

Metacognitive In Reading: The Awareness of Less Proficient EFL Learners on Reading Strategies

Delti Yulita^{1,*}, R D Safrina²

^{1,2} Universitas Pendidikan Indonesia, Bandung 41143, Indonesia 1

¹yulitadelt@gmail.com;*, ²safrina@upi.edu

* corresponding author

Received: 3rd June 2019

Revised: 3rd August 2019

Published: 18th October 2019

Abstract

This article addresses the profiles of metacognitive reading strategies used by less proficient EFL learners in one public university in the east of Indonesia. Data were collected from 54 undergraduate students using MARS (Metacognitive Awareness Reading Strategy Inventory) questionnaire. The questionnaires were analyzed using descriptive and inferential statistics which revealed the level of metacognitive reading strategies used by the less proficient EFL students. The analysis found that there is a high level of using Support Strategy (M=3.92, SD=1.22) and followed by Problem Solving Strategy (M=3.91, SD=1.1) and a medium level of using Global Strategy (M=3.39, SD=1.05). The finding revealed the lack of reading strategy instruction that concern the global analysis of the text. The results suggest that the less proficient EFL students need to generate their metacognitive level on global analysis strategies to improve their reading comprehension.

Keywords: Metacognitive, Reading Strategy, Less Proficient

Introduction

The research on reading strategies had been revealed the complexity of the reading process. The process reading is known for its complexity involving a mental process to comprehend the text. This mental process required the ability to decode the meaning of the sentences, getting the main ideas of the text, and find the relationship among ideas in the text. According to Denton, et.al, (2014), to comprehend the meaning of the text, the readers have to integrate their prior information in the text and their background knowledge to build the mental mapping. Mental mapping is needed to be monitored and evaluated during the reading process.

Some previous research gave more attention to the cognitive and content-oriented analysis instead of on how the learners conceptualized the comprehension process, such as meaning-making, beyond the technical and structural procedures (Zhang, 2001). Then, Zhang elaborated the perspective about reading strategies that there is a need to pay more attention to abstracts process strategies which the learners struggle consciously to comprehend the text. This abstract process relates to the awareness of the learners during reading. And,



this awareness assists the learners to control and monitor their behavior, thought, suggestion and technique to facilitate their comprehending towards the texts. That ability to control and monitor is regarded as a metacognitive strategy (Ahmadi, et.al, 2013; Cook, 2001; Oxford, 1990). Thus, the students and teachers' awareness of metacognitive reading strategies are the central points in the reading and learning process

The significance of metacognitive reading strategy is allowing the learners to develop their high order thinking skills. As it has been stated in National Curriculum Objective that the needs to increase students' competence to be highly proficient readers, investigating the students' profile, especially in reading strategies are crucial to measure the students' competence in reading. By knowing the students' metacognitive awareness in reading, teachers and educators could create and design reading activities and classroom projects that could help students to raise their metacognitive reading awareness. Thus, this study is exploring the differences and tendency of less proficient students on using metacognitive reading strategies. Previous studies indicated low ability learners that used Problem-Solving strategy as part of metacognitive categories in reading English text. However, there is no depth analysis of why this strategy is preferred by the less proficient learners and how the less proficient differ from each category used in the metacognitive reading strategy. It is aimed to find out how the students process the reading comprehension along with how they overcome the difficulties of the text. Importantly, it reveals the level of students' metacognitive process to get some improvement in reading comprehension.

Metacognitive reading strategies are derived from metacognition in learning process proposed earlier by Flavell (1977). They got recognition by Oxford and they are being classified as one of the six language learning strategies (see Rubin, 1987; Oxford, 1990; Chamot, 1994). Flavell (1977, 1981, 1987) defined metacognition as thinking about thinking. It consists of knowledge of cognition, and regulation of cognition. Knowledge of cognition covers declarative knowledge (what), procedural knowledge (how), and conditional knowledge (why and when). While the regulation of cognition covers the process of planning, monitoring, and evaluating the learning process. Additionally, metacognitive strategies also involved readers' deliberate mental behaviors for directing and controlling their cognitive strategy processing for successful performance (Phakiti, 2003). In 2009, Baker & Bell deepened that metacognitive strategies are related to how a person thinks and learns including three skill techniques: planning, monitoring, and evaluation.

The term metacognition is derived from the psychological field that refers to a person's cognition about cognition. The knowledge of metacognition was taken by Flavell (1977) to English language learning that focuses on the ability and awareness to rule the thinking process in learning the second or foreign language. Furthermore, metacognition is proposed as one of the learning strategies in reading as a way to regulate and monitor the cognition process (Zhang, 2001, Pammu, 2014).



The benefits of metacognitive in reading are to build self-regulation and foster independence. In other words, metacognitive considers as mental behavior for directing and controlling cognitive strategy to achieve the objectives in reading. The development of metacognition is created by Efklides (2008) by reconstructing Flavell's framework of metacognition aspects to be metacognitive knowledge, metacognitive experiences, and metacognitive skills. Metacognitive knowledge is relating to declarative knowledge in which knowledge about ourselves as learners. It involves the learners' recognition of their strength and weakness along with the factors influencing their learning. This knowledge consists of the knowledge of task and features, the knowledge of strategy in learning, and the knowledge of goals to be achieved. Metacognitive experiences are relating to awareness, feelings, and efforts when facing a task or processing the information. While metacognitive skills are relating to the procedural knowledge of the conscious effort to know how and when to use the strategies.

Some research has proven the use of metacognitive to increase reading comprehension and change reading behavior. Nash-Ditzel (2010) found how metacognitive reading strategies had successfully changed the students' reading behavior by transforming them to be self-regulated readers. The current study by Zhussupova & Kazbekova (2016) suggested that the use of metacognitive reading strategies could enrich students' knowledge of reading strategies and improve their critical skills in evaluating the reading process. In conclusion, the metacognitive reading strategy has become the effective strategy to improve reading comprehension in the scope of foreign language learning (Mokhtari, 2001; Zhang, 2001; Vianty, 2007; Karbalei, 2010; Mehrdad, 2012).

Mokhtari and Reichard (2001, 2002) developed an inventory to measure the metacognitive level in reading. They categorized the metacognitive reading strategies into global strategy, support strategy, and problem-solving strategy. The studies using the inventory by Mokhtari and Reichard (Mehdard, 2012; Karbalei, 2010; Vianty, 2007; and Zhang, 2001) confirm that each individual has differences in using these strategies. Abidin Pammu (2014) found that proficiency affects the choice of strategies used. The study has shown the less tertiary proficient learners are not clear and weak on strategic knowledge. This result is supported by the previous study by Mehdard (2012), Karbalei (2010), Vianty (2007), and Zhang (2001) confirm that the high scorers had more clear metacognitive strategic knowledge than the low scorers.

Method

This study applied quantitative and descriptive analysis to find out the metacognitive strategy used by the less proficient learners. The participants are 54 undergraduate students in one public university in the east part of Indonesia. The Metacognitive Awareness Reading Strategy Inventory (MARSII) by Mokhtari and Reichard (2002) was used to measure students' awareness and use of reading strategies in reading academic or school-related materials. The questionnaire consists of three sub-scales of reading strategies which are Global Reading Strategies, Support Reading Strategies, and Problem-Solving Strategies. Global Reading Strategies focuses on the early setting of reading goals or before the



reading act. Support Reading Strategies focuses on the use of a support mechanism or tools such as the use of dictionaries and references. Problem-Solving Strategies focuses on the strategies used by the readers when the reading text become difficult such as reread the information and adjusting the reading speed. Fifty-four EFL students in one public university in the east of Indonesia were selected as the sample for the study. The students were considered as less proficient learners as their reading performance during reading class and the obtained score during university entrance. The data gathered were analyzed by using the Likert scale from 5 as always, 4 as often, 3 as sometimes, 2 as seldom, and 1 as never. The finding was analyzed by inferential statistics the metacognitive level on the three sub-scales inventory, which are global strategy, support strategy, and problem-solving strategy.

Findings and discussion

The findings revealed the differences of strategies used by the less proficient learners into three sub-categories, which are global strategy, support strategy, and problem-solving strategy. Overall, the statistic shows the high use ($M=3.74$) of metacognitive reading strategies by the less proficient learners which varies within each category. The statistic of the data can be seen in the table below.

Table 1. Distribution of Metacognitive Reading Strategies into Three Sub-Categories

Strategy	Mean	SD
Global Strategy	3.39	1.22
Support Strategy	3.92	1.10
Problem-solving Strategy	3.91	1.05

From the table above, it can be obtained that support strategy is the most frequently used by the less proficient students. It shows that the students need aid in comprehending the texts such as using a dictionary, taking notes, or underlining the text to better understanding. The second most used strategy is problem-solving strategy which related to students' actions and techniques while reading the text. The students usually used the problem-solving strategy to deal with difficulties while working with the text such as re-reading the text to get a better understanding, guessing the meaning of unknown words, and adjusting reading speed. The least strategies used is global strategy that includes having a purpose in mind, previewing the text, and using typographical aids along with tables and figures.



Table 2. The Result of Metacognitive Reading Strategies Used by Less Proficient Learners

No	Strategies	Mean	SD
1	I have a purpose in my mind when I read	4.12	1.01
2	I think about what I know to help me understand what I read	3.54	1.18
3	I preview the text to see what it's about before reading it	3.59	1.14
4	I think about whether the content of the text fits my reading purpose	3.80	1.03
5	I skim the text first by noting characteristics like length and organization	3.31	1.08
6	I decide what to read closely and what to ignore	3.39	1.10
7	I use tables, figures, and pictures in text to increase my understanding	2.31	1.16
8	I use context clues to help me better understand what I'm reading	3.64	1.21
9	I use typographical aids like boldface and italics to identify key information	2.87	1.35
10	I critically analyze and evaluate the information presented in the text	2.96	1.09
11	I check my understanding when I come across conflicting information	3.89	0.94
12	I try to guess what the material is about when I read	3.05	1.20
13	I check to see if my guesses about the text are right or wrong	3.62	1.17
14	I take notes while reading to help me understand what I read	4.52	0.66
15	When text becomes difficult, I read aloud to help understand what I read	3.70	1.34
16	I summarize what I read to reflect on important information in the text	4.02	1.02
17	I discuss what I read with others to check my understanding	3.5	1.16
18	I underline or circle information in the text to help me remember it	4.37	1.01
19	I use reference materials such as dictionaries to help me understand what I read	4.52	0.72
20	I paraphrase (restate ideas in my own words) to better understand what I read	3.76	0.93
21	I go back and forth in the text to find relationships among ideas in it	3.76	1.04
22	I ask myself questions I like to have answered in the text	3.11	1.06
23	I read slowly but carefully to be sure I understand what I'm reading	4.09	1.05
24	I try to get back on track when I lose concentration	4.18	0.97
25	I adjust my reading speed according to what I'm reading	3.77	1.07
26	When text becomes difficult, I pay closer attention to what I'm reading	3.74	1.07
27	I stop from time to time and think about what I'm reading	3.76	0.86
28	I try to picture or visualize information to help remember what I read	3.72	1.02
29	When text becomes difficult, I reread to increase my understanding	3.94	1.23
30	I try to guess the meaning of unknown words or phrases	4.09	0.99



Table 2 shows the means of strategies used ranged from a high of 4.52 to a low of 2.31 with overall $M = 3.69$. It is indicating a high use of reading strategies by the less proficient students. The result obtains that 23 of 30 strategies fell in the high usage (mean 3.5 or above), 5 strategies fell in the medium usage group, and the remaining 1 strategy had to mean below 2.50. The interpretation of the strategies used by less proficient students are explained within three sub-categories of metacognitive strategy as follows,

Global Strategy

Global reading strategy is a strategy that focuses on the whole analysis of the text before reading the text carefully and detailly. In this strategy, the reader set the purpose of their reading, previewing the text, and setting what to read and what to ignore. The less proficient group performed on the medium level of global strategy with an overall mean score $M = 3.39$ and standard deviation of $SD = 1.22$. It is confirmed that less proficient learners reach the medium level of global analysis preference towards the texts they are reading. Largely, the students are highly user of some strategies in global analysis such as having a purpose when they read ($M = 4.12$) which indicate a positive approach towards their reading strategy. It can be said that the learners are aware of why they are reading and the goal they want to achieve during and after reading. The strategy is followed by fitting the content of the text to their reading purpose. Interestingly, the less proficient learners are quite having a clear picture that the reading should be matched with their purpose and they do the checking their understanding especially when there is conflicting information.

Furthermore, the result shows that the less proficient learners have a high score on previewing the text to capture the content of the text ($M = 3.59$) and they think about their background knowledge and using context clues to help them understand the text. In other words, the learners already know how to deal with the whole text and aware of the importance of their knowledge to help their reading comprehension.

However, they make little preference in using tables, figures, and pictures to increase their understanding ($M = 2.3$) as well they rarely use typographical aids like boldface and italics to identify key information ($M = 2.8$). It seems that the less proficient learners are still struggling with their technical matter that they need more practice to use aids provided in the text to get a better understanding and make them easier to get the context clues.

Moreover, students also do not often do a critical evaluation of the information presented in the text ($M = 2.96$). The critical evaluation is essential in reading that leads the reader to be a critical thinker. The high skilled reader performs a critical evaluation as a part of critical reading when they absorb the information in the text and compare it to their knowledge and any reference materials. This strategy enables the reader to enhance their high thinking order skill and improve their cognitive process during reading activities. At the end, the



reader becomes more self-regulated that has been the purpose of metacognition in reading.

Support Strategy

It is revealed that the less proficient students are at the high level of using support strategies. Support strategies are dealing with outside materials or aids to support the reading process and comprehension. The highest level of using support strategies are taking notes while reading and use reference materials such as dictionaries while reading (both $M=4.51$). It shows that the less proficient learners depend on the dictionary to help them understand the unknown words. Regarding their low-level reading process, it can be said that they still have low lexical access and do not have automatic word recognition.

Students also read aloud when the text become difficult and summarize their reading. Overall, the mean score of using support strategies is 3.917 which is the highest among other strategies. It is proven that students are still concern about the technical process such as linguistic and syntactic knowledge that placed them on the lower-level processes of working memory in reading (Grabe&Stoller, 2011).

In addition to word recognition, by using more time looking at the dictionary, the less proficient learners will slowly analyze a word into component sounds and blend them. It means that a great deal of time and capacity is consumed and make the task of comprehending the word and integrating the meaning of the word will take longer. A fluent reader can take in and store words together so that the basic grammatical information can be extracted to increase comprehension. It is also related to working memory where it is crucial to get through automatic word recognition. Once the working memory is well functioning, the reading comprehension process gets faster and comprehension become easy to maintain. This finding supports the previous hypothesis stated that less proficient learners read the different text in the same manner and paid little attention to the meta-analysis of text and rely more on decoding and linguistic knowledge.

Problem-solving Strategy

Problem-solving strategy is oriented on the solution when the comprehension problem arises. This strategy occurs as the reader find difficulties and obstacles during the reading process, for examples adjusting the reading speed, guessing the unknown words, and paying closer attention to the text. The result of the problem-solving strategy usage is slightly below the support strategies with a mean score of 3.914. It is considered also at the high-level strategies used by the students. The most frequent strategies used is that students often lose concentration and they always try to get back on track ($M=4.18$). It implies that the concentration is one of the problems arises during reading and the high level of this strategy means that the high level of the problem occurs. Moreover, the next frequent strategy is reading slowly and carefully to make sure the text understanding ($M=4.09$). It is also correlated with other strategies which are also in the high level of usage, those are reading back and forth and try to stop tie to time. Significantly, the less proficient choose to reread the text as the difficulties arise to help them get a better comprehension.



Correlated with the little preference on using a picture as a tool aids in global strategy, in problem-solving strategy the less proficient learners also rarely use the picture or visualize information to help them remember what they read. However, there is an interesting fact that compares to the global and support strategy; the less proficient learners mostly use the problem-solving strategy at the highest level. Like most of the high skilled readers on the previous research, the less proficient learners depend and more aware of solving problem or repair strategies when text becomes difficult to read.

The result from three sub-categories above revealed that the less proficient learners attribute the importance of metacognitive reading strategies by showing the high degree of strategies used. The possible force driving the students to use metacognitive strategies is their reading ability and level of proficiency. Researchers had agreed (Carrell et al, 1989, Mokhtari, 2001) that readers can compensate for a lack of English proficiency by increasing the use of reading strategies to get better understanding and comprehension. It has been mentioned in previous research that there is a positive relationship between metacognitive reading strategies and reading comprehension. However, the next question is arising from this study, is it guarantee that if the high level of metacognitive reading strategies implies the high level of reading ability? If it is so, how come the less proficient learners are considered as the high level of strategies usage but have a low ability in reading?

To answer those questions, the meta-reading needs to be constructed. As explained by Grabe and Stoller (2011) that there are two levels of reading that relates to the working memory process, they are the lower-level processes and the higher-level processes. The lower level processes are including lexical access, syntactic parsing, and semantic proposition formation. The higher-level processes are text model of comprehension, situation model of reader interpretation, background knowledge use and inferencing, and executive control processes. It is stated that higher-level processes are more closely represent typically as reading comprehension and fluent readers might have already come to both lower level and higher-level process of reading. This study found that less proficient students are struggling in lower level processing. To be a fluent reader, the students need to practice more the higher level of reading processes such as critical evaluation, checking and associating their background knowledge, and use the situation model.

As it has been stated, the complexity of the reading process needs to be improved by using metacognition as the way to control the readers' mind. Learners metacognitive reading strategy including the thinking about the reading process, planning for reading, monitoring comprehension while reading as well as conquer the problem-solving steps during comprehension (Zhang, 2001). The findings from this present study showed that the subjects are still highly used of support materials such dictionary, note-taking which revealed that they have linguistic boundaries during L2 reading and focus on decoding words to find the text meaning. It is confirmed that the learners are at the low-level process of



reading since they deal much with technical matters rather than on meaning construction of the whole texts.

The findings and theories could make implication towards teaching practice, assessment, and research in English as a foreign language field. From the teaching perspective, it is aimed for the teacher to reflect their reading instruction in the classroom. Teachers have to raise students' awareness of reading strategies through explicit instruction or by creating prompts on reading instruction that consist of five steps, those are preparation, presentation, practice, evaluation, and expansion. These steps are useful to encourage the use of reading strategies consciously. For the assessment, it provides the perceived use of strategy and actual strategy use during reading. It could assess the specific reading events and gives evident for less proficient learners when they read texts in a foreign language. In the research field, researchers must develop a method that could cover varying degrees of difficulties and how proficiency affect the use of reading strategies.

Conclusion

The result of the study indicates that regardless of their low competence in English, learners are highly aware of metacognitive strategy in reading. This finding is consistent with the previous studies (Zhang, 2001; Vianty, 2007; Pammu, 2014) showed the medium and high use of metacognitive knowledge of less tertiary learners or learners in a poor environment. However, there are differences in the variation of the strategy used in which this study revealed the frequent use off support and problem-solving strategies while the previous studies showed the high use of problem-solving strategy compare to the other strategies.

It can be concluded that the less proficient are still relying on the reference material to understand the text. While previous studies have proven that high skilled reader more focuses on global analysis of the text, the less proficient readers need to be more engaging in a low-level reading practice that dealing with technical things before they come up to high-level reading practice. The reader must settle in low-level reading process since it is a fundamental stage for fluent reading comprehension by mastering automatic word recognition or lexical access. Grabe (2011) has been stated that fluent readers can focus on and recognize a word in less than a tenth of a second. This skill needs thousands of hours of practice in reading. In other words, less proficient readers require more reading.

When it comes to higher-level of the reading process, a fluent reader forms a summary model of the text pattern and elaborate interpretation and how to understand the text. In this process, the reader establishes a purpose for reading, combine reading strategies, make inferences, draw background knowledge, monitor comprehension, and critically evaluate the information being read. To get at this level, the reader has to finish dealing with the low-level reading process, so they just focus to analyze the text globally.

Furthermore, the implication of this study needs to be elaborated for future research in reading strategy. The conclusion from this study needs to be repeated in larger samples and constructed reading test to provide a stronger and valid



answer to the issues. A descriptive study also needs to be applied to get depth understanding and perspective of the less proficient students regarding their metacognitive knowledge and awareness and how to get their working memory process at a higher level.

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