AMERICAN UNIVERSITY OF BEIRUT

THE RELATIONSHIP BETWEEN METACOGNITIVE STRATEGIES, GENDER, AND THE READING COMPREHENSION OF LEBANESE SIXTH GRADERS

by
REINA SAMIR FREIJ

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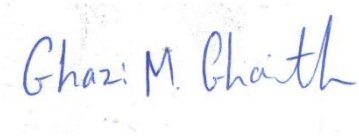
REINA SAMIR FREIJ

Approved by:

Dr Ghazi Ghaith, Professor
Education

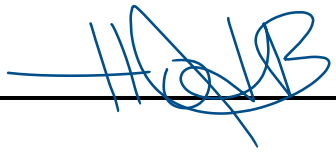


Advisor

Dr Karma El-Hassan, Associate Professor
Education

Member of Committee

Dr Hoda Baytiyeh, Associate Professor
Education



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Reina

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ABSTRACT

OF THE THESIS OF

Reina Samir Freij for Master of Arts
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Title: The Relationship Between Metacognitive Strategies, Gender, and the Reading Comprehension of Lebanese Sixth Graders

Given the fact that English is a global language and that cultivating a good command of the language is essential for academic success, comprehending authentic English texts has become a priority for EFL learners. Hence, there is emphasis on developing EFL learners' reading abilities.. To overcome various reading difficulties, research has been directed towards exploring the effectiveness of metacognitive reading strategies in increasing learners' levels of reading comprehension.. Besides, investigating gender differences in the employment of metacognitive reading strategies is also an important concern. To this end, the present study investigated the association between metacognitive reading strategies, gender, and the reading comprehension of a cohort of sixth graders enrolled in a private school in Beirut Lebanon (n = 28). Specifically, the study examined the relationship between six different metacognitive reading strategies and the literal and higher order comprehension of the EFL learners participating in the study (literal, interpretive, critical, and creative). In addition, the study attempted to explore gender differences in the employment of metacognitive reading strategies. An MSI Questionnaire developed by Schmitt (1990) was used to determine students' knowledge of strategic reading processing. A reading comprehension test is used to assess students' literal and higher order reading comprehension. Descriptive statistics were computed to examine the frequency use of metacognitive strategies by students. Besides, Pearson product-moment correlation coefficients were computed to investigate the relationship between metacognitive strategy use and reading comprehension. In addition, an Independent Sample t-test was used to determine gender differences in metacognitive strategy use. The study results showed that Predicting/Verifying was the strategy most frequently used. As for strategies and reading comprehension, there was a positive correlation between the use of strategies and students' reading achievement. However, no significant gender differences were found in the employment of metacognitive strategies. The present study findings can help educators and Lebanese EFL teachers determine effective reading strategies that help develop reading comprehension and increase their students' L2 literacy levels.

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CHAPTER 1

INTRODUCTION

In today's dynamic context of education, being literate is a necessity. As change agents, teachers are responsible for cultivating and strengthening the minds of the new generation, a task that is grounded in the enhancement of literacy abilities. In order to promote literacy abilities, considering the complex nature of Teaching English as a Foreign Language (TEFL), teachers strive to develop and plan effective literacy instruction. Besides, they are expected to simultaneously cater for students' learning needs and tackle challenges that arise from literacy skill development. McNamara (2007) asserts that reading comprehension in English is a challenging activity for EFL learners due to their inability to comprehend ideas that are grouped together, which hinders their understanding and leads to low reading comprehension. Hedge (2001) maintains that good language learners are autonomous and have a strong conceptualization of reading strategies which facilitates their language learning. To address reading deficits, it is crucial that English teachers employ useful reading strategies that would help students actively construct meaning from written texts.

The Significance of Reading in Education

Given the fact that reading in one's native language is a basic skill, supporting learners' efforts to read in English as a global language has become essential for academic and social success. Within the context of Teaching English as a Foreign Language (EFL), teaching reading, as a fundamental literacy ability, continues to take on increasing importance. Not only is reading a receptive skill, but also a complex process that involves extracting and integrating various information from a text while

activating prior knowledge. It is important to note that the term L2 refers to a second or foreign language being studied by a learner. Grabe and Stroller (2013) claim that L2 reading ability, with English as the L2, is in great demand due to the spread of English not only as a global language but also the main language of scientific technology and research. Thus, developing the reading abilities of L2 learners is the key to cultivating a rich teaching-learning experience. Also, engaging students in reading enables them to approach a text with expectations and interests. Further, Qanwal and Karim (2014) maintain that a reader becomes skilled as he/she practices reading at an early age, suggesting that habitual active reading promotes the construction of accurate comprehension of material that is presented. This suggests that the quality of students' learning experiences and performance levels are influenced by their reading abilities, knowing that skilled reading has become necessary in various academic subjects and is used across all subject matter.

However, the development of L2 reading is more complex than L1 and requires a considerable amount of time. This is due to the fact that L2 reading accounts for critical issues during reading such as activating linguistic knowledge, dealing with transfer effects, and using resources. Ghaith (2020) indicates that (L2) learners have limited exposure to authentic English language input, especially in real-life contexts unlike their (L1) counterparts. Moreover, Sweet and Snow (2003) note that reading comprehension is a multidimensional process that involves the reader, the content being read, and the act of drawing meaning out of a text. Hence, enabling EFL learners to excel at reading comprehension is a major challenge for English teachers due to its complex nature. As general study has demonstrated, metacognitive reading strategy awareness has been considered an effective way to facilitate EFL learners' reading

comprehension. Thus, reading comprehension deficits could be attributed to the lack of metacognitive strategy awareness in EFL classrooms.

Grabe and Stroller (2013) argue that students consider reading comprehension a complex process and face difficulties in constructing meaning from a text, which reveals the complexities of reading for general comprehension. Poor comprehension can also hinder students' comprehension of key subjects that are taught in English. Along with developing reading abilities, it is evident that English teachers should attend to metacognitive reading strategies and realize the impact they have on EFL learners' reading comprehension. Although reading difficulties differ from one student to another, research has demonstrated that some EFL learners can read a text but fail to monitor, evaluate, or reflect on a text to reach a particular learning goal. Reichenberg (2008) believes that EFL readers who struggle in reading should be taught various reading strategies in order to develop their reading comprehension. Having realized the importance of reading strategies, Qanwal and Karim (2014) also point out that English teachers play a very important role in making students overcome obstacles in reading by developing their reading strategies. Despite this, attempts to include metacognitive reading strategy instruction in the Lebanese English Language and Literature Curriculum are still limited and under investigated..

Statement of the Problem

Despite Lebanese students' exposure to English, there is a need to develop their reading comprehension skills by making them active metacognitive strategy users. Nguyen (2009) defines metacognitive reading strategies as "deliberate actions the reader actively deploys while reading in order to monitor their own reading process and avoid comprehension failures and so, to accomplish a reading task" (p. 7). In fact,

Wigfield et al. (2008) state that highly engaged readers use reading strategies and are internally motivated, which improves their reading achievement. Hence, the obstacles Lebanese EFL learners face in reading could be related to the lack of knowledge in selecting and employing effective metacognitive reading strategies. According to McNamara (2007), EFL readers consider reading comprehension in English as challenging because they may understand words separately but face obstacles when words are combined into meaningful ideas. Therefore, emphasizing metacognitive reading strategy instruction in Lebanese EFL classrooms is recommended as it helps pave the way for independent and active reading. Through *active* and *independent* reading, EFL learners can engage with an English text in deep and meaningful ways.

As for personal and demographic characteristics of readers, there seems to be a deficiency of knowledge in how male and female students employ metacognitive strategies in reading. There are few studies that emphasize gender as a variable when examining the relationship between metacognitive strategy use and EFL learners' reading comprehension although gender is considered a classic predictor in research. Thus, an investigation of gender differences in metacognitive strategy use is necessary for Lebanese EFL teachers and curricula designers since it provides them with significant insights into the various types of metacognitive strategies employed by male and female EFL learners in the Lebanese context and how it impacts their language learning process and reading achievement. Therefore, an effective and thorough investigation of the association between metacognitive reading strategy use and Lebanese sixth graders' literal and higher order levels of reading comprehension should be made.

Rationale

Many studies (Mokhtari & Reichard, 2002; Fewell, 2010; Madhumathi & Ghosh (2012); Küçükoğlu, 2013; Zare, 2013; Dabarera et al., 2014; Tavakoli, 2014; Alami, 2016; Meniado, 2016; Rastegar et al., 2017; Al-Sobhani, 2018; Wahyuni et al., 2018; Muhid et al., 2020; Teng, 2020) have examined the relationship between the use of metacognitive strategies, gender, and EFL learners' reading comprehension. "Metacognitive awareness raising can improve the level of students' performance and by implementing metacognitive teaching in educational process, desirable educational goals can be achieved" (Rahimi & Katal, 2012, p. 75). According to Hartman (1998), metacognition affects knowledge acquisition, comprehension, retention, and the application of what is learned, in addition to learning efficiency, critical thinking, and problem solving. "Deliberate use of special actions to monitor one's understanding seems to follow from a realization that a need to act with a plan, a need to check on one's comprehension, and a need to use particular trouble-shooting strategies to repair comprehension failures are necessary" (Paris et al., 1983, p. 300). While research focuses on the relationship between metacognitive reading strategies and reading comprehension abilities, there is still a gap in knowledge about metacognitive strategy use and reading comprehension in the Lebanese context, accounting for gender differences. Additionally, few studies have examined gender along with metacognitive strategy use in relation to literal and higher order reading comprehension among Lebanese EFL learners. Thus, the present study set to identify the different metacognitive strategies that are used by Lebanese EFL learners. Also, it attempts to determine whether males and females differ in terms of metacognitive reading strategy use. Equally important, the relationship between metacognitive reading strategies and

the reading comprehension of Lebanese sixth graders is examined. It is important to note that this study is conducted to fill a gap in the literature, knowing that there are few studies that have examined the role of gender, the reported use of metacognitive reading strategies in literal and higher order reading comprehension at the elementary level, especially in the Lebanese context.

Based on the review of literature, emphasis has been placed on different levels of reading comprehension because many researchers and scholars consider it a prerequisite for reading competency. Stanovich et al. (1986) claim that development of reading comprehension is based on cumulative growth, where students with strong comprehension tend to develop at a faster rate than those with weak comprehension.

Purpose of the Study

The purpose of this study was to investigate the relationship between metacognitive strategy use, gender, and sixth graders' reading comprehension. Furthermore, the study attempted to examine the relationship between metacognitive reading strategy use and Lebanese sixth graders' literal and higher order reading comprehension. It also focused on identifying any gender discrepancy in metacognitive strategy use. In other words, there was an attempt to determine whether EFL learners who used metacognitive reading strategies in reading performed better in tasks that assess literal and higher order levels of reading comprehension. In particular, the study aimed to examine the relative role of six categories of metacognitive strategies : (a)Predicting and Verifying, (b)Previewing, (c)Purpose Setting, (d)Self-Questioning , (e)Drawing from Background Knowledge, and (g)Summarizing and Applying Fix-up Strategies in predicting literal and higher order levels of reading comprehension.

Research Questions

The study addressed the following research questions :

- To what extent do sixth graders use metacognitive strategies in their reading of narrative texts?
- What is the relationship between metacognitive reading strategy use and the literal and higher order comprehension of sixth graders ?
- Do male sixth graders differ from their female counterparts in their use of metacognitive reading strategies?

Significance of the Study

Most societies have become multilingual, expecting qualified people to function well in English. According to Grabe and Stroller (2013), people functioning in a multilingual setting should be at high levels of proficiency in English to excel in science, technology, or conduct advanced research. In addition to comprehending English texts across different subject-areas, skilled reading is vital for EFL learners when connecting acquired knowledge to real world experiences. However, many students face difficulty when trying to understand given instructions and texts in English due to gaps in reading comprehension. Thus, determining metacognitive reading strategies that are effective for developing EFL learner's reading abilities and reading comprehension is of utmost importance. According to Mokhtari and Sheorey (2008), investigating metacognitive reading strategies for L2 learners has recently become a main concern for researchers and practitioners. Therefore, the present study aims to introduce Lebanese EFL teachers to metacognitive reading strategies that can be part of their instructional planning and classroom practice. Besides, the study findings may encourage curriculum designers and developers to include some of those key

language learning strategies in the Lebanese curriculum. Such valuable information is helpful when selecting metacognitive reading strategies to be taught and applied in Lebanese classrooms along with making big curricular decisions. As for Lebanese EFL learners, increasing metacognitive awareness helps facilitate the regulation and control of their cognitive functioning. In fact, this awareness enables students to become self-determined learners, especially in reading comprehension. The present study also assesses whether gender differences account to metacognitive strategy use differences. This investigation is important because if gender disparities exist, Lebanese teachers and educators can put effort into minimizing them to increase overall L2 literacy levels in EFL classrooms.

Definition of Terms

EFL. English as a Foreign Language: English learned in a non-English-speaking country.

Reading Comprehension. It is the process of simultaneously extracting and constructing meaning from textual material within a specific sociocultural context (Sweet & Snow, 2003).

Literal Comprehension. It is based on lower-level cognitive processing that occurs in reading . It refers to the ability to comprehend information that is directly stated in a text (Ghaith & El-Sanyoura, 2019).

Higher order Comprehension. It is based on higher-order cognitive processing that goes beyond the basic understanding on facts. “Higher-order comprehension requires interpretation, analysis, and synthesis of information and involves the three types of interpretive, critical, and evaluative comprehension” (Ghaith & Obeid, 2004, p. 50).

Metacognitive reading strategies. They are strategies which are designed to increase the readers' knowledge of awareness, develop reading comprehension, and promote self-evaluation.

Metacognitive Strategy Index (MSI Questionnaire). It is an instrument which tests metacomprehension strategy awareness ; “a 25-item, 4-option, multiple choice questionnaire that asks students about the strategies they could use before, during, and after reading a narrative selection” (Schmitt, 1990, p. 455).

CHAPTER 2

LITERATURE REVIEW

This section presents the theoretical framework of the study. It presents several concepts that are relevant to the study. Furthermore, it reviews the research studies that were conducted to examine the relationship between EFL learners' use of metacognitive reading strategies, gender, and their literal and higher order reading comprehension.

Theoretical Framework

This part propounds the following concepts: Metacognition and Flavell's model of Metacognitive Monitoring and its different classes of phenomena : Metacognitive Knowledge, Metacognitive Experiences, Goals, and Metacognitive Strategies. In addition, it highlights the significance of reading in language learning, presenting different reading models and metacognitive strategies as well as reading comprehension levels. Further, it sheds light on the relationship between metacognitive strategies, gender, and EFL learners' reading comprehension.

Metacognition

In the late 1970's, Flavell, an American Developmental Psychologist, coined the word "metacognition" which refers to thinking about thinking. The founding scholar refers to metacognition as "cognition about cognitive phenomena," (Flavell, 1979, p. 96). Various definitions of metacognition have been offered by researchers in the field of cognitive psychology. For instance, Cross and Paris (1988) define metacognition as the learner's knowledge and control over his thinking and cognitive activity. Schraw (1998) refers to metacognition as a general multifaceted set of skills that are distinct from one's general intelligence as they may compensate for intelligence deficits or lack

of prior knowledge on a particular topic. Along similar lines, Kuhn and Dean (2004) define metacognition as the act of being aware and managing one's thinking and cognition. Scholars agree that metacognitive activity enables the learner to retrieve strategies he had learned and select an effective one to be utilized in the appropriate context. In fact, Raoofi et. al (2014) assert that the various definitions of metacognition presented in the literature share a common core which highlights the learner's awareness and management of cognitive activity.

Flavell's Model of Cognitive Monitoring

In 1979, Flavell proposed a model of metacognitive monitoring which emphasized four different classes of phenomena: (1) metacognitive knowledge, (2) metacognitive experiences, (3) goals and tasks, and (4) metacognitive strategies.

Flavell (1976) maintains that metacognition, being multidimensional in its nature, is described in two main components: knowledge about cognition and the regulation of cognition (Cross & Paris, 1988; Flavell, 1979; Schraw & Moshman, 1995).

Metacognitive Knowledge. Flavell (1976) defines metacognitive knowledge as an individual's knowledge about the factors that affect his cognitive functioning. He also refers to knowledge about cognition as one's awareness of his strengths and limitations, including the potential interaction of internal and external factors that affect cognitive functioning. This variable mainly emphasizes one's knowledge about cognitive processing and self-regulation. Zhang and Zhang (2019) note that metacognitive knowledge comprises learners' understanding of cognitive functioning which affects their performance and outcome. An example of using this type of knowledge would be recognizing that studying in a quiet place would be more

productive than studying in a crowded area. Flavell (1976) classifies knowledge about cognition into three types: person knowledge, task knowledge, and strategic knowledge. As Anderson (2012) states, possessing knowledge about the different variables of metacognitive knowledge is essential for understanding how cognition functions.

Person knowledge refers to how the individual understands his own learning and information processing. Besides, it involves one's awareness of his own capabilities as a learner or thinker, especially when evaluating his knowledge of a subject. This self-awareness can either promote or hinder one's performance. For example, a student who has knowledge about different learning styles and can identify his own learning style has increased chances of gaining a good understanding of subject-matter. The second type of metacognitive knowledge, task knowledge, refers to one's identification of the nature and characteristics of a task. Flavell (1979) describes it as the acquisition of knowledge about the features of a particular task. As a matter of fact, Livingston (2003) claims that being aware of task variables encompasses knowledge about the task's difficulty level as well as how to fulfill the objectives. This variable involves an indirect evaluation of the complexity of a task and an acknowledgment of the resources needed for successful completion. Using task knowledge to assess a given task enables the learner to predict and evaluate his overall performance. For instance, a student that finds a text difficult can reread specific sections, which in turn enhances his analysis of the text and its components. Strategy knowledge emphasizes the application of metacognitive strategies to achieve the objectives. The underlying assumption is that using strategy knowledge allows an individual to select strategies that will promote and facilitate his completion of the task. According to Anderson (2012), selecting an appropriate strategy and knowing when to use it to accomplish a learning goal is a

major metacognitive behavior. An individual's lack of knowledge about metacognitive strategies hinders his ability to address learning challenges, considering the absence of strategic behaviors that develop one's performance (Anderson, 2012). Thus, strategy knowledge reflects an individual's ability to select an effective strategy to promote learning. An example applied to second language learning would be a student believing that he can learn better by memorizing the required content. This indicates that metacognitive activities require an activation of metacognitive knowledge and all its components.

Metacognitive Experiences. According to Flavell (1979), metacognitive experiences are "any conscious cognitive or affective experiences that accompany and pertain to any intellectual enterprise" (p. 906). They include internal responses and feedback about one's cognitive functioning, features, and outcome of metacognitive tasks. Metacognitive feelings include feelings of knowing, feelings of self-esteem, and feelings of satisfaction. Flavell (1979) also mentions that metacognitive experiences develop self-assessment as they help individuals revise their progress and learning goals. An example of a metacognitive experience is someone feeling anxious due to his inability to understand a concept that he identifies as complex and demanding. Learners are expected to go through metacognitive experiences in situations which alert them and stimulate their cognitive and affective functioning (Flavell, 1979).

Goals. Metacognitive goals can be defined as the outcome or objective of a cognitive activity. For instance, text comprehension, activating memory, and enriching one's knowledge of a concept can be the goals of a cognitive task. Flavell (1979) confirms that fulfilling a goal successfully requires utilizing metacognitive knowledge and undergoing metacognitive experiences.

Metacognitive Strategies. Metacognitive strategies are strategies that assist the learner in accomplishing a certain task. For learners to reach their metacognitive goals, they are expected to employ strategies that help develop their thinking, enabling them to monitor and regulate their cognitive functioning as well as evaluating their performance. This confirms the interplay of the different categories of Flavell's model of cognitive monitoring during metacognitive phases.

The Knowledge and Regulation of Cognition

Research in this field has revealed two constructs of metacognition: knowledge and regulation of cognition. Brown (1987) describes cognitive knowledge as what an individual understands and knows about his own thinking. This knowledge consists of three main components of metacognitive reading strategy awareness: declarative knowledge, procedural knowledge, and conditional knowledge (Paris et al., 1983). Regulation of cognition, on the other hand, refers to metacognitive skills that enable individuals to regulate their learning.

Components of Cognitive Knowledge. Declarative knowledge is portrayed as one's knowledge about his learning and what factors influence achievement and performance. Schraw et al. (2006) refer to declarative knowledge as one's knowledge about his learning abilities and potential factors that affect performance. This category of knowledge can be specifically defined within the context of reading as the awareness of variables that affect reading performance (Cross & Paris, 1988). For example, a learner possesses declarative knowledge when he is aware of reading strategies such as using prior knowledge, drawing inferences, and visualizing when carrying out a reading comprehension task. Schraw and Moshman (1995) suggest that successful students have declarative knowledge about their memory and use this knowledge efficiently during their

learning experiences. As for procedural knowledge, it is described as knowledge about the execution of procedures and the utilization of learning strategies. This type of knowledge involves an awareness and management of reading strategy use. In fact, many studies have reported that enhancing students' procedural knowledge was found to develop their problem-solving skills (Schraw & Moshman, 1995). On the other hand, conditional knowledge includes the conditions under which a strategy is utilized and an evaluation of the strategy's effectiveness. For instance, a reader might skim and scan a newspaper to quickly get an overview of the main ideas but do a close reading of a poem, knowing that the latter requires in-depth analysis and deeper understanding. When the reader activates conditional knowledge, he is able to select effective learning strategies as well as reflect on them. This comes in line with the fact that the possession of declarative, procedural, and conditional knowledge contributes to a successful acquisition of essential learning skills.

The Regulation of Cognition. The second construct of metacognition is the regulation of cognition. Hacker (1998) states that cognitive regulation consists of: monitoring and regulating. This construct involves planning, monitoring, and evaluation. (Flavell,1979). Baker and Brown (1984) explain that the regulation of cognition in reading involves the employment of planning, monitoring, testing, revising, and evaluating strategies. According to Schraw and Dennison (1994), planning requires purpose setting and a selection of appropriate resources while monitoring and evaluation involve performance assessment and strategies.

The Impact of Reading on Language Learning

Throughout history, the term "reading" has been used to basically refer to the process of decoding words. However, this concept has recently evolved to encompass

various cognitive and linguistic processes including reading comprehension, active reader-text interaction as well as text evaluation and decision making (Habók & Magyar, 2019). In addition to decoding, reading requires adequate vocabulary knowledge and an awareness of metacognitive skills so that a reader can monitor and reflect on his comprehension. Similarly, Anderson (2012) claims that proficient reading demands a strategic engagement in the construction of meaning out of a text. Setayesh & Marzban (2017) support the fact that reading should not be distinct from cognition, considering it a thought form that gets triggered by written text. They also note that reading and fluency are crucial aspects of general comprehension as they indicate the reader's use of cognitive resources in linguistic processes. Many scholars and researchers confirm that reading is an essential skill in foreign language teaching and learning. Brown (2001) also believes that reading is the most fundamental language skill taught in English as a Foreign Language (EFL) contexts. As a matter of fact, great emphasis is being placed on fostering a culture of reading in EFL environments, as educators seek to promote students' literacy skills as well as their cognitive and affective growth. Becerra et al. (2020) maintain that reading allows students to become independent learners leading to automaticity in creating meaning out of reading and writing. Possessing reading skills is of utmost importance not only for the fulfillment of academic objectives, but also for success in real-life contexts (Sadiku, 2015). Freire (1983) mentions that reading literary texts can be viewed as a main component of human development based on the reader's interaction with the social world. Thus, life-long readers experience round development which enables them to succeed as individuals in today's modern society. However, many EFL learners face difficulties in reading comprehension. Eskey (2005) explains that reading comprehension is a

complex task, so many EFL learners struggle in comprehending academic texts. Grabe (2009) also proposes that readers approach a text in terms of its structure, the organization of information, and author's purpose rather than a collection of words or sentences.

Reading Models

Reading models impact the approach through which educators teach reading to their students. The major models of reading are the bottom-up, top-down, and interactive model (Browne,1998). The bottom-up model basically emphasizes word decoding for meaning construction, considering the reading process text-driven as it takes place from part to whole. Educators who follow this reading model attempt to teach students basic reading skills in order to establish a solid foundation in literacy. After that, they introduce more advanced concepts including phonics, vocabulary, and comprehension. However, the top-down model focuses on the reader's comprehension and background knowledge about a certain topic, considering reading meaning-driven as it takes places from whole to part. In fact, this model encourages making predictions in which readers' prior knowledge assists them in predicting the word choice and vocabulary. Browne (1998) also mentions that the top-up model encourages starting a reading task with an activation of prior knowledge background about text structure and genre to successfully predict the meaning of different words in the text. The interactive model, on the other hand, integrates activities of communication, reading skills, and reading comprehension. Stanovich (1980) believes that this model combines the features of the bottom-up and the top-down reading models which makes the reading process more meaningful. In this model, the reader activates his/her prior knowledge

about word decoding, draws some predictions about the text and collects significant cues to actively construct meaning.

Reading Comprehension Levels

Reading comprehension can be defined as the act of constructing meaning out of a text.

According to Kintsch (2012), reading comprehension is the product of linking the reader's background knowledge to ideas presented in a text, and mentally representing the content in one's memory. It is evident that this process is complex since it involves the employment of different strategies and the use of reading skills for the reader to critically interact with a text on various levels. Lunzer and Gardner (1979) assert that the skills utilized in reading can be categorized into two main sub-skills which are, lower-order (literal) and higher-order skills. They also maintain that successful reading comprehension involves performing tasks of literal comprehension to understand the ideas presented in the text followed by tasks of higher order comprehension where the reader deeply interacts with the text.

Literal comprehension. Burns et al. (1999) define literal comprehension as one's ability to understand the ideas that are explicitly stated in a text while making direct connections. They also refer to this level as the basic comprehension of the direct ideas presented in a text. Examples of literal comprehension tasks involve identifying elements of a written text, the characters in a narrative, and establishing a proper sequence of ideas.

Higher order comprehension. Burns et al. (1999) define higher order comprehension as an act of interpreting, analyzing, or synthesizing the ideas presented

in a text. Examples of higher order comprehension tasks involve identifying an implicit main idea, character traits, and the author's perspective about a specific issue.

Metacognitive Reading Strategies

Metacognitive reading strategies can be defined as higher order methods used by learners to understand their own learning style and reflect on their cognitive functioning (Pressley & Afflerbach, 1995). They include planning strategies, monitoring strategies, and evaluating strategies involved in the completion and success of a learning experience (Israel, 2007). Employing metacognitive reading strategies may assist learners in reading comprehension (Anderson, 2003). In fact, research has demonstrated the effectiveness of metacognitive strategy use in increasing EFL learners' proficiency (Oxford et al., 1998).

Learners utilize planning strategies in the pre-reading phase to get prepared for reading. An example of a planning strategy that is used before reading is building one's background and activating prior knowledge about a certain topic. Moreover, "setting a purpose for reading" (Paris et al., 1990) and making predictions aids the reader's text comprehension. Monitoring strategies, on the other hand, are used while reading. As mentioned by Israel (2007), during reading, the learner monitors his comprehension, vocabulary acquisition, and identifies the main ideas in a text. For example, identifying significant sections of a passage relative to a required task is a monitoring strategy. As for evaluation strategies, they are strategies employed prior to reading, and they focus on understanding the application of acquired knowledge to real-life situations. For instance, after reading, the learner may evaluate the ideas presented in the text, extending his perspective and point of view.

In summary, the success of a learning activity relies heavily on metacognitive processing which is based on the utilization of a variety of metacognitive reading strategies: planning strategies, monitoring strategies, and evaluation strategies. According to O'Malley and Chamot (1990), when a student has a metacognitive approach to learning, he has a clear direction to monitor his performance and progress. Besides, metacognitive awareness allows the learner to evaluate his comprehension and to strategically activate appropriate strategies to facilitate their understanding (Carrell, 1989). Hence, regulatory processes should not be underestimated in the teaching-learning process since it would encourage learners to constantly monitor their progress in reading comprehension (Whitaker et al., 1994).

In the present study, metacognitive strategies will be classified into three categories: pre-reading strategies, during-reading strategies, and after-reading strategies. Pre-reading strategies can be defined as strategies that help readers build and activate their prior knowledge about a specific topic and set a purpose before exploring new reading material. For instance, previewing and purpose-setting are examples of strategies that are utilized before reading a text. As for during-reading strategies, emphasis is placed on making connections between ideas in a text in addition to monitoring one's understanding and generating significant comprehension questions. Last, strategies that are employed after the completion of a reading task allow learners to evaluate the content as they reflect on the text and its various components. There are six broad categories of strategies: (a)predicting and verifying, (b)previewing, (c)purpose setting, (d)self-questioning , (e)drawing from background knowledge, and (g)summarizing and applying fix-up strategies assessed using the MSI questionnaire.

Metacognitive Reading Strategies and Reading Comprehension

In today's modern society, being a proficient reader is a prerequisite for academic and professional success. Reading is recognized as a main language proficiency skill which is utilized globally (Al-Jarrah & Ismail, 2018). Keshavarz and Mobarra (2003) also note that an individual's reading abilities can be indicative of his learning potential. According to Pressley and Afflerbach (1995), skilled readers interpret information during reading, construct images, and categorize content drawing meaning out of a text. However, many EFL learners consider reading comprehension a challenging task (Eskey, 2005). As a matter of fact, Ghaith (2018) conceptualizes reading as a complex task of general and specific communication entailing the interaction of reader, text, and context-based variables. To comprehend a text, a competent reader is expected to closely read and evaluate written texts, integrating the presented content with prior knowledge. Thus, reading can be described as a multifaceted process since it requires a sufficient knowledge of vocabulary as well as a repertoire of effective reading strategies that ease text comprehension. Due to the complexity of the reading process, many EFL learners face difficulties in reading comprehension which affects their academic performance across different subjects. Munsakorn (2012) claims that EFL learners who do not employ appropriate metacognitive reading strategies are unable to completely comprehend academic texts. For instance, an EFL student whose vocabulary knowledge and reading strategy awareness is limited might likely face challenges in reading. For successful reading to occur, as Alvermann and Phelps (2002) explain, metacognitive activity involving awareness and cognitive monitoring should take place. Moreover, Wang et al. (2009) confirm that metacognitive reading strategy use has many benefits for students such as

fostering learning activities involving planning to approach an educational task and problem-solving. Hence, it is evident that metacognition is an essential component of proficient reading comprehension (Phan (2006).

To tackle the challenging of enabling EFL learners to become active readers, as research has demonstrated, metacognitive strategy instruction should be utilized to develop students' reading proficiency and aid their comprehension. Competent readers should employ different metacognitive reading strategies which increases their ability to tackle any potential comprehension challenges that arise. As mentioned by Salataki and Akyel (2002), emphasizing metacognitive strategy use in EFL contexts is of utmost importance for promoting students' reading abilities. As the student's reading strategy awareness increases over time, his use of metacognitive strategies develops (Pressley et al. (1998).

Relevant Studies on Metacognitive Strategy Use, Gender, and EFL Learners' Reading Comprehension

Many studies have examined the relationship between metacognitive strategies and the reading comprehension of EFL learners, few of which took gender into account (Mokhtari & Reichard, 2002; Fewell, 2010; Madhumathi & Ghosh (2012); Küçükoğlu, 2013; Zare, 2013; Dabarera et al., 2014; Tavakoli, 2014; Alami, 2016; Meniado, 2016; Rastegar et al., 2017; Al-Sobhani, 2018; Wahyuni et al., 2018; Muhid et al., 2020; Teng, 2020).

Mokhtari and Reichard (2002) examined the metacognitive reading awareness of elementary students. The study results showed that students moderately use metacognitive reading strategies. Regarding the relationship between metacognitive

strategy use and reading ability, students who showed higher reading abilities used metacognitive strategies more than the students who showed lower reading abilities.

Fewell (2010) studied the relationship between Japanese students' English proficiency level and the selection of Language Learning Strategies (LLS) in reading. The study subjects consisted of 56 participants with the proportion of gender at 62% female and 38% male in an EFL environment. The study employed a Japanese translated version of the SILL questionnaire developed by Oxford (1990), an English proficiency test, and a questionnaire of background information. The results showed that the selection and utilization of Language Learning Strategies (LLS) in reading was a critical source in determining language learning success or failure.

In a German study, Neuenhaus et al. (2011) investigated the structure of metacognition of fifth graders and its influence on school achievement. In fact, the study examined the relationship between fifth graders' metacognitive knowledge of reading comprehension and their achievement in English and Math in an EFL context. Findings of the study showed that students' metacognitive knowledge was related to achievement in particular domains in English and Math.

Madhumathi and Ghosh (2012) explored Indian students' reading strategy awareness and its association with reading achievement. The researchers measured the participants' metacognitive awareness using SORS and RCT. They also used a modified TOEFL test to assess the students' reading proficiency. Results revealed a high strategy use by Indian EFL learners in addition to a moderate positive correlation between metacognitive awareness and reading achievement. Regarding gender differences, the study indicated that females reported using metacognitive strategies more often than males in reading.

Küçükoğlu (2013) also conducted a research project to measure Turkish EFL learners' reading awareness levels and identify effective reading strategies that would help develop their reading comprehension. The project emphasized six main strategies: predicting, making connections, visualizing, inferring, questioning, and summarizing (Küçükoğlu, 2013).The instruments employed were a Reading Awareness Survey and the Metacognitive Strategy Index Questionnaire (MSI). The Reading Awareness Survey measured the students' initial strategy awareness while the (MSI) evaluated the effectiveness of specific strategies in developing reading abilities. Study results showed an improvement in students' reading comprehension after employing metacognitive reading strategies in the classroom.

In a study conducted by Zare (2013), the researcher made an attempt to determine the overall frequency of Iranian EFL learners' reading strategy use and gender-based strategy variation. Moreover, the study explored the relationship between reading strategy selection and use and EFL learners' reading comprehension. The sample consisted of 80 Iranian EFL learners. A reading strategy inventory and a reading comprehension test were employed to collect the required data from the participants. Descriptive statistics were conducted to determine the frequency of metacognitive strategy use by EFL learners. In addition, an independent sample t-test was utilized to identify gender differences in strategy use. To identify the relationship between metacognitive reading strategies and reading comprehension, the researcher used Pearson coefficient correlation. Regarding the findings, Iranian EFL learners were considered medium strategy users. There was no significant difference in the use of metacognitive reading strategies between male and female EFL learners. Moreover, a

positive correlation existed between the employment of metacognitive reading strategies and EFL learners' reading comprehension.

Dabarera et al. (2014) employed the Metacognitive Awareness of Reading Strategies Inventory (MARSI) and the University of New South Wales, International Competitions and Assessments for Schools, (UNSW ICAS) English competition Paper (2008) to respectively assess the learners' metacognitive awareness and reading comprehension in Singapore. Besides, male and female participants were interviewed to share their reflections on metacognitive strategy instruction, focusing on the Reciprocal Teaching approach. After conducting statistical analysis, study results revealed that an increase in (MARSI) scores was positively correlated with an increase in learners' reading scores, which confirms the fact that metacognitive awareness is positively correlated to enhanced reading comprehension of EFL learners. The analyzed data, both quantitative and qualitative, highlighted the effectiveness of metacognitive strategy instruction in increasing EFL learners' metacognitive awareness, which contributed to small but significant reading comprehension gains (Dabarera et al., 2014).

A study by Tavakoli (2014) explored Iranian EFL learners' overall metacognitive awareness of reading strategy use and its association with reading comprehension. More importantly, the researcher studied how gender and a learner's proficiency level might affect metacognitive strategy use. The study employed The Survey of Reading Strategies Questionnaire (SORS) and a reading comprehension test in addition to semi-structured interviews. After the obtained data was analyzed, results showed that Iranian EFL students had a moderate awareness aware of reading strategies. The most frequently used strategies were the Support Strategies, followed by Global

Strategies, and Problem-Solving Strategies. Besides, there was no significance gender difference in the employment of reading strategies between male and female learners.

Alami (2016) explored Omani students' reported use of metacognitive reading strategies by utilizing the Metacognitive Awareness of Reading Strategy Inventory (MARSI) Mokhtari & Sheorey, 2002). The study included a cross-gender comparison of metacognitive strategy use by Omani EFL learners and their reading comprehension. The participants who took the survey were a total of 200 Omani EFL learners. Results showed that students' overall metacognitive awareness is moderate (3.46). As for gender differences in metacognitive strategy use in reading comprehension, it was evident that female students use metacognitive strategies more frequently (3.64) in comparison to their male counterparts who use them moderately (3.28). In addition, students' use of metacognitive reading strategies contributed to better reading ability. According to Alami (2016), the study outcomes assert that metacognitive strategy instruction helps develop one's reading skills, a main goal of the educational system.

Meniado (2016) studied the relationship between and among metacognitive reading strategies, motivation, and the reading comprehension of Saudi EFL learners. The study was conducted at an industrial college in Saudi Arabia, having 60 Saudi EFL learners as study subjects. Data analysis showed that problem-solving, support and global strategies were all moderately used by Saudi EFL learners. In addition, Pearson correlation and t-test analyses showed that there was a significant relationship between metacognitive reading strategies and reading comprehension.

Rastegar et al. (2017) explored the relationship between metacognitive reading strategies and EFL learners' reading achievement. The study was descriptive and quantitative where 120 Iranian EFL learners took the Survey of Reading Strategies

(SORS) Mokhtari & Sheorey, 2002) and completed a TOEFL reading test. After conducting statistical tests, results showed that there was a positive and significant correlation between metacognitive reading strategy use and reading comprehension achievement. This highlights the importance of metacognitive strategy instruction in creating strategic readers which yields advanced learning outcomes.

Al-Sobhani (2018) examined the relationship between cognitive and metacognitive strategy use and the reading comprehension of Yemeni students learning English. He also studied metacognitive strategy use depending on gender. The study results revealed a medium and high use of metacognitive strategies by Yemeni students. Besides, correlational analysis showed a significant association between the metacognitive strategy use and reading comprehension. As for gender, there was no significant difference in metacognitive strategy use by male and female Yemeni students.

Moreover, Muhid et al. (2020) investigated the effectiveness of metacognitive strategies in teaching reading in an Indonesian context. Data was collected by means of a Metacognitive Strategy Questionnaire (MSQ) and a Reading Comprehension Test (RCT) that were administered to students. The results of the study highlight students' enhanced reading comprehension activity and improved performance after having received explicit metacognitive strategy instruction in the classroom. Students used selective attention strategy the most and self-reflection strategy the least. The results also showed that integrating metacognitive strategies in reading activities contributed to students' possession of comprehension skills which helps them become active and strategic readers.

Teng (2020) examined the effects of metacognitive reading strategy instruction on the reading comprehension of young ESL learners in an international school in Hong Kong. Twenty-five fifth graders participated in the study. Data was collected from group-discussions, students' reflections, and note-taking during reading activities in addition to two reading tests. The study results revealed that learners who received metacognitive strategy instruction developed a deep understanding of the reading activity and were able to activate their metacognitive knowledge which led to an enhancement in their reading performance. Metacognitive strategy instruction was found to foster primary students' reading comprehension through the stimulation of mental and emotional processes while reading. The results asserted that possessing metacognitive knowledge and its constituents: declarative, procedural, and conditional knowledge allowed ESL learners to make strategic choices to plan, monitor and evaluate their reading (Teng, 2020).

However, other studies revealed different and contradictory results.

Wahyuni et al. (2018) conducted a study to examine the relationship between metacognitive reading strategy awareness and the reading achievement of 150 Indonesian students. The participating students were administered the SORS questionnaire and a TOEFL test to measure their metacognitive awareness and reading comprehension respectively. Regarding metacognitive strategy use, problem-solving strategies were found to be the most frequently used by the participants, followed by support and global strategies. Yet, correlational analysis showed that there was no significant association between the metacognitive strategy awareness and students' reading comprehension.

CHAPTER 3

METHODOLOGY

Introduction

This chapter provides an overview of the research design, research questions, variables, population and sample selection procedure, data collection, instruments, and the procedures of data analysis.

Research Design

The proposed study employs a correlational design, also known as Associational Research, since it studies the relationships among three variables which are gender, metacognitive reading strategies and reading comprehension. It is important to note that variables are studied without any attempt to influence them and there is no manipulation of variables in the present study.

The study addressed the following research questions:

- To what extent do sixth graders use metacognitive strategies in their reading of narrative texts?
- What is the relationship between metacognitive reading strategy use and the literal and higher order comprehension of sixth graders ?
- Do male sixth graders differ from their female counterparts in their use of metacognitive reading strategies?

Study Variables

The independent variables in the study were gender and metacognitive reading strategies: Predicting and verifying, Previewing, Purpose setting, Self-questioning,

Drawing from background knowledge, and Summarizing and applying fix-up strategies. The dependent variables were literal and higher order reading comprehension: literal, interpretive, critical, and creative comprehension.

Population and Sample Selection Procedure

In this study, data were collected from participants enrolled in a private Lebanese School that uses English as the medium of instruction. The study context is a relatively religious prestigious school located in Beirut, Lebanon that follows the Lebanese Curriculum. The sample size is (n=28) Lebanese sixth graders. The age of the participants ranges from 11-12 years. Furthermore , there are 10 male students (35.7 %), and 18 female students (64.2 %).All the participants are Lebanese and native speakers of Arabic, learning English as a foreign language. Students enrolled in this school come from middle and high socio-economic backgrounds. English is the mandatory media of instruction for mathematics and science for this school.

Data Collection

After obtaining the consent of applying the study in the child's school, parental permission was sought prior to seeking children's consent. Parents were invited to an online meeting scheduled via Google Meet (platform used by school) to secure the permission to include the child in the study. The first 10 minutes of the session were dedicated for informing the parents about the study, sending the "Parental Permission Form" in English and Arabic language, and explaining the content of the permission form. During the second 10 minutes, the floor was given for the parents and guardians to discuss any questions or concerns they may have. In case of approval, the guardians were given some time to sign a parental permission form. The parental permission form was sent by the researcher in a private post on Google Classroom. The parents were

asked to electronically sign it or turn in a scanned image of the signed form via Google Classroom. After that, an online meeting was scheduled with the participants whose guardians signed the consent document and confirmed their child's participation. During the meeting, the researcher explained to the participants the subject of the study in addition to the tasks that they are expected to complete in case of approval. The researcher mentioned the risks and benefits. She also clarified the study significance and implications, stating that study findings help language teachers and coordinators better understand and identify reading strategies that could improve Lebanese students' comprehension. The researcher asserted that the students are free to participate and highlighted the need for their active participation. Last, they were asked to read the child assent form approved by IRB.

After collecting the submitted signed parental consent forms sent on Google Classroom, the number of participants who are willing to take part in the study was identified and finalized. An online meeting was scheduled with the participants via Google Meet during which they were sent two links: a link that directed them to the MSI online questionnaire and a link that directed them to an online Reading Test, knowing that both online data collection tools were hosted on AUB server limesurvey. The participants took the reading comprehension test within a period of 40 minutes. The reading comprehension test comprised of a narrative text and multiple-choice tasks that follow. It assessed students' literal and higher order comprehension. While responding to the questions, the participants were given access to the narrative text. Participants took the test independently, and no additional help was provided to them during the reading assessment. After a short break, the participants were asked to take the online survey (MSI Questionnaire) that measured their metacognitive knowledge and

awareness. The participants were given a period of 30 minutes to complete the questionnaire.

Instruments

The instruments that were employed in this study are : The Metacomprehension Strategy Index (MSI Questionnaire) (Schmitt, 1990) to examine the participants' strategic awareness (See Appendix I) and a Reading Comprehension Test (See Appendix II) to assess participants' literal and higher order reading comprehension. The English versions of the MSI Questionnaire and Reading Proficiency Test were given to all study participants with no need to translate it into their native language, Arabic.

Metacomprehension Strategy Index (MSI Questionnaire)

To measure participants' metacognitive knowledge of reading strategies, the study employed the Metacomprehension Strategy Index (MSI Questionnaire) developed by Schmitt (1990). Schmitt (1990) developed this questionnaire to measure and assess elementary students' reading awareness and strategic reading of a text. As a matter of fact, Schmitt (2003) argues that although an investigation of metacognitive knowledge requires evidence of cognitive control behaviors, information about the declarative and conditional strategy knowledge can be also elicited from the learners through the use of self-report instruments. According to Schmitt (1990), this self-report instrument "is a 25-item, 4-option, multiple choice questionnaire that asks students about the strategies they could use before, during, and after reading a narrative selection" (p. 455). The metacomprehension behaviors assessed fit within six categories which are : (a)predicting and verifying, (b)previewing, (c)purpose setting, (d)self-questioning , (e)drawing from background knowledge, and (g)summarizing and applying fix-up strategies. Individual test items are correlated to the six broad categories so that they are

indicative of metacomprehension strategy awareness. This instrument has been shown to be adequate, measuring "reading awareness and strategic reading in elementary level children who were given a narrative text" (Jiménez et al., 2009). It is a reliable instrument, having an internal consistency value of .87 using the Ku der-Richardson Formula 20 (Lonberger, 1988). In fact, the instrument includes several items that address each strategy which increases its reliability as a measurement tool. As for validity, Schmitt (1990) mentions that the validity data of MSI comes from different sources. MSI and IRA, The Index of Reading Awareness, have a statistically significant correlation ($r = .48$, $p < .001$), which suggests that the two instruments measure the same constructs. Besides, the results of an experimental study done by Schmitt (1988) provide evidence of a relationship between students' achievement on MSI and tasks that are utilized to assess metacomprehension (Schmitt,1990).

Reading Comprehension Test

To assess the participants' reading comprehension, an online Reading Test was developed by the researcher for this study. It was specifically designed for the present study and hosted on AUB server (Limesurvey). This instrument is intended to measure four different types of reading comprehension, literal and higher order: Literal, Interpretive, Critical, and Creative comprehension. It comprises of 20 items: 5 items to assess literal comprehension, 5 items to assess interpretive comprehension, 5 items to assess critical comprehension, and 5 items that assess creative comprehension. Each item was accurately worded and designed to assess a specific type of comprehension based on the text which makes it a valid tool. It is also a reliable instrument, having an internal consistency value of .81 using Cronbach's Alpha.

Procedure of Data Analysis

To begin with, the reading comprehension test was scored, for each of the literal and higher order questions. After that, the participants' responses to the MSI Questionnaire were interpreted.

To address the first research question regarding the frequency use of metacognitive strategies by Lebanese sixth graders, the Metacomprehension Strategy Index (MSI) scores were computed. Then, descriptive statistics (Mean and Standard Deviation) were conducted in order to obtain a mean rank order.

As for the second research question, Pearson correlation coefficients (r) were calculated to determine the relationship between the participants' reported use of metacognitive reading strategies with each of the MSI Questionnaire strategy types and their test scores, emphasizing both literal and higher order levels of reading comprehension.

To address the third and fourth research questions, an independent sample t-test was used to identify any differences between male sixth graders and their female counterparts in terms of metacognitive reading strategy use in addition to literal and higher order reading comprehension.

CHAPTER 4

RESULTS

This chapter reports the study results. The collected data from the sample of 28 Lebanese sixth graders was analyzed, and an overview of quantitative data analysis is provided in this chapter. Descriptive statistics (mean and standard deviation) for the metacognitive reading strategies and for the categories of reading comprehension are reported. The purpose of computing the mean and standard deviation was to examine the reported frequency use of the metacognitive reading strategies by the study participants. Moreover, a correlational analysis was conducted to identify the relationship between the independent variables (metacognitive reading strategies) and the dependent variables (literal and higher order reading comprehension). Finally, an independent sample t-test was used to identify any significant difference in the use of metacognitive reading strategies depending on gender.

In order to address the first research question regarding the reported frequency use of metacognitive reading strategies, the participants' MSI (Metacomprehension Strategy Index) scores were computed followed by descriptive statistics (mean and standard deviation) to finally generate a mean rank order of the scores. Table 1 presents the mean rank order of the scores of the metacognitive reading strategies under study. The descriptive statistics presented in Table 1 reveal that the strategy Predicting/Verifying is used most frequently by the respondents, having received the highest mean score among the six different metacognitive reading strategies. The mean score of the 28 participants for Predicting/Verifying strategy was M=2.67 and its standard deviation was SD=1.74. It is followed respectively by Drawing Background

(*M*=1.71 , *SD*=1.53), Summarizing (*M*=1.46 , *SD*=1.13), Previewing (*M*=1.25 , *SD*=.64), Self-Questioning (*M*=.96 , *SD*=.92), and Purpose Setting (*M*=.64 , *SD*=.67). Besides, the mean score of the participants for the overall metacognitive strategies was *M*= 8.96 and the standard deviation was *SD*= 4.80. Therefore, the three most frequently used metacognitive reading strategies are Predicting/Verifying, Drawing Background, and Summarizing; and the three least used metacognitive reading strategies are Previewing, Self-Questioning, and Purpose Setting (see Table 1).

Table 1

Descriptive Statistics and Mean Rank Order of Metacognitive Strategies

	N	Mean	Std. Deviation
Prediciting/Verifying	28	2.67	1.74
Previewing	28	1.25	.64
Purpose-Setting	28	.64	.67
Self-questioning	28	.96	.92
Drawing Background	28	1.71	1.53
Summarizing	28	1.46	1.13
MSI Total	28	8.96	4.80

As for the reported frequency use of metacognitive reading strategies by gender, the participants' MSI (Metacomprehension Strategy Index) scores were computed followed by descriptive statistics (mean and standard deviation) to finally generate a mean rank order of the scores considering the gender variable.

Table 2 presents the mean rank order of the scores of the metacognitive reading strategies under study by gender.

Table 2

Descriptive Statistics and Mean Rank Order of Metacognitive Strategies by Gender

	Gender	N	Mean	Std. Deviation
Predicting/Verifying	Male	10	2.00	1.49
	Female	18	3.05	1.79
Previewing	Male	10	1.00	.66
	Female	18	1.38	.60
Purpose-Setting	Male	10	.50	.52
	Female	18	.72	.75
Self-questioning	Male	10	.70	.82
	Female	18	1.11	.96
Drawing Background	Male	10	1.30	1.49
	Female	18	1.94	1.55
Summarizing	Male	10	1.30	.94
	Female	18	1.55	1.24
MSI Total	Male	10	6.80	4.07
	Female	18	10.16	4.85

The descriptive statistics presented in Table 2 reveal that the strategy Predicting/Verifying is used most frequently by male respondents having received the highest mean score among the six different metacognitive reading strategies. The mean score of the male participants for Predicting/Verifying strategy was *M*=2.00 and its standard deviation was *SD*=1.49. Similarly, the strategy Predicting/Verifying is used

most frequently by female respondents having received the highest mean score among the six different metacognitive reading strategies.

Purpose-setting strategy is least used by male participants having received the lowest mean score among the strategies. The mean score of the male participants for Purpose-setting was *M*=.50 and its standard deviation was *SD*=.52. Along similar lines, female participants used Purpose-setting strategy the least having received the lowest mean score among the strategies. The mean score of the female participants for Purpose-setting strategy was *M*=.72 and its standard deviation was *SD*=.75.

The second research question aimed at examining the relationship between metacognitive reading strategies and reading comprehension (literal, interpretive, critical, and creative comprehension) of Lebanese sixth graders. To address this question, correlational analysis was performed, and a correlational matrix was generated to summarize the correlations between the independent variables (metacognitive reading strategies categories) and dependent variables (reading comprehension categories) (See Table 3).

Table 3

Correlations Between Independent Variables (Metacognitive Reading Strategies) and Dependent Variables (Literal and Higher Order Comprehension)

		P/V	Pre	Pur	Que	B/K	S/FU
P/V	Pearson Correlation	1	.074	.338	.522**	.352	.489**
	Sig. (2-tailed)		.708	.079	.004	.067	.008
	N	28	28	28	28	28	28

Pre	Pearson Correlation	.074	1	.381*	.140	.411*	.088
	Sig. (2-tailed)	.708		.046	.477	.030	.655
	N	28	28	28	28	28	28
Pur	Pearson Correlation	.338	.381*	1	.216	.503**	.559**
	Sig. (2-tailed)	.079	.046		.270	.006	.002
	N	28	28	28	28	28	28
Que	Pearson Correlation	.522*	.140	.216	1	.332	.510**
	Sig. (2-tailed)	.004	.477	.270		.084	.006
	N	28	28	28	28	28	28
B/K	Pearson Correlation	.352	.411*	.503**	.332	1	.439*
	Sig. (2-tailed)	.067	.030	.006	.084		.019
	N	28	28	28	28	28	28
S/FU	Pearson Correlation	.489**	.088	.559**	.510**	.439*	1
	Sig. (2-tailed)	.008	.655	.002	.006	.019	
	N	28	28	28	28	28	28
MSI Total	Pearson Correlation	.755**	.433*	.655**	.677**	.756**	.748**
	Sig. (2-tailed)	.000	.021	.000	.000	.000	.000
	N	28	28	28	28	28	28

Literal Comp	Pearson Correlation	.634**	.419*	.643**	.542**	.652**	.643**
	Sig. (2-tailed)	.000	.027	.000	.003	.000	.000
	N	28	28	28	28	28	28
Interpretive Comp	Pearson Correlation	.730**	.334	.585**	.368	.502**	.512**
	Sig. (2-tailed)	.0000	.082	.001	.054	.006	.005
	N	28	28	28	28	28	28
Critical Comp	Pearson Correlation	.714**	.535**	.530**	.416*	.474*	.552**
	Sig. (2-tailed)	.000	.003	.004	.028	.011	.002
	N	28	28	28	28	28	28
Creative Comp	Pearson Correlation	.648**	.280	.479**	.472*	.486**	.610**
	Sig. (2-tailed)	.000	.149	.010	.011	.009	.001
	N	28	28	28	28	28	28

		MSI Total	Literal Comp	Interpretive Comp	Critical Comp	Creative Comp
P/V	Pearson Correlation	.755**	.634**	.730**	.714**	.648**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	28	28	28	28	28

Pre	Pearson Correlation	.433*	.419*	.334	.535**	.280
	Sig. (2-tailed)	.021	.027	.082	.003	.149
	N	28	28	28	28	28
Pur	Pearson Correlation	.655**	.643**	.585**	.530**	.479**
	Sig. (2-tailed)	.000	.000	.001	.004	.010
	N	28	28	28	28	28
Que	Pearson Correlation	.677*	.542**	.368	.416*	.472*
	Sig. (2-tailed)	.000	.003	.054	.028	.011
	N	28	28	28	28	28
B/K	Pearson Correlation	.756**	.652**	.502**	.474*	.486**
	Sig. (2-tailed)	.000	.000	.006	.011	.009
	N	28	28	28	28	28
S/FU	Pearson Correlation	.748**	.643**	.512**	.552**	.610**
	Sig. (2-tailed)	.000	.000	.005	.002	.001
	N	28	28	28	28	28
MSI Total	Pearson Correlation	1	.857**	.750**	.798**	.753**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	28	28	28	28	28

Literal Comp	Pearson Correlation	.857**	1	.693**	.689**	.688**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	28	28	28	28	28
Interpretive Comp	Pearson Correlation	.750**	.693**	1	.626**	.796**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	28	28	28	28	28
Critical Comp	Pearson Correlation	.798**	.689**	.626**	1	.666**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	28	28	28	28	28
Creative Comp	Pearson Correlation	.753**	.688**	.796**	.666**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	28	28	28	28	28

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The correlational matrix presented in Table 3 shows the statistical relationship of literal, interpretive, critical, and creative comprehension to the overall metacognitive reading strategies and each of the six strategies (Predicting/Verifying, Previewing, Purpose Setting, Self-Questioning, Drawing Background, and Summarizing). As to literal comprehension, there was a strong positive correlation between literal comprehension and Predicting/Verifying strategy ($r = .634$, $p < .01$), Previewing ($r = .419$,

p<.05), Purpose Setting (r= .643, p<.05), Self-Questioning (r= .542, p<.01), Drawing Background (r= .652, p<.01), and Summarizing (r= .643, p<.01) in addition to the overall metacognitive reading strategies (r= .857, p<.01). With regards to interpretive comprehension, there was a statistically significant and strong relationship with Predicting/Verifying (r= .730, p<.01), Purpose Setting (r= .585, p<.01), Drawing Background (r= .502, p<.01), and Summarizing (r= .512, p<.01) in addition to the overall metacognitive reading strategies (r=.750, p<.01). However, interpretive comprehension was unrelated to Previewing and Self-Questioning strategies. Furthermore, there was a statistically significant relationship between critical comprehension and Predicting/Verifying (r= .714, p<.0), Previewing (r= .535, p<.01), Purpose Setting (r= .530, p<.01), Self-Questioning (r= .416, p<.05), Drawing Background (r= .474, p<.05), Summarizing (r= .552, p<.01) in addition to the overall metacognitive reading strategies (r=.798, p<.01). Likewise, there was a strong positive correlation between creative comprehension and Predicting/Verifying (r= .648, p<.01), Purpose Setting (r= .479, p<.01), Self-Questioning (r= .472, p<.05), Drawing Background (r= .486, p<.01), and Summarizing (r= .610, p<.01) in addition to the overall metacognitive reading strategies (r= .753, p<.01). On the other hand, the Previewing strategy was unrelated to creative comprehension.

It is also important to note that the statistical results revealed that some metacognitive reading strategies were significantly related to each other. For instance, there was a statistically significant correlation between Predicting/Verifying and Self-Questioning (r= .522, p<.01) and Summarizing (r= .489, p<.01). Besides, there was a low but statistically significant relationship between Previewing and Purpose Setting

(r= .381, p<.05) and Drawing Background (r= .411, p<.05). As to Drawing Background, strategy, it was related to Purpose Setting (r= .503, p<.01) and Summarizing (r= .439, p<.05). Similarly, Summarizing strategy was related to Purpose Setting (r= .559, p<.01) and Self-Questioning (r= .510, p<.01).

To address the third research question, an independent sample t-test was used to identify differences in metacognitive reading strategy use and the literal and higher order comprehension of Lebanese sixth graders depending on gender. The results of the Independent Sample t-Test show that there is no statistically significant difference between male and females in metacognitive reading strategy use, based on their MSI score t = -1.856, p = .075 (two-tailed). The mean score of MSI for males is 6.80 (*SD* = 4.07), and the mean score for females is 10.16 (*SD* = 4.85). Similarly, there is no statistically significant difference between male and females in literal and higher order comprehension, based on their reading test score t = -1.764, p = .089 (two-tailed). The mean score of overall comprehension for males is 9.00 (*SD* = 5.18), and the mean score for females is 12.61 (*SD* = 5.19) (See Table 4).

Table 4

Results of T-test for Differences in Metacognitive Strategy Use

	Male (n = 10)		Female (n = 18)		t-test	Sig. 2-tailed
Variable	*M*	*SD*	M	*SD*	*t*	*P*
MSI Total	6.80	4.07	10.16	4.85	-1.85	.075

CHAPTER 5

DISCUSSION

This chapter reports the study results. The study explored the relationship between metacognitive strategy use, gender, and the literal and higher order comprehension of Lebanese sixth graders. Specifically, the study aimed to identify which reading metacognitive strategy categories are reported to be the most frequently used by students and their relation to literal and higher order comprehension. Moreover, there was an investigation of gender differences in metacognitive strategy use of Lebanese sixth graders. Regarding students' frequency use of metacognitive strategies, the study results indicated that Predicting/Verifying is the strategy used most frequently by Lebanese sixth graders. The participants' mean scores for the overall metacognitive strategies was higher than those of the Previewing, Purpose Setting, Self-questioning, Drawing Background, and Summarizing strategies.

Based on the findings, it is evident that Lebanese sixth graders frequently preview a text, make predictions, draw from background knowledge, and summarize ideas while performing a reading task. This can be attributed to students' exposure to those strategies in EFL classrooms in addition to their reliance on prior knowledge to make the reading experience more meaningful and enhance their understanding of a text. However, the results revealed that students did not receive enough instruction in the remaining metacognitive reading strategies such as Purpose Setting and Self-questioning, and this is indicated by the low use of those strategies in reading. It is important to note that the scale developed by Oxford (1990) and Mokhtari and Sheorey (2002) was used to label students' strategy use.

In general, Lebanese sixth graders are capable of employing metacognitive strategies, especially Predicting/Verifying and Drawing-Background strategies which indicates that they are familiar with metacognitive reading strategies either from classroom instruction by their teachers or from the Reading-Writing Workshop in English textbooks.

The study findings are somewhat consistent with those of previous research done on metacognition, gender, and reading comprehension. Regarding the frequency use of metacognitive reading strategies by EFL learners, the findings of the present study confirm those of Mokhtari and Reichard (2002) who reported moderate use of metacognitive reading strategies by elementary students. This is also consistent with the findings of Zare (2013) and Tavakoli (2014) which revealed that Iranian students moderately use diverse metacognitive strategies in reading. The results are also in line with the study conducted by Alami (2016) which revealed that Omani students are moderate users of metacognitive strategies while performing a reading task in English.

The above findings highlight the fact that participants were inconsistent in utilizing metacognitive reading strategies. This can be attributed to students' lack of awareness and insufficient knowledge about the importance of metacognitive strategy utilization for successful comprehension. Further, it could be due to the few efforts that have been devoted to incorporating metacognitive instruction in Lebanese EFL classrooms. As a matter of fact, the results of the present study are consistent with those of Al-Sobhani (2018) on Yemeni students' moderate use of metacognitive strategies in reading. Moreover, they support the findings of Meniado (2016) who reported the moderate use of metacognitive strategies by EFL students in Saudi Arabia.

Regarding the association between metacognitive strategy use and the literal and higher order comprehension of Lebanese sixth graders, the results indicated a strong positive correlation between overall metacognitive strategy use and literal, interpretive, critical, and creative comprehension (r=.857**, r=.750*, r=.798**, and r=.753** respectively). This could be due to the students' activation of prior knowledge and employment of strategies based on previous learning experiences.

It is important to note that several studies have explored the relationship between metacognitive reading strategies and the reading comprehension of EFL learners. A study conducted by Zare (2013) revealed a strong positive correlation between the employment of metacognitive strategies and reading comprehension. Moreover, Muhid et al. (2020) reported a statistically significant relationship between explicit metacognitive strategy instruction and reading achievement. Rastegar et al. (2017) also found a positive correlation between the use of metacognitive strategies and reading abilities of students in addition to an improvement in academic performance. Finally, a study by Teng (2020) illustrated a positive correlation between the possession of metacognitive knowledge and metacognitive awareness of reading strategies and the reading comprehension of EFL learners.

On the other hand, the study findings of Wahyuni et al. (2018) showed no significant association between metacognitive strategy awareness and students' reading achievement.

Regarding the differences between male and female EFL learners in metacognitive strategy use, results showed that there was no statistically significant difference in their employment of metacognitive reading strategies. This is consistent with a study conducted by Zare (2013) who reported that males did not differ from

their female counterparts in metacognitive strategy use in reading, and those of Tavakoli (2014) who confirmed the lack of gender discrepancy in the use of metacognitive reading strategies. Along similar lines, the study findings of Al-Sobhani (2018) revealed that there was no difference in the utilization of metacognitive strategies depending on gender. However, the results are inconsistent with those of Alami (2016) who reported a difference in metacognitive strategy use. In fact, Alami (2016) illustrated that female EFL learners used metacognitive strategies more frequently than their male counterparts, which is not in line with the findings of the present study. Similarly, Madhumathi and Ghosh (2012) reported that female students showed a higher use of metacognitive strategies in comparison to their male counterparts in reading.

Pedagogical Implications

The findings of the present study have pedagogical implications for language teachers, EFL students, and educators engaged in curriculum design. To begin with, Lebanese EFL teachers are highly encouraged to apply metacognitive strategy instruction in their classrooms, making their students aware of the importance of utilizing diverse strategies to develop their L2 reading comprehension across different academic subjects. The mean scores of the metacognitive strategies assessed in the study emphasize the fact that Lebanese sixth graders do not possess enough knowledge about the different metacognitive strategies present and thus, they do not frequently use effective strategies while performing a reading task. This can hinder their understanding of English texts and affect their overall academic performance. Strategies such as previewing, self-questioning, and purpose setting should be taught to students since they help them create direction while reading which in turn aids and reinforces their

comprehension. It is also of utmost importance to expose students to a variety of metacognitive strategies and to train them on how to select appropriate strategies for specific purposes in reading. This will enable them to become proficient readers as they learn how active and independent readers think and interpret textual content, considering the fact that L2 reading is not a process which is entirely natural.

Regarding structuring and designing the curriculum, the study findings shed light on the frequency use of different metacognitive reading strategies by Lebanese EFL learners. The results of this investigation are beneficial for curriculum designers who attempt to integrate and reinforce metacognitive strategy instruction in the Lebanese EFL curriculum, hoping to address students' gaps in reading comprehension. Finally, adapting metacognition and metacognitive strategies in education is highly crucial as it increases students' awareness of learning experiences which enhances their cognitive and affective growth. Understanding the structure of one's own thinking can facilitate the students' development of new life skills and increase their ability to become independent and life-long learners.

Limitations and Recommendations

It is certain that most research studies have specific limitations that researchers can't avoid. Although the researcher usually attempts to ensure the validity and reliability of the study, some study flaws might arise.

An important limitation of the present study is that the metacognitive awareness of Lebanese students was measured using a self-report instrument (MSI Questionnaire) by Schmitt (1990). Thus, the collected data was based on the participants' individual answers which indicates that the researcher could not ensure that the students managed

to choose the answer that is realistic rather than choosing the answer which was socially and logically acceptable to them.

Another limitation is that the number of study participants is small , and the students represent Lebanese EFL learners who come from a middle or high socio-economic class. Thus, the study results cannot be generalized to the larger Lebanese population.

CHAPTER 6

CONCLUSION

In conclusion, this study investigated the relationship between metacognitive reading strategies, gender, and the reading comprehension of Lebanese sixth graders. Moreover, it explored the differences in metacognitive strategy use depending on gender. Considering the study population, I believe there is a need to conduct further research in the Lebanese context related to metacognitive awareness and the use of diverse metacognitive reading strategies in addition to their interplay with L2 reading comprehension. This investigation is crucial as metacognition and the activation of students' metacognitive awareness continue to take on increasing importance in education, especially in language teaching and learning. Educators who understand themselves and possess the ability to understand their students can help increase metacognitive awareness which results in life-long learning, an ongoing pursuit of knowledge.

APPENDIX 1

METACOMPREHENSION STRATEGY INDEX (MSI

APPENDIX

Metacomprehension strategy index

Directions: Think about what kinds of things you can do to help you understand a story better before, during, and after you read it. Read each of the lists of four statements and decide which one of them would help *you* the most. *There are no right answers*. It is just what *you* think would help the most. Circle the letter of the statement you choose.

I. In each set of four, choose the one statement which tells a good thing to do to help you understand a story better *before* you read it.

1. Before I begin reading, it's a good idea to:
   - A. See how many pages are in the story.
   - B. Look up all of the big words in the dictionary.
   - C. Make some guesses about what I think will happen in the story.
   - D. Think about what has happened so far in the story.
2. Before I begin reading, it's a good idea to:
   - A. Look at the pictures to see what the story is about.
   - B. Decide how long it will take me to read the story.
   - C. Sound out the words I don't know.
   - D. Check to see if the story is making sense.
3. Before I begin reading, it's a good idea to:
   - A. Ask someone to read the story to me.
   - B. Read the title to see what the story is about.
   - C. Check to see if most of the words have long or short vowels in them.
   - D. Check to see if the pictures are in order and make sense.
4. Before I begin reading, it's a good idea to:
   - A. Check to see that no pages are missing.
   - B. Make a list of the words I'm not sure about.
   - C. Use the title and pictures to help me make guesses about what will happen in the story.
   - D. Read the last sentence so I will know how the story ends.
5. Before I begin reading, it's a good idea to:
   - A. Decide on why I am going to read the story.
   - B. Use the difficult words to help me make guesses about what will happen in the story.
   - C. Reread some parts to see if I can figure out what is happening if things aren't making sense.
   - D. Ask for help with the difficult words.
6. Before I begin reading, it's a good idea to:
   - A. Retell all of the main points that have happened so far.
   - B. Ask myself questions that I would like to have answered in the story.
   - C. Think about the meanings of the words which have more than one meaning.
   - D. Look through the story to find all of the words with three or more syllables.
7. Before I begin reading, it's a good idea to:
   - A. Check to see if I have read this story before.
   - B. Use my questions and guesses as a reason for reading the story.
   - C. Make sure I can pronounce all of the words before I start.
   - D. Think of a better title for the story.
8. Before I begin reading, it's a good idea to:
   - A. Think of what I already know about the things I see in the pictures.
   - B. See how many pages are in the story.
   - C. Choose the best part of the story to read again.
   - D. Read the story aloud to someone.
9. Before I begin reading, it's a good idea to:
   - A. Practice reading the story aloud.
   - B. Retell all of the main points to make sure I can remember the story.
   - C. Think of what the people in the story might be like.
   - D. Decide if I have enough time to read the story.

Underlined responses indicate metacomprehension strategy awareness.

10. Before I begin reading, it's a good idea to:
    A. Check to see if I am understanding the story so far.
    B. Check to see if the words have more than one meaning.
    C. Think about where the story might be taking place.
    D. List all of the important details.

II. In each set of four, choose the one statement which tells a good thing to do to help you understand a story better *while* you are reading it.

11. While I'm reading, it's a good idea to:
    A. Read the story very slowly so that I will not miss any important parts.
    B. Read the title to see what the story is about.
    C. Check to see if the pictures have anything missing.
    D. Check to see if the story is making sense by seeing if I can tell what's happened so far.
12. While I'm reading, it's a good idea to:
    A. Stop to retell the main points to see if I am understanding what has happened so far.
    B. Read the story quickly so that I can find out what happened.
    C. Read only the beginning and the end of the story to find out what it is about.
    D. Skip the parts that are too difficult for me.
13. While I'm reading, it's a good idea to:
    A. Look all of the big words up in the dictionary.
    B. Put the book away and find another one if things aren't making sense.
    C. Keep thinking about the title and the pictures to help me decide what is going to happen next.
    D. Keep track of how many pages I have left to read.
14. While I'm reading, it's a good idea to:
    A. Keep track of how long it is taking me to read the story.
    B. Check to see if I can answer any of the questions I asked before I started reading.
    C. Read the title to see what the story is going to be about.
    D. Add the missing details to the pictures.
15. While I'm reading, it's a good idea to:
    A. Have someone read the story aloud to me.
    B. Keep track of how many pages I have read.
    C. List the story's main character.
    D. Check to see if my guesses are right or wrong.
16. While I'm reading, it's a good idea to:
    A. Check to see that the characters are real.
    B. Make a lot of guesses about what is going to happen next.
    C. Not look at the pictures because they might confuse me.
    D. Read the story aloud to someone.
17. While I'm reading, it's a good idea to:
    A. Try to answer the questions I asked myself.
    B. Try not to confuse what I already know with what I'm reading about.
    C. Read the story silently.
    D. Check to see if I am saying the new vocabulary words correctly.
18. While I'm reading, it's a good idea to:
    A. Try to see if my guesses are going to be right or wrong.
    B. Reread to be sure I haven't missed any of the words.
    C. Decide on why I am reading the story.
    D. List what happened first, second, third, and so on.
19. While I'm reading, it's a good idea to:
    A. See if I can recognize the new vocabulary words.
    B. Be careful not to skip any parts of the story.
    C. Check to see how many of the words I already know.
    D. Keep thinking of what I already know about the things and ideas in the story to help me decide what is going to happen.

**Underlined responses indicate metacomprehension strategy awareness.*

APPENDIX 2

READING COMPREHNSION TEST

Reading Comprehension

Directions: Read the narrative selection. Answer the questions that follow.

Reem likes to go to the park with her mom every Saturday. She likes to play at the park with her friends. Today when Reem goes to the park, she looks around and becomes very sad.

"What is wrong, Reem?" Mom asks.

"There is so much trash on the ground," Reem says. "It seems like each day, I see more trash here."

Reem and her mom look around. There are old boxes on the ground. There are popped balloons on the ground. There are old cans, too.

"You are right," Mom says.

"The park is very dirty." "What can we do?" Reem asks.

"I am sure you will think of something," Mom says.

Reem and her mom go home. Reem paints a picture of a park. She uses blue, green, brown, and yellow paint. PLEASE KEEP OUR PARK CLEAN, she writes in big letters on top of her picture.

"Let's go back to the park, Mom," Reem says.

"Okay," Mom says.

Reem grabs a bunch of trash bags to take with her. She also brings along some tape. When Reem gets to the park, she tapes her picture on a big trash can. "Here you go!" she says to her mom. She hands her mom a bag.

"Will you help me pick up the trash?"

"I sure will," Mom says.

The children at the park run over to see what is going on. Reem hands them bags.

"Let's clean this place up," she says.

The children pick up lots of trash. They talk and laugh as they work. Soon all the bags are full.

"We need to come back another day. There is still some trash on the ground," Reem says.

"But the park looks much better. I knew you would think of some way to help." Mom says.

1.Who are the main characters in the story?

a. Reem

b. Reem and Mom

c. Reem and her friends

d. Reem, Mom and friends

2. Where does the story mainly take place?

a. at the park

b. at Reem's home

c. at school

d. at the playground

3.How does Reem feel after she goes to the park?

a. sad

b. lazy

c. happy

d. energetic

4. What do Reem and Mom find on the ground?

a. old boxes

b. old boxes and popped balloons

c. old cans

d. All of the above

5. What is the first thing Reem does when she arrives home?

a. has lunch

b. paints a picture of the park

c. grabs trash bags

d. All of the above

6. The story is told from:

a. first person point of view

b. second person point of view

c. third person point of view

d. None of the above

7.What is the author's purpose in this text?

a. to inform

b. to entertain

c. to persuade

d. to express feelings

8.The genre of the text is:

a. Historical fiction

b. Biography

c. Realistic Fiction

d. Informational Article

9. Which word best describes Mom?

a. smart

b. arrogant

c. greedy

d. supportive

10. Which word best describes Reem?

a. responsible

b. childish

c. lazy

d. lonely

11. Why does cooperation matter?

a. It allows people to take turns and help each other out.

b. It makes people lazy and dependent.

c. It allows people to focus on their own needs and interests.

d. It makes people uninterested and bored.

12. A way to reduce the problem of throwing trash in parks is:

a. closing parks on weekends

b. using commercial trash cans

c. charging entrance fees

d. closing all playing areas

13. Based on how Reem and Mom act:

a. They have a bad mother-daughter relationship.

b. They have a strong mother-daughter relationship.

c. They have a weak mother-daughter relationship.

d. None of the above

14. The effect of dialogue in the story is:

a. decreasing the story's pace

b. increasing the difficulty of the story

c. making the story more dynamic

d. making the story longer

15. Based on the sentence below, what do you know about Reem?

She likes to play at the park with her friends.

a. She is shy.

b. She is sociable.

c. She is hostile.

d. She is an attention-seeker.

16.Which statement best reflects your opinion on Reem's character and behaviour?

a. I believe Reem is childish and rushes into things.

b. I believe Reem is caring and has a high sense of responsibility.

c. I believe Reem is lonely and needs to find a hobby.

d. I believe Reem is bossy and controlling.

17. What does the story teach you?

a. Keeping parks clean is every visitor's job, which helps contribute to a more welcoming park atmosphere.

b. Keeping parks clean is not every visitor's job; it is the garbageman's duty.

c. Keeping parks clean is unnecessary; people can visit malls and avenues instead.

d. Keeping parks clean is necessary, and one way to do that is to make them private.

18. How would you feel if you were Reem's sibling?

a. proud

b. ashamed

c. disappointed

d. jealous

19. Why is this text realistic?

a. Events can happen in real life.

b. Characters are imaginary.

c. The character feels sad.

d. All of the above

20.What would you have done next if you were Reem?

a. Go back home and take some rest

b. Plan for a bigger community service project

c. Go out with friends to celebrate

d. None of the above

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