USING METACOGNITIVE STRATEGIES IN ACADEMIC READING: A CASE STUDY ON BANGLADESHI ESOL LEARNERS

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A thesis submitted to the Department of English and Humanities in partial fulfilment of the requirements for the degree of
M.A. in English

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Declaration

It is hereby declared that

1. The thesis submitted is my own original work while completing degree at BRAC University.

2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.

3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.

4. I have acknowledged all main sources of help.

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Abstract

Students of English language classrooms in English to Speakers of Other Languages (ESOL) context often face difficulties in understanding English texts. Research suggests that various metacognitive reading strategies may help students to improve reading comprehension. To date, there has been limited studies on this aspect in an ESOL context such as Bangladesh. Thus, this study explored how a training on metacognitive strategies affect tertiary level students' reading comprehension. The researcher chose a qualitative, multiple case study approach to conduct the study. In the first phase, the participants were asked to comprehend a text without any training on metacognitive strategies. The second phase consisted of a training on metacognitive strategies of reading while the third phase asked the participants to read a new text utilising the learnt strategies. Finally, the participants shared their views on their experience through a semi-structured interview. The findings revealed that students have improved their ability to comprehend a text after receiving the metacognitive training in terms of timing, fluency and motivation for reading. The study has pedagogical and theoretical implications as well as replicable for any teacher researcher in a similar ESOL context.

Keywords: Metacognitive reading strategy; Academic reading; Bangladeshi ESOL learners; Reading comprehension; Metacognitive training.

Dedication

I would like to dedicate this dissertation paper to my beloved parents.

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Chapter 1

Introduction

1.1 Background of the Study

Proficiency in metacognitive strategies has remained a broader field of research in education. The term "metacognitive" was introduced by the American psychologist John H. Flavell (1979). Since then, it has been used in learning theories (Veenman, Wolters & Afflerbach, 2006), specially in self- regulated learning in connection with planning, monitoring, evaluating and problem- solving (Boekaerts, 1999; Paris & Paris, 2001). With the developing interest of the educators, instructors and researchers, this field has become the concern of exploration as well as its effectiveness in the learning process (Boekaerts, 1999). In fact, metacognition is associated with motivation (Zimmerman, 1995; Borkowski, Chan & Muthukrishna, 2000), critical thinking (Kuhn, 1999), problem solving (Flavell, 1976), learning strategies (Capc & Mares, 2001), or auto regulated learning (Boekaerts, 1997; Zimmeman, 2002) (as cited in Doulik, Skoda & Rican, 2015).

As a matter of fact, the impact of metacognitive strategies on second or foreign language learning is noteworthy. For example, communication, language acquisition, problem solving and reading comprehension. Moreover, metacognition is not only helpful in academic sector but also it influences a learner's personal life by developing one's way of thinking (Al- Jarrah, Mansor, Talafhah & Al- Jarrah, 2018). The perception has been popularised since people are able to implement it in their thinking (Mahdavi, 2014).

Previous scholarly works are the evidences of the usefulness of metacognitive strategies as it aids the students in their planning, controlling, evaluating of learning by making them successful learners (Rahimia & Katala, 2011). But it is a matter of wonder that some empirical studies recommend the limited use of metacognitive strategies than the traditional method (Denton &

Bond, 2013). This is the reason why more research should be conducted on the efficiency of metacognitive strategies on language learning.

Again, Sun (2013), states that high metacognitive strategy users can identify their weaknesses and strengths which help them to adopt right strategy in the appropriate situation and thus, they do a good result. Therefore, the notion of metacognitive strategies should be developed (Oxford, 1990; as cited in Sun, 2013) and consciousness must be created among students specially for upper intermediate level to become an autonomous learner by applying metacognitive strategies. In this case, teachers can play an active role to make them introduce with these strategies. Adding to that, Doulik, Skoda & Rican (2015) find out that skilled readers are well aware of these strategies and the difficulties faced while reading whereas low efficient readers are tended to focus on meaning by minimising the use of metacognition.

Furthermore, several studies showed a positive relationship between self- learning attempt and learning outcome. On the other hand, some empirical studies find inappropriate relationship between metacognitive strategies and academic achievement (Nett, Goetz, Hall & Frenzel, 2012). For all the above reasons, use of metacognitive strategy in education has drawn the attention of researchers and further investigation should be conducted to explore more information.

1.2 Metacognitive Strategies in Academic Reading

To describe what academic reading is, Sohail (2015) states that academic reading differs from other types of reading as it requires critical skill to understand its language, word and sentences. Academic reading insights students with unique view and ideas by increasing their ability to pay more attention and thinking process.

In connection to that, metacognitive is the process of thinking about thinking (Meniado, 2016) which promotes learning and ability to understand a written text (Ahmadi, Ismail & Abdullah, 2013). In Flavell's (1979) view, metacognition is the knowledge of an individual's thinking process, power of activation and supervision. Fadel, C. et.al (2017) upholds the importance of metacognition in learning not only in academics but also in general; specially in new situations when one's habitual response does not work (Drikes, 2010). Metacognition is necessary particularly for academic reading because one needs to understand and contrive while reading a text (Zhang, 2013).

In this regard, Djudin (2017) opines that, metacognitive strategies are the essential elements to become an autonomous learner and to reach one's goal because students become conscious about their learning and thinking process on how to solve a problem, how to analyse and how to pick up a new thing. Through this process they become an independent learner and eventually a problem solver.

In the same vein, a learner can adopt metacognitive reading strategy deliberately or unintentionally to direct its learner towards the goal to comprehend the text (Afflerbach, Pearson, & Paris, 2008). Use of metacognition enhances the capability to go beneath the superficial level of the text by creating a connection between the reader and the text so that the reader can come across the information and background knowledge (Meneghetti, Carretti, & De Beni, 2006). For example, Chinese EFL students have to master in academic reading and give exams like CET 4, CET 6 (College English Test), TEM 4, TEM 8 (Test for English Majors) to fulfill their academic and professional purposes. Consequently, they take academic reading as a challenge (Zhang, 2013). In 2003, Wen showed in his study that students take support of metacognitive strategies when facing any obstacle in their reading activity. Therefore, Meniado (2016), sees metacognitive strategies as

a solution to the problem faced by the inefficient readers. Once more, to establish the relationship between metacognitive strategy and academic reading, several experiments can be mentioned. One study is conducted by Shokrpour and Fotovatian (2009), where the experimental group who are trained with metacognitive strategies showed more progress than the control group in their reading tasks. Another study by Madhumathi and Ghosh (2012) demonstrates that Indian students are more prone to take support of metacognitive strategies to solve their reading problems.

All the aforementioned reasons and examples provide a strong evidence for the effectiveness of using metacognitive strategies to accomplish the academic purpose of reading.

1.3 Promoting the use of Metacognitive Strategies in Academic Reading

How to promote metacognitive strategies in learning and instruction specially in academic reading that ought to be a serious concern. In this regard, Palincsar and Brown (1984), illustrates some effective methods of teaching metacognitive strategies. They suggest to not practice only the strategies in segregation rather incorporate them with other learning styles. As an example, summarising, questioning, clarifying and predicting are the reciprocal method to command over their thinking process and learning to become an efficient reader.

In 2011, Lai observes the effectiveness of metacognitive training provided on 171 third and fourth grade students. This program creates consciousness about the utilisation of these strategies among them that they will recognise particular strategies conforming to their necessity. Moreover, more emphasis is given on self- questioning, verbalisation and summarisation. After that, they achieve an outstanding progress than those that are not given training. On this aspect, use of metacognitive strategies upgrades their viewpoint, observation and critical thinking ability when integrating with other strategies. Thus, they are ready to focus and solve their problem on their own (Iftikhar, 2014).

Most importantly, Zhang & Sheepo (2013), mentions the three steps of teaching metacognitive strategy- planning, monitoring and evaluating. Planning occurs in pre- reading stage where learners think about the topic and content to formulate a prior knowledge. Besides, pictures, graphics, headings, and subheadings add more to that (Benchmark education, 2011, as cited in Usman, Aziz & Absida, 2017). Monitoring includes "make connections, predictions, inferences, use contextual clues, use text features, identify text structures, use graphic organisers to pinpoint particular types of text information and write comments or questions on self-stick notes" (Fogarty, 1994, as cited in Usman, Aziz & Absida, 2017, p. 429) and eventually evaluating includes "collecting feedback, gathering data or information, and doing assessments" (Usman, Aziz & Absida, 2017, p. 430).

Furthermore, Millis (2016), exemplifies some metacognitive activities for practicing within the classroom. Listing of things what they can remember about the concept or topic, then paraphrasing and lastly if they are ready to relate the concept with real- life examples these are prior activities to a lesson. Next, during the lesson they are assigned with tasks such as completing an incomplete sentence, compare and contrast of two elements, theories, historical movements or works of literature and then supporting a statement with proper logic or information and justifying it. After the end of a lesson, teachers can ask questions related to the lesson to check their understanding of what they are taught or can assign more complex activities as homework to build up the consciousness of metacognition. Similarly, taking multiple choice questions, essay writing and exams are the best way to reflect on students' learning outcome. A teacher can easily focus on the outcome, shortcoming, problem and solution of their metacognitive strategy learning.

1.4 Metacognitive Strategies in Academic Reading in ESOL Countries

The present study has aimed to explore previous researches conducted on different ESOL countries on the use of metacognitive strategies in reading comprehension in academic sector: Karbalaei (2010) at Iran & India; Meniado (2016), Zare & Othman (2013) at Saudi Arabia; Saengpakdeejit & Intaraprasert (2014), Wichadee (2011), Anuyahong (2018) at Thailand; Mammadova & Gurbanova (2018) at Azerbaijan; Shang (2016), Chai, Wong & King (2016) at Taiwan; Cheng, Liao & Chang (2018), Lau & Chen (2013), Luo (2013) at China; Iqbal, Noor, Muhabat & Kazemian (2015) at Pakistan; Lau (2006) at Hong Kong; Sani, Chik, Nik & Raslee (2011) , Erliana (2015); Edward, Pudin & Din (2020), Noor (2006) at Malaysia; Ahmed (2016) at Sudan; Taki (2016) at Canada & Iran; Rastegar, Kermani & Khabir (2017), Ganji, Yarahmadzehi & Sasani (2018), Ahmadian, Poulaki & Farahani (2016) at Iran; Cogmen & Saracaloglu (2009), Kaya (2015), Sen (2009); Cubukcu (2008), Memiş & Bozkurt (2013) and Ilter (2017) at Turkey; Asmawati (2015) and Antoni (2010), Umar (2016) at Indonesia.

To date, very few studies have been conducted on the metacognitive awareness of Bangladeshi EFL tertiary level learners: Akther, Masroor & Misbauddin (2020); Sultana (2016); Islam & Akhter (2020); Paul (2012) and Aktar (2018). The current study attempts to bridge this gap of knowledge and explore how much metacognitive awareness they possess in their academic reading and which strategies are frequently used by them. In addition, most of the previous studies were set in different ESOL countries except from Bangladesh. That is why, this study aims at using metacognitive strategies in academic reading for ESOL student who are being taught in Bangladeshi contexts.

These present studies on metacognitive strategies in academic reading in ESOL countries show how the researchers find out various metacognitive strategies that make students efficient in their

academic reading. The authors focused mostly on the effect of metacognitive strategy in Asian countries like China, Thailand, India, Pakistan, Indonesia and Arab countries like Saudi Arabia, Turkey, Iran but overlooked Bangladesh. However, the literature has a gap of knowledge on the setting of Bangladeshi ESOL learners. This is the reason why this study aims at exploring how much aware the Bangladeshi ESOL learners are about using metacognitive strategies in their academic reading.

1.5 Statement of the Problem

Comprehension means the ability to understand the main ideas of a text and what is the connection between those ideas (McNamara, 2007). Reading is the feasible way of developing language learning where English is a foreign/second language (Gorsuch & Taguchi, 2010). Academic success or failure depends on reading comprehensibility (Taylor et al., 2006). It is noteworthy that, most ESL learners are found unaware of using metacognitive strategies specially the inefficient ones. They feel concerned and confused how to improve their reading capability and which strategy works on which situation (Shokrpour & Fotovatian, 2009). Thus, they fail in self-planning, self- monitoring and self- evaluating in their academic reading. So, reading has become a major concern globally. All the researchers and educators are working on this field on how to promote metacognitive strategies in those countries where English is practiced as a second/ foreign language. They aim to extract the fruitfulness of these strategies and how to bring improvement in reading. In addition, their prime focus is to find out how metacognitive strategies may improve students' comprehensibility in reading. There are differences between learners in case of reading activities and different findings are extracted by the experiments conducted upon the participants. However, minimal studies are conducted on Bangladeshi students' use of metacognitive strategies

in academic reading. This study will shed some lights on this fact and try to find out how learners in an ESOL context utilise metacognitive strategies of reading in English academic course. To find out how these metacognitive strategies are used, students' opinions after using the strategies must be looked into.

1.6 Research Questions

Central Research Question: To explore how various metacognitive strategies of reading are utilised by Bangladeshi ESOL students.

R.Q. 1. How do Bangladeshi ESOL students utilise various metacognitive strategies of reading?

R.Q.2.

a) How do the students feel about using the metacognitive strategies of reading in academic English class?

b) What kinds of challenges did the students face while implementing metacognitive strategies of reading?

1.7 Delimitations of the Study

The study did have certain limitations that I tried my best to address as the researcher. Firstly, qualitative method is adopted to conduct the study and to answer all the research questions. Next, only tertiary level students from Dhaka city are chosen for this study because it was convenient for me to contact with participants from my own city and same level of learners as a pandemic situation was going on during the research. Moreover, city people are privileged with good quality internet connection and communication system and the whole data collection was run over Zoom

platform. Also, tertiary level learners do not require support from their parents in the data collection process. So, it is free from any bias.

1.8 Significance of the Study

To the best of my knowledge, very little research has been conducted to explore if ESOL students of Bangladesh are able to utilise various effective metacognitive strategies of reading for their academic purpose. This study fills the gap of knowledge by highlighting the necessity of incorporating metacognitive strategies in academic reading. As all the participants of the study were Speakers of English of Other Languages, this study is useful for Bangladeshi English language classrooms as well as any other ESOL countries. The study looks at the benefits of implementing metacognitive strategies in academic reading for Bangladeshi tertiary level learners that can be implemented in other levels of English learners as well. Moreover, the findings of this study contribute to the theoretical framework of metacognitive strategy learning. Students will be benefitted by understanding the usefulness of using metacognitive strategies in their academic reading so that they can overcome their struggles in reading and become an efficient reader.

In addition, the study is valuable to the field of teaching and learning of academic reading skills which aims at making learners fluent readers. The findings of the study will provide a guideline for further studies in the field of metacognitive strategy learning and for ESOL/ELT teachers around the world. Finally, the research design proposes that workshops can be used as a qualitative research approach in the field of educational research. This research approach can be explored further in future studies by other researchers.

1.9 Definition of Key Terms

Academic Reading: According to Sengupta (2002), Academic reading is different from other types of reading as it is complex in nature and it has multi- levels. Academic reading is purposeful and requires critical reading of longer academic texts in order to complete the particular major subject of an individual. Leki (2001) defined academic reading, "Academic reading involves a wide and exhaustive reading of texts, which are subject explicit and include a thorough amalgamation of data from various resources" (p. 88). Furthermore, academic reading is very thoughtful, serious and multifaceted process (Shuyun & Munby, 1996).

Metacognitive Reading Strategies: Learners use metacognitive reading strategies as a choice, behaviour, thought, suggestion and technique to assist in their learning process (Cook, 2001; Macaro, 2001; Oxford, 1990). Metacognition is the knowledge of an individual's thinking process, power of activation and supervision (Flavell, 1979). According to LD Online Glossary (2014), Metacognition is the process of "thinking about thinking." For example, good readers use metacognition before reading when they clarify their purpose for reading and preview the text.

English for Speakers of Other Languages (ESOL): According to the Cambridge English dictionary, ESOL is the abbreviation for English for Speakers of Other Languages. It refers to the teaching of English to students whose first language is not English and they live in a non-native English- speaking country where English is considered as a second or foreign language. Some ESOL countries are: Bangladesh, India, Malaysia, Thailand and many more. All the participants of this study are from Bangladesh.

Chapter Two

Review of Literature

2.1 Introduction

The aim of this study is to understand the concept of reading comprehension and look into the metacognitive strategies used by the students for academic purpose. This chapter thus discusses relevant theory and scholarly works regarding metacognitive strategies applied in academic reading. This chapter also aims at locating a gap in the literature on the Bangladeshi context whether the students are familiar with metacognitive strategies or not and what strategies are used by them to accomplish their reading tasks. They are discussed below:

2.2 Complications or Drawbacks in Reading Skill

Students face lot of problems or complications while reading such as, vocabulary problem, speed reading, lack of strategies and many more. Through various researches these problems have come out which should be in our focus so that we can work on that and improve students' reading skill. In this regard, Sohail (2015) reflects on the fact that students have a bad habit to read any text very quickly as whole text, instead of part by part. By doing this, they do not understand the main idea of the text at all. Moreover, most students do not aware of all the reading strategies, few were unsure about the effectiveness of the strategies while some others are totally out of reading practices. Finally, it is an observation of the study that they do not possess efficient reading strategies. In Ganji, Yarahmadzehi & Sasani (2018)'s study, participants are found inefficient in using metacognitive strategies. They are not well- trained and hence, prefer to use traditional method instead of problem- solving strategies like skilled reading, skillful thinking, self-

monitoring and strong comprehension. But to some extent they can use global strategies. The major finding of the study is that reading activity and strategical acknowledgment has no mutual connection. Mainly, students are not prepared or taught these strategies and direction on their usage during the course. Less practice and insufficient guidance are responsible for this fragile relationship between reading text and strategies. So, reading a text very quickly without understanding and unfamiliarity or incompetency in metacognitive strategies are the shortcomings behind reading skill.

In addition to that, lack of vocabulary knowledge is a major problem which the students mostly failed to master. In this case, they should try to guess the meaning from the context instead of knowing the exact meaning (Iqbal, Noor, Muhabat & Kazemian, 2015). The authors uphold the importance of building up a good reading habit as they are not habituated of reading other materials such as, English newspaper, story and literature apart from reading to pass in the examination. Reading apathy and demotivation is the main reason behind this. Teachers are also highly responsible for this bad habit. They should inspire them for free writing to develop vocabulary, critical thinking, sentence structure and innovation. Besides, parts of speech are another factor which students should improve and know the usage properly because a word can be classified differently according to different context. Lastly, it is suggested in this study that teachers can come up with teaching important strategies like "skimming, scanning, previewing, predicting, anticipation and reading in chunks" (p. 5). According to Saengpakdeejit & Intaraprasert (2014), dependency on dictionary is an indication of less skilled reader. For this, contextual cues, background knowledge, assistance and translation can be used as strategies to comprehend the text. Thus, vocabulary is a vital consideration in reading.

According to Luo (2013), this quantitative study deals with low efficient College students of China in their CET (College English Test) and aims to find out the difficulties faced by the low efficient readers, teacher's role to solve this problem and finally conclusion and recommendation regarding CE teaching and learning. At first, the problem actually arises from the both linguistic and schematic context and for this, the teacher can bring prosperity with the help of both the text based and skill- based reading materials but text based material is way more helpful than the other one because it provokes the interest of the readers. Lastly, the author suggests investigating more practical things and does a further research on the newcomers. Therefore, by identifying reading problems, reading skill can be developed.

2.3 Metacognitive Strategies in Reading Comprehension

Various studies looked at how metacognitive strategies may influence learners' reading skill because metacognitive strategies have an extraordinary influence on the comprehension of reading. It is found that good readers are frequent users of metacognitive strategies and poor readers just ignore them. It should be included both in teaching and learning to get a better result on reading comprehension. Besides, it increases students' motivation for self- efficacy. They become motivated and push themselves up for being a fluent reader. Researchers found a positive impact of metacognitive strategies on reading comprehension skill which helps to learn a second language and for communicational purpose. This section thus explores the effectiveness of using metacognitive strategies and its various aspects in relation to reading.

2.4 Effectiveness of Metacognitive Strategies

So many researches have been conducted on various participants to check their response over the use of metacognitive strategies. In most studies, participants are benefitted after using those strategies. In this regard, Ahmadia, Poulaki & Farahani (2016), investigates on the reading strategies used by the high and low scoring IELTS candidates of Iran and also if there are any remarkable differences between them in use of those strategies. However, they find no special variation in participants' cognitive strategies concerning frequency but translation and skipping- these two types of cognitive strategies are seen to constantly use in various ways when completing the IELTS reading passages. Moreover, metacognitive strategies like self-monitoring and planning along with compensation strategies like using linguistic and other clues is beneficial for high scorers to understand the text. On the other hand, making positive statements and using progressive relaxation are the affective strategies used by the both groups unintentionally whereas memory and social strategies are left by them. It is a suggestion from the authors that in order to become an efficient reader, teachers should provide themselves with effective reading strategies.

Finally, the study possesses some shortcomings, for example, only male participants are chosen for this experiment without considering their educational background, another group of participants who have no experience of IELTS should be kept for a more accurate result. Another study by Karbalaei (2010), examines the difference between Indian and Iranian ESOL learner's use of metacognitive strategies in their academic reading. Despite having different socio- cultural environment, Indian students respond more frequently than Iranian students by applying top- down approach and most types of support reading strategies such as- summarising, paraphrasing, note-taking contrasting to the Iranian students who follow bottom- up strategies and use dictionary to find out the meaning of an unknown word when they read. On the other hand, Indian students are

more prominent writers which can be a fundamental reason behind using those strategies. What is common in between them that they use slow and careful reading, re- reading as problem- solving strategies.

Again, Taki (2016), examines the use of online metacognitive strategies in two different contexts. Canadian students are found to adopt more online strategies than the Iranian students (both Farsi L2 & English L2). The reason behind Canadian students' frequent use of these strategies is that they are more comfortable in online setting and expert in using technology. The technique they apply is a top- down method which is a global strategy. The study also asserts that Canadian students are well- organized in their reading comprehension activity. In contrast to that, Iranian students assist themselves with problem- solving and support strategies because of their cultural expectations and institutional environment. This type of setting promotes memorization and teacher dominated classroom. But they use metacognitive strategies more precisely in English L2 than Farsi L1. Also, the study asserts that the readers possess sufficient knowledge of these reading strategies. The limitation of the study is that it deals with two same groups, L1 and L2 and only two cultural and linguistic contexts. Other contexts should be considered for a more in- depth analysis. Consequently, Chern (1993), showed a positive correlation between the metacognitive reading strategy awareness and reading comprehension procedure in case of EFL/ ESL readers (as cited in Rastegar, Kermani & Khabir, 2017). Participants of this study who apply planning, monitoring and evaluating achieve success in reading activity in contrast to those who do not take advantage of those strategies.

In this respect, Ditzel (2010), observes that participants of his study can instantly or immediately apply metacognitive strategies in their reading comfortably for two semesters. Even they start to use these strategies naturally while reading and can successfully transmit those strategies to their

reading activities. Thinking while reading regulates an extraordinary step towards self- regulated reading for every student. To find out the differences between Turkey students' reading comprehension skills who use metacognitive strategies and those who follow the traditional methods, Sen (2009) notices that female students participate in a more number than the male students. Thus, no remarkable difference is noticed between the experimental group and the control group regarding main ideas of the text and guessing from the context while attempting the t- test but experimental group who applies metacognitive strategies shows a remarkable development than the control group who goes with the traditional methods in reading comprehension achievement score. However, six teachers collaborate with the students in this study. Furthermore, experimental group keep themselves ahead concerning the skill "guessing the end of the text" than the control group but when it comes to get the main idea there is no much difference between them. Lastly, it is suggested by the author that students should introduce with the effective reading strategies by giving them proper instruction on how to get the main ideas and guess the end of a text. This study finds metacognitive strategies as the most efficient reading strategies.

Similarly, Cubukcu (2008) finds benefit of using metacognitive strategies on those students who face problems in understanding the meaning of a text and vocabulary. Thus, this study works as an evidence for the usefulness of metacognitive strategies that they have a great influence on reading comprehension. Moreover, a model of instruction for teaching and applying metacognitive strategies has been used in this study which aids the learners to make aware of why, when and how to apply those strategies to make themselves a self- learner and skilled one.

Therefore, researchers have found a positive and effective relationship between metacognitive strategies to reading comprehension.

2.5 Relation between Motivation and Metacognitive Strategies

Motivation in reading and metacognitive strategies possesses a mutual relationship within themselves. Use of metacognition increases learner's motivation which adds to their reading comprehension. To begin with, Guthrie, Hoa, Wigfield, Tonks, Humenick & Littles (2007), examine the effect of motivation in different types of texts on elementary level and how much motivation contributes to the reading comprehension. At first, if one feels interested in reading that means he/she is highly cognitively engrossed which leads to the success. Secondly, students who have perceived control prefer to choose books on their own by applying specific strategies and area of interest. Furthermore, students' self- efficacy in reading is defined after taking the interview. But they do not show it on a vast range and possess a clear idea about it. They stick only word and sentence level skills in case of self- efficacy.

Finally, reading in a collaborative way seems important to some students and some find it unnecessary. Some students think that collaboration builds up based on relationship. There are many reasons or motivation works behind reading. Some read to gain knowledge, some read on their favorite topics or to make themselves knowledgeable which is a crucial motivational factor. Another finding is that, students usually go for narrative text, genre that fits with the time on a low or medium level, whether the book is interesting or boring. When examining reading motivation from the interviews, it is proved that motivation aids to the comprehension. But this is extracted from the observation of the interviewers, not directly claimed by the individual. Also, analysis of the findings show that highly motivated students can remember plots and topics of a text of their favorite topic or author. This means they understand the text in a better way.

In this regard, Meniado (2016), highlights Saudi students' unfamiliarity of some meta- cognitive strategies as a reason behind their moderate use of those strategies. To some extent, teachers are

also responsible for not knowing these strategies and using them in their instruction. It is the problem- solving strategies which keep the University Second Language learners more ahead than beginner level Foreign Language learners. In addition to that, they prefer reading for fun and feel interested to read humorous or comic books. Their topics of interests are- "adventure, religion, computer, internet, technology, sports, current events, novels, poetry, and plays" (p. 124). These issues need to be considered before any planning or development in curriculum and instruction.

Surprisingly, Saudi students fail in comprehension test even after they apply meta- cognitive strategies. Thus, it proves no remarkable connection between Saudi EFL learners' comprehension performance and their use of reading strategy. However, this study finds a positive relationship between motivation or interest and meta- cognitive reading strategies from the observation that students feel lazy to read a long and difficult text and end up in guessing answers by skipping the lines due to lack of motivation to read the whole text. Besides, Noor (2006) explains the two approaches- deep and surface approach in reading comprehension. Participants remain intrinsically motivated by implementing varied strategies to connect ideas with their reading in deep approaches and can successfully understand the meaning of the text whereas surface approaches comprise extrinsic motivation, poor reading skills and strategies by giving attention to only the essence of the paragraphs and fail to fully understand the text. He also identifies one significant factor that is the feeling of anxiety while reading as long and difficult text makes learners anxious with the negative perception even before they start reading.

As a consequence, Shang (2015) finds a positive relationship between online meta- cognitive strategy use and motivation as those strategies aid in developing motivation. To increase the motivation of the learners for a better performance on hypertext comprehension, global strategy use and translation of sentences work hand in hand. Translating first language and using global

strategies enhance motivation level which leads to the understanding of the text. According to Chen et. al (2011), appropriate strategy instruction, pre- reading and post- reading steps help in EFL learners reading comprehension. Motivation, specifically computer self- efficacy has a direct influence on hypertext reading activity.

By comparison, Sani, Chik, Nik & Raslee (2011), find average motivational rate among participants of this study to take interest in reading with others. Extrinsic motivation for instance, reading for examination cannot retain their attention for lifetime and for this they need to assign reading for pleasure and knowledge. The study also finds two vital approaches used by the good readers- challenge and self- efficacy beliefs. Academic success can be achieved with the appropriate instruction and reading strategies. But it is a matter of concern that students are not aware of using higher level metacognitive strategies rather they use lower- level strategies such as, dictionary use, skimming, scanning and looking for word meaning. Only reading for academic purpose does not fulfill the overall reading objective.

Surprisingly, Erliana (2015), finds a contrasting relationship between reading strategies and reading comprehension. If one applies strategies with proper knowledge only then it will work. Then, the relationship between reading motivation and reading comprehension is such that comprehension is proportionate to motivation. Lastly, she finds no relation between reading strategies and reading motivation. Varieties of reading strategies do not necessarily add to the motivation in reading. Finally, a remarkable relationship is seen between reading strategies and reading motivation to reading comprehension. More employment of reading strategies brings out a positive outcome in reading comprehension.

Anuyahong (2018) states that, participants from Thailand use skimming, scanning, getting main ideas and supporting details, inferencing, predicting and problem- solving strategies to employ a

better planning, tactics, action to the comprehension. Interactive strategies (top- down) and decoding method (bottom- up) are adopted by them for the analysis of the contents of reading passage. Another finding of the study is that they possess intrinsic motivation to achieve a good grade. To retain their interests and motivation, audio cassettes can be attached with books and more illustration and cartoons can be inserted. It is suggested in the study that students should teach vocabulary, identifying main ideas and incorporating movies and cartoons as a material.

Likewise, Ahmed (2016) uses a questionnaire and a test to check some hypothesis that is used for the assessment of factors which work behind the reading comprehension abilities. The major findings of the study are that motivation and attitude these two factors are way more influential or it can be said that success can be achieved by these two in accomplishing reading text or comprehension. The researcher also claims that this study will provide solutions to the problems aroused in reading comprehension. Furthermore, a quantitative study by Memis & Bozkurt, (2013), attempts to interrogate the success of Turkish fifth- graders reading comprehension in relation with motivation and proficiency level. Firstly, girls are more ahead than the boys in their understanding of reading. Autonomous learners attain good score on reading comprehension irrespective of gender. Vocabulary is very much important in understanding a reading passage and activities should be arranged in such a way that it develops vocabulary knowledge. In addition to that, reading comprehension has a medium rate of connection with internal and external motivation along with reading level. This study also finds out that internal motivation has little or no remarkable influence on reading comprehension whereas external motivation plays an important role in this case.

Last of all, a mixed method approach is conducted by Wichadee (2011) on the 40 EFL students at a private university of Thailand to determine the efficacy of metacognitive strategies instruction

along with their usage. The findings of the study shows that regular practice of metacognitive strategies improve the thinking capability of the learners and bring development to those who are poor readers by providing proper guidance. In this way, they can attain a high score on reading tasks. For example, they improve in taking notes, highlight the main points, how to check on their own lacking by creating consciousness. Besides, students can realize the impact of metacognitive strategies in EFL reading when they apply them in completing reading passages. More practice will lead them to more success by familiarizing them with the usage of these strategies. It is an observation from the study that inefficient readers may take much time while practicing with the strategies and for this, teachers should provide them opportunity while giving instruction. To sum up, metacognitive strategies have a significant effect on students' motivation in reading.

2.6 Example of Useful Strategies and Techniques in Reading

This section provides some significant examples of useful strategies and techniques in fostering learners reading ability on the basis of the following studies:

Malaysians are found as excessive strategy users because those strategies have a vigorous effect on reading comprehension by ensuring high success rate. In this case, female ESL learners exceed the male participants in using those strategies. Besides, teachers can implement reading strategies with teaching method and language learning through observations, language diaries, questionnaires, and interviews to help the weaker students and can retain their motivation, autonomy, and confidence as well as make them achieve their goal in the target language (Zare & Othman, 2013).

With regard to that, Edward, Pudin & Din (2020), focus on the effective reading strategies among Malaysian ESL male and female learners, for example- repetition, visualising, analysing, inferring,

memorisation and note- taking. The result demonstrates that Malaysian male and female students are frequently using those strategies but they possess remarkable differences in using those strategies. Teachers can familiarise them with effective and useful strategies, how to apply them in appropriate context by involving them in more practices. Thus, this study facilitates to the relation with gender and reading strategies and opens up a new era for future research.

According to Tercanlioglu (2004), UK postgraduate students' response over meta- cognitive strategies, cognitive strategies, and support strategies in their first language (L1) and second language (ESL) are examined in this study. Firstly, reasoning, analysis, note taking, synthesising, adjusting speed, guessing the meaning from the context, and re-reading are the cognitive strategies. Secondly, metacognitive strategies mean intentional, careful and planned reading techniques, having a purpose in mind, previewing and organisation, or using typographical aids, tables and figures through which learners monitor or manage their reading skill. Finally, support strategies are basically support mechanisms intend to aid the reader in comprehending the text through the general consensus such as- dictionary, taking notes, or underlining or highlighting the text. For instance, Mammadova & Gurbanova (2018), conduct a needs analysis on the Azerbaijan EFL learners to extract the results. It is noticeable that, they face reading difficulties frequently and apply skimming and scanning strategy as a solution. Through scanning and bold typed key words they can understand the content and guess the answers from the text. Other strategies are: looking for particular information, finding out structure of the text, organising and understanding author's point of view. Along with that, vocabulary is needed for university use, for everyday conversation and for study or academic purpose.

Moreover, one can integrate reading with writing, for example- summarising, writing feelings after reading, making table of contents; integrate reading with speaking- speaking about content and

own thoughts; integrate reading with listening- listening lectures on academic topics, watching and discussing videos related to content. Umar (2016) also talks about two important strategies- skimming and scanning that brings development in reading. It increases students' reading capability specially finding hard words in a passage. The interview and observation data indicates the growth of students' engagement, response and involvement through this teaching and learning process. Therefore, participation and motivation in reading are raised by skimming and scanning. However, two problems are identified in this study. One is lack of vocabulary knowledge and another is struggling to find a key word. An attempt is made to explore the advantages of skimming and scanning strategy in the matter of reading comprehension progress through a quasi-experimental design on the students of SMK Darussalam Makassar. Participants are divided into two groups. One is KR (Automotive Technique of Easy Transportation) group and the other is SM (Automotive Technique of Motorcycle) group. Participants are not familiar with skimming and scanning strategy at the beginning. For that, they face difficulties in reading and try to understand the meaning of each word which slows down the pace of their reading and they cannot finish their reading within the hard and fast time frame. Surprisingly, after applying skimming and scanning they can grasp the main idea of the text within the given timeframe. For example, participants who are slow readers can solve all the multiple- choice questions applying skimming and scanning and can save their time.

Finally, the study finds a positive influence of skimming and scanning on the narrative, descriptive and news item text understanding which is proved by the statistical data analysis of students' progress (Asmawati, 2015).

In 2018, Cheng, Lio & Chnag made an attempt to teach summarisation through an educational game by integrating keyword auction mechanisms and first- year graduate students' reaction is

checked. It is an observation that participants are able to make a comparison on their assessment of key words with others and can make decision regarding keywords. For example, using synonyms and incorporating new ideas to summaries by discarding useless information. The study also upholds improvement in summary writing and examines reading problems of graduate students such as, shortcomings in structure analysis, integration of idea and argumentation. In this regard, their academic needs can be fulfilled with the support of advanced technology. For example, automatic essay scoring can be utilised for self- evaluation on writing. In the same way, Huang & Hong in 2016, exhibits a positive and powerful impact of a flipped classroom on the score of experimental group (EG) students' ICT learning. However, playing a video before starting the face- to- face class, asking relevant questions to warm up, making small groups and asking questions, evaluation, feedback and closure from the teacher in a flipped classroom is efficient for the learners. Adding to that, the free Internet access to run facebook lessens their anxiety and boosts up their creativity both in learning English and internet use.

Furthermore, if an institution can provide a flipped classroom with teacher-student interaction and constructivist approaches where one has easy entrance to build self- learning and progress ICT and English language comprehension promptly along with boosting up intrinsic and extrinsic motivation, it will bring out a positive result.

Most importantly, Lau & Chen (2013), upholds the significance of investigating the contextual factors of self- regulated learning (SRL) in an evolving era. With the rectification of education in the 21st century Chinese students show a positive attitude in SRL by recognising reading instruction. It is a confirmation from the study that teachers play a significant role in promoting Chinese student's SRL. Finally, the effect of both traditional cultural beliefs and contemporary forces should be kept in mind under the evolving modern Chinese era.

This study also suggests providing a concrete and social educational context for further studies rather placing all Chinese students in same cultural background. Another technique is RAP (Read-Ask-Put) paraphrasing strategy for the readers who are at frustration level. The result is that all the participants progressed much and obtained success by adopting this strategy. Moreover, autonomous performers show development in recall and main idea and focus more on details in the texts. They are able to do it after an effective cognitive strategy training. Cognitive strategy training leads to the understanding of the information given in the text. Overall positive responses are found from the students at the time of interview (Ilter, 2017).

After that, Cogmen & Saracaloglu (2009), finds that both analytic and pragmatic strategies are utilised by the participants in a medium or high level. Turkish Language Teaching Department provides students with courses such as, Novel analysis, Linguistics and Modern Turkish Literature because fictional texts help to develop the critical thinking skill of the students. Again, the students should have proper knowledge of metacognitive strategies like selecting, organising and commenting on key words for academic success and also aware of their proper usage.

Accordingly, in 2015, Ebru Kaya checks 50 preparatory Turkish students' knowledge on various reading strategies and if they can use them properly or not after a training program is examined through a mixed method approach. A questionnaire is developed at the very beginning of the study to find out that students are not much familiar with the reading strategies which is further supported by the interview data. Then both the interview and questionnaire data reveal that after receiving training on strategies they are able to comprehend a text successfully. The findings also reach to a conclusion that students who receive training show better performance than the ones who do not have a training. For example, students with proper training are able to get the main idea and supporting details of a text**.** Moreover, they become more confident and motivated at the end of

the study after a successful accomplishment of reading comprehension. In addition to that, a full academic year can be considered for future research instead of only one single semester.

Regarding, Antoni (2010) conducts a qualitative study on some EFL teachers to check the strategies applied when teaching reading comprehension and some random students to check their responses over those strategies in Riau. It is found from the classroom observation that teachers use reading strategies in pre, while and post reading stage to help the students in understanding the text. Brainstorming, predicting and use of dictionary these are the part of the pre reading stage; reading aloud, re- reading, re- telling the text and discussion on unfamiliar words are done in while-reading stage and lastly in post- reading stage evaluation, clarifying and justifying, asking questions, reviewing, providing assignment and follow- up activity these are implemented by the teachers. They have sufficient theoretical knowledge based on their experiences but to some extent they have lacking.

However, the study finds three teachers who need to put more effort in this case. The reason behind using those strategies is that they want to assist students in their reading and also these strategies are supported by the theories. Furthermore, in response to the students, they think teachers should give them proper instruction before reading the text on how to apply those strategies.

2.7 Metacognitive Strategy Use with the Help of Technological Context

In this modern world everything becomes easier with the help of technology. Use of technology makes teaching and learning easier. However, researchers find out the fruitful impact of using technology in their learning.

As a matter of fact, Cuevas, Russell & Irving (2012) analyses the effectiveness of the computer reading module in motivating students. The study demonstrates that both ISR (Independent Silent

Reading) groups achieved same benefit and progressed much than the control group in academic reading particularly in global reading comprehension as well as perform excellently on all reading assignments. In this case, motivation works behind the success rate of ISR group who read from the computer modules in comparison to the control group. They added that, the computer reading package with its cognitive tools aid in their success. It is evident in this study that cautious set up of technological packages can prompt learning ability of difficult material.

Adding to that, in Li's (2009) study the participants use strategies such as- note taking, making connections and contextual guessing with the help of technological and non- technological support. Having poor proficiency level, they put more attention on meaning and try to guess the meaning from the context by linking them with familiar situation. Along with that, summarisation and discussion are used as higher levels of cognitive and social strategies in technological setting and consultation with the researcher and peers concerning the word meanings are used as a lower level of social strategy in non- technological setting. Moreover, using a computerised dictionary helps them to finish reading in a systematic way by saving their time. Finally, their motivation to read line by line increase after they fully understand the meaning.

In Chai, Wong & King (2016)'s opinion, motivation is a vital factor in any kind of learning as it works as a force behind the success of the students. Technology- based learning researchers should check out the impact of motivation on learning in a technological context.

In Psychologist's opinion, East Asian students are incorporated with high academic achievement as they better understand the task value and focus on how to do well but the Singaporean Chinese participants cannot make a difference in self- efficacy and task value in this study. Hence, there are two implications of the study. One is the academic implications where Chinese students' academic and non- academic, inside and outside classroom experiences are examined. Another is

the practical implications which facilitate further investigations on how to use the mobile device to learn beyond the classroom and relate it to daily real- life activities. Indeed, technology plays a vital role in the reading comprehension by implementing it with the metacognitive strategies.

2.8 Reading Strategies between Poor and Good Readers

It is very important to recognise who are the good readers and who are the poor ones, what creates difference between them and most importantly what are the variations between their uses of strategies. For this reason, Akcan (2017), looks into the literacy experiences of both good and poor readers based on their school performance as poor readers are graded lower than the good ones not only in reading but also in other areas like writing, math, science and physical education by their parents and teachers. He finds that poor readers possess weak personality skill such as, low leadership skill, self- esteem, self- expression and emotional well- being along with poor learning skill such as, low analytical skill, classroom participation, knowledge transfer and oral proficiency. In addition to that, they are not self- driven to participate actively in the classroom and do not willingly interact with their teacher because of their ego and dependency.

In contrast to that, good readers are self- driven to accomplish their task quickly by giving more focus. That's why they are seen to perform actively in the classroom, comfortably interact with their teachers to ask them any questions and giving answers, maintain mutual relationship with fun and casualty. The researcher also checks their reading ability by providing them some journals. Efficient readers are seen to write longer sentences, use rich and more vocabularies with almost no spelling mistakes. Exception is also found in case of some students who write short answers as well. But it is a shortcoming of the study that both teachers and parents are failed to identify the poor readers in their task engagement. The author added an interesting fact that, good readers are

attributed as smart, intelligent, hard- worker, creative whereas lovely, sweet, caring these adjectives are attributed to the poor ones.

According to Lau (2006), good readers in Hong Kong are more conscious about the title and reading goal, able to recognize keywords, form the main ideas, guessing, make comparisons, generate, elaboration, monitor and many more to solve problems aroused by reading. They unintentionally improve their reading strategies with experiences as there is no clear- cut instruction in Hong Kong Chinese language classes. On the other hand, poor readers in Hong Kong use no strategy and read line by line. This study also upholds the influence of intrinsic motivation on student's strategy and reading performance. Poor readers do not like reading as they are extrinsically motivated. They apply surface approach while reading and unable to understand the deep meaning of the text and face difficulties in recognising words.

Thus, they feel discouraged to try again to complete the task. Teachers need to change their teaching method to contribute more in the development of the poor readers by focusing more on reading skills. The study suggests to re- check their ability to use some strategies like skipping, adjusting, self- question and prediction as well.

In this regard, the present study aims to investigate an in- depth analysis on Bangladeshi ESOL students' utilisation of metacognitive strategies in their academic reading. While doing my undergraduate at Southeast University, I found lots of students who do not know what the reading strategies are and thus, they face reading difficulties even in their tertiary level. The context of this study is very much significant as it will open up a new era in bringing success in academic reading of a non-native English country. Therefore, this study will facilitate both the teachers and students to find out the exact problems and their solutions in reading comprehension and to work accordingly.

The next section will discuss the theoretical model of metacognitive strategy learning used in this present study.

2.9 The Theoretical Model of Metacognitive Strategy Learning

Metacognition has three different stages primarily known as PME: Planning, Monitoring and Evaluating where planning stands for formulating a plan before appearing the task, monitor means to look up for solution regarding comprehension problem and finally, evaluation is the perception of the reader at the end of a task (Fogarty, 1994). The framework is given below:

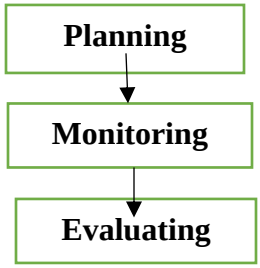

Fig 2.1: Model of PME

2.10 Chapter Summary

In this chapter, previous researches and their findings are discussed in case of using metacognitive strategies in academic reading comprehension. The aforementioned findings helped to locate the gap in this field of research and thus, aims to study on that. Finally, a theoretical model of metacognitive strategy learning is shown which will be used to in analysing data.

Chapter Three

Research Methodology

3.1 Introduction

This chapter discusses the research methodology adopted for conducting this study. As stated earlier in chapter one, the main aim of this study is to explore how various metacognitive strategies of reading are utilised by Bangladeshi ESOL students. The first research question explores how Bangladeshi ESOL students utilise various metacognitive strategies of reading. The second research question aims at finding how do the students feel about using the metacognitive strategies of reading in academic English class and what kinds of challenges did the students face while implementing metacognitive strategies of reading. The chapter further describes the rationale behind choosing a qualitative multiple case study approach, the process of selecting the participants and collecting data, the framework of data analysis and the steps taken to establish the trustworthiness of the study.

3.2 The Qualitative Paradigm and Its Philosophical Assumptions

Research methodology is the whole process of mapping the research; from the step of theoretical development to data analysis (Collins & Hussay, 2003 & Creswell, 2009). Moreover, how things are perceived in this world that is the main concern of research philosophy (Saunders et al., 2009; Yin, 2009).

Patton (2002) defines worldview as "a way of thinking about and making sense of the complexities of the real world" (p. 69). There are various philosophical worldviews such as, post positivism, constructivism, participatory action frameworks, or pragmatism which has components like ontology, axiology, epistemology and methodology (Creswell 2009; Lincoln et al. 2011). Among

all the qualitative research paradigms, I chose the pragmatist worldview where I made an attempt to see how Bangladeshi ESOL learners use various metacognitive strategies in their academic reading.

According to Johnson & Onwuegbuzie (2004) & Sale et al. (2002), qualitative approach depends on subjective view and interpretivism and thus accepts the fact that there can be multiple realities from a researcher's point of view. It is stated by the scholars of pragmatics that there can be an objective reality which come across through human experience (Goles and Hirschheim 2000; Morgan 2014a; Tashakkori and Teddlie, 2008). Among these forms of perspectives, my research matches with the experimentalism form of the pragmatist view as Frega (2011) said that empirical or experimental approach is given prioritised in pragmatic worldview. In pragmatism the researcher actively involves in data collection and creating theories through the observation of his own and others' actions (Goldkuhl, 2012). As science and experiment have a close knit connection, pragmatists usually are very keen to gather evidence through experiment so that they can solve human problems (Beniwal, 2018).

The philosophical assumptions of the study described in the table on the next page are adapted from Creswell's (2007) table of "Philosophical Assumptions with Implications for Practice" (p.6).

Table 3.1: The Philosophical Assumptions of the Study

Research Paradigm	**Philosophical Assumptions**			
Pragmatism	**Ontological** Multiple Subjective Views of Participants	**Epistemological Interpretive/Constructivist** Studies the multiple realities, descriptions and experiences of populations	**Axiological** Researcher's values and biases will be discussed along with participants' interpretations	**Methodological** Qualitative Multiple Case Study Approach

According to Creswell (2009), the ontological assumption views the issues of reality created by the researcher concerned within the research conditions. For instance, as a researcher, I have analysed the records of think- aloud approach extracted from the comprehension test to find out how do Bangladeshi ESOL students utilise various metacognitive strategies of reading (RQ 1) and also to explore how various metacognitive strategies of reading are utilised by Bangladeshi ESOL students (Central RQ). The excerpts from the students' interview transcriptions served as the means to show their feeling about using the metacognitive strategies of reading in academic English class (RQ 2a) and the challenges they face while implementing metacognitive strategies of reading as well (RQ 2b). The next category of these assumptions is epistemological assumptions where the researcher associates with the participants by interviewing or observing over a long period of time for a collaborative purpose of the study (Creswell, 2009; Saunders et al., 2009). I sat with the participants for several interview sessions. The third assumption is an axiological assumption which determines the values and morals of a researcher (Creswell 2009; Lincoln et al. 2011). Later, in this chapter, I have explained my positionality or role as a researcher. Finally, the methodological basis of my research is the best way for understanding shared knowledge about the world (Creswell 2009; Lincoln et al. 2011).

3.3 Research Design

I have developed the research design for this study by keeping in mind the previous literature and the research questions. Pragmatic research paradigm has been approached for conducting this study that focuses on actions taken by a researcher and its implications on an immediate problem. Here, the comprehension test and the think- aloud recordings were the actions taken by me and the responses of the participants in the interview session and their final reading outcome were the implications of that action. The central objective of the research is to explore how various metacognitive strategies of reading are utilised by Bangladeshi ESOL students and to address the issue, I decided to choose a qualitative multiple case study approach. Strauss and Corbin (1990) define the term 'Qualitative' as a type of research where people's lives, their lived experiences, behaviors, emotions, feelings and also function of an oganisation, social movements, cultural phenomena and interactions between nations are examined. Corbin & Strauss (2008) also mention that a qualitative research helps the researchers to identify the inner experience of the participants' and to find out the construction of meaning in cultural context. Besides, observation, record analysis and interview taking are the process of data collection in a qualitative research (Cohen, Manion, & Morrison, 2011) which means it is a non- statistical way comprises of multiple realities (Rahman, 2016). In 2012, Maxwell describes qualitative research is flexible in nature that can be established to a greater area. The research design of this study is given in detail in the following sections of the chapter.

3.4 Multiple Case Study Approach

According to Thomas, (2011); Hyett, Kenny & Dickson- Swift, (2014), case study is a popular means of qualitative study among researchers. Jacobson, in 2002 defines case study as an in- depth

study about a person, a group of people or a unit. Another definition is given by Thomas in (2011) that a case study is an examination process to study with an extensive view by one or varied ways. In this regard, Cousin (2005), says that it is a good approach to define cases through the analysis of its context to understand. A case study approach can be better understood from the direct quotation of Creswell (2013) that "The case study method "explores a real- life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in depth data collection involving multiple sources of information… and reports a case description and case themes" (p. 97). Therefore, a case study can develop and approve a theory by explaining observed phenomena which gives a deep insight for investigation (Flyvberg, 2007). Nonetheless, cases are chosen by keeping in mind the accessibility of the researchers. But a researcher needs to be careful while choosing a single case study or multiple case studies according to the incident and context (Yin, 2003). Baxter & Jack (2008) and Stake (1995) state that if a study deals with more than one cases that will be a multiple case study and it is connected with multiple experiments. For instance, in my study I have analysed multiple cases of Bangladeshi ESOL learners regarding their use of metacognitive strategies in reading. They go on to say that, a multiple case study is used to find out the similarities and differences between those cases. Moreover, it is a great advantage of multiple case study that its result is counted as strong and reliable (Baxter & Jack, 2008). In addition, multiple case studies generate more strong theoretical ground with sufficient pragmatic evidence. In this way, multiple cases empower great exploration of research question and evolution (Eisenhardt & Graebner, 2007). Nevertheless, multiple case studies have demerits along with advantages. It is extravagant and time- consuming to run a multiple case study (Baxter & Jack, 2008). In my study, I chose taking interviews and reading comprehension test and will analyse the

recordings of the participants to find out the effective metacognitive strategies from their reading comprehension.

3.5 The Researcher's Role

Being a student of English Department in a private university in Dhaka, Bangladesh, I have been teaching English in different coaching centers and working as a home tutor since my under graduation. I have taught many students of school and college level and I know that the book *English for Today* is used as a popular teaching material in Bangladeshi school and colleges. While teaching English I have noticed that most of the students do not like reading because of their inefficiency in understanding the meaning of the text and often ask the teacher to translate the meaning in their native language. Furthermore, they are seen to apply some strategies while reading the text so that they can understand the meaning. For example, if they do not recognise a word, they try to guess the meaning from the context. Along with that they use contextual cues and key words when answering a particular question or filling up an information. But most of the time, they cannot apply the proper strategy in their reading. When asking them several times what they feel when they read, what their perceptions about reading strategies are and are they really familiar with reading strategies, they gave a shocking reply that most of them actually feel apathy while reading. They do not even have a habit of reading other sources except from their academic books such as, English newspaper, magazines, story books, novels and many more.

Moreover, while doing my undergraduate at Southeast University, I found many students who did not know what the reading strategies are and thus, they face reading difficulties even in their tertiary level. The context of this study is very much important as it will open up a new era in bringing success in academic reading of a non- native English country. Surprisingly, one of the

teachers from Southeast University says that in Bangladesh reading is not given that much importance in academics and thus, there is less emphasis puts on the strategies and techniques of reading comprehension which is one of the main reasons that students find reading a great obstacle in their academic sector. In spite of learning English almost 12 years still they are not efficient in reading. As I am a student of English language teaching and also a teacher, this lacking provoked a thought inside me and hence, inspired me to choose this as a research topic for my MA thesis. I believe, in the interviews, they shared their perceptions on using metacognitive strategies in academic reading in order to enhance reading comprehensibility.

Throughout this study, pronoun "I" has been used only for the convenience of narrating and describing the findings. It may seem that the "I" is projecting personal views, but in reality, the study is free from any personal or cultural biases because the themes of the analysed data were rated by an expert to make the data trustworthy. The interview transcriptions were sent to the participants for member checking to make the data credible. So, the "I" of the study reflects my endeavor to explore how Bangladeshi ESOL learners utilise metacognitive strategies by checking their comprehension test along with their thought will be analysed to understand their feeling or perception while doing the task. Therefore, this study will facilitate both the teachers and students to find out the exact problems and their solutions in reading comprehension and to work accordingly.

3.6 Setting

My study is set in Dhaka city, the capital of Bangladesh. I conducted the study in the year 2020, the year of pandemic. Everyone was in lockdown and it was difficult to run the research by going outside. So, I had to carry out the study in online. I chose 4 participants from tertiary level aged between 18- 25 as there is no fixed number in the selection of participants in a qualitative study

and if data from the participants meets to a saturation point that is adequate for conducting a qualitative study (Sargeant, 2012). All of them are living in Dhaka. All of the participants are the ESOL learners from a reputed private university who belong to a non- native English -speaking country as the main purpose of my study is to find out the utilisation of Bangladeshi students' metacognitive strategies in their academic reading. Thus, online platform serves as a savior and convenient way to conduct the research.

3.7 Selecting The participants

According to Polit & Beck (2014), a qualitative research primarily aims at understanding of a phenomenon rather than making mere judgement about the participants and datas. Non- probability sampling is applied for the selection of the participants for the sake of extracting a rich amount of data. Burns & Groove (2005), highlights a feasible sampling technique named Snowball or Chain sampling where the participants manage other participants who share the exact experience and are more keen in the research. Moreover, the researcher can ask for more participants through this snowball technique. This is also a purposeful sampling technique of selecting the participants who will aid in the research by providing useful information from their experience (Seetharaman, 2016). Besides, there is no fixed rules on the number of participants in a qualitative study like quantitative study (Patton, 2002). Seetharaman (2016) said to bear in mind that the data must be sufficient enough to meet with the research questions. But the sampling method and the number of participants can be improved or reformed with the progression of the study or based on findings. In this regard, Sargeant (2012) added to that, to determine suitable participant based on the research questions is one of the most important stage in qualitative study and the number of participants should be adjusted until the required information is gathered. Ishak & Bakar in (2014) asserts that

a qualitative researcher should decide the participant number only then if there are no chances of arising new information. This is known as saturation point. When the saturation point comes, the participant number can be fixed. This is also suggested by Neuman (2009) as sequential sampling where the number of cases grow until it has come to a saturation point. The researcher is the supreme appliance in a qualitative research who will ensure authentic data collection from each participant for answering the research questions. The reason the researcher is considered as a supreme figure here is that the inappropriate selection may lead to a vague understanding of the phenomenon (Glesne & Peshkin, 1992).

For this study, I have chosen tertiary or University level learners because it is easier for them to monitor their mistakes and keep record of their thinking and strategies than the primary or mid-level learners. Moreover, as I am a University student it would be more comfortable for me to seek help from my mates.

In order to select participants or cases for this study, I first contacted with one of my friends but she was always in a hurry that I could not get enough data from her and also after one session she denied to help me out. Therefore, I had to exclude her data. After that, through the snowball technique I managed to convince 4 participants for the data collection process and throughout the three sessions they aided in my research.

3.8 An Overview of Data Collection Procedures

According to Gillham (2000), qualitative study has many ways of data collection. Such as, interviews, observations, document and record analysis, physical artefacts. Among them I have collected my data through interviews and physical artefacts (e. g. students' reading comprehension test).

3.8.1 Students' Reading Comprehension Tests

Day	Activity
Day 1: March 01, 2021	Briefing on Think-aloud Reading comprehension test without training: Text A
Day 2: March 05, 2021	Workshop on metacognitive strategies
Day 3: March 07, 2021	Reading comprehension test with training: Text B

Table 3.2: Steps in reading comprehension test

The students contributed to the study by reading at two sessions. On day 1, in the first session, they were given a brief training on think-aloud protocol and then they were asked to write and read- aloud the thoughts that came into their minds during the reading of Text A (see Appendix D). No metacognitive training was given to them at the first session. Whatever they did was the result of their self- knowledge. I attempted to find out how much metacognitive they are from their thinking as they were not aware of the metacognitive reading strategies. So, their thinking only reflects their inner metacognitive ability. This was to explore how they performed on their reading activity without any training.

On day 2, in the second session, they were given a metacognitive training in a workshop so that they can aware of those strategies and can apply them properly.

After that, on day 3, they were asked to write their thinking and what strategies they used in their reading along with that. It was to check if they can properly apply metacognitive strategies to

accomplish the tasks after doing the workshop. How much they have improved in this regard after receiving a proper teaching of metacognitive strategies that is the aim of the test.

3.8.2 Semi- structured Interviews

An interview is used widely as a tool for collecting data in research. Edwards & Holland, 2013; Stuckey, 2013; Gill et al., 2008; Jamshed, 2014; DiCicco-Bloom & Crabtree, 2006) describes three types of interviews: structured, semi- structured and unstructured interviews (as cited in Adhabi & Anozie, 2017). Among these types of interviews, I chose the semi- structured interview for the convenience of both the researcher and the participants as it has the flexibility in nature. Such as, semi- structured interview can be happened individually or in a group. I decided for an individual session with everyone to have an in-depth conversation with the participants (Adhabi & Anozie, 2017).

3.8.2.1 Designing the Interview protocol

The interview protocol I have used to design the interview questions is adopted from Castillo- Montoya's four phase interview protocol.

"**Phase 1:** Ensuring interview questions align with research questions

Phase 2: Constructing an inquiry-based conversation,

Phase 3: Receiving feedback on interview protocols

Phase 4: Piloting the interview protocol" (Castillo- Montoya, 2016, p. 812).

The first phase aims to create an alignment between interview questions and research questions because an alignment increases the effectiveness of those questions by discarding the useless

inquiries (Castillo- Montoya, 2016). In the second phase, Patton (2015) said that interview protocol works as a tool of inquiry that asks relevant questions related to the study along with discussion about a specific topic (as cited in Castillo- Montoya, 2016). Thirdly, it is very much important to check the authenticity of this interview protocol. To increase the credibility of this protocol the researcher should ask for the feedback from an expert if the questions reflect his/ her intends or not (Patton, 2015; as cited in Castillo- Montoya, 2016). Finally, the researcher should do a pilot study before the main one so that it can reflect on the outcome of the final study (Castillo-Montoya, 2016).

3.8.2.2 Piloting the Interviews

I piloted the interview questions (phase four of the protocol) with one of my participants only when an expert gave me feedback. I chose to pilot with one participant because of his helpfulness and availability. He was always willingly ready to help in my research. Tashakkori & Teddlie (2003), initiate the practicality of pilot study both in quantitative and qualitative research. Piloting is considered so important as it helps to find out the mistakes and shortcomings in the process (Teijlingen & Hundley, 2001; Watson, Atkinson & Rose, 2007). Thus, the aim of this pilot study was to check the validity and adequacy of the questions and to get a glimpse of the final interviews.

3.8.2.3 Conducting the Final Interviews

On completion of the interview piloting, I set appointments with the participants for the semi-structured interviews. The interviews were conducted over zoom, a trending online platform as the pandemic situation was going on. So, it was not possible for anyone to sit for a

face-to- face interview session. I took individual interviews as everyone has different opinion and outlook on the research. They were given enough time to think and tell their opinion. I made sure that they are comfortable with me to answer these questions and avoid any kind of biasness. All of them were co- operated with me and the whole session went very well.

3.9 An Overview of Data Analysis Procedures

This section of the chapter will discuss the steps I had taken to analyse the data obtained from the reading comprehension tests and interviews.

3.9.1 Data Analysis Framework

A research work needs to establish its data analysis process based on a framework in order to analyse the data appropriately according to the research questions. For analysing the data of this study, I have used three stages of learning metacognitive strategies: planning, monitoring and evaluating (PME) model (Fogarty, 1994) (R.Q. 1).

Again, for answering R. Q 2 (a) & (b), I have used qualitative thematic analysis. According to Braun and Clarke (2006), "Thematic Analysis is a method for identifying, analysing and reporting patters (themes) within data" (p. 79). Furthermore, they mentioned that there are six steps in thematic analysis approach. They are:

1. "Familiarising yourself with the data
2. Generating initial codes
3. Searching for themes
4. Reviewing potential themes

5. Defining and naming themes
6. Producing the report" (Braun & Clarke, 2006, p. 87).

3.9.2 Analysing the Reading Test

The reading comprehension tests (see Appendix E) were analysed by placing them within the framework of PME model ((Fogarty, 1994). Students' reading strategies were found out and cross- checked where they planned, monitored and evaluated.

3.9.3 Analysing Interviews

For analysing students' interviews, the audio recordings of the interview were transcribed by the researcher. The transcriptions were then coded with the help of the seven- column coding template proposed by Ahmad (2017). Then the emerging themes aroused from the prominent codes. All the themes of the multiple cases were then compared to create a thematic pattern for answering the research questions.

3.10 Ethical Considerations

The ethical issues of conducting the current study were taken into account before proceeding with the data collection procedures. On the day of piloting and final data collection both for the interviews and the reading comprehension test, the participants were asked to read the "informed consent form" carefully and sign. The consent form outlined the stages of reading sessions and the responsibilities of the participants while being a part of the study. It also informed the participants that their responses in the comprehension test and interview sessions would be

recorded. The participants were ensured that I would maintain their privacy and in keeping my promise.

3.11 Trustworthiness of the Study

It is very essential to establish trustworthiness in a research. Pilot & Beck (2014) exemplifies trustworthiness as a measure to build up reliance in data collection & analysis, methods to make sure the quality of the study. Amankwaa (2016), emphasises the necessity of establishing the protocols and procedures by a researcher to make it reliable for the readers. The processes of creating trustworthiness are- credibility, dependability, confirmability and transferability (Lincoln & Guba, 1985). Merriam (1995), talks about triangulation, a technique for establishing credibility that it takes multiple sources of data for the sake of greater understanding. For example, interviews, observation, notes and recording (Cope, 2014). For this study, I have used interviews and think-aloud recording of reading comprehension as the sources of data. In this regard, Cope (2014), points to an important fact that to remain aware of not affecting the research process by the researcher's values, background and prior experience which is called Reflexivity. In this study, as a researcher I have avoided my personal opinion and bias during the research. Hence, the ultimate aim of triangulation is to minimise any kind of bias (Patton, 1999) and definitely it leads to a better assessment of the findings (Golafshani, 2003). To be specific, triangulation worked as a support to enhance the credibility and dependability of this study. Again, Lincoln & Guba (1985), acknowledge prolonged engagement which means the way of creating trust and affinity with participants for collecting detailed information. For this, a researcher needs to allocate adequate time in data collection and understanding the participant feelings and the incident of the study. At

the very beginning of the study, I have taken my participants' approval and permission through the consent form as they are going to provide me data for my study.

Another remarkable technique of ensuring credibility is member checking. In this technique the researcher may ask the participants to go through the documents or recording of data that they are participated already. It is because the researcher wants to make sure that the records or documents of data match with what they actually intended (Lincoln & Guba, 1985). In my study, I have emailed each of them the interview and reading comprehension documents for re- checking. Moreover, for inter-rater reliability I have consulted with an expert from the field of English language teaching who has 11 years' experience of teaching in a tertiary level. In addition to that, Merrriam (1995) used the term "Audit Trail" (p. 5750) means elaborate description of data collection process, decision making process. which I have applied in my study as well (see Appendix I).

These are the overall steps I have taken to establish trustworthiness in my study.

3.12 Chapter Summary

At the beginning of this chapter, I have described the philosophical assumptions, pragmatic research paradigm, the rationale behind choosing multiple case study research approach for conducting this study and my positionality as a researcher. Next, I discussed the data collection procedure with the rationale behind choosing participants' recordings, and students' interviews as sources of my collecting data. The final section of the chapter described the data analysis framework adopted for the study, along with the steps I had taken measures for establishing credibility and trustworthiness of data.

Chapter Four

Results and Discussion

4.1 Introduction

The main goal of this study was to explore various metacognitive strategies of reading are utilised by Bangladeshi ESOL students. In addition, as a researcher, I also attempted to find out how do the students feel about using those strategies, what kinds of challenges did they face while implementing metacognitive strategies of reading through multiple case study approach to consider each of the participant as a single case study.

This chapter will present the findings of the study based on the following research questions:

1. How do Bangladeshi ESOL students utilise various metacognitive strategies of reading?
2 (a). How do the students feel about using the metacognitive strategies of reading in academic English class?

   (b). What kinds of challenges did the students face while implementing metacognitive strategies of reading?

The first section of the chapter will briefly depict the educational backgrounds of each of the four participants or case studies. Section two describes students' response to metacognitive strategies (planning, monitoring and evaluating); Text A, without any metacognitive training; Text B, with a metacognitive training workshop and students' response to metacognitive training. Lastly, the final sections analyse the generated themes or findings from interview sessions occurred individually with each participant about their feelings and struggles.

4.2 Section One: A Brief Introduction to the Cases

This section will briefly introduce the four participants or cases in terms of their educational backgrounds, their exposure to English as a subject of study and their English learning habits. I believe these details do have an impact on how the participants accomplished the two phases of reading comprehension test.

4.2.1 Case 1: Rafi

The first participant of my study is Rafi Ahmed, an undergraduate student at BRAC University, department of English and Humanities. Rafi is from Bengali medium who got introduced with English as a subject in class two. According to him, his school followed the traditional Bengali medium educational system where more importance was given on the syllabus than the other ones. That means English language learning was confined within the syllabus. He said in the interview that the teachers never hold him to stop reading things outside from the syllabus nor they encouraged or influenced to go through any novels or story books which is not included in the syllabus. Therefore, Rafi got influenced by his friends when he was in College. He used to read English literature from his College days because the friends he hanged around with shared what they read or watched with each other. They said to him that he needs to indulge himself in the world of English literature. After that, arriving at the University, he used to read English newspapers and English literature in cafeteria when there are no classes. So, basically, he was influenced by his friends to form a habit of reading books or newspapers or magazines and many more. One thing he mentioned in the interview that in this pandemic situation when everyone is in lockdown, he made reading English newspaper as a regular habit. The interesting thing is that while reading newspaper, he highlights important words or information and note them down in a

diary. Surprisingly, he never heard of metacognitive strategies in his school days. He learned only simple reading methods in his school. After that, in his College days, he got to know that reading has some sort of strategies like skimming and scanning but the word 'metacognitive' he never heard that. He considers himself as a moderate reader who try to understand fully what he reads in English but in case of Old Literature, Biology and Political related articles or writings he really finds himself in a big trouble. Apart from that he is good at understanding English.

4.2.2 Case 2: Hafsa

Hafsa is the second participant of my study. She is also from Bengali medium instruction and currently she is pursuing her post- graduation degree at BRAC University, department of English and Humanities. When asking, she replied that she was introduced English as a subject from class one. It is an amusing fact that Hafsa was inspired by her father from the beginning of her schooling. She said that, her father always tried to draw her attention to the abundance of the English language along with to the different languages in the world. She took an attempt of reading English newspapers at the age of 11 or 12 when she was in class 5 or 6. After that, when she was in class 8, she formed a habit of reading English story books, magazines along with newspapers. She became very upset while saying that in Bengali medium schools usually they were not encouraged to do any extra reading activities outside the syllabus. They only focused on English 1st & 2nd paper. It is sad but true that only getting good marks in the examination was considered as a sign of being a good student. She added that she never heard about metacognitive strategies in her school. She heard about it first when she was in the fourth year of her Honours. However, she considers herself as a slow but careful reader. Unfortunately, she does not have a habit of

keeping any diary for noting down her mistakes or important information but she wishes she had that habit.

4.2.3 Case 3: Agness

Another participant I chose for my study is also a post- graduate student from BRAC University. Her name is Agness Jerry. She is from a Bengali medium background who was introduced with English as a subject from class 1. Agness read in a missionary school where she was highly motivated by her teachers. She said that, her teachers were always inspire them to read books. There were extra curriculum activities of reading such as, reading competition both inside and outside the classroom apart from the syllabus. Hence, she was inspired by her teachers from her school days. So, it was easy for her to build up a reading habit from her childhood. She used to read lots of story books, magazines and many more. since her childhood but one thing she mentioned that she read more Bangla books that English ones. In her College days, she read a few English books and newspapers. After that when she decided to pursue higher education in English Literature and Language she started reading English books and newspapers on a regular basis. Therefore, she used to keep a note book in her under graduation to write down her mistakes, her struggles, new vocabularies and also interesting facts. Unfortunately, her school and college never mentioned about any reading strategies. After entering into University, she heard about reading strategies and "metacognitive" this term is to an extent new to her. She heard about it but did not know much about it. Thus, she considers herself as a moderate reader.

4.2.4 Case 4: Romana

The last and final participant of my study is Romana. Romana is a very shy but helpful person. She came up with her personal and educational background information in the interview

session so that it can facilitate in my research. Romana considers herself as a low efficient reader but a sincere student who is now a post-graduate student at BRAC University. She put more effort to overcome her lacking in language learning. She thinks that as she is from Bengali medium background she did not develop a habit of reading English newspapers and books. Though she is a student of English Literature, she only sticks to the curriculum. She started reading English as a subject from class 2 and her school never encouraged them to read anything outside the syllabus. Teachers only taught what was necessary for passing the examinations. Even teachers could not speak in English or there was no talk regarding reading any novel or stories. But sometimes her friends in a group discussed about movies and books and many more. She first got to know about metacognitive reading strategies when I conducted the workshop to teach them metacognitive strategies. So, it was totally a new lesson for her. She did not develop a habit of keeping any diary or note book to record her mistakes or whatever she learns. Thus, she is afraid of vocabulary and complex sentence structure and often find herself in a trouble regarding that. She now realises that if she formed a habit of reading and keeping a note book to write down informations and mistakes she would develop by now. At present she tries to understand English texts and read newspapers.

4.3 Section Two: Students' Response to Metacognitive Strategies (Planning, Monitoring and Evaluating)

In this section, I will describe how the students responded to the three phases of metacognitive reading strategies: planning, monitoring and evaluating and perform two stages of reading activity. It is very important to understand the response of the participants and how they utilise various metacognitive strategies in their reading in order to answer research question 1.

4.3.1 Day One: Checking students' Existing Metacognitive Knowledge with Think- Aloud Protocol Training

The first stage of reading was conducted to measure the existing metacognitive knowledge of the participants. In order to do that students are asked to keep a record of their thinking while reading aloud. No metacognitive training was given before the task. But an instruction was given regarding "Think- aloud Protocol." In that instruction, they were asked to apply whatever strategies they know along with their thinking. Thus, the aim of this first stage was to check their existing knowledge of how much metacognitive they are.

4.3.1.1 Briefing on Think- Aloud Protocol

I familiarise them briefly with think- aloud protocol through a short training that they are going to keep record of whatever they are thinking while reading as think- aloud is a method of recording everything told by the participants (Creswell, 2008). According to Lawson and Hogben (1996), think- aloud is not a mere description of what someone is doing. It is a verbal- process of the thoughts that came into mind extensively applied in various language learning studies. Accordingly, for a clear understanding, I showed them a You Tube video on how to use think-aloud (see Appendix F). The participants then were told that they were going to read the selected passage and solve some tasks, but they were going to tell me everything that they were thinking during their reading or kept record of their thinking. I assured them that thinking aloud might seem difficult at first, but with practice they would get used to it and that it would be fun. The participants

were asked to report each of their thoughts as they occurred. The task took place for 2 hours because the purpose was to extract their thinking from the reading.

4.3.1.2 Responding to Text A

The initial task or the first session which was to get the participants accustomed to thinking aloud (not knowing the metacognitive reading strategies), was a passage (Text A, see Appendix D). From this passage, several tasks were assigned to the participants, such as: Multiple Choice Questions, Question- Answer and Summary writing (see Appendix D). The passage was selected so that the thoughts of the participants during their reading can be recorded. Both hand- written and audio- tape was used to collect data. Audio- tape can be misleading sometimes and time consuming. For this reason, I told the participants to write down their thoughts as well. This procedure also eliminates the errors that occur during transcription of those audio tapes that are difficult to hear. As no metacognitive training was given in this session, participants did not know that there are three stages in metacognitive learning: planning, monitoring and evaluating. They just did whatever they could with their existing knowledge. From their think- aloud recording I have evaluated their performance.

Some participants used their background knowledge by looking at the title, author's name and picture before reading the text. Others just jumped into the text directly. Rafi and Hafsa visualised a picture inside their minds while focusing on the title. Rafi said,

"After reading the title, the idea came to my mind is that healthy diet and food habit can keep my mind refreshed and stress free."

Besides, the picture helped them a lot to get the idea about the passage and created interest among them before reading the text. Hafsa said,

"It makes sense because consuming healthy food will build healthy body, and healthy body means healthy mind, healthy mind means least depression or zero depression.

Author name, I think she is South American by her name."

So, from their thinking it can be understood that not all of them did a planning before their reading. Next, during the reading session, both similarities and differences were seen among the participants while using several strategies. The participants particularly monitored their mistakes in case of vocabulary where they were stuck because of not knowing the meaning of the unfamiliar words. They picked up some words, such as: "Processed meat, legumes, adherence and micronutrients." However, all of them used dictionary or context to find out the meaning of these words. Their reading was interrupted and slowed down to some paragraphs where they could not make connection or come across to the meaning. Then they re- read the paragraphs, paused a little and again read until they understood the meaning. Interestingly, they mentioned that they did not use any strategy in some places where they were struggling to understand the meaning and left that part. According to Hafsa,

"When I read the second paragraph, I kept thinking."

"I don't know anything about Mediterranean diet. So, I skipped it."

Moreover, in the case of MCQ and question- answer, they mentioned that they searched for the particular information by putting more attention on the key words and specific lines. So, basically they skimmed and scanned to solve those tasks. Rafi used memorisation while answering to a multiple- choice question as he found the fact very much interesting and so, he remembered that information. Mostly, they were seen to use skimming and scanning. Agness and Hafsa used other strategies such as, predicting and visualisation. All the four participants could manage to use these strategies without any metacognitive training.

Lastly, while summarsing the text all of them tried to gather the main gist of the passage and reflect on the author's point of view in their writing. Rafi and Hafsa said that they could grasp the main idea and write a summary of the passage. Contrastingly, Agness said that

"I hardly managed to write 5 lines summary." Romana said,

"I faced trouble while summarizing. I found lack of vocabulary and could not express my feeling through my writing."

Besides, Hafsa mentioned that she could not understand the meaning of "Adherence & legume" and did not use any strategy and left them without knowing the meaning. Overall, these were their responses to reading Text A.

4.3.2 Day Two: Workshop on Metacognitive Reading Strategies

On the second day, I arranged a workshop for my participants. In that workshop, I familiarized them with some metacognitive strategies. I made a list of metacognitive strategies to teach them their meaning and usage. Those strategies were taken from previous scholarly articles which I mentioned in my Literature Review chapter. The following strategies have been used in the workshop.

Repetition, visualising, analysing, inferring, memorization and note- taking---- are the most effective reading strategies among Malaysian ESL male and female learners (Edward, Pudin & Din, 2020) used in the workshop.

Besides, I have used Skimming and scanning strategy which is seen as a solution to reading difficulty according to Mammadova & Gurbanova (2018). Through scanning and bold typed keywords, the content can be understood and guess the answers from the text. Other strategies are: looking for particular information, finding out the structure of the text, organising and

understanding the author's point of view. Equally, vocabulary, summarising, writing feelings after reading are very much essential in reading comprehension. For example, using synonyms and incorporating new ideas into summaries by discarding useless information.

Additionally, main idea and supporting details of a text, brainstorming, predicting and use of dictionary these are the part of the pre-reading stage; reading aloud, re-reading, re-telling the text and discussion on unfamiliar words are done in while- reading stage and lastly in the post- reading stage there is evaluation, clarifying and justifying, asking questions. (Ebru Kaya, 2015).

Nevertheless, I gave more emphasis on the title and reading goal, monitoring, adjusting and self-questioning. According to Lau (2006), good readers in Hong Kong are more conscious about the title and reading goal, able to recognize keywords, form the main ideas, guessing, make comparisons, generate, elaboration, monitor and many more to solve problems aroused by reading. The aforementioned strategies have been used in my workshop so that the participants can learn about their proper usage and thus, properly apply them in their reading comprehension test.

4.3.2. 1 Day Three: Responding to Text B

This session was initiated to familiarise the students with various metacognitive strategies. From Text B (see Appendix D), similar tasks were assigned to the participants, such as Multiple-Choice Questions, Question-Answer and Summary writing. After receiving the training, students were expected to apply those strategies they are taught in the workshop.

Correspondingly, in this session, the three stages of metacognitive strategies (planning, monitoring and evaluating) were checked to find out if they had any improvement or not in the case of using metacognitive strategies.

At first, all the participants were seen to do planning before their reading in this session as well. The participants used their background knowledge by looking at the title and author's name before reading the text. For example, Rafi, the first participant, focused more on the word "neuroscientists and think." He used his background knowledge and guess that

"The text is something related to our brain and thinking is connected to our brain"

where Agness tried to predict the main theme of the passage by focusing more on the title. Similarly, Romana guessed from the title what could be the theme of the text. Hafsa used her background knowledge by reading the first line that

"a scientist who works with the brain has come up with a new and exciting research finding of an amazing power of a human brain."

So, it is observed from the data that all of them did very good planning before reading.

In the phase of monitoring the participants actually could use most of the strategies they were taught in the workshop. All of them used skimming & scanning, main idea, repetition, visualisation, use of context and dictionary, personalisation. In addition to that, justification, supporting detail, making the connection, inferring, memorisation and note-taking have been frequently used by them. The participants used dictionary, context and personalisation when they came across words like- "Naysayers, conjectures, perceptual, novelty, trivial phobias, social cognition, bombard, neurons, neuroeconomics, iconoclasts, biological and electrical rumblings, hardwired, march to a different drumbeat, pitfall and stimuli." They could successfully make justification, took help from supporting details along with making the connection between paragraphs. Moreover, in the case of MCQ and question-answer, they applied skimming & scanning, note-taking, memorisation and inferring. Interestingly, Agness wrote in her think-aloud

script, "*Iconoclasts are different from other people that why it is so"*. Here, Agness used a self-questioning strategy to understand the text.

Then she could make the connection with other lines. Hence, all four participants could manage to use these strategies with the help of metacognitive training.

In the final phase of evaluation, all of them easily understood the author's point of view and what he tried to mean. They felt the interest to read and enjoyed writing their understanding of the text. But Hafsa and Romana faced a little problem in that they wrote a very short summary and struggled with difficult words. According to Romana,

"I could write the summary well but struggled with difficult and unknown vocabularies, for example, the scientific terms."

Overall, these were their evaluation of themselves.

4.3.3 Students' Response Towards Metacognitive Training

The main purpose of conducting two reading tests was that whether the metacognitive training has any positive effect on the participants or not. What result can be found after teaching metacognitive reading strategies? In-Text A, they were more confused, nervous and faced problems and difficulties whose solutions they did not know. They knew strategies to some extent but they did not know the exact term or what strategy should apply to solve their problem. They just randomly picked some strategies by themselves. But in Text B, they understood what are the metacognitive strategies, their meaning and their usage very well. Their think-aloud record is the biggest proof that they have applied all the strategies correctly and in suitable places.

Vocabulary: Lack of vocabulary knowledge is a major problem which the students should try to guess the meaning from the context instead of knowing the exact meaning (Iqbal, Noor, Muhabat

& Kazemian, 2015). In the case of vocabulary learning, the participants of my study used contextual cues, background knowledge and a dictionary to find out the meaning of the words which they do not know. In 2010, Karbalaei conducted a study where Indian students used a dictionary to find out the meaning of an unknown word when they read. In contrast, Saengpakdeejit & Intaraprasert (2014), considered the use of the dictionary as a feature of the less skilled reader. Interestingly, the participants of my study were more inclined to find out the meaning of an unknown word from google search where they are stuck what Li (2009) mentioned that computerised dictionary had remained as a help for his participants to complete reading systematically by saving their time.

Summarisation: Summarising is a good strategy to gather the main idea of a text in short. For instance, Indian students are more frequent users of summarising, paraphrasing and note-taking (Karbalaei, 2010). Similarly, my participants perfectly used these strategies where needed such as all of them wrote a summary of the text where they tried to incorporate the author's point of view with synonyms and main ideas as well as took note of important information. In 2018, Cheng, Lio & Chang made an attempt to teach summarisation through an educational game, for example, using synonyms and incorporating new ideas to summaries by discarding useless information. Besides, they visualised during reading, analysed facts, inferred and memorise particular information in case of MCQ and Q/A. Malaysian male and female students were found as frequent users of those strategies by Edward, Pudin & Din in 2020 and teachers should familiarize them with effective and useful strategies, how to apply them in the appropriate context by involving them in more practices.

Skimming and Scanning: Skimming and scanning are the two most used strategies for solving MCQ and Q/A in this test. In this regard, Mammadova & Gurbanova (2018) noticed Azerbaijan

EFL learners frequently applying skimming and scanning strategy as a solution to their reading difficulties. According to Umar (2016), skimming and scanning bring development in reading by increasing students' reading capability especially finding hard words in a passage. In addition, Asmawati (2015), divided her participants into two groups. She found that participants who have reading difficulties and are slow reader can solve all the multiple-choice questions by applying skimming and scanning and thus, can save their time.

Other Strategies: There are other strategies implemented by the participants of the present study. Ahmadia, Poulaki & Farahani (2016), emphasised on self-monitoring and planning stage of reading what the participants of the present study successfully did in their reading test. He added that metacognitive strategies like self-monitoring and planning along with compensation strategies like using linguistic and other clues are beneficial for high scorers to understand the text. Furthermore, Chern (1993), showed a positive correlation between the metacognitive reading strategy awareness and reading comprehension procedure in the case of EFL/ ESL readers that students apply planning, monitoring and evaluating achieve success in a reading activity in contrast to those who do not take advantage of those strategies (as cited in Rastegar, Kermani & Khabir, 2017).

Moreover, after receiving the training participants of my study took advantage of supporting details such as, understanding the terms "neuroeconomics and iconoclasts, the example of 40- watt light bulb etc." to comprehend the paragraphs. Also, they opinioned that they have got the main idea and understood the text very well. In Ilter's (2017) study, autonomous performers showed development in recall and main idea and focus more on details in the texts**.** They can do it after an effective cognitive strategy training which leads to the understanding of the information given in the text. Overall positive responses are found from the students at the time of the interview.

Similarly, Ebru kaya (2015), provided 50 Turkish students with such training. The findings concluded that students who receive training show better performance than the ones who do not have training. For example, students with proper training can get the main idea and supporting details of a text. The best part of my participants was that all of them set a reading goal, focused more on the title, monitored their application, grasped main ideas as well as guessed to accomplish the tasks which are further supported by Lau (2006). He noted that good readers in Hong Kong are more conscious about the title and reading goal, able to recognize keywords, form the main ideas, guessing, make comparisons, generate, elaborate, monitor and many more to solve problems aroused by reading.

From the above analysis and discussion, it can be understood that the participants of this study have improved undoubtedly regarding metacognitive reading strategies. It means that they clearly understood metacognitive strategies after receiving the training. This time, their thinking was clear and they were more sure how to overcome their problems. They were specific in their attempt. They were able to use different kinds of metacognitive strategies and their improvement in using those strategies is noteworthy.

In this respect, Meniado (2016), in his study has found that students were able to use various metacognitive strategies successfully with the help of "teachers modelling" on how to apply metacognitive strategies. For example, identifying topic and content, main idea and supporting detail, author's point of view by comparing them with their real-life situation and many more. Therefore, this is beneficial for the students if they are provided with metacognitive training as it positively impacts their reading comprehension. Moreover, in this study, the students accomplished the three stages of metacognitive learning: planning, monitoring and evaluation after the training session as well as Wang et al. (2009) conducted a study in China on University EFL

students. In that study, students who carried out the planning, monitoring and evaluation stage show more progress in their reading activity than those who did not take advantage of metacognitive strategies.

Therefore, it can be said that metacognitive training has a positive impact on them and if we can give proper training regarding metacognitive strategies to our Bangladeshi ESOL learners they will for sure improve their reading skill.

4.4 Section Three: Students' Response to Metacognitive Strategies: Feelings and Challenges

This section will answer research question 2 (a) and 2 (b) jointly, where I will be examining how was my participants' feeling (R.Q. 2 a) after the workshop, during the use of metacognitive strategies in accomplishing the reading activity along with what were the challenges (R.Q. 2 b) for them for applying those strategies. To answer this issue, I will analyse the prominent themes generated from the semi-structured interview. The themes will reflect on the answers to research question 2 (a) and 2 (b). These will be the findings of the present study. Also, I will highlight some other findings from previous studies which will add to my research findings.

4.4.1 Using Metacognitive Strategies is Interesting and Makes Reading Enjoyable

To answer a question in the interview session, Rafi said that *"Interesting learning and enjoyed using strategies."* Agness said, *"Interesting and enjoyable text reading."* While asking while makes her reading interesting and enjoyable, she replied that "by using metacognitive strategies."

All of them were interested to read and enjoyed the text. The title, topic and interesting facts made the text enjoyable to them. It means that when they actually understood the connection between the title and the main text and gradually comprehend the whole text that time reading became a pleasure for them and a fascination to read created inside them. It means using metacognitive strategies is interesting and makes reading enjoyable. In response to that, Misa (2014), said that the University students of Timor (English Department) developed their reading comprehension skill by using metacognitive strategies as it boosted up their self-confidence in learning and motivation in reading. In this regard, Meniado (2016), in his study found a positive correlation between reading interest and metacognitive strategy use which is also supported by the example of Iranian EFL learners' awareness of metacognitive strategies and reading motivation (Jamshidi and Moghaddam, 2013). The findings suggest that when comprehension happens with the help of metacognitive strategies reading becomes interesting and motivation increases.

4.4.2 It Takes Less Time to Read with the Help of Metacognitive Strategies

In my study, I have come across this new information that with the help of metacognitive training it takes less time to read. In my participants' opinion, they did not have much idea of what to do before receiving the metacognitive training. They were confused and took more time to think. As they were not provided with any metacognitive teaching, they took time to understand. So, in their opinion, they took more time to read Text A. On the contrary, they were instructed with effective metacognitive strategies before the reading of Text B. This time they were very much sure about their problems and how to overcome them. Their comprehension skill developed with the help of metacognitive learning. So, they could read Text B with the minimum time. However,

this new finding enriched my research in the era of metacognitive strategies in reading comprehension.

"Text A took more time to read as there was no training before it & Text B took less time to read as there was training before it" (Rafi)

"No training was given before Text A. So, it took more time to read & Metacognitive training was given before Text B. So, it took less time to read." (Hafsa)

"I was confused what to do as no training was given before Text A. Thus, it took more time to read & Text B took less time to read because I was clear after receiving the training." (Agness)

"Without any training, Text A took more time to read & Text B took less time to read with the help of training." (Romana)

Previous researches did not mention anything about the time but only provided strong support regarding awareness in reading through explicit instruction. McTavish (2008), in this regard, said that metacognitive instruction aims at creating more awareness about one's thinking and reading process and thus enhances reading comprehension. Similarly, the participants of my study became more aware of using metacognitive strategies which built up their understanding and hence they required less time to complete the text. For example, efficient readers of the French language exhibited more awareness in using metacognitive reading strategies than the less efficient readers (Barnett, 1988). Again, Chern (1993) found a co-relation between ESL or EFL learners' awareness of metacognitive strategy and reading comprehension. Therefore, the new finding of my present study along with the previous evidence provides concrete support in the usefulness of metacognitive instruction in reading.

4.4.3 Comprehension was Faster with the Help of Metacognitive Strategies

All of the four participants agreed with the fact that despite being difficult and longer they could perform well on Text B with the help of metacognitive strategies. The use of metacognitive strategies makes their reading faster by aiding their comprehension. The text seems difficult at first but the learning from the metacognitive workshop assists them to overcome that difficulty. For example, vocabulary learning. They took help from the context and used a dictionary to comprehend the meaning which makes them fluent in reading.

"Neuroeconomics- checked dictionary & iconoclast- definition is given, so used context." (Agness)

"Novelty is a new word to me, I used dictionary to find out the meaning here." (Hafsa)

It is the advantage of Metacognitive strategy instruction that it removes the difficulties faced by the EFL learners in their reading which advances their ability to comprehend a text (Jafari & Ketabi, 2012). They observed the effectiveness between the use of strategy use and awareness-creating in their study. However, the participants in the present study uttered the word "faster" in the interview session that they think metacognitive strategy training makes their reading faster. This is because students are acquainted with these strategies by providing explicit instruction in metacognitive strategies that affects their reading comprehension ability (Lovett, 2008). Habibian (2015) also found evidence in his study regarding metacognitive instruction where the experimental group exceeded the control group by utilising more monitoring and evaluation strategies after receiving the training program. Thus, this knowledge of metacognition contributed to their comprehension skill.

4.4.4 Metacognitive Training may Interfere with Task Performance

It is no doubt that metacognitive activity is beneficial. There is sufficient evidence from previous researches to prove this fact and my study also found positive impacts of using metacognitive strategies to enhance reading comprehension. Hence, providing metacognitive training to the learners is considered as helpful. Surprisingly, to find out the answer to research question 2 (b), I asked my participants what problems did they face while implementing metacognitive strategies. One of the participants said that after learning about strategies from the training he found some strategies helpful for example, memorisation and inferring that he kept depending on which might not work in every situation. Similarly, another participant said she kept using those strategies, again and again, they were taught in the workshop. Metacognitive training creates a dependency on the same strategies which might affect their task performance. The rest of the participants agreed with the fact that it is not always possible to think about strategies or keep focused on them. It creates an interruption in the task and hence, task performance was affected. This indicates that it is not always fruitful to keep thinking about strategies that might affect negatively while doing any task. As a consequence, metacognitive training can be unhelpful sometimes.

There is also evidence from previous researches showing how metacognition can sometimes be unhelpful. According to Norman (2020), metacognitive strategies can interfere with task performance if one always gives attention to the metacognitive activity. If someone intentionally applies strategies in every step of reading it would be difficult or can be burdensome for his/ her to continue the activity. From this finding, it can be said that being over-concerned about metacognitive strategies can ruin the spontaneity of natural reading. Nevertheless, the usefulness

of metacognitive instruction is indisputable as the usefulness overshadows its minor disadvantages.

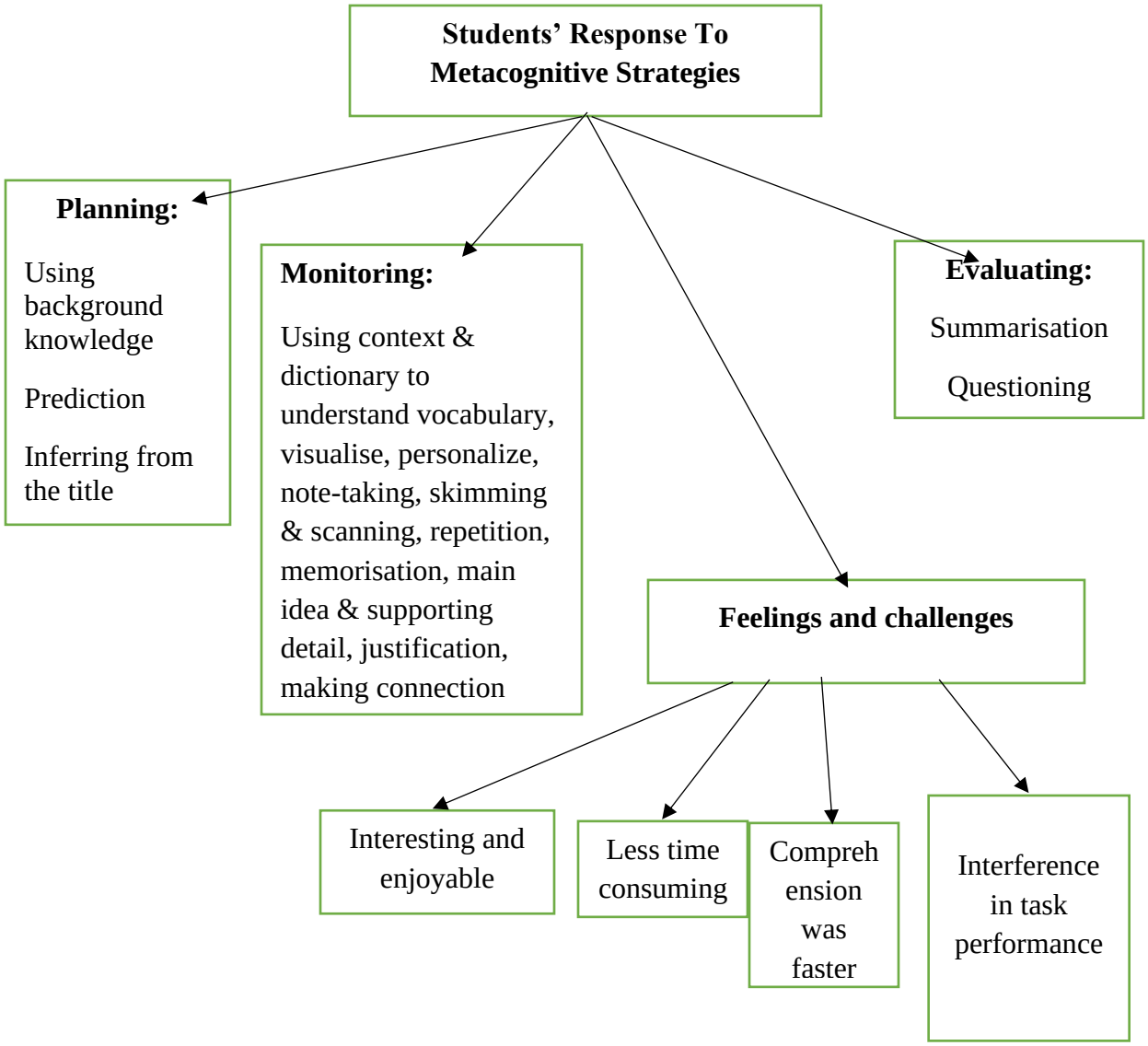

Figure 4.1 Emergent Themes of the study.

Chapter 5

Conclusion

5.1 Introduction

This concluding chapter aims at summarising the major findings of the study and discussing the implications and recommendations for Bangladeshi ESOL learners in their academic reading. The study attempted to fill the gap of knowledge regarding using metacognitive strategies in the academic reading of ESOL contexts. In addition, it explored how the students feel and what are their struggles in implementing Metacognitive strategies.

The three research questions of the study were:

2. How do Bangladeshi ESOL students utilise various metacognitive strategies of reading?
3 (a). How do the students feel about using the metacognitive strategies of reading in academic English class?

   (b). What kinds of challenges did the students face while implementing metacognitive strategies of reading?

5.2 Major Findings in Brief

5.2.1 Students' Reading Comprehension Tests (Planning, Monitoring and Evaluating)

The initial task for the students was that they had to sit for two reading sessions. In the first one, they were only told to keep a record of their think-aloud, whatever thinking came to their mind during reading. They were not given any instruction regarding metacognition. They were only taught how to do think-aloud by demonstrating them from a passage (see Appendix D). This

session was to check their existing ability of metacognition without any teaching how they perform on reading Text A. The result shows that to some extent they have metacognitive knowledge which they applied some strategies to their reading. But as they were not aware of planning, monitoring and evaluating stages they could not mention anything about that.

After that, before the second session of reading, a workshop was held to familiarise them with effective metacognitive strategies and their usage. In that workshop, they learnt that metacognitive strategy learning has three stages- planning, monitoring and evaluating (Fogarty, 1994). Next, they could perform well on reading Text B. They were able to complete the three stages of learning metacognition- planning, monitoring and evaluating and using effective strategies in their reading comprehension. They have improved a lot after attending the workshop. Thus, it is proved in this study that metacognitive teaching has a positive impact on reading comprehension.

5.2.2 Students' Feelings and Struggles in Using Metacognitive Strategies

In the reading sessions, students might have missed some points or important information to highlight in the think-aloud process. That is why I sat for semi-structured interviews with everyone. In that interview, they expressed their feelings and struggles while performing reading tasks by using effective metacognitive strategies. Firstly, they expressed that they enjoyed reading the text and it was interesting. They found the topic amusing and interesting facts were there. Secondly, it took less time to read with the help of metacognitive training as comprehension was faster and they understood the text very well. In addition to that, in case of struggles, they noticed that metacognitive teaching created a dependency on using some strategies which might affect the performance of their task. But overall, the benefits of metacognitive teaching could outweigh those little shortcomings.

5.3 Contributions of the Study

5.3.1 Implications for Teaching Strategies

It has become a crucial problem for ESOL students to face reading difficulty and lack of comprehension. It has made English teachers rethink their teaching strategies in English language classrooms. In the case of academic reading classes, often students come up with reading problems such as, incomprehension in vocabulary, not getting the main idea, reading speed, unable to find out information and many more. They are very much inefficient in reading comprehension skill. In this regard, students may require more practice and techniques to develop their reading proficiency. However, their comprehensibility can be improved easily by infusing metacognitive strategy training in the classroom. That is why this study proposed to use various kinds of metacognitive strategies in their academic reading so that the students can become efficient in their reading. The strategies to enhance students' reading comprehensibility can applicable not only in ESOL contexts but also in the native English- speaking academic reading classrooms as well. Even though the metacognitive reading workshop is looking at a short-term outcome in this study, it can be completely utilised by the teachers for a more extended period.

5.3.2 Implications for the Theories of Metacognitive Strategies in Academic Reading Skill

This study has found some unique facts regarding metacognitive strategies in academic reading which insights a new light upon the theory. The participants of the study have utilised metacognitive strategies successfully after the workshop which leads to a better comprehension of the text. They shared their feelings regarding using metacognitive strategies that they feel

interested to learn those strategies and it makes their reading enjoyable. Moreover, metacognitive strategies serve as a time saviour by making their comprehension faster as they required less time to comprehend the text. In addition to that, they point out a complication of using metacognitive strategies that it affects their task performance if they remain conscious all the time about which strategy to use and create dependency on them. These unique findings will help to build materials for new theory by providing interesting and promising areas to work on. Thus, future research can be conducted on this area based on these findings.

5.3.3 Implications for Knowledge

Current studies on fostering metacognitive strategies in reading skill cover different aspects of the field such as the positive relationship between metacognitive strategies and reading comprehension (Chern, 1993; Ilter, 2017; Ebru Kaya, 2015; Lau, 2006; Meniado, 2016; Wang et al., 2009). However, very few studies have explored whether Bangladesi ESOL learners can utilise various kinds of Metacognitive strategies or not. Moreover, it is important to investigate the challenges they face in using those strategies. The study thus bridges the gap of knowledge in the field of teaching reading through metacognitive strategies. Also, the study focuses on the fact that their inefficiency in reading is due to not providing them with proper metacognitive training where they will be familiar with effective metacognitive strategies along with their proper usage. This study emphasises that teachers must encourage using metacognitive strategies so that the students can comprehend the text and accomplish reading activities.

5.4 Recommendations

Referring to the findings of the study, I would like to provide several recommendations:

1. The study urges policymakers of Bangladesh to bring a transformation in the syllabus of their schools. If the school curriculum introduces students to the use of metacognitive strategies from the beginning, they will eventually become efficient reader and will not face any difficulty at the tertiary level.
2. At first, English teachers should model the metacognitive strategies in their teaching to make them understand easily and then students will be able to use the strategy on their own.
3. The topic and content of reading text should be interesting and recent that motivate students to read.
4. Materials should be chosen in such a way that it is free from any racial or cultural bias as there can be multiple background students in a classroom and also materials that elicit the use of various strategies by providing multiple opportunities for practice.
5. While providing metacognitive training teachers should be careful regarding their instruction is clear and come up with examples that match better with the strategies. Sometimes teacher can ask students to provide their own examples to check their understanding.

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APPENDIX A

LETTER OF CONSENT FOR PARTICIPANTS

Dear participants, My name is Fahmira Akther Doly. I am pursuing my post- graduation study in ELT & Applied Linguistics at the Department of English & Humanities, BRAC University, Dhaka, Bangladesh. My research title is "Using Metacognitive Strategies in Academic Reading: A Case Study on Bangladeshi ESOL Learners". The main aim of this study is to explore how do Bangladeshi ESOL students utilise various metacognitive strategies of reading. For being a part of the study, you must sit for a three day reading sessions along with a think- aloud training and a metacognitive learning workshop.

The details are given below:

Day	Activity	Material
Day 1	Briefing on think- aloud protocol	Hand Note A You Tube video on think-aloud protocol
	Reading Comprehension Test- 1 (without any metacognitive training)	Text on "Eating healthy Foods may Lower Depression Risks."
Day 2	Workshop on metacognitive strategies	Hand Note
Day 3	Reading Comprehension Test- 2 (with the help of metacognitive training)	Text on "A neuroscientist reveals how to think differently

After completion of all the reading sessions, you will be invited to attend an interview with me to talk about your feelings and struggles during the reading sessions. Your interview will be recorded and only be used for the purpose of this study, and not be disclosed to anyone. If you would like to be a part of this study, please read the details given in the consent form on the next page and sign it. Your kind cooperation in conducting the study will be highly appreciated.

Thanking you

Fahmira Akther Doly

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Research Participation Consent Form Please read the following statements and tick in the box.

1. I have read the description and understood the information given which describes what this study is about and data collection methods will be taken ☐

2. My participation is voluntary and I feel free to withdraw at any time ☐

3. I agree to take part in all of the reading sessions and interview sessions of the study ☐

4. I agree to be video and audio taped for my voice and face ☐

5. The researcher has my permission to contact me through the following phone number or email address for any clarification after the completion of data collection ☐

……..... .....

Name Signature

Date

Phone No.

Email address:

APPENDIX B

INTERVIEW QUESTIONS FOR PARTICIPANTS

Data for answering research questions 2 (a) and (b) were collected by interviewing the participants after completion of the reading sessions.

Interview Questions	Background Information	RQ 1	RQ 2 (a)	RQ 2 (b)
1. What do you study at present? Which institution?	×			
2. What was your medium of instruction in your school?	×			
3. When was English introduced as a subject in your school?	×			
4. Have you developed a habit a reading English books, newspapers or any literature piece? From when and who inspired to read beyond text?	×			

5. Did your school institution emphasise on reading activities apart from the syllabus?	×			
6. Are you introduced with metacognitive reading strategies or in your school?	×			
7. Do you understand what you read in English?	×			
8. Do you have a planning before your reading?		×		
9. Do you preview the text/title/picture (if given) to see what the text is about?		×		
10. Do you re- read, or give a slow and careful reading when the text seems difficult?		×		
11. Do you take notes or underline while reading to remember important information?		×		
12. In case of unknown vocabulary, do you try to guess the meaning from		×		

the context or use reference material, for example, dictionary?				
13. Do you try to picture or visualises while reading?		×		
14. Do you go back and forth to make connections between paragraphs?		×		
15. Do you often ask yourself questions to check your understanding?		×		
16. Do you use your prior/ background knowledge or what you have already know to help in your reading?		×		
17. Do you try to guess/infer information from the text?		×		
18. Do you monitor your mistakes and struggles where you stuck in your reading?		×		
19. How did you feel while using metacognitive strategies?			×	

For Example: Did you enjoy or find it uninteresting? Was it difficult or easy for you?				
20. Can you mention some of your struggles or obstacles you faced often during applying metacognitive reading strategies?				×

APPENDIX C
SAMPLE INTERVIEWS OF PARTICIPANTS

Notational Conventions of the Interview Transcripts

Notation	**Meaning**
1. DU	Discourse Unit
2. I	Interviewer
3. [ ]	For showing action [Laughs]
4. ,	Small pause
5. …	Long pause (if in the middle of the sentence) Incomplete sentence (if at the end of sentence)
6. Umm/uh	Hedging in speech
7. DU RAF 42	DU student name's first three alphabets DU number DU RAF 42 refers to Rafi's DU number 42

Sample Interview of Rafi

DU	Participants	Questions and Answers
1.	I	Hello! At first, I want to give you thanks for coming to the interview session.
2.	Rafi	Mention not
3.	I	So, what do you study at present? Which institution?
4.	Rafi	Currently I am an Honors student under English And Humanities Department at BRAC University.
5.	I	What was your medium of instruction in your school?
6.	Rafi	Ummm I was a Bengali Medium Student but in University I have to shift in English.
7.	I	Ok, very good! When was English introduced as a subject in your school?
8.	Rafi	As far as I remember English was introduced at class two, yea! Class two.
9.	I	Have you developed a habit a reading English books, newspapers or any literature piece? From when and who inspired to read beyond text?
10.	Rafi	I used to read English literature from my college days because the friends I hanged around with, specially when the friends are in a group and they shared what they read or watch then they said to me that I need to get out of my box or come across some English literature then I indulge myself in the world of English literature and in university cafeteria, when there is no classes for

		me I used to read English newspapers and have formed this as a habit in this lockdown.
11.	I	Did your school institution emphasise on reading activities apart from the syllabus?
12.	Rafi	I belong to a Bengali medium School. They followed traditional educational style. Umm my school never hold me stop reading things outside from the syllabus but… yea I was never influenced by my school teachers to go through novels and story books in that time that is not included in the syllabus. They always gave more importance on the syllabus than the other ones.
13.	I	Are you introduced with metacognitive reading strategies in your school?
14.	Rafi	No, I have never heard of metacognitive reading strategies in my school days. I learned how to read in my school just following simple reading methods. While I was in college, I got to know that reading has some sort of strategies as well, but that was not metacognitive strategies and probably skimming and scanning, very generalized or common ones. This is skimming… this is scanning like that.
15.	I	Do you understand what you read in English?
16.	Rafi	[Laughs] Yes, I understand and try to understand fully what I am reading in English. If I find difficulties probably the old literature works from different authors and the articles related to Biology…[thinking] and and, and Political articles, political related words give me more trouble.
17.	I	Do you usually have a planning or set goals before reading?

18.	Rafi	Before reading anything the only goal I have is to understand the text fully and practice the knowledge I gather from the text in real life.
19.	I	Do you preview the text/title/picture (if given) to see what the text is about?
20.	Rafi	Definitely, Even I try to grasp the gist of the text by seeing the provided image at the very beginning.
21.	I	Do you re- read, or give a slow and careful reading when the text seems difficult?
22.	Rafi	Uh! When the text seems difficult, I slow down my reading speed. Try to understand word by word and read more carefully just to understand what I am reading.
23.	I	Do you take notes or underline while reading to remember important information?
24.	Rafi	Yes, occasionally... No, no wait, Yes, I do it every times. Even when I read newspaper I highlight important words or information and note them down in my diary.
25.	I	In case of unknown vocabulary, do you try to guess the meaning from the context or use reference material, for example, dictionary?
26.	Rafi	At first, I try to get the meaning from the context, if I am too blank then I use outside resources. Mostly I use dictionaries from internet or search in the google.

27.	I	Do you try to picture or visualises while reading?
28.	Rafi	Yes, I try to visualize every time the context I am going through. That gives me a feeling that my reading is okay, I am understanding what is written or what the author tries to say. That is more easy for me to go through any text.
29.	I	Do you go back and forth to make connections between paragraphs?
30.	Rafi	Yes, as I said earlier when the text jumps from one topic to another to understand the connection I get back to the previous paragraph and try to find the relations and connections, what the author is trying to describe.
31.	I	Do you often ask yourself questions to check your understanding?
32.	Rafi	Umm…. [thinking] Not mostly but sometimes I ask myself is it okay for me? Am I understanding what is up there, what is written there… One more thing, when I need to memorize or remember any particular information I use this technique again and again.
33.	I	Do you use your prior/ background knowledge or what you have already know to help in your reading?
34.	Rafi	I always use my background knowledge to help my reading. If any part of my reading matches with my background knowledge I use that.
35.	I	Do you try to guess/infer information from the text?
36.	Rafi	I do it sometimes when there is no clear meaning stated. [Laughs]

37.	I	Do you monitor your mistakes and struggles where you stuck in your reading?
38.	Rafi	After reading every text I think about some minutes about the text so that I can figure out for myself that did I understand the text or not. This way I evaluate myself.
39.	I	How did you feel while using metacognitive strategies? **For example:** Did you enjoy or find it uninteresting? Was it difficult or easy for you?
40.	Rafi	Well, [thinking] fine, I find both the text entertaining because of the topic was really interesting. I found using those strategies interesting and it makes the reading enjoyable. While I was reading text A, it took me more time to grasp information from it. Because I had no idea or training before that. But when I read text B while knowing effective metacognitive reading strategies from the training, I understood the text faster and it took less time. Though it was difficult from the first text but I overcome difficulties faster and understood the text easily as well.
41.	I	Can you mention some of your struggles or obstacles you faced often during applying metacognitive reading strategies?
42.	Rafi	Personally, I didn't face any difficulties applying metacognitive reading strategies but one thing I noticed which is when I learned about one strategy and I find it easy and useful I kept depending on the same strategy to find a solution for every problem which might not work every time. Suppose, memorization and inferring are two metacognitive strategies I depended on the most but with the help of only these two I cannot deal with every complication.
43.	I	Thank you so much Rafi. Take Care.
44.	Rafi	Thank you. You, too.

Appendix D

Reading Texts Used for the Data Collection

Text A:
Eating Healthy Foods may Lower Depression Risk

By Agata Blaszczak Boxe
September 18, 2015

Following a diet rich in produce and low in processed meats even if you don't do it perfectly may be helpful in preventing depression, according to a large new study.

To lower the risk of depression, "People can eat everything, but everything in moderation," as long as they try to eat lots of vegetables, fruits, nuts and fish, and avoid fast food and processed meats, said study author Almudena Sanchez- Villegas of the University of Las Palmas de Gran Canaria……. (Continues)

Retreived from: https://t.ly/aV5W

Answer the following Questions:

1. "People can eat everything, but everything in moderation." What do you understand by this statement? Write in your own words.
2. Explain the statement "Even a moderate adherence to these healthy dietary patterns was associated with an important reduction in the risk of developing depression."
3. Why Mediterranean diet is considered healthy?
4. Do you know someone around you who has depression? To what extent life style and food habit of that person affected his/her mental stability?

Now summarise the passage into your own words (Within 7-10 sentences).

Multiple Choice Questions:

1. Who is the author of this news article?

a) Agata Blaszczak Boxe

b) A person who works for Live Science

c) Almudena Sanchez- Villegas

2. At the very beginning of the study, researchers interviewed university graduates. How long did I take for them to be part of the study once again?

a) A decade-long

b) A period of 8.5 years

c) It is not mentioned

3. Which of the following foods do not take part of the principles of Mediterranean and other healthy diets?

a) Processed meats

b) Nuts and fish

c) Vegetables and legumes

4. People who follow Mediterranean diet has a ___ chance of depression than those who did not adhere to any diet at all.

a) 10-15 percent lower

b) 25- 30 percent lower

c) 35-40 percent lower

5. Micronutrients mentioned in the passage are ------

a) Vitamin C & Magnesium

b) Vitamin D & Iron

c) Vitamin B & Zinc

Text B:

A Neuroscientist Reveals How to Think Differently

By Rituparna Nath

In the last decade a revolution has occurred in the way that scientists think about the brain. We now know that the decisions humans make can be traced to the firing patterns of neurons in specific parts of the brain. These discoveries have led to the field known as neuroeconomics, which studies the brain's secrets to success in an economic environment that demands innovation and being able to do things differently from competitors. A brain that can do this is an iconoclastic one. Briefly, an iconoclast is a person who does something that others say can't be done.

This definition implies that iconoclasts are different from other people, but more precisely, it is their brains that are different in three distinct ways: perception, fear response, and social intelligence. Each of these three functions utilizes a different circuit in the brain. Naysayers might suggest that the brain is irrelevant, that thinking in an original, even revolutionary, way is more a matter of personality than brain function. But the field of neuroeconomics was born out of the realization that the physical workings of the brain place limitations on the way we make decisions. By understanding these constraints, we begin to understand why some people march to a different drumbeat……. (Continues)

Retrieved from: https://collegedunia.com/news/e-482-ielts-reading-sample-with-explanation-a-neuroscientist-reveals-how-to-think-differently

Choose the correct letter, A, B, C or D.

1.Neuroeconomics is a field of study which seeks to

A. cause a change in how scientists understand brain chemistry.

B. understand how good decisions are made in the brain.

C. understand how the brain is linked to achievement in competitive fields.

D. trace the specific firing patterns of neurons in different areas of the brain.

2. According to the writer, iconoclasts are distinctive because

A. they create unusual brain circuits.

B. their brains function differently.

C. their personalities are distinctive.

D. they make decisions easily.

3.According to the writer, the brain works efficiently because

A. it uses the eyes quickly.

B. it interprets data logically.

C. it generates its own energy.

D. it relies on previous events.

4.The writer says that perception is

A. a combination of photons and sound waves.

B. a reliable product of what your senses transmit.

C. a result of brain processes.

D. a process we are usually conscious of

5.According to the writer, an iconoclastic thinker

A. centralises perceptual thinking in one part of the brain.

B. avoids cognitive traps.

C. has a brain that is hardwired for learning.

D. has more opportunities than the average person.

6. Write down a short summary of the text.

Question – Answer:

1.Why thinking like a successful iconoclastic is demanding?

2.Why iconoclasts think of the concept of the social brain is useful?

3.Do you think iconoclasts are generally an asset? Why?

4.Why iconoclasts think differently from other people?

Appendix E

Data Analysis

Table 1: Reading Comprehension Test: Text A (without metacognitive training)

Participant Name	Strategy	Source	Comment
Rafi	Using background knowledge	Title & Picture	After reading the title, the idea came to my mind is that healthy diet and food habit can keep my mind refreshed and stress free.
	Skimming	Rich in Produce and low in Processed meat	Focusing more on less cooked foods such as fresh vegetables. (Understood by the title and picture)
	Repetition	"People can eat everything but everything in Moderation."	I slowed down, paused a little and re- read the line. Then I assumed the correct meaning of the line by reading the following paragraph.
	Prediction	Anti-Depressant Drug	I guessed the meaning from the word depression.
	Comprehension of vocabulary	Mediterranean Diet, Legumes & MCQ	I understood the phrase from the context. MCQ: From the context I have predicted that Mediterranean food chart emphasize more on taking vegetables. So, processed meat is an opposite to that.

	using context & dictionary		Legumes: I searched in google.
	Skimming & scanning	Q/A & MCQ	I searched for particular line or key words and sometimes read line by line to find out the answers. In MCQ 1,4 & 5: I looked for the word author, numerical elements and the word vitamin.
	Memorisation	MCQ	I remembered the number as it seems an interesting research approach for me.
	Summarisation	Summary Writing	I got the main ideas & can summarise.
Participant Name	**Strategy**	**Source**	**Comment**
Agness Jerry	No strategy	"People can eat everything, but everything in moderation." At the start of the study….. 10 years later.	I understood the paragraph that it talks about a research with 15,000 Graduates.

		The researchers found that …..to a low degree.	
	No strategy	Mediterranean diet for example…..	I have no idea about it.
	Comprehension of vocabulary using dictionary	Legume	I did not know what is ‘legume.’ I searched for legumes in the google and then I understood that it is kind of grains or seeds.
	Repetition	The researchers don’t know for sure….	I paused and again read the paragraph. It might be talked about some micronutrients which are essential for our brain health.
	Skimming & Scanning	Q/A and MCQ	I looked for the exact words and lines. MCQ: Key Word
	Summarisation	Summary writing	I hardly managed to write 5 lines summary.

Participant Name	Strategy	Source	Comment
Hafsa	Using background knowledge	Title & Author name, Picture	It makes sense because consuming healthy food will build healthy body, and healthy body means healthy mind, healthy mind means least depression or zero depression. **Author name:** I think she is South American by her name.
	No strategy	Following a diet …… according to a large study.	Just read but did not fully understand. "According to a large study" by large study, I understand covering a huge number of participants, or longitudinal study meaning covering a great amount of time.
	Visualisation	Picture	The picture on the left is very colorful, full of colorful fruits and vegetables. I love them. I love banana, green vegetables, capsicum, coconut and so on. This picture helps me to hold my attention and creates interest to read the whole text.
	No strategy	"People can eat everything, but everything in moderation."	When I read the second paragraph, I kept thinking.

	Predicting	At the start of the study…. 10 years later	Now I see in this paragraph that my prediction about the participant number and the long time of the study is absolutely correct and even about the author is from South America.
	Comprehension of vocabulary using context	Adhere & legume Anti- depressant	In this paragraph, some words are unfamiliar to me, such as adhered, legumes. "Anti- depressant" I can guess the meaning from the context.
	No strategy	"Mediterranean diet" The researchers found that …… 7 ways to recognize depression in 20-something	I don't know anything about Mediterranean diet. So, I skipped it. Did not get the idea

	Skimming & Scanning	Q/A and MCQ	I searched for particular information
	Summarisation	Summary writing	Yes, I could manage to write a short summary.
Participant Name	**Strategy**	**Source**	**Comment**
Romana	Using context & dictionary	"Mediterranean diet" "Adherence"	The context helped me to understand the phrase. I checked dictionary to find out the meaning of 'adherence.'
	Repetition	"People can eat everything, but everything in moderation." One potential mechanism	At first, I did not get the meaning. I read again and tried to understand what they meant by 'moderation.' Then I understood that it may be consuming anything in a limited way. I tried to get the meaning of 'one potential mechanism' and what the author actually means. I slowed down my reading and read several times.
	Skimming & Scanning	Q/A and MCQ	I focused on the particular line and key words for the information.

Table 2: Metacognitive Reading Strategies used in Text B (with metacognitive training)

Participant Name	Strategy	Source	Comment	Planning	Monitoring	Evaluating
Rafi	Using background knowledge	Title Q/A	Focusing more on 'neuroscientists' and 'think'. Well, I used my background knowledge and guess that the text is something that is related to our brain and thinking is connected to our brain. Q/A no 1	✓		
	Justification	In the last decade a revolution …..think about the brain Q/A	In the last decade a revolution …..think about the brain Q/A		✓	

	Supporting detail	"neuroeconomics & iconoclast"	new terms for me. But with the definition and explanation I got the meaning. So, supporting details helped me a lot.		✓	
	Making connection	This definition implies that iconoclasts ….. in three distinct ways: perception, fear response, and social intelligence	New information for me but I could connect the idea with the previous paragraph.		✓	

	Using dictionary & Prior knowledge	Naysayers, Conjectures, Perceptual, Novelty, Impediment	Used dictionary the meaning is understood by the concept and from my prior knowledge		✓	
	Using Context & personalisation	Trivial phobias, Social cognition Bombard	Understood from the context. This particular paragraph also matches with my real-life experience as well. Social cognition- Understood from the context		✓	
	Inferring	March To a different Drumbeat	I have inferred to understand this specific phrase. I also visualized this whole thing while understanding the meanings of this		✓	

			paragraph.			
	Visualisation	40- watt light bulb Q/A	Visualiased the idea of 40-watt bulb thing to understand how brain functions Q/A no 3		✓	
	Repetition	The idea of perception Perception is central to iconoclasm …. what other people say.	Did not understand at first. Re- read or repetition Re- read the paragraph to understand.		✓	
	Main Idea	Finally, to be successful iconoclasts …..	Understood the meaning, imagining a video which I watched on you tube on successful person.		✓	
	Memorisation &	MCQ Q/A	MCQ no 1, 2, 4 Q/A no 1		✓	

	note-taking					
	Skimming & Scanning	MCQ Q/A	MCQ no 3, 5 Q/A no 2, 4		✓	
	Summarisation	Summary writing	I could easily understand the author's point of view and what he tried to mean. I felt interested to read the text			✓
Participant Name	**Strategy**	**Source**	**Comment**	**Planning**	**Monitoring**	**Evaluating**
Agness Jerry	Prediction & Using background knowledge	Title Last decade & scientists think about the brain	I tried to predict the main theme of the passage by focusing more on the title. Focusing more on the last decade & scientists think about the brain, I could get the main idea and my prediction was right.	✓	✓	

	Questioning	Iconoclasts are different from other people	Why? At first question arises in my mind then after reading forward, I got my ans. So, I could make connection between these lines.			✓
	Personalisation	There are many types of fear, but the two ……..	I could personalize here that I feel fear of public ridicule and I know many people who also have this type of phobias.		✓	
	Comprehension of vocabulary using dictionary & context	Neuroeconomics & Iconoclast Biological and electrical rumblings Hardwired, conjectures Bombard	Neuroeconomics- checked dictionary & iconoclast- definition is given, so used context Used dictionary Used context		✓	

	Main Idea	Finally, to be successful iconoclasts …..	Got the main idea		✓	
	Inferring	Q/A & MCQ	Q/A & MCQ		✓	
	Note-taking & Memorisation	Q/A & MCQ	MCQ no 1, 2, 4 Q/A no 1		✓	
	Repetition	Perception is central to iconoclasm ….. The problem with novelty…..	re- read the paragraph		✓	
	Visualisation	Iconoclasts create new opportunities….	I can visualise that one day our country will prosper in a rapid growth if we utilize these assets.		✓	

	Skimming & Scanning	Q/A and MCQ	MCQ no 3, 5 Q/A no 2, 4		✓	
	Summarisation	Summary writing	I really enjoyed summary writing because I could express my understanding of the text easily.			✓
Participant Name	**Strategy**	**Source**	**Comment**	**Planning**	**Monitoring**	**Evaluating**
Hafsa	Using background knowledge	Title Revolution	Using background knowledge, I understand that a scientist who works with brain has come up with a new and exciting research finding about an amazing power of a human brain. The first line, revolution, caught my mind, I think this is the main theme, the text is about some	✓		

			revolutionary findings about the ability of a human brain.			
	Prior knowledge & Memorisation	Iconoclast	using my prior knowledge, 5 years ago I memorized some GRE vocabularies, Iconoclast was one of them, so far, I remember, it means someone who can think revolutionarily opposite or different from others or have a faith like that.		✓	
	Main Idea	Perception is central to iconoclasm …..	I understand the role of perception in an iconoclast brain, these are new information to me.		✓	
	Justification	This definition implies that….	The next line justifies my guess about my background knowledge.		✓	

	Visualisation	2nd Paragraph Idea of 'Perception' Successful iconoclast	I can visualize a picture of human brain. My own interpretation of perception is written here which backs up my own understanding. Ambani from India, Steve Jobs, Barack Obama, all the scientists who invented steam engine, electricity, vaccine of plague and many more, I think they are successful iconoclast. I visualize them or something about them.		✓	
	Making connection	MCQ	MCQ no 3		✓	
	Personalisation	Bombard	this word reminds me one of my teachers from		✓	

		Cognition	undergrad, I have heard this word first from her, her picture comes into my brain. Cognition is the word which remind me of my father because I heard it first from him and at that time I didn't know what it means and why people have to use such a difficult word. So, I feel a personal connection.			
	Comprehension of vocabulary using dictionary	Novelty	Novelty is a new word to me, I used dictionary to find out the meaning here.		✓	
	Memorisation	Interpretation of knowledge	I can relate the interpretation of knowledge in the brain		✓	

		MCQ	with my higher secondary book, where I first read this, I guess. So, my memorization heled me a lot. MCQ no 1			
	Inferring	MCQ Q/A	MCQ no 2, 4		✓	
	Repetition	Q/A	Q/A		✓	
	Supportin g detail	The definition implies that…..	The 2nd paragraph gives me supporting details. It excites me because these are new to me and I love scientific explanation. I can visualize a picture of human brain.		✓	
	Skimming & Scanning	Q/A and MCQ	MCQ no 3		✓	
	Summaris ation	Summary writing	I understood but could wrote a few lines.			✓

Participant Name	Strategy	Source	Comment	Planning	Monitoring	Evaluating
Romana	Using background knowledge	Title	Using my background knowledge and guess what could be the theme of the text.	✓		
	Making Connection	In the last decade… This definition implies that….	How thinking about the brain could be revolutionary? I could make connection with the previous paragraph and also justified my idea why they said it is revolutionary.		✓	
	Using context & dictionary	"Neurons, Neuroeconomics, Iconoclastic ones" Naysayers & March to a	new words to me and I used dictionary I could not understand and so, used dictionary. New vocabulary, used context & dictionary		✓	

		different drumbeats Pitfall, hardwired, stimuli & conjecture				
	Visualisation	Finally, to be successful iconoclast	Visualize		✓	
	Repetition	Perception is central to iconoclasm…. Novelty	re- read the paragraph to understand Could not understand the idea of 'Novelty.' Re- read the paragraph		✓	
	Main Idea	Iconoclasts create new opportunities in	I got the main idea and totally agree with the paragraph.			✓

		every area……				
	Supporting detail	Fixed energy budget…40- Watt light bulbs	This example or supporting detail made me understood the idea		✓	
	Skimming & Scanning, Predicting	Q/A and MCQ	I focused on the particular line and key words for the information.		✓	
	Summarisation	Summary writing	I could write the summary well but struggled with difficult and unknown vocabularies, for example the scientific terms.			✓

Appendix F

Handout- 1

What is Think- Aloud?

According to Creswell (2008), think- aloud is a method of recording everything told by the participants. In this process, a reader verbalizes or speaks out whatever thinking comes in his mind, his feelings or the techniques he applied during the reading of a piece of text.

Why we use Think- aloud?

- It helps students learn to monitor their thinking as they read and improves their comprehension.
- It teaches students to re-read a sentence, read ahead to clarify, and/or look for context clues to make sense of what they read.
- It slows down the reading process and allows students to monitor their understanding of a text.

How to Use Think- Alouds?

These questions may help you in think- aloud.

- What do I know about this topic?
- What do I think I will learn about this topic?
- Do I understand what I just read?
- Do I have a clear picture in my head about this information?
- What more can I do to understand this?
- What were the most important points in this reading?
- What new information did I learn?
- How does it fit in with what I already know?

All the informations are collected from:
Think- alouds, (n.d). Retreived from https://www.readingrockets.org/strategies/think_alouds

Demostration from a video:

I have used the following video to demonstrate them how to do think- aloud.
Retreived from https://youtu.be/G0ZHimY5YZo

Handout- 2

Introduction: "Metacognition" is often simply defined as "thinking about thinking." The term "metacognition" is most often associated with John Flavell (1979). According to Flavell (1979, 1987), metacognition consists of both metacognitive knowledge and metacognitive experiences or regulation.

Adopted from: Hendrick, C. (2014, September 22). *Metacognition: An Overview*. https://learning.wellingtoncollege.org.uk/resources/metacognition-an-overview/

Metacognitive learning has three stages: Planning, monitoring and evaluating (Fogarty,1994).

Planning: Before beginning a task –

- Set go
- als
- Plan the task or content sequence
- Plan how to accomplish the task (choose strategies)
- Preview a text

Monitor/Identify problems: While working on a task-

- Check your progress on the task
- Check your comprehension as you use the language. Do you understand? If not, what is the problem?
- Check your production as you use the language. Are you making sense? If not, what is the problem?

Evaluate: After completing a task:

- Assess how well you have accomplished the learning task
- Assess how well you have used learning strategies
- Decide how effective the strategies were
- Identify changes you will make the next time you have a similar task to do

Retreived from https://quizlet.com/147468700/learning-how-to-learn-metacognition-flash-cards/

Example of Metacognitive strategies:

Repetition, Memorisation, Skimming and Scanning, Main Idea & Supporting Details, Predicting, Use of dictionary and Context, Visualisation, Inferring, Note- taking, Summarisation, Using background knowledge, Justification, Making Connnection, Questioning.

(Strategies are taken from literature review section).

Appendix G.1

Sample of Coding Template by The Researcher:

Interview Question (1)	**Subordinate Key Word of Question (2)**	**Subordinate Main Point from conversation (3)**	**Elaboration examples from verbal to support the subordinate (4)**	**Occurrence main idea transferred into the form as key word(s) (5)**	**Frequency of occurrence (6)**	**Ordering of Discourse Unit (7)**
How did you feel while using metacognitive strategies? **Probing Qs:** Did you enjoy or find it uninteresting? Was it difficult	Feeling: Enjoy or uninteresting, difficult or easy	* interesting strategies & enjoying reading *Text A: took more time to read without training *Text B: took less	"Well, [thinking] fine, I find both the text entertaining because of the topic was really interesting. I found using those strategies interesting and it makes	Entertaining topic, interesting strategies and enjoyed reading Text A: took more time to read as there was no training before it & Text B: took less time to read as	**1** **2**	40

or easy for you?		time to read with the help of training *faster	the reading enjoyable. While I was reading text A, it took me more time to grasp information from it. Because I had no idea or training before that. But when I read text B while knowing effective metacognitive reading strategies from the training, I understood the text faster and it took less time. Though it was difficult from the first text but I overcome difficulties	there was training before it Text B was difficult from the first text but I overcome the difficulties faster because a training was given before Text B where no training was given in Text A	**2**	

			faster and understood the text easily as well.”			

Can you mention some of your struggles or obstacles you faced often during applying metacognitive reading strategies?	Struggles or obstacles in applying metacognitive reading strategies	*dependency on	“Personally, I didn’t face any difficulties applying metacognitive reading strategies but one thing I noticed which is when I learned about one strategy and I find it easy and useful I kept depending on the same strategy to find a solution for every problem which might not work every time. Suppose, memorization and inferring	***** depending on the same strategy. *memorization and inferring are two metacognitive strategies I used to depend on the most.	**2**	42

			are two metacognitive strategies I depended on the most but with the help of only these two I cannot deal with every complication.			

Appendix G. 2

Sample Theme Generation Template

R. Q. 2(a)	How do the students feel about using the metacognitive strategies of reading in academic English class?				
Interview Question	How did you feel during the reading? **Probing:** Did you enjoy or find it uninteresting? Was it difficult or easy for you?				
Raf (C1)	**Haf (C2)**	**Agn (C3)**	**Rom (C4)**	**Subthemes**	**Themes**
Entertaining text, interesting strategy enjoyed reading (Raf 40)	Interesting text, enjoyed reading (Haf 40)	Interesting and enjoyable text reading (Agn 40)	Interesting topic and enjoyable reading (Rom 40)		Using metacognitive strategies is interesting and makes reading enjoyable.

Text A took more time to read as there was no training before it & Text B took less time to read as there was training before it. (Raf 40)	No training was given before Text A. So, it took more time to read & Metacognitive training was given before Text B. So, it took less time to read (Haf 40)	I was confused what to do as no training was given before Text A. Thus, it took more time to read & Text B took less time to read because I was clear after receiving the training (Agn 40)	Without any training, Text A took more time to read & Text B took less time to read with the help of training (Rom 40)		It takes less time to read with the help of Metacognitive training.
Text B was difficult from the first text but I overcome the difficulties faster because a training was given before Text B where no training was given in Text A (Raf 40)	Text B was difficult and longer but metacognitive training helped me to read the text faster (Haf 40)	Text B was a little bit difficult but I could read faster with the help of training (Agn 40)	Text B: I read very fast though it was difficult. It is because I knew what to do from the training (Rom 40)		Comprehension was faster with the help of Metacognitive training.

R. Q. 2(b)	What kinds of challenges did the student face while implementing metacognitive strategies of reading?				
Interview Question	Can you mention some of your struggles or obstacles you faced often during applying metacognitive reading strategies?				
Raf (C1)	**Haf (C2)**	**Agn (C3)**	**Rom (C4)**	**Subthemes**	**Themes**
I learned about one strategy from the training and I find it easy and useful I keep depending on the same strategy Memorization and inferring are two metacognitive strategies I used to depend on the most which might not work in every place (Raf 42)	Sometimes I put more focus on the strategies and it creates an interruption while doing the task.	After knowing the strategies I kept using those strategies again and again which might not work on every times. For example, skimming & scanning, inferring and using dictionary or context (Agn 42)	It is not always possible to think about strategies while reading. It affected on my performance (Rom 42)		Metacognitive training creates dependency on the same strategies. Metacognitive knowledge may interfere with task performance

Appendix G. 3
Rating for Students' Interview

Please respond to the following themes by choosing "Agree" or "Disagree". You can also suggest new themes on the comment's column.

R. Q. 2 (a). How do the students feel about using the metacognitive strategies of reading in academic English class?						
Theme	**Main Ideas**	**Discourse Unit**	**Verbal- Support**	**Inter- rater**		**Comments/ Suggestions**
Interesting and enjoyable.	Using strategies were interesting and reading was enjoyable.	Raf 40 Haf 40 Agn 40 Rom 40	"Interesting learning and enjoyed using strategies." "Interesting text, enjoyed reading." "Interesting and enjoyable text reading." "Interesting topic and enjoyable reading."	**Agree** / / **(partially)**	**Disagree** / /	Does she mean that through metacognitive strategies?
Less time consuming	With the help of	Raf 40	Text A took more time to read as there was no	/		

	Metacognitive training it took less time to read.		training before it & Text B took less time to read as there was training before it.			
		Haf 40	No training was given before Text A. So, it took more time to read & Metacognitive training was given before Text B. So, it took less time to read.	/		
		Agn 40	I was confused what to do as no training was given before Text A. Thus, it took more time to read & Text B took less time to read because I was clear after receiving the training	/		
		Rom 40	Without any training, Text A took more time to read & Text B took less time to read with the help of training.	/		

Comprehension was faster	Metacognitive training aids in comprehension to make reading fast.	Raf 40	Text B was difficult from the first text but I overcome the difficulties faster because a training was given before Text B where no training was given in Text A	/		Why don't you say fluent instead of fast?
		Haf 40	Text B was difficult and longer but metacognitive training helped me to read the text faster	/		
		Agn 40	Text B was a little bit difficult but I could read faster with the help of training	/		
		Rom 40	Text B: I read very fast though it was difficult. It is because I knew what to do from the training	/		

Rater's Name: Dr. Sabreena Ahmed

Date: 6th May, 2021

Appendix G.4

Inter-Rater Reliability Calculation for Students' Interviews

Calculation of Inter-Raters' Reliability

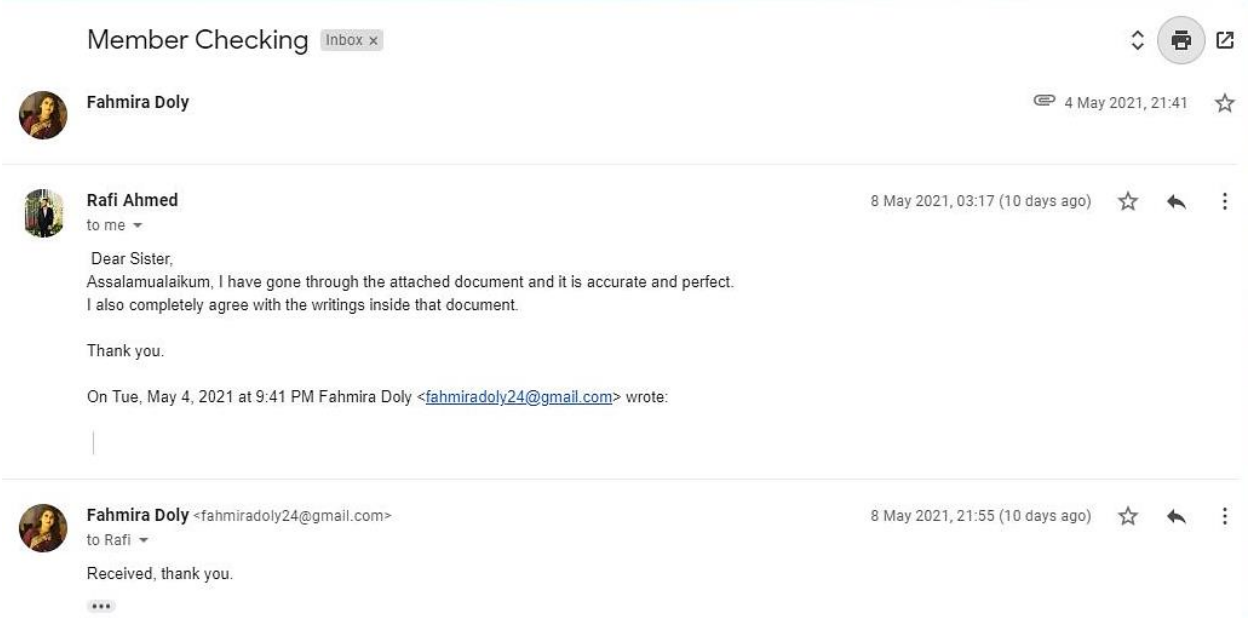
Percentage of agreement: (10/12) *100= 83.33% 12 stands for

[12= total number of verbal supports

10= inter-rater's agreement with the verbal supports]

Appendix H

Sample of E-mail for Member Checking



Appendix I

Audit Trail of the Study

Date	Activities	Records
25th September,2020	Approval of topic from the supervisor	Approval E-mail
15th February, 2021	Contacting the supervisor for the permission of data collection procedure	E- mail
March 01, 2021	Conducting the first reading session (text A) with think- aloud protocol	Zoom
March 05, 2021	Conducting the workshop on metacognitive strategies	Zoom
March 07, 2021	Conducting the second session of reading (text B)	Zoom
March 10, 2021	Analysing students' reading tests	Recording
March 12, 2021	Interviews of participants	Recording
March 18th, 2021	Transcribing interviews.	Recording
May 8th, 2021	Member checking	E- mail
May 10th, 2021	Contacting rater, sending documents for rating and receiving inter-raters' feedbacks.	E- mail & soft copy of the documents