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Article

# Metacognitive Reading Strategies of EFL University Students

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#### ABSTRACT

This present paper reports finding from a study dealt with the English as a Foreign Language (EFL) students' metacognitive reading strategies. A total of 68 students were selected enrolled in English department of private university in West Sumatra and they were asked to complete a survey. However, after analysing the data, only the data from 38 students as participants could be included in the report. In this quantitative survey, the instrument used to gather data was based on a Survey of Reading Strategies (SORS). The study's findings revealed that the Global Reading Strategies was the most frequently used, followed by the Support Reading Strategies and the Problem-Solving Strategies. Furthermore, implications of the finding are discussed in relation to reading comprehension of foreign language teaching and learning.

**Keywords**: EFL university students, foreign language teaching and learning, Metacognitive reading strategy, reading comprehension, reading strategy

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### **INTRODUCTION**

The ability to evaluate and comprehend a written text critically is considered as one of the most essential factors that can determine students' academic performance (Bagri & Dickinson, 2023). A rich body of research has documented the way how critical thinking provides students with important skills to understand a complex text (e.g. Liao et al., 2022; Ro, 2023). Furthermore, reading is defined as a complex task that draws on many different processes including written symbol recognition and comprehension using the readers' schemata, contextual clues, and other reading skills (Afsharrad et al., 2017; Alfarwan, 2021; Alkhateeb et al., 2021; Villanueva, 2022). Then, reading comprehension as the main purpose of reading plays a crucial role in the second language learning process. As one of the main sources providing the students with the essential input, reading strategies are really needed in understanding the meaning of the texts (Moradi et al., 2023).

In learning foreign language, the goal of higher education is to foster student success to read more independently and critically (Rianto, 2021; Talwar et al., 2023) and in the latest landscape of higher education, tasks in academic reading are considered as the important components for students' college courses and performance. They are expected and should be mastered the way how to summarize main ideas, make good logical inferences, cite and claim textual evidence, and combine information from various references (Talwar et al., 2023). Moreover, to be a skilful and efficient reader, reading strategies are needed to be employed (Arabmofrad et al., 2021). According to Moradi et al., (2023), readers need reading strategies as one of the influential factors in understanding a text, and in learning, students can use various reading strategies depending on the texts they read and the purpose of their reading. They add that metacognitive strategies are one of fundamental strategies that readers can use while reading. Prior researches also points out that metacognitive reading





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strategies have a great influence on reading comprehension performance and enables readers to understand their cognitive abilities and figure out the way how to read texts efficiently using metacognitive skills (Maghsudi & Talebi, 2009; Razkane & Diouny, 2022; Taraban et al., 2004).

Knowing the importance of second language reading strategies and the significance of reading in EFL educational contexts, there is still a gap in our knowledge about the reading strategies used by students, especially at the university level. Although many studies have been carried out in the area of determining students' reading strategies, research that takes in higher education is relatively rare (Mokhtari & Reichard, 2002; Rianto, 2021), especially involving Indonesian EFL students. The present study inspires the researchers to examine the use of metacognitive reading strategies on reading comprehension among university students. This research is very important because it can provide additional empirical evidence on the use students' reading strategies in learning English as a foreign language, particularly in Indonesia's higher education context.

It is important to have a better understanding of how reading strategies work to encourage successful comprehension. Readers choose to use a particular aspect of a text based on their reading goals. It is believed that reading comprehension performance relies on the ability to employ effective strategies (Frid et al., 2022). Reading strategies can be defined as mental processes in which readers consciously select what they read in order to get comprehension (Afsharrad et al., 2017). It is also using the actions in drawing the meaning out of a text (Alkhateeb et al., 2021).

Reading comprehension strategies are divided into two major categories; namely cognitive reading strategies and metacognitive reading strategies (Moradi et al., 2023). Cognitive strategies refer to ongoing conscious mental behaviors employed by second language learners in order to achieve better outcomes in the process of language learning. On the other hand, metacognitive reading strategies are used to evaluate and improve readers' awareness and control the reading comprehension. It includes planning, monitoring, and evaluating strategies (Phakiti, 2003).

In relation to reading, metacognitive strategies play an important role in supporting critical thinking and written text comprehension (Sheorey & Mokhtari, 2001). The commonly used of several metacognitive reading strategies among students are making them to reread the text, activate their prior knowledge, apply contextual clues, make meaning of inferencing, think aloud, summarize the ideas, locate the keyword, make a prediction, visualize mental images, use graphic organizers, and evaluate their understanding (Alkhateeb et al., 2021; Maghsudi & Talebi, 2009. Furthermore, in achieving high level of comprehension, students who are expert readers and highly skilled would apply certain metacognitive strategies (Sheorey & Mokhtari, 2001). Students who have metacognitive skills can monitor their development in understanding and learning something. In addition, metacognition presents students the ways how to estimate the outcomes of their efforts by allowing them to predict the probability of being able to remember the material (Arabmofrad et al., 2021). Activities in metacognitive are considered as a part of the self-regulated strategies that students employ for their learning management (Gavora et al., 2020).

Some research studies have investigated the relationship on the use of metacognitive strategies in language skills such as writing (Teng et al., 2021; Zhang & Zhang, 2022), speaking (Demorsy et al., 2023), listening (Tan et al., 2020), and reading (Gavora et al., 2020; Moradi et al., 2023; Nash-Ditzel, 2010); Sheorey & Mokhtari, 2001; Villanueva, 2022). One of the most debated subjects to be discussed in reading comprehension is the way how to select reading strategies (Arabmofrad et al., 2021).

In order to explain more about the issue on students' metacognitive awareness of reading strategies, (Mokhtari & Reichard, 2002) designed MARSI – Metacognitive Awareness of Reading Strategy Inventory. It divided reading strategies into three different types; namely global learning strategies, problem-solving strategies and support strategies. Global learning strategies refer to activities of readers used for an overall analysis of the text; problem



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solving strategies refer to the procedures used when the text becomes difficult to read; and support strategies are practically oriented activities connected with the use of external reference materials (Gavora et al., 2020). Then, Sheorey & Mokhtari (2001) constructed SORS – Survey of Reading Strategies. SORS is the adaptation of MARSI and focuses on the same reading strategies as MARSI, but it is intended use specifically to explore the same educational level (i.e. high school through college) students who are native or non-native speakers of English (Gavora et al., 2020; Mokhtari & Sheorey, 2002). Moreover, this present research will use SORS – Survey of Reading Strategies designed by Sheorey & Mokhtari (2001)

### **METHOD**

This present study used a quantitative survey design. The study was conducted at private university in West Sumatra. The participants of this study were 38 full-time academic study EFL university students. They have passed all reading subjects. They are chosen by using purposive sampling. The data for this study were collected through the use of Survey of Reading Strategies (SORS) constructed by Sheorey & Mokhtari (2001) which is intended specifically to discover the metacognitive reading strategies used by senior students who non-native speakers of English. Students are asked to read each statement and circle the number that applies to them, indicating the frequency with which they use the reading strategy implied in the statement. SORS is reported to have good validity and reliability (Mokhtari & Reichard, 2002). The SORS measures three broad categories of reading strategies; namely, global strategies (represented by 13 items), support strategies (represented by 9 items) and problem solving strategies (represented by 8 items). There are 30 main questions about what strategies that the students used while reading English materials.

Data collection of The SORS was administered at the beginning of individual class periods with the help of the classroom instructor. The students were informed of the purpose of conducting the survey and of the fact that there were no right or wrong answers. They just asked to express their honest opinion by circling the appropriate number printed on the right side of each SORS statement. They have to answer the statements given using Likert scale from level 1 (never) to level 5 (always). Typically, the participants were able to complete the survey in 10–15 minutes, and few of them taking a slightly longer time.

#### FINDINGS AND DISCUSSION

The students' responses were examined in terms of SORS strategies, sub-scales, and overall use. The most use of the metacognitive reading strategies was found to be global reading strategies, followed by support reading strategies, and then problem-solving strategies. The global reading strategies are oriented towards text analysis globally. By using this strategy, students make generalizations about their understanding of the text, use include previewing or skimming the text before reading or setting expectations during reading. In the global strategies category, the items are distributed into 13 items. Students' responses to Global reading strategies overall use are presented in table 1.

Table 1. Student responses to Global Reading Strategies

No	Itom		Response					
	Item	5	4	3	2	1		
1	I have a purpose in mind when I read	17	10	7	2	2		
2	I think about what I know to help me understand what I read	13	15	7	2	1		
3	I preview the text to see what it's about before reading it	7	14	13	0	4		
4	I think about whether the content of the text fits my reading purpose	12	8	14	2	2		
5	I skim the text first by noting characteristics like length and organization	7	6	11	8	6		
6	I decide what to read closely and what to ignore	10	17	9	1	1		





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les, figures, and pictures in text to increase my understanding	7	8	15	6	2
		-	10	O	2
text clues to help me better understand what I'm reading	8	13	11	5	1
ographical aids like bold face and italics to identify key information	9	9	11	6	3
y analyze and evaluate the information presented in the text	6	12	14	5	1
ny understanding when I come across conflicting information	11	14	10	2	1
uess what the material is about when I read	11	11	12	0	4
o see if my guesses about the text are right or wrong	12	16	5	5	0
1	oographical aids like bold face and italics to identify key information ly analyze and evaluate the information presented in the text my understanding when I come across conflicting information guess what the material is about when I read	bographical aids like bold face and italics to identify key information 9 by analyze and evaluate the information presented in the text 6 by understanding when I come across conflicting information 11 by uses what the material is about when I read 11	bographical aids like bold face and italics to identify key information 9 9 9 ly analyze and evaluate the information presented in the text 6 12 my understanding when I come across conflicting information 11 14 guess what the material is about when I read 11 11	bographical aids like bold face and italics to identify key information 9 9 11 ly analyze and evaluate the information presented in the text 6 12 14 my understanding when I come across conflicting information 11 14 10 guess what the material is about when I read 11 11 12	pographical aids like bold face and italics to identify key information 9 9 11 6 bly analyze and evaluate the information presented in the text 6 12 14 5 my understanding when I come across conflicting information 11 14 10 2 guess what the material is about when I read 11 11 12 0

Support reading strategies are used to understand reading through additional assistance, for example by seeking external references or by taking notes. In the support strategies category, the items are distributed into 9 items. Students' responses to support reading strategies overall use are presented in table 2.

**Table 2. Student responses to Support Reading Strategies** 

No	Thomas		Response				
NO	Item	5	4	3	2	1	
1	I take notes while reading to help me understand what I read	3	7	20	4	4	
2	When text becomes difficult, I read aloud to help me understand what I read	6	9	7	6	11	
3	I summarize what I read to reflect on important information in the text	10	17	10	1	1	
4	I discuss what I read with others to check my understanding	6	8	11	8	4	
5	I underline or circle information in the text to help me remember it	7	14	9	7	1	
6	I use reference materials such as dictionaries to help me understand what I read	6	14	11	6	1	
7	I paraphrase (restate ideas in my own words) to better understand what I read	11	13	8	6	2	
8	I go back and forth in the text to find relationships among ideas in it	10	12	9	4	3	
9	I ask myself questions I like to have answered in the text	10	16	7	4	1	

Then, the problem solving strategies are used in solving challenges as reading becomes increasingly difficult. In this type of strategy, it includes reading slowly and carefully, adjusting the reading speed depending on the type of reading, rereading, imagining a word, or guessing the meaning of a word. In the problem solving strategies category, the items are distributed into 8 items. Students' responses to Problem Solving Strategies overall use are presented in table 3.

Table 3. Student responses to Problem Solving Strategies

No	Thomas	Response				
	Item	5	4	3	2	1
1	I read slowly but carefully to be sure I understand what I'm reading	10	12	13	3	0
2	I try to get back on track when I lose concentration	14	15	6	2	1
3	I adjust my reading speed according to what I'm reading	7	15	10	5	1
4	When text becomes difficult, I pay closer attention to what I'm reading	12	15	5	4	2
5	I stop from time to time and think about what I'm reading	8	12	13	5	0
6	I try to picture or visualize information to help remember what I read	10	12	12	4	0
7	When text becomes difficult, I re-read to increase my understanding	13	10	11	3	1
8	I try to guess the meaning of unknown words or phrases	12	14	8	1	3

The result of the independent sample t-test underlying each subscale of strategy. The significance values obtained were .397 for global reading strategies (p>0.05), .356 for problem-solving strategies (p>0.05), and .980 for support reading strategies (p>0.05) as th following table:



Table 4. Descriptive statistics of metacognitive reading strategies

Subscale	.Sig
Global Reading Strategies	.397
Support Strategies	.980
Problem Solving Strategies	.356

As an important part in students' learning, metacognitive reading strategy awareness enhances students' reading comprehension (Alkhateeb et al., 2021). The purpose of this study was to identify students' reading strategies. In this study, students' metacognitive awareness of reading strategies at university while reading academic materials was explored using Survey of Reading Strategies (SORS) constructed by Sheorey & Mokhtari (2001). The findings showed that students were moderately aware of reading strategies and the most used strategies were global reading strategies, followed by support strategies, and then problem-solving strategies. In the global reading strategies, students set their purpose for reading and activating their prior knowledge. They, then, preview the text for content and predict what the text is about, followed by decision making on what to read closely to enhance reading comprehension. With respect to support reading strategies, students take notes while reading and use reference materials like using dictionaries to understand and underline or circle information in the text to help them remember. Readers, then, use paraphrasing or restating the ideas in their own words and read aloud when the text and reading materials become difficult to understand. In the problem-solving strategies, which were picked less by the participants, students pay closer attention to reading when the text is difficult to them. Then, they read the text aloud to help them understand, followed by rereading and visualizing the information read with reflection on the process, which increases their understanding.

The result of this study support (Muzdalifah & Ahmad, 2015) who noted ranked as the most frequently used in all three strategies in SORS were global strategy, followed by support strategy and then problem solving strategy. The finding of this study is also opposite to those of Villanueva (2022) who reported more use of metacognitive strategies were Problem-Solving (PROB). In a different study, the differences in using reading strategy were also influenced by gender and academic classification (Hong-nam et al., 2014). In Korean, for example, problem-solving strategies were students' most preferred strategies. Knowledge about these gender differences in reading comprehension makes it relevant to examine boys' and girls' reading strategy use (Lindholm & Tengberg, 2019).

#### **CONCLUSIONS**

In conclusion, EFL teachers should actively engage students in practicing the appropriate strategies for specific types of texts, use model strategy, offer alternative strategies to exercise, and encourage students to select and use strategies which are appropriate for their needs and the type of their reading selection. The current study is not without limitations. The participants consisted of limited college students from a private university. Future research on the use of SORS should select participants who are more diverse in location. As for the results, the trends suggested in the present study need to be further investigated, preferably using a larger and more representative participant. Finally, we would argue that there is a need to further examine how the use of reading strategies is related to comprehension based on gender point of view related to achievement. This study is recommended that teachers help their students to improve their reading strategy use.

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ensuring that questions related to the accuracy or integrity of the work are appropriately investigated and resolved. SI worked on the project and the main conceptual ideas and proofread the manuscript. DM checked the Grammar. SS wrote on the analysis theory and did the data analysis. AP collected the data.

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