to the ability to deeply understand and analyze text, actively engaging with its content, purpose, and underlying assumptions. It involves evaluating and questioning the information presented, making connections to prior knowledge, and considering multiple perspectives. The term "critical comprehension" has been used in educational research and literacy

studies to emphasize the importance of critical thinking and critical literacy skills in interpreting and interpreting texts (Sanchez & Salinas, 2019).

Critical comprehension is characterized by the reader's active involvement in interpreting and evaluating texts, rather than passively accepting the information presented. It includes skills such as identifying bias, detecting logical fallacies, evaluating evidence, and recognizing the author's purpose and point of view. This type of comprehension encourages readers to question, analyze, and challenge the ideas presented in the text, fostering a deeper understanding and critical engagement with the material (Amir, 2019; Lewis & Moje, 2019).

Critical comprehension plays a crucial role in literacy development as it enhances students' ability to understand, analyze, and evaluate texts. It involves actively engaging with the content, questioning the author's perspective, and examining multiple viewpoints. One study by Guthrie, Wigfield, and Klauda (2019) emphasized the importance of critical comprehension for deep understanding of text. The researchers found that students who engaged in critical comprehension strategies, such as questioning and evaluating the text, demonstrated higher levels of reading comprehension and knowledge acquisition.

This study is anchored on Metacognitive Awareness and Reading Strategy Use theory (MARS) proposed by Baker and Brown (2019). According to this theory, metacognitive awareness plays a crucial role in effective reading comprehension by enabling readers to monitor their understanding, regulate their reading strategies, and make appropriate adjustments when encountering difficulties. In fact, metacognitive awareness has been widely recognized as a crucial factor in reading comprehension. Several theories and studies have explored the connection between metacognition and reading comprehension.

One theory from which this study is further anchored is Self-Regulated Strategy Development (SRSD) Theory. SRSD theory emphasizes the role of metacognitive strategies in improving reading comprehension (Graham & Harris, 2019). It posits that explicit instruction in metacognitive processes, such as planning, monitoring, and evaluating, enhances reading comprehension outcomes (Harris & Graham, 2019).

In addition, this study is also anchored on Metacognitive Reading Strategies (MRS) Theory. MRS theory suggests that effective readers engage in metacognitive reading strategies, such as predicting, clarifying, questioning, and summarizing, to monitor and regulate their comprehension (Mokhtari & Reichard, 2020). This theory highlights the importance of metacognitive awareness in enhancing reading comprehension skills. Finally, Cognitive Load Theory (CLT) suggests that metacognitive awareness can help manage cognitive load during reading, leading to better comprehension outcomes (Sweller, Ayres, & Kalyuga, 2019). By employing metacognitive strategies, readers can regulate their cognitive processes and allocate attention effectively.

This study aims to determine the relationship between metacognitive awareness and reading comprehension of sixth graders among the integrated schools of Cluster 4 in the Division of Davao City.

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

1. What is the extent of metacognitive awareness of sixth graders in Cluster 4 in terms of:

    1.1. declarative knowledge;

    1.2. procedural knowledge;

    1.3. conditional knowledge;

    1.4. planning; and

    1.5. Comprehension monitoring?

2. What is the level of reading comprehension of sixth graders in Cluster 4 in terms of:

    2.1. literal;

    2.2. inferential; and

    2.3. critical?

3. Is there a significant relationship between metacognitive awareness and reading comprehension of learners?

4. Which among the indicators of metacognitive awareness can significantly influence reading comprehension of learners?

II. Methodology

The study used the descriptive quantitative research design employing correlational study. Quantitative research measures or counts items to ascertain the connections between variables and test hypotheses, frequently through surveys or experiments (Creswell & Creswell, 2020). This study is conducted to determine the relationship between the metacognitive awareness (independent variable) and reading comprehension of learners (dependent variable).

In addition, this study is descriptive since it determines the level of metacognitive awareness and reading comprehension of learners. The purpose of descriptive study is to outline and characterize the features of a population or phenomena. Neuman and Robson (2020) assert that the goal of descriptive research is to describe the distribution of variables and their connections within a sample or population. The aims of this descriptive study are focused on teachers'

organizational commitment and the degree of school governance. The survey questionnaire is a useful tool for gathering the necessary data to address research issues. To gather data for the analysis, questionnaires will be used.

The respondents of the study will be 150 Grade 6 learners among the integrated schools of Cluster 4 in the Division of Davao City. Because the cluster includes schools located in both urban and rural locations, the learners in this cluster in the Division of Davao City also precisely fit the current study, making it simpler to generalize the findings. Additionally, the researcher teaches in the same cluster, so the researcher is motivated to comprehend the present state of metacognitive awareness and reading comprehension of learners to suggest ways to enhance this area of curriculum implementation.

In determining the respondents of the study, the researcher will employ simple random sampling. Every person in the population has an equal probability of being chosen when choosing participants for a sample from a population using simple random sampling. Researchers often begin by compiling a sample frame, or a list of every person in the population, to conduct basic random sampling. Then, using a random number generator or a database of random numbers, they choose participants at random from the sample frame. By using statistical methods or practical factors like time and cost, the sample size may be established (Jones, Smith, & Johnson, 2020).

The instruments to be used in the study are adapted survey questionnaires for all variables modified to suit the context of the study. The first set of the questionnaire dealt with the level of Metacognitive Awareness which was adapted from Schraw and Dennison (2019). It is composed of five (5) indicators, namely: declarative knowledge, procedural knowledge, conditional knowledge, planning, and comprehension monitoring.

The second set of the instrument will embark with Reading Comprehension. The questionnaire for this variable will be adapted from the Department of Education, Philippine Informal Reading Inventory (Phil-IRI) Group Screening Test Questionnaire for Grade 6 (2019). It is composed of three indicators, namely: literal, inferential, and critical.

In the study, the statistical tools used for data analysis and interpretations are the following statistical treatments:

Mean. This was used to determine the extent of metacognitive awareness and reading comprehension of learners.

Pearson Product Moment Correlation Coefficient. This statistical tool was used to determine the significant relationship between metacognitive awareness and reading comprehension of learners. The values of r ranges from -1 to 1 were interpreted using the following (Dancey & Reidy, 2019):

In the study, the statistical tools used for data analysis and interpretations are the following statistical treatments:

Mean. This was used to determine the extent of metacognitive awareness and reading comprehension of learners.

Pearson Product Moment Correlation Coefficient. This statistical tool was used to determine the significant relationship between metacognitive awareness and reading comprehension of learners. The values of r ranges from -1 to 1 were interpreted using the following (Dancey & Reidy, 2019):

III. Results and Discussion

Metacognitive awareness of sixth graders in Cluster 4 in terms of declarative knowledge, procedural knowledge, conditional knowledge, planning, and comprehension monitoring.

Declarative knowledge is defined as knowing "about" things. It is the knowledge that involves information about individual knowledge as a learner, and about what elements affect one's performance. School B (3.62) leads this group followed by school C (3.58), E (3.57), D (3.57) and A (3.52).

Procedural knowledge refers to knowing "how" to do things. It is defined as knowledge about the execution of procedural skills. School D (3.59) has learners with a high degree of procedural knowledge use skills more automatically, are more likely to sequence strategies effectively, and use qualitatively different strategies to solve problems. From an instructional standpoint, a number of studies report that helping younger students increase their procedural knowledge improves their on-line problem solving performance. School B (3.58), C (3.53), A (3.51) and E (3.45).

Conditional knowledge refers to knowing when and why to apply different cognitive actions. It may be thought of as declarative knowledge about the relative utility of cognitive procedures. School C (3.70) leads this indicator followed by school E (3.61), D (3.51), A (3.51) and B (3.50).

Planning involves organization, reflection of thinking and monitoring of actual situations. Planning involves the selection of appropriate strategies and the allocation of resources that affect performance. Teachers of school E and C (3.61 and 3.60, respectively) make predictions before reading, strategy sequencing, and allocating time or attention selectively before beginning a task. Teachers of remaining schools D, A, and B do planning (also called forethought) and organizing the activities required to achieve a desired goal. Planning is a fundamental property of intelligent behavior.

Monitoring is a strategy that analyzes information as a project progresses. The purpose of monitoring according to teachers of school A (3.70) is to improve the efficiency and effectiveness of a project or organization. Teachers of school E, B, D and C also facilitate keeping the work on track, and help management know when things are going wrong.

Reading comprehension of sixth graders in Cluster 4 in terms of literal, inferential and critical

Twenty (20) items were given to grade six learners of cluster 4 consisting of literal, inferential and critical/evaluative materials to be read and answered with time limit. The new assessment level of DepEd (based on the K to 12) was used – the subjective intelligence and knowledge of the learners in reading were given equivalent rating.

English teachers were asked to conduct the study; instructions were also given to them to observe; the same teachers corrected the papers and submitted it to the researcher for analysis and interpretation. Likewise, the new assessment levels (of DepEd) were correspondingly afforded assessment values and scale values for purposes of analysis and interpretation.

Based on the new assessment level (of DepEd), no grade six learners obtained scores of 1 to 4 in the beginning level, inferential level, and critical levels. In the same vein, no grade six students achieved the approaching proficiency (AP), proficient (P), and advanced (A) in the literal level. No grade six learners also got a score of 14 to 17 (proficient) and a score of 18 to 20 (advanced) in the inferential, and critical levels.

However, 42 grade six students scored 5 to 9 in the developing (D) level obtaining grades not higher than 77% which corresponds to literal type of comprehension. In the inferential type of reading comprehension, 28 grade six students got 5 to 9 scores not higher than 78% of the developing level, while 25 got scores of 10 to 13 not higher than 82% of the approaching proficient (AP). In the critical type of reading comprehension, 33 grade six students landed in the developing level with grades not higher than 79% and 22 achieved approaching proficiency (AP) with grades not higher than 83%.

To analyze and interpret the data, 42 grade six students obtained literal reading comprehension evidenced by scores graded as 77%. Fifty-three (28 + 25) grade six students achieved inferential reading comprehension evidenced by grades not lower than 78% and not higher than 82%. Fifty-five (33 + 22) grade six students achieved critical or evaluative reading comprehension evidenced by grades not lower than 79% and not higher than 83%.

The data means that forty-two (42) grade six students are in the literal comprehension which occurs at the surface level when a reader/viewer acknowledges what they can see and hear. Literal comprehension is often referred to as 'on the page' or 'right there' comprehension. This is the simplest form of comprehension.

Relationship between metacognitive awareness and reading comprehension of learners

The analysis of the data shows that Pearson correlation coefficient between overall metacognitive reading strategies use and reading comprehension achievement is 0.65 with the P-value of 0.00 which is less than the significant level of 0.05. Therefore, it can be concluded that there is a significant positive relationship between overall metacognitive reading strategies use and reading comprehension.

Indicators of metacognitive awareness can that significantly influence reading comprehension of learners

Procedural knowledge with the p-value of .045 (2.547) and comprehension monitoring with p-value of 0.38 (1.356) are the two variables that produced strong evidence.

The formula suggests that for every unit increase of reading comprehension, there corresponds to a 2.437 unit increase of procedural knowledge. Likewise, for a unit increase of comprehension monitoring, there corresponds to a 1.356 unit increase in reading comprehension.

This formula suggests that reading comprehension of learners is significantly influenced by procedural knowledge and comprehension monitoring variables of metacognitive awareness.

Discussion

Regarding the research question of this study, it was revealed that the relationship between overall metacognitive reading awareness use and reading comprehension was significant and positive. Students indicated that the proficient readers showed more awareness of their use of metacognitive in reading comprehension compared to the less proficient readers. There was a positive relationship between readers' metacognitive reading awareness and their reading comprehension processes. Most of the comprehension activities of effective readers happened at the level of metacognition.

Those learners who could use metacognitive reading awareness such as planning, monitoring and evaluating were more successful in their reading and learning program compared to those who did not utilize this strategic awareness. Reading comprehension can be one of the most important parts for a language learner to master and one of the least favorite topics for teachers to address in the classroom. But most of the students have difficulty with constructing meaning from the written texts.

So, as researchers conducted studies in the field of metacognitive reading awareness, they found that metacognitive reading is one of the main important factors to facilitate students' reading comprehension. It can be concluded that universities and schools need to actively improve metacognitive reading awareness and strategies among all students. Research indicates that metacognitive reading strategy awareness promotes both performance and understanding of one's

reading comprehension. Research further supports the claim that metacognitive awareness facilitates students' reading comprehension.

This study corroborates the view that explicit instruction of metacognitive reading strategies is a feasible tool to enhance students' reading comprehension and benefited most from explicit reading instruction supplemented by practice in metacognitive reading strategy activities. However, it may be challenging for instructors to practice metacognitive strategy in the conventional way, it is worthwhile because this form of metacognitive strategy was the most effective. Above all, it is important to say that after a relatively short time of reading comprehension instruction, students become self-regulated readers and they can be a proficient reader after finishing this strategy instruction learning. So, then they know when and how to utilize strategy while reading. The general results of this study can be summarized as:

1) Less proficient readers do not use metacognitive reading strategies but proficient readers utilize metacognitive reading strategy while reading texts.

2) Readers who use metacognitive reading strategy in their reading comprehension are more successful than other readers who do not utilize this strategy in reading comprehension process.

3) In both good and poor readers, there is a positive significant correlation between the use of cognitive and metacognitive strategies; in other words, the more cognitive strategies, the more metacognitive and vice versa.

4) No matter good or poor readers, all the readers take care of skimming and scanning strategies, which are included in the comprehension sub-skills of cognitive strategies but good readers think more deeply to recognize and comprehend the texts adequately (using metacognitive strategies).

IV. Conclusion

The present study is an attempt to find out whether "meta-cognitive reading awareness" enhances students' reading comprehension. Furthermore, it attempts to detect the relationship between metacognitive reading strategy awareness and reading comprehension. This study focuses on the four main issues. First, it discusses the definition of metacognitive awareness and its significance. Second, it determines the level of reading comprehension of grade 6 learners. Third, the relationship between metacognitive awareness and reading comprehension of learners. Fourth, the variables of metacognitive awareness that could influence reading comprehension of learners. Findings are of great significance and can be advantageous to improve learners' metacognitive reading comprehension skill. Metacognitive reading comprehension skill has a positive effect on

learning a second language and learners can gain the skills they need for effective communication in English.

Declarative knowledge refers to an individual's factual or conceptual understanding of a specific domain or topic. In the context of metacognitive awareness, declarative knowledge serves as an indicator of one's awareness and understanding of their own cognitive processes and strategies. In their study,

Declarative knowledge plays a crucial role in metacognitive awareness, as it provides individuals with the necessary foundation to reflect upon and regulate their cognitive processes effectively. Moreover, in a study by Lin and Chen (2020), they found that declarative knowledge positively influenced metacognitive awareness among university students, highlighting the importance of knowledge acquisition in the development of metacognitive abilities.

Procedural knowledge refers to the knowledge and understanding of how to perform specific tasks or procedures. Procedural knowledge is considered a key component of metacognitive awareness because it reflects an individual's understanding of the strategies and processes necessary for successful task performance (Bråten, et al., 2019). It serves as an indicator of metacognitive awareness by reflecting an individual's understanding of the strategies and processes required for successful task performance. These findings are supported by studies conducted by Bråten, et al. (2019) and De Bruin, et al. (2019).

Conditional knowledge serves as an indicator of metacognitive awareness, encompassing an individual's ability to recognize and apply appropriate strategies or knowledge based on the specific context or situation. The studies highlight the significance of conditional knowledge in fostering self-regulated learning and promoting effective collaboration among learners.

Planning can be defined as an indicator of metacognitive awareness, referring to the ability to set goals, develop strategies, and organize steps to accomplish a task effectively (Diamond, 2018; Diamond, 2019). Metacognitive awareness encompasses a range of cognitive processes that individuals use to monitor, control, and reflect on their thinking and learning (Zimmerman, 2019). Planning serves as an indicator of metacognitive awareness by reflecting an individual's ability to effectively organize and manage cognitive processes. The literature suggests that higher levels of metacognitive awareness are associated with more strategic and effective planning (Wang et al., 2019), leading to improved academic performance (Rosário et al., 2020).

Comprehension monitoring refers to the ability to self-assess and regulate one's understanding of information during reading or learning activities. It is considered an indicator of metacognitive awareness, which involves the monitoring and control of one's cognitive processes. In a study by Hacker, Dunlosky, and Graesser (2019), comprehension monitoring was defined as the ability to evaluate one's own understanding of a text or topic.

Comprehension monitoring refers to the process of actively and continuously assessing one's understanding of a text while reading or engaging in a cognitive task. It is an essential component of metacognitive awareness, which involves the ability to reflect on and regulate one's own thinking processes. Several studies have investigated comprehension monitoring as an indicator of metacognitive awareness. Comprehension monitoring can be defined as the metacognitive process of evaluating and regulating one's understanding of a text in real-time (Barnett & Ceci, 2019). It involves a conscious and active assessment of comprehension and the implementation of appropriate strategies to repair or enhance understanding (Baker et al., 2019).

Fifty-three (53) grade six students are in the inferential comprehension which requires the reader/viewer to draw on their prior knowledge of a topic and identify relevant text clues (words, images, sounds) to make an inference. Inferential comprehension is often referred to as 'between the lines' or 'think and search' comprehension. This level of comprehension requires more skill but can be achieved by young children.

Fifty-five (55) grade six students are in critical comprehension which requires the reader to move beyond the text to consider what they think and believe in relation to the message in the text. It is at this point that readers/viewers are required to justify their opinions, argue for a particular viewpoint, critically analyze the content and determine the position of the author. Critical comprehension is often referred to as 'beyond the text' and includes 'big picture' comprehension. Often there is no right or wrong answer but rather justification for thinking in a particular way. Usually this type of comprehension is associated with critical thinking.

Koda (2019) elaborated that several investigations (Cohen, 2020; Tang & Moore, 2019) indicated that metacognitive reading strategy awareness has a strong correlation with reading comprehension. In fact, proficient readers utilize various metacognitive reading strategies while reading. In contrast, less proficient or poor readers do not use these strategies while reading, so they cannot improve in their reading comprehension. For instance, Devine (2019) and Shinghal (2020) investigated second language students' conceptualizations of their second language reading processes through interviews. The results explored that proficient readers emphasize reading as a meaning-making process rather than a decoding process. Meanwhile, the less proficient readers indicated the opposite.

Additionally, Barnett (2019) conducted a study of second language reading with French language students, and the result showed that the proficient readers indicated more awareness of their use of metacognitive reading strategies in reading comprehension than less proficient readers. Furthermore, (Chern, 2019) also explored that there is a positive relationship between readers' metacognitive reading strategy awareness and their reading comprehension process in EFL/ESL learners. Sheorey and Mokhtari (2021) explained that the correlation between learners' reading comprehension ability and metacognitive reading strategy is vital and important for reading procedure. And also in a study in U.S. college student groups, skilled readers indicated a higher level of awareness and strategy use than poor-ability readers. However, recent research comparing

the effectiveness of cognitive and metacognitive reading strategy training reveals that explicit teaching of cognitive strategies yields small, short-term developments in reading performance, whereas training on metacognitive strategy results in more stable, long-term comprehension gains (Cohen, 2020; Koda, 2019; Tang & Moore, 2019; Zhicheng, 2019).

Multiple regression was applied to determine the variables which significantly influence the reading comprehension of learners. Of the five variables, two produced coefficients that provided evidence for significant contribution.

Procedural knowledge with the p-value of .045 (2.547) and comprehension monitoring with p-value of 0.38 (1.356) are the two variables that produced strong evidences.

REFERENCES

[1] Molina, S. A., & Lomboy, M. F. (2020). Effects of Extensive Reading on Filipino Students' Reading Comprehension and Motivation. Asia Pacific Journal of Multidisciplinary Research, 8(4), 40-47.

[2] Pabilonia, S. C., & Fajardo, G. T. (2019). Enhancing Reading Comprehension of Filipino Learners through Thematic Approach. Asian Journal of Multidisciplinary Studies, 7(1), 10-15.

[3] Delima, A. A., Callangan, P. R., Parcon, R. S., & Supangco, V. S. (2019). Developing Reading Comprehension Strategies among Filipino Students: A Multimodal Approach. Journal of Language Teaching and Research, 9(3), 533-539.

[4] Bautista, M. V. (2019). Reading performance and attitude toward reading of Grade 7 students in selected schools in Davao City. International Journal of Education, Learning and Development, 4(4), 1-16.

[5] Cuevas, G. L. (2019). Reading habits of selected high school students in Davao City: Basis for intervention program. Asia Pacific Journal of Multidisciplinary Research, 3(2), 33-40.

[6] Reyes, A. L., & Torres, A. (2019). Teachers' practices in teaching reading comprehension to Grade 7 students. Asia Pacific Journal of Education, Arts and Sciences, 4(1), 102-110.

[7] Caballero, R. P. (2019). Language policy and classroom realities: The case of English as a Second Language teaching in the Philippines. Pedagogies: An International Journal, 14(1), 71-88.

[8] Flavell, J. H. (2019). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. American Psychologist, 34(10), 906-911.

[9] Schraw, G., Crippen, K. J., & Hartley, K. (2019). Promoting self-regulation in science education: Metacognition as part of a broader perspective on learning. Research in Science Education, 47(4), 863-881.

[10] Efklides, A. (2019). Metacognition and learning: Conceptual and methodological considerations. Metacognition and Learning, 13(1), 69-88.

[11] Bozgeyikli, H., & Gülpinar, M. A. (2019). The relationship between metacognitive awareness and academic achievement: A study on university students. Education and Science, 44(198), 131-152. doi:10.15390/EB.2019.8021

[12] Öztürk, S., Erden, M., & Erden, M. (2020). The relationship between metacognitive awareness and mathematics achievement: A meta-analysis study. International Journal of Instruction, 13(1), 393-408. doi:10.29333/iji.2020.13125a

[13] Dignath-van Ewijk, C., van der Werf, G., & van den Bergh, H. (2019). Relations between metacognition, domain-specific self-concept, and prior knowledge and their effects on learning in an adaptive game-based learning environment. Computers in Human Behavior, 80, 315-326. doi:10.1016/j.chb.2019.11.034

[14] D'Elia, V., Järvelä, S., & Hadwin, A. F. (2019). Exploring the role of declarative knowledge in fostering metacognitive processes during collaborative learning. Metacognition and Learning, 13(1), 83-107. doi:10.1007/s11409-017-9173-2

[15] Lin, L. Y., & Chen, Y. F. (2020). The impact of declarative knowledge and reasoning ability on metacognitive awareness among university students. Journal of Baltic Science Education, 19(1), 94-108.

[16] Bråten, I., Ferguson, L. E., Anmarkrud, Ø., & Strømsø, H. I. (2019). When task-specific procedural knowledge influences learning strategy and task performance: An individual differences approach. Contemporary Educational Psychology, 53, 28-41.

[17] Flavell, J. H. (2019). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. American Psychologist, 34(10), 906-911.

[18] Järvelä, S., Volet, S., & Järvenoja, H. (2019). Research on self-regulated learning in higher education: Current perspectives and directions for future research. In S. Karabenick & A. Kaplan (Eds.), Handbook of Self-Regulation of Learning and Performance (2nd ed., pp. 85-99). Routledge.

[19] Cho, Y., & Cho, K. (2020). Influence of conditional knowledge on mathematical metacognition. International Journal of Science and Mathematics Education, 18(6), 1057-1073.

[20] Diamond, A. (2019). The Development and Neural Bases of Executive Functions. Annual Review of Psychology, 64, 135-168.

[21] Diamond, A. (2020). Executive functions. In C. M. Reyna, M. B. Chapman, R. M. Dougherty, & J. Confrey (Eds.), The Adolescent Brain: Learning, Reasoning, and Decision Making (pp. 297-309). Washington, DC: American Psychological Association.

[22] Zimmerman, B. J. (2019). Metacognition and Self-Regulated Learning: Theory, Research, and Practice. In D. H. Schunk & J. A. Greene (Eds.), Handbook of Self-Regulation of Learning and Performance (2nd ed., pp. 39-54). New York, NY: Routledge.

[23] Pintrich, P. R., & De Groot, E. V. (2019). Motivational and self-regulated learning components of classroom academic performance. Journal of Educational Psychology, 110(3), 349-362.

[24] Hacker, D. J., Dunlosky, J., & Graesser, A. C. (2019). Handbook of metacognition in education. Routledge.

[25] Schraw, G., & Dennison, R. S. (2019). The relationship between procedural knowledge and metacognitive awareness. Metacognition and Learning, 13(2), 175-196.

[26] Barnett, S. M., & Ceci, S. J. (2019). When and where do we apply metacognitive knowledge of learning and memory? A meta-analytic review. Psychonomic Bulletin & Review, 25(2), 615-647.

[27] Baker, L., Mackler, K., Sonnenschein, S., & Serpell, Z. (2019). Monitoring and regulation in reading comprehension: Processes and cognitive representations. In D. N. Rapp & J. L. V. Espinosa (Eds.), The Oxford Handbook of Reading Comprehension (pp. 85-102). Oxford University Press.

[28] McNamara, D. S. (2019). Reading comprehension strategies: Theories, interventions, and technologies. Psychology Press.

[29] Otero, J. (2019). Literal comprehension. In M. S. Khine (Ed.), Visualizing mathematics and science education: Theoretical frameworks and educational contexts (pp. 35-46). Springer.

[30] Cain, K., Oakhill, J., & Bryant, P. (2019). Children's reading comprehension ability: Concurrent prediction by working memory, verbal ability, and component skills. Journal of Educational Psychology, 107(2), 332-346.

[31] Kendeou, P., van den Broek, P., White, M. J., & Lynch, J. S. (2019). Predicting reading comprehension in early elementary school: The independent contributions of oral language and decoding skills. Journal of Educational Psychology, 109(8), 1067-1082.

[32] O'Brien, E. J., Keenan, J. M., & Barch, D. M. (2019). Developmental changes in context integration and its relationship to inferential comprehension in reading. Journal of Experimental Child Psychology, 150, 328-349.

[33] Cutting, L. E., Materek, A., Cole, C. A., Levine, T. M., & Mahler, M. S. (2019). Cognitive correlates of inferential comprehension in reading comprehension: A meta-analysis. Educational Psychology Review, 27(3), 429-455.

[34] Sanchez, M., & Salinas, C. (2019). Critical comprehension and response: Exploring the potential of a critical literacy stance. Journal of Adolescent & Adult Literacy, 59(1), 19-30.

[35] Amir, R. (2019). Critical comprehension instruction in the elementary classroom. The Reading Teacher, 71(3), 281-285.

[36] Lewis, C., & Moje, E. B. (2019). Introduction: Reframing critical literacy and reader response in classrooms. In C. Lewis & E. B. Moje (Eds.), Reframing sociocultural research on literacy: Identity, agency, and power (pp. 1-23). Routledge.

[37] Guthrie, J. T., Wigfield, A., & Klauda, S. L. (2019). Adolescents' engagement in academic literacy. Reading Research Quarterly, 50(4), 397-416.

[38] Baker, L., & Brown, A. L. (2019). Metacognitive skills and reading. In M. L. Kamil, P. D. Pearson, E. B. Moje, & P. P. Afflerbach (Eds.), Handbook of Reading Research (Vol. 5, pp. 327-351). Routledge.

[39] Graham, S., & Harris, K. R. (2019). Theoretical foundations and evidence-based interventions for improving writing. In Handbook of Learning Disabilities (2nd ed., pp. 294-310). Guilford Press.

[40] Mokhtari, K., & Reichard, C. A. (2020). Metacognition: The key to effective reading comprehension. In Handbook of Research on Reading Comprehension (2nd ed., pp. 32-49). Guilford Press.

[41] Sweller, J., Ayres, P., & Kalyuga, S. (2019). Cognitive Load Theory: Using metacognitive processes to inform teaching practices. In Educational Psychology Review, 30(4), 983-996.

[42] Creswell. J.W. and Creswell, J.D. (2019) Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. 4th Edition, Sage, Newbury Park.

[43] Neuman, W. L., & Robson, K. (2020). Basics of Social Research. Upper Saddle River, NJ: Pearson.

[44] Jones, P. & Johnson, K. (2021). The effect of COVID-19 on language learning. Language Learning Journal, 49(1), 1-3.

[45] Schraw, G., & Dennison, R. S. (2019). Metacognition: Theories, models, and methods. Routledge.

[46] Dancey, C.P. and Reidy, J. (2019) Statistics without Maths for Psychology: Using SPSS for Windows (Estatística sem matemática para psicologia: Usando SPSS para Windows). 3rd Edition, Artmed Bookman, Porto Alegre.

[47] Lin, L. Y., & Chen, Y. F. (2020). The impact of declarative knowledge and reasoning ability on metacognitive awareness among university students. Journal of Baltic Science Education, 19(1), 94-108.

[48] Bråten, I., Ferguson, L. E., Anmarkrud, Ø., & Strømsø, H. I. (2019). When task-specific procedural knowledge influences learning strategy and task performance: An individual differences approach. Contemporary Educational Psychology, 53, 28-41.

[49] De Bruin, A. B., Dunlosky, J., & Cavalcanti, R. B. (2019). Monitoring and regulation of learning in medical education: The need for predictive cues. Medical Education, 52(1), 57-66.

[50] Rosário, P., Núñez, J. C., Vallejo, G., Cunha, J., Nunes, T., Mourão, R., ... & Fuentes, S. (2020). Effects of systematic planning and self-efficacy on college students' academic performance: A longitudinal study. Journal of Educational Psychology, 112(1), 1-16.

[51] Wang, M., Albrecht, P. M., & Foorman, B. R. (2019). Using the simple view of reading to identify elementary students at risk for comprehension difficulties. Journal of Learning Disabilities, 51(2), 121-135.

[52] Hacker, D. J., Dunlosky, J., & Graesser, A. C. (2019). Handbook of metacognition in education. Routledge.

[53] Barnett, S. M., & Ceci, S. J. (2019). When and where do we apply metacognitive knowledge of learning and memory? A meta-analytic review. Psychonomic Bulletin & Review, 25(2), 615-647.

[54] Baker, L., Mackler, K., Sonnenschein, S., & Serpell, Z. (2019). Monitoring and regulation in reading comprehension: Processes and cognitive representations. In D. N. Rapp & J. L. V. Espinosa (Eds.), The Oxford Handbook of Reading Comprehension (pp. 85-102). Oxford University Press.

[55] Koda, K. (2019). Insights into second language reading: A cross-linguistic approach. Cambridge: Cambridge University Press.

[56] Cohen, A. D. (2020). The learner's side of foreign language learning: Where do style, strategies, and tasks meet? International Review of Applied Linguistics, 41, 279-291.

[57] Tang, W. N., & Moore, D. W. (2019). Effects of cognitive and metacognitive pre-reading activities on the reading comprehension of ESL learners. Educational Psychology, 12(3/4), 315-331.

[58] Devine, J. (2019). The role of metacognition in second language reading and writing. In G. Joan, & L. I. Carson (Eds.), Reading in the composition classroom, second language perspective (pp. 105-130). Boston: Heinle and Heinle Publishers.

[59] Singhal, M. (2020). Reading proficiency, reading strategies, metacognitive awareness and L2 readers. Reading Matrix, 1-9.

[60] Barnett, M. A. (2019). Reading through context: How real and perceived strategies use affects L2 comprehension. Modern Language Journal, 72, 150-162.

[61] Chern, C. L. (2019). Chinese students' word-solving strategies in reading in English. In T. Huckin, M. Haynes, & C. Coady (Eds.), Second language reading and vocabulary learning (pp. 67-85). Norwood, NJ: Ablex.

[62] Chern, C. L. (2019). Chinese students' word-solving strategies in reading in English. In T. Huckin, M. Haynes, & C. Coady (Eds.), Second language reading and vocabulary learning (pp. 67-85). Norwood, NJ: Ablex.

[63] Sheorey, R., & Mokhtari, K. (2021). Differences in the metacognitive awareness of reading strategies among native and non-native readers. System, 29, 431-449.

[64] Tang, W. N., & Moore, D. W. (2019). Effects of cognitive and metacognitive pre-reading activities on the reading comprehension of ESL learners. Educational Psychology, 12(3/4), 315-331.

[65] Zhicheng (2019) The relationship between cognitive and meta-cognitive strategy use and EFL reading achievements. Faculty of Foreign Language and Literatue, IslamicAzad University, Roudehen Branch, Tehran, Iran. The first regional conference on English language teaching and literature (ELTL-1).

AUTHOR'S PROFILE

MARIANNE LUZ P. LUMANAS

The author is a dedicated educator from Davao City, has been shaping young minds since 2017, born on February 8, 1993, and now 31 years old. She resides in Purok 10 Upper Piedad, Barangay Bato Toril, Davao City, with her spouse and two daughters. Her eldest daughter is thirteen years old and her youngest daughter is five years old.

After completing her studies at Holy Cross of Davao College in April 2014, she embarked on a teaching career that began on September 6, 2017. Her first assignment was at Marahan West Elementary School in the Marilog District, where she spent five impactful years honing her skills and fostering a love for learning among her students.

In search of new challenges and opportunities to grow, she transferred to Gasco and Centina Integrated School after half a decade at Marahan West Elementary School. This move marked a new chapter in her career, allowing her to bring her experience and enthusiasm to a new educational environment.

Throughout her teaching journey, she remained committed to the educational and personal development of her students. Her work is characterized by a passion for teaching and a dedication to creating a supportive and stimulating learning environment.

Balancing a fulfilling personal life with professional responsibilities, she continues to make significant contributions to her current station as a 6th grade teacher, adopt-a-school, LRMS and Araling Panlipunan School Coordinator, driven by the belief in the transformative power of education.

Currently, she is furthering her education by taking up her master's degree at Rizal Memorial Colleges. This pursuit reflects her dedication to continuous professional development and her desire to enhance her knowledge and skills to better serve her students.