Volume 14, No. 4, 426-438
Journal of English Language Teaching
E-ISSN 2302-3198
Published by Departemen Bahasa dan Sastra Inggris
FBS Universitas Negeri Padang
http://ejournal.unp.ac.id/index.php/jelt

An analysis of metacognitive awareness in reading strategies to comprehend academic text among English Education Students at Universitas Negeri Padang

Syafiq Laura Ivanka.S[1] and Ainul Addinna[2]
[1,2] Universitas Negeri Padang, Indonesia
Correspondence Email: syafiqlaura29@gmail.com

Article History
Submitted: 2025-10-27
Accepted: 2025-11-05
Published: 2025-12-01

Keywords:
Metacognitive awareness, reading strategies, academic text, English education, MARSI-R

Abstract

Reading academic texts requires more than understanding vocabulary; it also involves the ability to plan, monitor, and evaluate one's reading process. This study aimed to analyze the level of metacognitive awareness in reading strategies among English Education students at Universitas Negeri Padang and to identify the types of strategies they most frequently used. The research employed a quantitative descriptive design. The data were collected through the Metacognitive Awareness of Reading Strategies Inventory-Revised (MARSI-R) questionnaire and semi-structured interviews. The participants were 24 fourth-year students selected through purposive random sampling, with six students interviewed to gain deeper insights. The results revealed that students generally demonstrated a medium level of metacognitive awareness (M = 3.4). Among the three strategy categories, problem-solving strategies were most frequently used (M = 3.6), followed by support strategies (M = 3.4) and global strategies (M = 3.2). This finding indicates that while students were fairly aware of how to manage their reading, they did not consistently plan or monitor their comprehension. Overall, students tended to apply strategies unconsciously, highlighting the need for greater emphasis on metacognitive awareness training in reading instruction to develop more strategic and independent readers.

How to Cite: Ivanka, S. & Addinna, A. (2025). An analysis of metacognitive awareness in reading strategies to comprehend academic text among English Education Students at Universitas Negeri Padang. *Journal of English Language Teaching*, Vol. 14(4), 426-438, https://doi.org/10.24036/jelt.v14i4.136077

INTRODUCTION

Reading is one of the most essential skills in English language learning, especially for university students who must deal with academic texts such as textbooks, journal articles, and research papers. However, reading in English is not easy for students who learn it as a foreign language (EFL). Wahyuni et al. (2019) stated that many EFL students face difficulties in understanding academic texts. They can read words and sentences correctly but often fail to grasp the deeper meaning because they struggle to connect ideas and think critically. This suggests that successful reading requires not only language ability but also higher-order thinking and self-regulation.

In reading, self-regulation is closely related to metacognition, a term introduced by Flavell (1979) that means "thinking about one's own thinking." Metacognition involves being aware of what one understands, noticing confusion, and knowing what to do to fix it. In the context of reading, metacognitive awareness helps students plan, monitor, and evaluate their comprehension. For example, skilled readers preview a text before reading, slow down when they face difficulties, or summarize information to check understanding. These behaviors are examples of metacognitive reading strategies that turn reading from a passive process into an active, strategic one.

Metacognitive awareness is different from simply using strategies. It is about knowing when and why a strategy should be used and being able to control one's reading process. Schraw and Moshman (1995) explained that metacognitive awareness includes both knowledge about strategies and the ability to regulate them. Students with high metacognitive awareness can choose appropriate strategies depending on their purpose and text difficulty, while students with low awareness may use the same limited strategies in every situation. Thus, awareness makes the difference between reading mechanically and reading strategically.

Unfortunately, many EFL students use reading strategies unconsciously. They may reread, highlight, or use a dictionary, but they do not always understand why these actions help. As a result, they rely on habits rather than conscious reflection. Paris and Jacobs (1984) observed that reading instruction often focuses on answering comprehension questions rather than teaching students how to plan and monitor their reading. Students are rarely encouraged to reflect on how they understand or manage their comprehension. This creates a learning gap: students use strategies but are not fully aware of them, which limits the effectiveness of their reading.

In many Indonesian EFL classrooms, this situation is also common. Students tend to focus on vocabulary and grammar instead of learning how to regulate their reading. When reading academic texts, they may be able to understand words but fail to identify the writer's purpose or the main argument. This happens because they are

not trained to apply metacognitive strategies consciously. They read mechanically, without checking whether they really understand what they read. As a result, reading becomes tiring and less meaningful.

Preliminary observations of English Education students at Universitas Negeri Padang show similar findings. Many students admitted that they often highlight or reread parts of a text, but they could not explain why these actions were useful. Others said they simply guessed the meaning of difficult sections or skipped them. These habits indicate that while students do use strategies, they often do so without full awareness. They are not managing their reading strategically. This suggests that the main issue is not whether students use strategies, but whether they are aware of using them and understand their purpose.

Previous research supports this observation. Septiani et al. (2022) found that English Education students at Universitas Negeri Padang generally have a medium level of metacognitive awareness. They sometimes use strategies but not consistently or purposefully. Mokhtari and Reichard (2002) also categorized metacognitive awareness into three levels: high, medium, and low. Students at a high level use strategies consciously and flexibly, while those at a low level are unaware of how to regulate their reading. Most students fall in the middlethey use strategies but without full reflection, which limits their comprehension.

Low metacognitive awareness can have serious effects on students' academic success. Grabe and Stoller (2011) noted that reading instruction in many EFL programs emphasizes grammar and vocabulary, leaving students unprepared for the demands of academic texts. Wahyuni (2019) found that students with low awareness are more likely to give up when they face difficulties in reading and are less motivated to find solutions. Without awareness, reading becomes a slow, frustrating process rather than an active and enjoyable one.

On the other hand, studies have shown that developing metacognitive awareness improves reading comprehension. Teng (2020) found that students who were trained to use metacognitive strategies not only improved their understanding but also became more confident readers. Similarly, Zhang (2019) showed that students with high metacognitive awareness could adapt their reading strategies to different kinds of texts more effectively than those with low awareness. These studies confirm that metacognitive awareness is a key factor for successful academic reading.

The researcher's own experience as an English Education student at Universitas Negeri Padang also supports this conclusion. During reading classes, strategies such as summarizing or using dictionaries were often used but not discussed as part of conscious metacognitive training. When facing difficult texts, the researcher often repeated the same strategies without considering their effectiveness. Later, the researcher realized that understanding one's own reading process is just as

important as knowing the language. This experience reflects the need to help students become more aware of their reading strategies.

Based on this background, the main problem does not lie in whether students use strategiesthey clearly dobut in whether they are aware of using them consciously and appropriately. Many students apply strategies automatically, without thinking about why or how these strategies help. This lack of awareness creates a gap between strategy use and strategy knowledge, which affects how well students comprehend academic texts. Therefore, developing students' metacognitive awareness is necessary to make them independent, reflective readers who can manage their learning effectively.

This study focuses on analyzing metacognitive awareness in reading strategies among English Education students at Universitas Negeri Padang. The research aims to (1) determine the level of students' metacognitive awareness when using reading strategies to comprehend academic texts and (2) identify the types of metacognitive strategies most frequently used. By doing so, this study seeks to understand how well students can recognize, control, and evaluate their reading processes and how their awareness influences their comprehension.

This research also fills a gap in the literature. While previous studies have explored metacognitive awareness in various EFL contexts (Yüksel & Yüksel, 2012; Dangin, 2020; Nastasia, 2023), few have examined this issue in the context of English Education students at Universitas Negeri Padang using the Metacognitive Awareness of Reading Strategies Inventory-Revised (MARSI-R) developed by Mokhtari, Dimitrov, and Reichard (2018). Most earlier studies used the original MARSI or focused only on the frequency of strategy use. The revised MARSI-R offers clearer and more reliable measurement of students' awareness. Therefore, this study contributes new insights by analyzing both the level of metacognitive awareness and the types of reading strategies used among these students.

The findings of this research are expected to provide both theoretical and practical benefits. Theoretically, they contribute to a deeper understanding of metacognitive awareness in EFL reading and offer empirical data from Indonesian university students. Practically, the results can help students recognize their reading habits and improve their strategy use. For teachers, the findings may guide reading instruction by emphasizing the importance of teaching how to plan, monitor, and evaluate comprehension rather than only testing it. For curriculum designers, the study can provide insights into how to integrate metacognitive strategy training into reading courses for future English teachers.

In conclusion, reading academic texts in English requires more than knowledge of vocabulary and grammarit requires the ability to manage one's own reading process. Metacognitive awareness enables students to become active, strategic, and independent readers. However, many EFL students, including those at Universitas Negeri Padang, still struggle to apply this awareness consciously. By

analyzing students' levels of metacognitive awareness and the strategies they use most frequently, this research aims to highlight the current condition of students' reading awareness and offer suggestions for improving reading instruction. Ultimately, strengthening students' metacognitive awareness can help them become more reflective readers who are better prepared to succeed in academic and professional settings.

METHOD

This study used a quantitative descriptive design because it aimed to describe the level of students' metacognitive awareness in using reading strategies and to identify the types of strategies they used most frequently when reading academic texts. According to Creswell (2012), a quantitative descriptive design is appropriate for studies that seek to describe existing conditions using numerical data without manipulating variables. The participants were twenty-four fourth-year students of the English Education Study Program at Universitas Negeri Padang in the academic year 2024/2025. They were selected through purposive random sampling because they had completed several reading courses and regularly read academic texts in English, making them suitable participants for this research.

The main instrument was the Metacognitive Awareness of Reading Strategies Inventory-Revised (MARSI-R) developed by Mokhtari, Dimitrov, and Reichard (2018). It consisted of fifteen statements divided into three categories: Global, Problem-Solving, and Support Reading Strategies. Students rated each statement on a five-point Likert scale from 1 (I I have never heard of this strategy before) to 5 (I know this strategy quite well, and I often use it when I read). To enrich the data, semi-structured interviews with six students representing high, medium, and low awareness levels were conducted. The quantitative data were analyzed using mean scores and interpreted based on the MARSI-R scale, while the interview data were analyzed descriptively to support the findings.

RESULTS AND DISCUSSION

Research Finding

This section presents the results and interpretation of the data obtained from the Metacognitive Awareness of Reading Strategies InventoryRevised (MARSI-R) questionnaire and interviews with selected students. The findings are organized according to the two research questions:

1. What is the level of students' metacognitive awareness in using reading strategies to comprehend academic texts?
2. What are the types of metacognitive reading strategies most and least used by the students?

Before presenting the results, it is important to explain the criteria used to interpret the mean scores from the MARSI-R. Each statement in the questionnaire was rated on a five-point Likert scale ranging from 1 (never) to 5 (always). The mean scores were interpreted using the criteria established by Mokhtari, Dimitrov, and Reichard (2018) as shown below:

Range of Mean Scores	Level of Awareness
3.5 ≥	High
2.5 3.4	Medium
2.4 ≤	Low

Table 1. Criteria of metacognitive awareness level

A high score means that students are highly aware and often use reading strategies consciously. A medium score shows moderate awareness and occasional use, while a low score indicates minimal awareness or infrequent use.

Finding 1: The level of students' metacognitive awareness in using reading strategies to comprehend academic texts

No	Studnets	GLOB mean	PROB mean	SUP mean	Total mean	Level
1.	FAD	3,4	3	3,2	3,2	Medium
2.	AP	3,4	4	3,6	3,7	High
3.	HP	3	4	4	3,4	Medium
4.	RK	3,4	4,4	3,4	3,7	High
5.	S	3,6	4,4	3	3,7	High
6.	RAP	2,6	2,8	3,2	2,9	Medium
7.	RMR	1,6	3,2	2,4	2,4	High
8.	SDS	3,4	3,6	3,4	3,5	High
9.	ATP	3,4	3,4	3,6	3,5	High
10.	BDO	3,2	3,6	3,4	3,4	Medium
11.	CSA	3,6	3,4	3,2	3,4	Medium
12.	KBA	4	4,8	4,2	4,3	High
13.	MSV	3,4	3,8	3	3,7	High
14	AMS	2,8	3,4	3,8	3,3	Medium
15.	NDP	3,4	3,4	3,2	3,4	Medium
16.	SV	3,4	3,8	4	3,7	High
17.	SR	3	3	3	3,0	Medium
18.	RC	3,4	3,6	3,6	3,5	High
19.	SW	3	3,6	2,8	3,1	Medium
20.	R	2,8	3,4	3,2	3,1	Medium

21.	GGM	4,4	3,8	4	4,1	High
22.	KAA	2,6	3,6	2,4	2,9	Medium
23.	KLY	3	3,2	3,6	3,3	Medium
24.	DA	3	3	3,6	3,2	Medium
Total mean		3,2	3,6	3,4	3,4	

Table 2. Students' overall metacognitive awareness level

The first research question aimed to determine the overall level of students' metacognitive awareness. Based on the MARSI-R results, the total mean score was 3.4, which falls into the medium level category. This means that students were moderately aware of their use of reading strategies. They used some strategies consciously but not consistently across different reading situations.

Level	Frequency	Percentage
High	10	41.7%
Medium	13	54.2%
Low	1	4.1%

Table 3. Distribution of students' metacognitive awareness levels

As shown in Table 2, the highest mean score was in problem-solving strategies (3.6), while global (3.2) and support (3.4) strategies were in the medium range. Out of 24 students, 10 students (41.7%) achieved a high level of awareness, 13 students (54.2%) were in the medium level, and one student (4.1%) showed a low level of awareness.

These findings indicate that most students have a moderate understanding of metacognitive reading strategies. They can use strategies to assist comprehension but often do so without reflection or consistency.

This result supports the theory of Flavell (1979), who described metacognition as awareness and regulation of one's cognitive activities. The students in this study showed partial awareness—they knew about reading strategies but had not yet developed full control over when and how to use them. Likewise, Schraw and Moshman (1995) explained that metacognitive awareness consists of both knowledge and regulation. The medium score found here implies that students had knowledge of strategies but were not always able to regulate or evaluate their use effectively.

Interview data supported these findings. Most students mentioned that they often reread difficult sections or highlighted key points, but few said they planned their reading or checked their comprehension afterward. One student said, *"I sometimes check the title before reading, but I don't always think about my purpose."* Another stated, *"When I find a difficult paragraph, I reread it until I*

understand." These responses show that students use strategies naturally but not strategically.

This aligns with Anderson's (2002) argument that EFL readers tend to use strategies intuitively without explicit reflection. As a result, they become "mechanical readers" who complete reading tasks but do not consciously monitor comprehension.

Therefore, it can be concluded that the overall level of metacognitive awareness among English Education students at Universitas Negeri Padang is medium. They possess knowledge of reading strategies but need to develop stronger regulation skills to plan, monitor, and evaluate their reading processes more effectively.

Finding 2: The types of metacognitive reading strategies most frequently used by the students

The second research question aimed to identify which metacognitive reading strategies were used most frequently by the students. The results revealed that problem-solving strategies were the most frequently used, followed by support strategies, while global strategies were the least used.

Category	Mean	Level
Problem-Solving Strategies (PROB)	3.6	High
Support Reading Strategies (SUP)	3.4	Medium
Global Reading Strategies (GLOB)	3.2	Medium

Table 4. Comparison of strategy categories

Problem-solving strategies (PROB)

Problem-solving strategies refer to the actions readers take when facing comprehension difficulties. These include rereading, slowing down, guessing meanings from context, and focusing more closely on challenging parts of a text.

The results showed that problem-solving strategies had a mean score of 3.6, which indicates a *high level* of awareness. This means that students often used these strategies when they encountered difficulties while reading academic texts.

Interview data confirmed this. One student said, *"When I don't understand a sentence, I read it again slowly."* Another explained, *"If I find new words, I try to guess their meaning from the next sentence."* These behaviors show that students are aware of the need to monitor comprehension and take action when understanding breaks down.

This finding supports Pressley and Afflerbach (1995), who stated that successful readers are active and monitor their comprehension regularly. It also aligns with Anderson's (2002) idea that problem-solving strategies demonstrate effective metacognitive regulation. However, the interviews also revealed that students tended to rely only on simple techniques like rereading and guessing, rather than using more advanced strategies such as summarizing or self-questioning.

Global reading strategies (GLOB)

Global reading strategies are planning-oriented actions used before and during reading, such as previewing, predicting, and identifying text structure. The mean score of this category was 3.2, indicating a *medium level* of awareness.

Many students admitted that they did not often preview the text or set goals before reading. One student said, *"I just read directly without thinking about what I want to find."* This shows limited awareness of planning and organization.

According to Mokhtari and Reichard (2002), global strategies help readers create a mental framework before reading and are essential for effective comprehension. The low use of these strategies suggests that students tend to read reactively, focusing on understanding the text after problems arise rather than preparing in advance. This result is consistent with Paris and Jacobs (1984), who found that many EFL students focus on completing reading tasks rather than planning for understanding.

Support reading strategies (SUP)

Support strategies are tools or techniques that assist comprehension, such as using dictionaries, highlighting, or taking notes. The mean score of this category was 3.4, also at the *medium level*.

From the interviews, many students mentioned using support strategies, especially underlining or translating unfamiliar words. One said, *"I underline the important parts to help me remember."* Another said, *"I use Google Translate when I find difficult words."* These strategies show that students use external aids but may not evaluate their effectiveness.

Mokhtari and Reichard (2018) emphasized that support strategies are beneficial when used consciously. However, the findings suggest that students' use of support strategies is often mechanical rather than reflective. They tend to depend on surface-level understanding rather than deeper comprehension, which is similar to Grabe and Stoller's (2011) observation about EFL readers focusing on word-level processing.

So from these three strategy categories indicates that students were most aware of problem-solving strategies (M = 3.6) and least aware of global strategies (M

= 3.2). This suggests that students are more reactive than proactive readers—they know how to fix comprehension problems but lack habits of planning and evaluating their reading.

This pattern is consistent with Yüksel and Yüksel (2012) and Dangin (2020), who found that EFL university students generally show higher use of problem-solving strategies than other types. Schraw and Dennison (1994) argued that full metacognitive control involves three processes: planning, monitoring, and evaluation. The results of this study show that students are strong in monitoring (problem-solving) but need improvement in planning (global) and evaluating (support) strategies.

Discussion

The findings of this study revealed that the overall level of students' metacognitive awareness in using reading strategies to comprehend academic texts was at a medium level (M = 3.4). This means that students were somewhat aware of the strategies they used but did not always apply them consciously or consistently. Among the three categories of strategies, problem-solving strategies were the most frequently used (M = 3.6), while global (M = 3.2) and support strategies (M = 3.4) were used less often. These results provide an important picture of how English Education students at Universitas Negeri Padang approach academic reading and offer insights into the development of metacognitive awareness among EFL learners.

The medium level of metacognitive awareness found in this study supports the findings of previous research conducted both internationally and locally. Mokhtari and Reichard (2018) and Anderson (2002) found that EFL learners often demonstrate moderate awareness of reading strategies, suggesting that students know some strategies but do not use them systematically. Similarly, studies conducted in Indonesia by Yüksel and Yüksel (2012), Dangin (2020), and Nastasia (2023) also reported that university students tend to show medium awareness of reading strategies. These consistent results across contexts confirm that metacognitive awareness in reading is a common challenge among EFL learners, who often focus on understanding texts without consciously planning, monitoring, or evaluating their reading process.

The dominance of problem-solving strategies in this study also reflects what has been found by other researchers. Mokhtari and Reichard (2002) noted that readers commonly use problem-solving strategies such as rereading, guessing meaning from context, and adjusting reading speed when they face comprehension problems. Pressley and Afflerbach (1995) argued that such strategies indicate a certain level of metacognitive control because students monitor their understanding and attempt to repair it when necessary. This finding was further supported by Dangin (2020), who found that Indonesian EFL learners are usually strong in problem-solving but weak in planning and evaluating strategies. The students in this study similarly relied on rereading and guessing rather than on higher-level strategies

such as summarizing or questioning, which shows that their awareness is mostly reactive rather than reflective.

On the other hand, the limited use of global and support strategies found here indicates that students were less skilled in preparing for reading and reflecting afterward. Paris and Jacobs (1984) and Grabe and Stoller (2011) both emphasized that successful reading requires active planning and evaluation before and after the reading process. The interview data in this study also showed that most students read without identifying the text's purpose or structure, which may prevent them from developing deeper comprehension. This lack of planning and reflection supports Flavell's (1979) claim that metacognition requires both awareness and regulation. While students were aware of some reading strategies, they lacked the regulation skills to apply them effectively and consistently.

The findings of this study extend previous knowledge by providing more specific insights into the reading behavior of English Education students at Universitas Negeri Padang. Although the overall level of awareness is similar to that found in other EFL contexts, the interviews showed that many students used strategies unconsciously and automatically rather than strategically. This suggests that students are familiar with certain reading actions but do not view them as part of a broader metacognitive process. Such results highlight the need for explicit metacognitive strategy instruction, where students are taught not only what strategies to use but also how and when to apply them effectively.

In summary, the present study strengthens the evidence that EFL learners, including Indonesian university students, generally possess moderate metacognitive awareness in reading. The dominance of problem-solving strategies shows that students can monitor their comprehension, but the limited use of global and support strategies reveals that they still lack self-regulation and reflection. These findings confirm and extend previous studies while also emphasizing the importance of incorporating metacognitive instruction in reading courses to help students become more strategic, self-regulated readers who can effectively comprehend academic texts.

CONCLUSION

This study aimed to analyze the level of students' metacognitive awareness in using reading strategies and to identify the types of strategies most and least used by English Education students at Universitas Negeri Padang. The findings showed that the students' overall level of metacognitive awareness was at a medium level (M = 3.4). This means that students were somewhat aware of how to use reading strategies but did not always apply them consciously or regularly when reading academic texts.

Among the three categories of reading strategies, problem-solving strategies were used most frequently, while global and support strategies were used less often.

This suggests that students are more focused on solving reading problems when they appear rather than planning before reading or reflecting afterward. Although students showed the ability to monitor their comprehension, they still lacked skills in setting goals, predicting meaning, or evaluating their understanding after reading.

These findings are important because they show that even advanced EFL students still need support to develop deeper awareness of how they read. Metacognitive awareness is not only about knowing reading strategies but also about using them purposefully and effectively. When students understand and control their reading process, they can become more independent and successful readers.

Therefore, teachers should include explicit instruction of metacognitive strategies in reading courses. Students need opportunities to practice how to plan before reading, monitor their understanding while reading, and reflect after reading. This kind of instruction can help them improve their comprehension of academic texts and prepare them to become more reflective readers and future teachers.

Future research may explore how metacognitive strategy training influences students' reading performance over time or how different types of texts affect students' use of strategies. Such studies will deepen our understanding of how metacognitive awareness develops in EFL contexts.

REFERENCES

Anderson, N. J. (2002). *The role of metacognition in second language teaching and learning.* ERIC Digest.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson.

Dangin. (2020). Students' awareness of metacognitive reading strategies in academic reading. *Journal of English Teaching and Learning Issues, 3*(1), 33–42.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist, 34*(10), 906–911.

Grabe, W., & Stoller, F. L. (2011). *Teaching and researching reading* (2nd ed.). Pearson Education.

Mokhtari, K., & Reichard, C. A. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology, 94*(2), 249–259. https://doi.org/10.1037/0022-0663.94.2.249

Mokhtari, K., Dimitrov, D. M., & Reichard, C. A. (2013). Revising the Metacognitive Awareness of Reading Strategies Inventory (MARSI) and testing for factorial

invariance. *Studies in Second Language Learning and Teaching, 3*(2), 231–252. https://doi.org/10.14746/ssllt.2013.3.2.3

Nastasia, N. (2023). *Metacognitive awareness of reading strategies in critical reading and literacy course used by Indonesian EFL university students: A survey study* (Undergraduate thesis, Universitas Islam Indonesia). Universitas Islam Indonesia Repository.

Paris, S. G., & Jacobs, J. E. (1984). The benefits of informed instruction for children's reading awareness and comprehension skills. *Child Development, 55*(6), 2083–2093.

Pressley, M., & Afflerbach, P. (1995). *Verbal protocols of reading: The nature of constructively responsive reading.* Lawrence Erlbaum Associates.

Schraw, G., & Dennison, R. S. (1994). Assessing metacognitive awareness. *Contemporary Educational Psychology, 19*(4), 460–475.

Schraw, G., & Moshman, D. (1995). Metacognitive theories. *Educational Psychology Review, 7*(4), 351–371.

Teng, F. (2020). The benefits of metacognitive reading strategy awareness instruction for young learners of English as a second language. *Literacy, 54*(1), 29–39. https://doi.org/10.1111/lit.12177

Wahyuni, Z., Ratmanida, R., & Marlina, L. (2018). The relationship of students' metacognitive reading strategies awareness and reading comprehension: The case of sixth semester students of English Department, Universitas Negeri Padang. *Journal of English Language Teaching (JELT).*

Yüksel, İ., & Yüksel, İ. (2012). Metacognitive awareness of academic reading strategies. *Procedia – Social and Behavioral Sciences, 31*, 894–898. https://doi.org/10.1016/j.sbspro.2011.12.164

Zhang, L. J. (2019). Metacognitive awareness and second language reading comprehension: A conceptual overview.