



THE METACOGNITIVE AWARENESS OF READING STRATEGIES IN THAI EFL LEARNERS

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ABSTRACT

This paper explores the metacognitive awareness of reading strategies and the use of reading strategies among Thai EFL learners. Fifteen female university students who are in their fourth-year undergraduate study of English at a Thai university participated in this study. The study used a mixed-method approach. The Metacognitive Awareness of Reading Strategies Inventory (MARSI) was used to investigate the participants' metacognitive awareness involved in reading. Also, to insightfully assess and analyze the participants' reading strategies while they were reading the academic texts, a think-aloud protocol was used. The findings reveal that the participants' overall use of metacognitive awareness of reading strategies (Global, Problem-solving, and Support reading strategies) was at a high level (Mean = 2.85, S.D. = 0.31). Among 30 individual reading strategies, the most frequently used was underlining and circling (Mean = 3.60, S.D. = 0.74), which fall under Support Reading Strategy (SUP). On the other hand, it can be seen that the least frequently used reading strategy was asking self-questions (Mean = 1.93, S.D. = 0.70), under the category of SUP strategies. When considering the appropriate and effective use of metacognitive reading strategies in the think aloud protocol by the participants in successful reading comprehension, it is discovered that using background knowledge, previewing text, reading slowly and carefully, pausing to reflect on reading, taking notes while reading, and summarizing were frequently used the students.

Keywords: EFL learners, metacognitive, reading strategies, think aloud, Thailand.

1.0 INTRODUCTION

Reading is very important for learners who learn English as a foreign language (EFL) because they have to use it as a fundamental tool for all areas of learning. Nowadays, most Thai EFL learners tend to have difficulties reading English texts, especially the academic texts. The problems that Thai EFL learners encounter come from the traditional teaching method and learners themselves. Students are regularly taught to read and translate the text from English into Thai. In a traditional classroom, they can only learn from what the teacher knows. Additionally, many learners find reading difficult because they as struggling readers cannot simultaneously use both bottom-up and top-down processes (Aebersold & Field, 1997, as cited in Sinthopruangchai, 2011). Murtagh (1989) emphasizes that the most successful readers are those who can effectively use both bottom-up and top-down processes. Another reason why a

lot of learners struggle with reading is that they neither have enough lexicon knowledge nor syntactic knowledge (Chawwang, 2008). They do not have reading strategies and cannot apply these strategies to help them understand what they read. Thus, to read successfully, learners need to realize the use of a reading strategy that helps them tackle the problems while reading and their reading comprehension (Ismail & Tawalbeh, 2015). The strategy used in reading involves metacognition that basically refers to thinking about thinking or an awareness of what and how a reader knows (Samuels et al., 2005). Therefore, the reading strategy and metacognition are the major components leading to learners' successful reading

Many previous studies have shown the importance of reading strategy and metacognition in reading. Lin and Yu (2015) carried out a think-aloud study of reading strategies used by EFL college students reading Chinese (L1) and English (L2) texts. It was revealed that when students read an English text, they used various reading strategies more frequently and effectively in order to comprehend the text successfully. Wang (2016) also found that readers with higher language proficiency were aware of applying appropriate and effective reading strategies to deal with the problems throughout the reading process. They were more likely to become proficient readers because they comprehended what they read better than readers who could not use the reading strategies and failed to understand the text. Furthermore, Chamot (2009) states that learners who become aware of metacognitive strategies can monitor, regulate their learning processes, find solutions to achieve their reading tasks and evaluate themselves after the task completion. Griffith and Ruan (2005) cited Dole, Brown, and Trathen (1996) by asserting that readers who use their proper and specific strategies can metacognitively comprehend better than those who do not. When taking a closer look at university learners, Tavakoli (2014) reported that Iranian university EFL students with higher and frequent metacognitive awareness of reading strategy use tended to have greater reading ability. This implied idea agrees with Mokhtari and Reichard (2002) when stating that unskilled readers are relatively low in metacognitive knowledge.

In brief, learners can be skilled readers if they have the ability to control and monitor the reading strategies they use while reading and also if they have more awareness of doing the reading tasks. For example, they should have a purpose in mind when they read the text. They should know when to read carefully or when to pay less attention to unimportant ideas to help them understand the text (Mokhtari & Reichard, 2002). This study is aimed to answer these following research questions:

1. To what extent do Thai EFL learners use metacognitive awareness of reading strategies?
2. What reading strategies do Thai EFL learners use while reading academic texts?

2.0 LITERATURE REVIEW

2.1 Reading strategies and metacognition in reading

A number of research studies have examined how strategies affect students' reading comprehension. Reading strategies are defined as self-directed actions that readers are aware and manage to achieve reading goals, for example retrieving, regulating, and evaluating the information (Erler & Finkbeiner, 2007; Paris, Lipson, & Wixson, 1994, as cited in Wang, 2016). According to Jimenez, Garcia, and Pearson (1996, as cited in Lin & Yu, 2015), a reading

strategy refers to an action or a specific plan consciously done by a reader who is trying to make sense of the text. In addition, Zang, Gu, and Hu (2008, as cited in Wang, 2016) stated that the reading strategy that learners used depended on their levels of English proficiency. The students who often used reading strategies tended to have high proficiency level of English. They mainly used top-down reading strategies (e.g. using prior knowledge, predicting and integrating information, recognizing text structure, and using inferences,) and monitored their reading processes more frequently. On the other hand, students who used less reading strategies had low level of English proficiency because they only focused on bottom up strategies for example, rereading, translating, and looking up unfamiliar words.

The reading strategy use reflects the reading performance. Successful readers are considered good strategy users. As shown by studies on the reading strategies used by successful readers (Carrell, Pharis, & Liberto, 1989; Sheorey & Mokhtari, 2001; Wen, 2003, as cited in Pei, 2014), it is indicated that the reading comprehension tasks completed by successful readers happen at the metacognitive level. As a result, the importance of metacognitive awareness or metacognition in reading has become recognizable with participants in various settings.

Metacognition is related to thinking about learning processes, planning, monitoring, and evaluating one's thinking ability (Baker & Brown, 1984; Chamot & Kupper, 1989). Metacognition is associated with reading awareness and readers who have great metacognitive awareness tend to be more successful or skilled readers (Chamot, 1998, as cited in Hong-Nam & Page, 2014). Phakiti (2003) studied Thai university EFL students and revealed that those who often use metacognitive strategies gained significantly better reading performance. Kummin and Rahman (2010) agreed that students who were proficient in English frequently used various strategies. They reported that those who were less proficient had little knowledge of metacognition. They were unable to use appropriate and effective strategies to evaluate their own reading comprehension. Ismail and Tawalbeh (2015), who conducted a study about metacognitive reading strategies with 41 EFL non-English major students, found that the reading strategy use help readers solve their reading difficulties and increase their reading ability. Sheorey and Mokhtari (2001, as cited in Iwai, 2016) also stated that students with high English proficiency seemed to use a greater variety of strategies while reading English texts.

This study is based on Mokhtari and Reichard (2002), who designed and developed the Metacognitive Awareness of Reading Strategies Inventory (MARSI) as a tool for assessing readers' metacognitive awareness and strategy use while reading. The MARSI contained three categories or subscales: Global reading strategies (GLOB), Problem Solving strategies (PROB), and Support Reading Strategies (SUP). The global reading strategies include a set of intended reading strategies oriented toward analyzing text globally. Examples are setting purpose for reading, activating prior knowledge, predicting and previewing text. The problem solving strategies represent the strategies to solve problems when readers find texts difficult to comprehend. Examples include reading slowly and carefully, pausing to reflect on reading, rereading, visualizing information, and guessing meaning of unknown words. The support reading Strategies include functional strategies to help readers understand the text better. Examples are underlining, taking notes, paraphrasing, and using outside reference materials like dictionaries. With the aforementioned, the MARSI can help categorize readers into unskilled and skilled readers. According to the study of Saricoban and Behjoo (2017), the results indicated that the metacognitive awareness of reading strategies affected reading comprehension skills of Turkish EFL students. Successful reading students were more likely to use metacognitive reading strategies so that they could become skilled readers. They used

problem solving strategies the most, followed by global and support reading strategies. Panchu, Bahuleyan, and Seethalakshmi (2016) also conducted a study to explore the metacognitive awareness of reading strategies among the first year medical students in Indian. The findings revealed that all students used problem solving strategies the most compared to other subscales. As for the students with very good academic scores, they used support reading strategies more frequently than global reading strategies. Thus, the role of metacognitive awareness of reading strategies has an important role in the students' academic performance. Boyraz and Altinsoy (2017) carried out a study investigating university student teachers' use of metacognitive reading strategies. The study revealed that the student teachers used reading strategies differently depending on their levels. The students who were in senior and prep levels used metacognitive reading strategies at higher level. Based on the three subscales of MARS, problem solving reading strategies were commonly used among student teachers in all levels; however, the difference in the strategy use compared in terms of the student teachers' levels was not statistically significant.

2.2 Think-aloud protocols

Think aloud protocols have been rooted in cognitive science and psychology. Also, they have been used in second language reading studies to analyze reading processes. Due to the fact that reading is a silent and hidden process, the best way to access this process is using think-aloud protocols (Yoshida, 2008). Using this technique is powerful to explore the mental data and the researchers will be able to get insightful inner speech from readers (Afferbach, 2000 & Smith, 2006, as cited in Wang, 2016). Think aloud-protocols can be classified into retrospective and concurrent. In a form of retrospective think-aloud protocols, participants were asked to recall what they were thinking after completing the reading task; whereas, in concurrent think-aloud protocols, participants were allowed to say any words aloud and keep telling what they were thinking during the process of completing the task (Yoshida, 2008).

Many studies provide evidence that think-aloud protocols are valued as a way to elicit individual humans' thought process to study the readers' metacognitive awareness and strategy use in reading. Yayli (2010) conducted a study and analyzed EFL university students' cognitive and metacognitive reading strategies using think-aloud protocols. It revealed that the students with higher English proficiency used cognitive and metacognitive reading strategies more frequently than those with lower English proficiency. Jahandar et al. (2012) also conducted an experimental study about the think-aloud method in foreign language reading comprehension among upper-intermediate Iranian EFL learners. They found out that there was a positive effect of using think-aloud method with a view to improve learner's reading comprehension, thus learners who used various effective metacognitive reading strategies improved their reading comprehension.

3.0 RESEARCH DESIGN

3.1 Participants

As suggested by Creswell and Clark (2011), the purposive sampling can be used in both quantitative and qualitative research to identify and select appropriate participants who are knowledgeable and experienced with a topic based on the researchers' interest. Since the purpose of this study is about reading strategies of Thai EFL learners, it is important that the participants have sufficient knowledge of English. The strategy to seek participants is

maximum variation to describe the current study although the number of the participants is relatively small. In terms of the purposeful selection of the participants, it was possible to contact an instructor at the university to discuss their academic performance, and their English language backgrounds. This was very helpful to confirm that the participants' qualifications are appropriate for this study.

As a result, the participants were Thai EFL learners who were doing their fourth-year undergraduate study at that time in English major, the Faculty of Education in a university located in the central region of Thailand. Each of them was at the average age of 22. They have been studying English as a Foreign Language for more than 10 years. Based on their transcripts, they had some experience with only two English reading courses (English for Academic Purpose I and II) when they were in the second year. Having been in the field of Education, they have been familiar with reading educational academic texts, particularly research journals in language pedagogy and linguistics. The number of students in a typical class was seventeen (one male, and sixteen females). To establish the fairness and equity in research participation, one male needed to be excluded. There were sixteen females but one of them was not an EFL learner. She also needed to be excluded. Therefore, there were only fifteen females who participated in this study.

3.2 Research Instruments

3.2.1 Standardized tests of reading comprehension

In this study, a standardized test of reading comprehension in English was used as a tool to purposefully measure the participants' reading ability. Only the reading section in the test was adapted from Barron's Paper-Based TOEFL (PBT) model test (Sharpe, 2011). The participants were assigned to read three passages and choose the best alternative for each item. The passages are expository texts which allow the participants to use various reading strategies. Each passage with the average word count of 250 is followed by ten multiple-choice items. Each item has four alternatives which one is the correct answer. The total test score is 30. The participants must finish 30 questions within 50 minutes.

3.2.2 Questionnaires on metacognitive reading strategies

In this study, the Metacognitive Awareness of Reading Strategies Inventory or MARS (Mokhtari & Reichard, 2002) was used to explore the use of various metacognitive strategies in English reading comprehension among the participants. The MARS was adopted and adapted. Then it was translated in Thai, which is the participants' first language in order to avoid language barriers and get the accurate information. The 30 statements under the three reading categories were adopted and translated in Thai, but the Likert scale was adapted. The original instrument was a four-point Likert scale, ranging from 1 ("Never or Almost never") to 4 ("Always or Almost always"). To enhance the clarity of the response options, it was reduced to a four-point Likert scale, 0 ("Never") to 4 ("Always"). The mean scores were categorized into three levels of reading strategy use; high (≥ 2.68), Medium (1.34-2.67) and low (≤ 1.33).

Before using the questionnaires, a pilot study with randomly selected undergraduate students who were studying in the fourth year majoring in English, but in another Thai university was carried out to determine the clarity of the instructions and statements in the questionnaires. The internal consistency of reliability coefficient is determined by Cronbach's

alpha. Among 30 items of all three reading strategies, the Cronbach's alpha is 0.896 indicating the high internal consistency in the items of the metacognitive awareness of reading strategies. This instrument can be used to assess the metacognitive awareness of reading strategies of Thai EFL learners well.

In each questionnaire, it has two parts: the demographic data, and the adapted Thai version of MARS. With regard to the demographic data, it aims to draw the participants' background information containing age, undergraduate major at the university, year they are studying, number of years they have been studying English, and previous grades of reading courses they took. As for the adapted Thai version of MARS, there are 30 items that can be divided into three categories or subscales of reading strategies: global reading strategies or GLOB, problem-solving strategies (PROB), and support reading strategies (SUP). The participants were required to mark the reading strategies they use on a 4-point Likert scale ranging from 0 ("Never") to 4 ("Always").

3.2.3 Academic texts

In this study, three academic texts in English were used. Since the participants have been accustomed to reading academic research journals in English language teaching and linguistics, the texts used were only the abstracts excerpted from the research. However, they still represented and summarized the major aspects of the entire research papers in a prescribed sequence, so the participants could assess the overall important information in the research papers. All the texts used in the think-aloud session were suitable for the reader's age and college level.

The first text was an abstract on 'Task-based language teaching: An empirical study of task transfer from SAGE online publishing.' It had 194 words in length. The second text was a 152-word abstract about 'Effects of task repetition on learners' attention orientation in L2 oral production'. It was taken from the same online source as the first text. The first two texts were used for demonstrating and training how think-aloud protocols work. The last text discussed the language teaching which the topic was on 'Communicative Language Teaching and Its Impact on Students' Performance'. It consisted of 184 words taken from online Journal of Educational and Social Research MCSER Publishing. This text was used to collect the data during the actual think aloud session.

3.2.4 Think-Aloud Protocols

A think-aloud protocol was used to analyze if the participants comprehended the texts they were reading and what strategies they used while reading the academic texts. In think-aloud session, there were divided into three phases: a demonstration phase, a practice phase, and an actual study. The participants were only recorded while reading the last text in the actual think-aloud session (the other two texts were used for demonstration and practice periods). The primary data from the think-aloud session were transcribed and resulted in analytically coding for individual insights and themes based on the metacognitive reading strategies.

3.3 Data Collection Procedures

The participants were scheduled to meet during the class hours after cooperating with the university instructor at the Faculty of Education. In two-hour class period, the participants were explained the nature of this study and the tasks they were going to perform. First, they were

asked to complete the standardized tests of reading comprehension. Then, they were asked to do the questionnaires. After completion, the tests and the questionnaires were all collected.

With regard to the think-aloud sessions, only four participants who gained the highest and lowest scores from the standardized tests of reading comprehension were selected. All the selected participants then gave their consent to participate in the study. They were informed that the session would be divided into three main phases: a demonstration period, a practice period, and the actual study. In a demonstration period, the participants were exposed to the think-aloud procedures. The participants were told that they should express what they were thinking while reading the academic texts for comprehension. They were allowed to make notes and use online dictionaries if they wished. Then, it was shown to them how to do the think-aloud using the first academic text about 'Task-based language teaching: An empirical study of task transfer.'

After that, the participants could ask questions about think-aloud protocol while reading for more accurate procedures. Then, they were given the second text about 'Effects of task repetition on learners' attention orientation in L2 oral production' to practice thinking out loud. After the practice phase, the participants were given the text about 'Communicative Language Teaching and Its Impact on Students' Performance'. They were given time to verbalize while comprehending the text. They were also able to make additional comments and recall the ideas of the text.

3.4 Data Analysis

According to the standardized test of reading comprehension, the scores collected from all the participants were calculated to identify their level of reading proficiency. The participants who gained scores greater than or equal to 24 (80 percent of the test) were categorized into a high level of reading ability while those who gained scores less than 15 (50 percent of the test) were in a low level of reading ability.

Regarding the data obtained from questionnaires responded by the participants, the overall and the individual levels of reading strategy use in the three main categories (GLOB, PROB, and SUP strategies) were analyzed by calculating the means and the standard deviation to examine the participants' metacognitive awareness of reading strategies. To interpret the scores averages, the levels of usage were set up into three levels based on the questionnaires, which were adapted and translated in Thai with modifying the averages into 4-point Likert scales. The three levels of reading strategy use are high (a mean of 2.68 or higher), medium (a mean of 1.34 - 2.67), and low (a mean of 1.33 or lower).

In the analysis of the think-aloud protocols, the data obtained were coded and classified into the three main categories of reading strategies described in Mokhtari and Reichard's (2002) MARSI.

4.0 ANALYSIS AND DISCUSSION

4.1 The participants' overall use of metacognitive awareness of reading strategies

The results obtained for the first research question: To what extent do Thai EFL learners use metacognitive awareness of reading strategies?

Table 1: Participants' overall use of metacognitive awareness of reading strategies

Type	Mean	S.D.	Level of Usage
Global reading strategies (GLOB)	2.94	0.40	High
Problem-solving strategies (PROB)	2.99	0.38	High
Support reading strategies (SUP)	2.59	0.37	Medium
Overall reading strategies	2.85	0.31	High

As shown in Table 1, it is indicated that the participants used problem-solving strategies or PROB the most (Mean = 2.99, SD = 0.382), followed by global reading strategies or GLOB (Mean = 2.94, SD = 0.40), and then support reading strategies or SUP (Mean = 2.59, SD = 0.37). The participants used PROB strategies and GLOB strategies at a high level, and SUP strategies at a medium level respectively. With regard to the overall reading strategy use, it is discovered that the participants used metacognitive awareness of reading strategies at a high level (Mean = 2.85, S.D. = 0.31).

Table 2: Participants' use of each reading strategy

Type	Reading strategy	Item	Mean	S.D.	Level of Usage
GLOB	Previewing text	4	3.40	0.99	High
	Using context clues	19	3.33	0.72	High
	Using typographical aids	22	3.27	0.70	High
	Using background knowledge	3	3.20	0.56	High
	Using tables, figures & pictures	17	3.13	0.52	High
	Checking understanding	25	3.13	0.52	High
	Guessing what material is about	26	3.07	0.59	High
	Skimming to note	10	3.00	0.76	High
	Deciding what to read	14	2.87	0.92	High
	Setting purpose for reading	1	2.60	0.83	Medium
	Analyzing and evaluating	23	2.47	0.74	Medium
	Checking if guesses are right	29	2.53	0.74	Medium
	Checking if text content fits purpose	7	2.27	1.03	Medium
PROB	Re-reading	27	3.40	0.74	High

	Getting back when distracted	11	3.20	0.68	High
	Guessing unknown words	30	3.20	0.68	High
	Visualizing information	21	3.13	0.74	High
	Reading slowly and carefully	8	3.00	0.76	High
Type	Reading strategy	Item	Mean	S.D.	Level of Usage
	Adjusting reading speed	13	3.00	0.93	High
	Pausing to reflect on reading	18	2.73	0.88	High
	Paying closer attention when facing text difficulties	16	2.27	0.88	Medium
SUP	Underlining and circling	12	3.60	0.74	High
	Going back and forth to find relationships	24	3.00	0.76	High
	Paraphrasing	20	2.93	0.70	High
	Using dictionaries	15	2.73	0.80	High
	Discussing reading with others	9	2.67	0.90	Medium
	Summarizing	6	2.33	0.90	Medium
	Taking notes while reading	2	2.13	0.99	Medium
	Reading out loud	5	2.00	0.66	Medium
	Asking self-questions	28	1.93	0.70	Medium

Table 2 shows the participants' use of each reading strategy. When looking at 13-item global reading strategies (GLOB), 9 strategies were at the high level (69.23%) and 4 strategies were at the medium level of usage (30.77%). This indicates that the participants monitored and managed their reading processes carefully. The most carefully planned strategies used by the participants included previewing text (Mean = 3.40, S.D. = 0.99), using context clues (Mean = 3.33, S.D. = 0.72), using typographical aids (Mean = 3.27, S.D. = 0.70), and using background knowledge (Mean = 3.20, S.D. = 0.56). On the other hand, the least GLOB strategies used by the participants at the moderate usage level were checking if guesses are right or wrong (Mean = 2.53, S.D. = 0.74), and checking if text content fits purpose (Mean = 2.27, S.D. = 1.03).

With regard to 8-item problem-solving strategies (PROB), seven strategies were used highly (87.50%) in order to solve difficult texts for better understanding. The strategies used were re-reading (Mean = 3.40, S.D. = 0.74), trying to get back on track when distracted (Mean = 3.20, S.D. = 0.68), guessing unknown words (Mean = 3.20, S.D. = 0.68), visualizing

information (Mean = 3.13, S.D. = 0.74), reading slowly and carefully (Mean = 3.00, S.D. = 0.76), adjusting reading speed (Mean = 3.00, S.D. = 0.93), and pausing to reflect on reading (Mean = 2.73, S.D. = 0.88). However, another one strategy used moderately (12.50%) was paying closer attention when the participants face text difficulties (Mean = 2.27, S.D. = 0.88). This was considered as the least used PROB strategy.

Apart from GLOB and PROB strategies, 9-item support reading strategies (SUP) were reported. Four strategies were used at the high level (44.44%). The participants reported that the strategies they used highly included underlining and circling (Mean = 3.60, S.D. = 0.74), going back and forth to find relationships (Mean = 3.00, S.D. = 0.76), paraphrasing (Mean = 2.93, S.D. = 0.70), and using dictionaries (Mean = 2.73, S.D. = 0.80). The other strategies they used were at the medium level (55.56%) and they were considered as the least SUP strategies. The strategies contained: discussing reading with others (Mean = 2.67, S.D. = 0.90), summarizing (Mean = 2.33, S.D. = 0.90), taking notes while reading (Mean = 2.13, S.D. = 0.99), reading out loud (Mean = 2.00, S.D. = 0.66), and asking self-questions (Mean = 1.93, S.D. = 0.70).

When considering 30 individual reading strategies, 20 strategies (66.67%) fell into the high level, and 10 (33.33%) were reported to be at the medium level. None of the reading strategies were at a low level. Although the result of overall reading strategy use was a problem-solving strategy, the result of individual reading strategies was different. The most frequently used one was underlining and circling (Mean = 3.60, S.D. = 0.74) categorized into SUP strategies. The second rank was re-reading (Mean = 3.40, S.D. = 0.74) categorized into the problem-solving reading strategies, including previewing text (Mean = 3.40, S.D. = 0.99) in GLOB strategies. The third rank of reading strategy use was using context clues (Mean = 3.33, S.D. = 0.72) in GLOB strategies. On the other hand, it can be seen that the least frequently used reading strategy was asking self-questions (Mean = 1.93, S.D. = 0.70)

4.2 The participants' use of metacognitive awareness of reading strategies while reading academic texts

The results obtained for the second research question: What reading strategies do Thai EFL learners use while reading academic texts?

Only four participants who gained highest and lowest scores from the standardized comprehension test were chosen to assess insightful data about what strategies the participants used while they were reading the academic texts. All of the strategies used by four participants during the think-aloud session were categorized into three subscales: global reading strategies, problem solving strategies, and support reading strategies.

From the analyses, two participants with high English proficiency repeatedly used a set of effective strategies. The strategies they used repeatedly based on the GLOB strategies were: (1) using background knowledge, (2) previewing text, (3) deciding what to read or what to ignore, (4) using context clues, and (5) guessing what material is about. The strategies they used concerning the PROB strategies included: (1) reading slowly and carefully, (2) pausing to reflect on reading, (3) re-reading, and (4) guessing unknown words. Regarding the SUP strategies, the strategies used frequently were: (1) taking notes while reading, (2) summarizing, (3) underlining and circling, and (4) paraphrasing. The two participants tended to preview the text and tried to focus on the main ideas by underlining and circling them. They tried to use the background knowledge to help them understand the relevant topic of the text. They read and thought along while reading. When they found that they did not understand the important words

or ideas, they paid more attention and read again. They stopped to think and tried to summarize or paraphrase in their own words.

When analyzing the data from the other two participants with low English proficiency, the GLOB strategies they used similarly were: (1) previewing text, and (2) guessing what material is about. Based on the PROB strategies, the participants used the strategies: (1) re-reading and (2) trying to get back on track when distracted. The participants also frequently used the SUP strategies that included: (1) taking notes while reading, (2) reading out loud, (3) underlining and circling, and (4) using dictionaries. Although the participants tried to preview the text, they focused on word meaning. When they found unknown words or phrases, they tried to re-read. However, they ended up looking up the words in the dictionaries.

4.3 Discussion

The results of this study were consistent with some relevant studies that stated the metacognitive awareness of reading strategies by using MARSII. The findings of Mokhtari and Reichard (2002) indicated that the overall reading strategy use among the participants was at the medium level and the order of the strategy use was problem solving, followed by global strategies, and support reading strategies. Furthermore, according to the studies conducted by Panchu, Bahuleyan, and Seethalakshmi (2016) and Boyraz and Altinsoy (2017), the results support the present study that EFL students used problem solving strategies the most. The students with good and very good academic scores tended to have metacognitive awareness of reading strategies. However, when looking at the overall reading strategy use reported in this present study, it was at the high level because the criteria of the average score of the questionnaires had been modified.

When considering the fifteen participants' overall English proficiency level from doing the standardized tests, none of them gained less than 50 percent (two participants who gained the lowest scores of the group were still chosen.) Because they were Thai EFL learners in a fourth-year study in English major, the Faculty of Education, they could pass the test. In addition, although they used to study only two reading courses in the university, it can be assumed that the participants improved metacognition in reading by themselves through their long process of learning experiences during the university study.

According to the data from think-aloud protocols, the results were in line with Zang, Gu, and Hu (2008, as cited in Wang, 2016). They stated that learners' reading strategy use depended on their English proficiency levels. Learners who had higher proficiency levels of English used reading strategies more effectively. Two of the participants who had high English proficiency tended to mainly begin reading with their prior knowledge, and break down small elements to increase comprehension. They also appeared to be skilled readers because they used top-down reading strategies and they had better higher proficiency in English, including the content area knowledge and vocabulary. Furthermore, not only did the participants use top-down strategies, but they also used some of the bottom-up strategies such as re-reading, and guessing unknown words. By this, it supports what Murtagh (1989) stated that readers who combined top-down and bottom-up strategies are considered the most successful readers.

On the other hand, the other two participants who gained the lowest scores in the group seemed to focus more on word recognition when they tried to preview the text first. The reason why they failed to understand the text was in line with Chawwang (2008) that they lacked academic vocabulary to help comprehend the text. Also, they were not exposed to the reading

text given. This indicates that they did not have enough background knowledge to build up their comprehension. Apparently, they used bottom-up reading strategies.

The aforementioned results were in line with the findings of Ismail and Tawalbeh (2015). They mentioned that learners needed to be able to use the reading strategies to help cope with difficult texts and find solutions for successful comprehension. The participants who frequently used appropriate and effective strategies can comprehend the text better; therefore, in this current study, two of the participants with high proficiency of English tended to have greater reading ability. This supports the results of Chamot (2009), Griffith and Ruan (2005), and Tavakoli (2014).

According to the results obtained from the questionnaires and the think-aloud protocols, it is suggested that the most frequently used strategies and the effective use of metacognitive reading strategies that the participants used while reading were: (1) previewing the text to make predictions, (2) underlining and circling to help remember the key information, and (3) re-reading for more understanding. However, one of the problems among the participants was unknown vocabulary. In fact, vocabulary influenced their reading comprehension, but most of them tried to use the strategies to guess difficult words from the contexts. If they thought the words did not affect their interpretations while reading, they decided to ignore them.

5.0 CONCLUSION

As stated at the beginning, the participants were mostly familiar with the traditional teaching reading pedagogy. The participants who were less successful in reading mainly focused on individual word meaning so that they could understand the text. However, when they studied in a university, they could not avoid a large amount of reading materials, especially academic texts. This can cause difficulties for the participants or EFL learners. Thus, the conclusion is that it would be beneficial for both learners and language teachers to promote metacognition in reading. As discussed previously that the participants had hardly ever been trained to become skilled readers because they were exposed to only a few reading courses. Besides, teachers might not plan or provide their learners opportunities to interact with the texts in meaningful instructions or practical contexts. The EFL learners can improve if teachers help their learners identify their metacognitive awareness of reading strategies and use multiple strategies simultaneously to become skilled or successful readers.

Due to the fact that the study only involved a small number of single gender undergraduates in a Thai university, the participants of this study could not reflect the whole population of Thai EFL undergraduate students; in other words, the findings of this study might not be able to be generalized to an entire population. Therefore, increasing the number of participants from both genders (males and females), representing other majors or programs in either public or private universities in Thailand, could expand the findings as different samples from other universities may provide different results.

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