METACOGNITIVE READING STRATEGIES AWARENESS IN ENGLISH LANGUAGE CONTEXT AMONG AVIATION CADETS

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Received: April 3, 2023 Published: May 31, 2023

Abstract: As reading in the English language context has widely taken a position in the educational field, the reading score among aviation cadets was far from expectation. Several empirical studies have underpinned metacognitive reading strategies as supporting components in determining the reading performance of EFL learners, yet an investigation within the scope of cadets of the aviation field remains limited in the Indonesian context. This study explored cadets' awareness level of metacognitive reading strategies and how they demonstrate awareness toward the use of those strategies in the English language context. An explanatory design was utilized, with 30 aviation cadets involved. The data was obtained from self-inventory reports and open-ended questions. The result confirmed that aviation cadets are metacognitively aware of the three elements of reading strategies with medium level of awareness. Moreover, cadets with high scores reading tests encompass more support reading strategies and problem-solving strategies compared to lower scorers. While cadets who got average scorers utilize three parts metacognitive reading strategies. These results confirmed that cadets who can maintain their cognition and proceed with various strategies in reading activities, will perform better in reading within the English language context.

Keywords: metacognitive reading strategies, English reading context, aviation cadets awareness

How to Cite: Syahidah, I., Suryati, N., & Muniroh, S. (2023). Metacognitive reading strategies awareness in English language context among aviation cadets. *The Journal of English Literacy Education: The Teaching and Learning of English as a Foreign Language*, 10(1), 93-109. http://dx.doi.org/10.36706/jele.v10i1.20998

INTRODUCTION

The importance of having adequate English language proficiency, not to mention reading skill, is an undeniable fact. In the education context, the ability not only to read but more likely to comprehend is necessarily needed for learners' academic success. To agree, cadets are expected to be proficient in English to support their academic as well as future career. Not to mention, reading enhances their ability in understanding written information. Ardiani (2022) states that English proficiency is an essential element for safety and aviation security improvement based on the

policy of International Civil Aviation Organization (ICAO). This is because the language of the pilot and air traffic controller is one among other factors that can cause a plane crash (Ardiani, 2022). It can be said that English is a compulsory ability that should be mastered by cadets of aviation, including all four skills. Also, Limbong (2021) also adds that by having adequate English capability, cadets are able to take a place in the market needs at national and international levels. It can be said that successful cadets not only have sufficient knowledge in their field but also have competence in every aspect of the language. Similarly, Rochmawati et al. (2022) in the context of aviation underpin cadets are formed to be ready to work in reliable aviation and airports, thus English acquisition is necessary for cadets because it will support their career development worldwide. Moreover, the numerous materials and terminologies of aviation and airports are written in the English language. This situation asks them to have such capability in comprehending the learning materials. They further add that cadets must have a strong sense of metacognitive strategies to be successful in understanding the course material better and effectively (Rochmawati et al., 2022). In order to meet up with the demand, the cadets are required to continuously enhance and train themselves in English not to mention reading as both theoretical and practical.

In recent years, the rise of metacognitive strategies has been accompanied by a heated issue on readers' comprehension specifically in the field of EFL learning. In reading itself, these strategies are viewed as basic steps and more elevated skills to enhance readers' competence. Empirical preceding studies highlighted the application of metacognitive reading strategies have controlled readers' competence in comprehension activity (Deliany & Cahyono, 2020; Duong & Nguyen, 2022; Rahmat & Jincheng, 2022; Rochmawati et al., 2022; Zhang & Guo, 2020). This is because metacognitive elements are interconnected to readers' cognitive process in comprehending textual material. It deals with self-management or self-regulation in a given reading activity. Tedjo (2022) further evidence that reading strategies of metacognitive contain powerful effects for advanced learners to support their academic and professional development by reading skillfully.

The attention to language learning,- and reading strategies, has rapidly expanded from the role of cognitive into the metacognitive, known as metacognitive reading strategies for assisting readers in understanding the reading text (Ali & Razali, 2019). As the heart of the reading process, metacognitive refers to an active process of thinking about thinking (Flavell, 1979) which is presented in the form of a reading strategy for processing the comprehension of reading activities. Metacognitive reading strategies cannot be neglected because these significantly assist and guide readers in completing the reading task (Ghaith & El-Sanyoura, 2019; Mokhtari et al., 2018). The major contribution assists readers in managing and monitoring reading activity, readers know what to do once facing various obstacles in reading (Tedjo et al., 2022). These strategies direct readers to be aware of their own thinking processes, they know how to best understand the text, make adjustments toward the reading process once a problem has just occurred, and make decisions in order to complete the task given effectively. By having this, learners are significantly empowered to be autonomous and effective readers as they are utilizing the reading strategies based on their needs toward the condition and text. Since its long-lasting contribution, EFL readers are expected to have a clear understanding pertaining to the concept of metacognitive reading strategies and its utilization as a way to boost

their reading performance (Deliany & Cahyono, 2020; Mokhtari et al., 2018; Zhang & Guo, 2020, Tedjo, 2022).

Studies found that cadets' reading performance was far from satisfactory, some of them were unable to comprehend the written English material (Limbong, 2021; Rochmawati et al., 2022). In the context of West Java province, Rochmawati et al. (2022) unfold that metacognitive reading strategies can be one of the factors detected. The cadets were roughly aware of the utilization of metacognitive reading strategies that can help them to possess the reading effectively. As a consequence, most civil aviation cadets in two different programs were challenged in understanding and comprehending English texts from school-related material either from books, journals, or articles. Although their reading test was increased, they were unable to comprehend the content of what they were reading which ended up with the test result being far from satisfactory. In the case of the Makassar region, most cadets majoring in air traffic control stated a lower level of reading ability (Ardiani, 2022). Although instructional materials of aviation are dominantly occurring in English terminology, immersing cadets with reading activity is indeed challenging. The language instructor is asked to apply numerous strategies to boost cadets' ability in understanding written material (Sukma, 2018). It can be claimed that the majority of cadets in Indonesia were unaware of the existing metacognitive reading strategies used and the significance of each utilization, as a result, it affects their performance in reading.

Notwithstanding a cognitive strategy to perform the given task, metacognitive reading strategies are associated readers' self-management readers in given reading activities (Zhang & Guo, 2020). Its strategies reflect various actions for planning and monitoring reading. Planning reveals actions that readers need to be taken, how the utilization and when it should be utilized, while actions undertaken by readers to check, monitor and evaluate their thinking process as well as reading tasks given, represent monitoring strategies. Taking more specifically, the branches of metacognitive reading strategies are categorized into three; global reading strategies, problem-solving strategies, and support reading strategies (Mokhtari, 2016; Mokhtari et al., 2018; Mokhtari & Sheorey, 2002). Global reading strategies or GRS typically intends at the initial stage of reading consisting of five statements (having purpose, taking notes, previewing, reading aloud and checking content). GRS reflects action taken by cadets prior to comprehending the whole text. While problem-solving strategies (PSS) are procedures that can be applied when obstacles or difficulties arise such as giving a break while reading, using symbols, critically analyzing, rereading, and guessing meaning. PSS aims as repairing strategies amidst or during the reading process. Support reading strategies (SRS) as it names, work as supporting procedures to maintain readers' understanding, the strategies are discussing with others, getting back on track, underlining information, adjusting reading speed, using additional material. The utilization of these strategies can be varied based on the reading situation which reflects the cadets' metacognitively aware of reading strategies. The awareness of metacognitive reading strategies taps learners' viewpoints toward the existence and the substantial of three elements of reading strategies include GRS, PSS, and SRS in reading academic-related material. If readers begin to be aware of their own thinking and learning process, they consciously tend to utilize various metacognitive reading strategies in order to assist them in understanding the text effectively. In line with this, Mokhtari et al. (2018) the strategy significantly directs students to be effective and efficient readers as they are trying to work on most essential aspects of written information and to adjust their reading strategies as needed.

Broadly, several researchers on reading and EFL teaching have investigated the essential role of metacognitive reading strategies for tertiary students (Dangin, 2020; Darjito, 2019; Deliany & Cahyono, 2020; Duong & Nguyen, 2022; Rochmawati et al., 2022; Sheikh et al., 2019; Sinom & Kuswandono, 2022; Talwar et al., 2023). Some underpin significant association among metacognitive strategies utilization and readers' performance in different EFL contexts and Vietnamese subjects (Duong & Nguyen, 2022). Others focused on learners' academic success in the context of Pakistan and the United States respectively (Sheikh et al., 2019; Talwar et al., 2023). Other streams conducted among university students in Java provinces such as Deliany and Cahyono (2020) depicted that ELT students in East Java who showed higher awareness of metacognitive reading strategies were considered as skilled readers and good at reading. On a similar vein, undergraduate EFL students in Central Java revealed high awareness of metacognitive reading strategies utilization (Dangin, 2020). Their awareness is reflected through their action in utilizing various reading strategies while fixing comprehension obstacles. In spite of the proportion of mentioned procedures to enhance readers' performance, most researchers pertaining to EFL learners have mainly focused on giving a train, correlating, and classifying the reading strategies in the context of tertiary students. A latest discovery pertaining to aviation cadets has not represented adequate viewpoints on the metacognitive reading strategies as EFL learners (Rochmawati et al., 2022). The investigation roughly investigated the cadets metacognitive reading strategies awareness despite more focus on underpinning the cadets' motivation in reading. Previous researchers genuinely gave attention to university students as the research subjects.

A preliminary investigation conducted by the researcher to the aviation cadets in an institution at South Sumatera, unfolded the cadets' English proficiency are utmost in levels of moderate and low. The majority of them specifically get unsatisfactory results on the reading test. During the learning process, understanding the English material given was challenging for them. Not only because of a lack of ability in English but more likely it might be because of insufficient understanding in using reading strategies that can assist them. This condition goes along with the discovery by Zhang and Guo (2020). They underpinned inappropriate strategies used in reading may direct students to the lack of success apart from lack of repertory. Furthermore, Rochmawati et al. (2022) add that a strong sense of metacognitive strategies can assist cadets to perform better. It can be assumed that metacognitive reading strategies can be an essential reason behind low performance of cadets in reading comprehension. Mokhtari et al. (2018) highlight the constant assessment of metacognitive reading strategies should be done periodically to know how readers possess the reading text which is reflected from their reading result. In this case, examining cadets' understanding toward the reading strategies needs to be conducted to explore how the readers possess the reading text which will end up successful or otherwise. The awareness can also uncover how the cadets construct the activities which suit learning needs, and indirectly can also maintain cadets' reading performance. Considering the importance of reading to support cadets' academic performance, it is also regarded as one of the abilities that they should accomplish during study to support their career development. Accordingly, further study needs to be conducted highlighting the metacognitive reading strategies awareness among aviation cadets in this context. This present paper was intended to explore aviation cadets' awareness level of metacognitive reading strategies and how they demonstrate awareness of the metacognitive reading strategies in reading activities within English language context.

METHODOLOGY Subjects

The research was conducted in one aviation polytechnic located in South Sumatra provinces which involves 30 aviation cadets. The population was active aviation cadets of Diploma-IV majoring in an Airport Engineering Program. The selection was made based on the purposive sampling technique in order to consider the homogeneity of the participant's data (Creswell, 2014) in which cadets who have taken TOEFL test or TOEFL-like test and have enrolled in English course. The consideration of involving results of different tests because the institution has organized their own TOEFL and TOEFL like test. There were some students who have accomplished the TOEFL test, and some have accomplished the TOEFL-like test in that institution. In addition, the researcher began with investigating the issue and collecting the cadets' proficiency level with permission given by the language unit of the institution. Hence, reading test scores was explored as a way to consider the subject. Therefore, thirty cadets gave their consent to participate in the selfinventory questionnaire and 6 selected students for open-ended questions. There were six female cadets and twenty sixth male cadets who were classified into high scorers of the reading test; 7 cadets (>450), mid scorers; 16 cadets (400-450), and low scorers; 7 cadets (<400).

Design and Procedures

The research employed a sequential explanatory mixed-method design to address the problem highlighted. This explanatory approach is undertaken by collecting and analyzing quantitative data first in form of survey, then continuing with qualitative data as a proponent detail to support the findings. This design is the appropriate procedure to describe the attitudes of participants and give additional information for better completion (Creswell, 2014). The procedure began with collecting the data from a single survey of Metacognitive Awareness of Reading Strategies Inventory (MARSI) to reveal the awareness grade of GRS, PSS and SRS. Open-ended narrative questions were administered in the second phase. The urgency of administering this was to potentially reap shed more-light and reap more fruitful and reliable data (Clandinin & Caine, 2013) of how the utilization of metacognitive reading strategies. Hence, 6 selected cadets were asked giving their response toward the three open-ended written questions pertain to how the utilization of reading strategies amidst reading in English language context. The selected subjects were determined from high, mid, and low scores of reading test. This selection was undertaken since reading performance regards as one of factors that affect the metacognitive reading strategies used is multifaced and overlapped. Students who differ their performance was involved in this study to nail down particular group.

Prior data collection, the survey was validated and, regarded as valid and reliable to utilize with the Cronbach's alpha coefficient was equal to .850. Meanwhile, openended questions had firstly validated by an expert with the reason to check the

appropriateness of each item in eliciting the objective aligned. The expert is a professional lecturer who has experienced in teaching for about 10 years and been engaged with creating instructional material for reading for EFL, ESP, and ELT, and currently working on enhancing EFL students reading strategies in university level. After checking the validity and appropriateness of the open-ended questions, modification was made based on her suggestion since two questions remained ambiguous and excluded from the item. There were finally four questions were understandable and appropriate to use.

Data Collection and Data Analysis

A questionnaire was employed to collect the qualitative data of cadets' awareness. The questionnaire was adapted from the newest version of Metacognitive Awareness of Reading Strategies Inventory (MARSI) (Mokhtari et al., 2018). The MARSI consists of 15 statement items covering 3 aspects of awareness (5 elements of GRS, 5 items of PSS, and 5 items of SRS). The self-inventory was administered online in the form of Google Form by using Bahasa Indonesia to avoid misconception to examine metacognitive reading strategies among aviation cadets and the cadets were asked to scale their awareness from 1-5 toward the statement. Scale 1; never heard, 2; have heard but less idea about the strategy, 3; know what it means, 4; know and can explain about the strategy utilization, and 5; regularly use it. In addition, the openended questions were responded to in the final step in a different form after they completed the questionnaire. The question items were developed based on the theory of readers' metacognitive awareness by Mokhtari et al. (2018) to obtain information pertaining to how cadets perceive the utilization of the strategies of metacognitive reading in reading academic-related text. The four questions asked cadets' particular actions and procedures they take prior reading, strategies preference to understand the context of text during comprehension activity, obstacles faced during completing the reading task, and strategies or action taken in overcoming the obstacles to complete the task given.

The MARSI questionnaire was analyzed through simple calculation of descriptive statistics to measure cadets' awareness level of metacognitive reading strategies. The awareness levels are interpreted into three categories based on the mean scores such as high level of awareness (M=3.5 or higher), medium level of awareness (M=2.5-3.4), and low level of awareness (M=2.4 or lower). Moreover, the awareness of each aspect was presented descriptively with mean and standard deviation. Meanwhile, the response of open-ended questions was analyzed narratively based on the concept of metacognitive reading strategies designed by Mokhtari et al. (2018).

FINDINGS AND DISCUSSION

Findings

Quantitative Findings

In conjunction with the major objectives to examine cadets' awareness of metacognitive reading strategies, the quantitative data of MARSI inventory was responded to by 30 aviation cadets. The findings of cadets' awareness level were presented below.

Cadets' Awareness of Metacognitive Reading Strategies

The score was obtained by calculating each subscale of the metacognitive reading strategies and dividing with the highest score. From the total number of participants (N=30), the highest score of each subscale was 150. In addition to this, the aviation cadets' level awareness of metacognitive reading strategies was presented in the form of mean scores as follows.

Table 1. Descriptive statistics of metacognitive reading strategies awareness

N	Metacognitive Reading Strategies	Inventory Scale	
		Mean	Std. Deviation
30	Global Reading Strategies (GRS)	3.34	.850
	Problem-solving Strategies (PSS)	3.44	.839
	Support Reading Strategies (SRS)	3.50	.930
	Total inventory scores	3.43	

The finding of analysis showed that the overall mean of inventory scale was higher than 3, in which 3.43 (Table 1). Since the total mean was around in the medium level of awareness (M= 2.5 -3.4), it can be said that aviation cadets perceive to have awareness of metacognitive reading strategies in the medium level with a mean around 3.43. The aviation cadets were aware of existing metacognitive variations and maintained to employ it in daily usage of reading academic text. The awareness also reflects the most frequent usage of three subcategories of the strategies. In addition, support strategies received the highest scale that cadets have (M=3.50) followed by problem-solving strategies (M=3.44) and global reading strategies with (M=3.34) respectively. To reiterate, the most preferred strategy was SRS strategies, meanwhile the PSS and GRS were moderately used by the aviation cadets.

Table 2. Metacognitive reading strategies awareness in each aspect

Strategy	Statement	Mean	Std. D
GRS	Having a purpose in mind when I read		1,36
	Previewing the text to see what it is about before reading it	3.41	1,10
	Checking to see if the content of the text fits my purpose for reading.	3.65	1,08
	Using typographical aids like boldface and italics to pick out key information.	3.58	1,18
	Critically analyzing and evaluating the information read	3.41	.98
PSS	Getting back on track when getting side-tracked or distracted	3.41	1.12
	Adjusting my reading pace or speed based on what I'm reading.	3.82	1.10
	Stopping from time to time to think about what I'm reading	3.41	1.12
	Re-reading to make sure I understand what I'm reading	3.65	1.23

Strategy	Statement	Mean	Std. D
	Guessing the meaning of unknown words or phrases	3.48	1.12
SRS	Taking notes while reading	3.72	1.22
5115	Reading aloud to help me understand what I'm reading		1.46
	Discussing what I read with others to check my		1.15
	understanding Underlining or circling important information in the text	3.86	1.03
	Using reference materials such as dictionaries to support my reading	3.89	.86

Referring to the metacognitive framework, the descriptive statistics (Table 2) was calculated to describe the awareness of each category of GRS, PSS, SRS. The finding indicated that the cadets' highly aware of support strategy (SRS) specifically in varieties of "using dictionaries as additional materials to support their reading" (M= 3.89), "underlining or circling essential information" (m=3.86) and "discussing what I read with others to check my understanding" (M=3.75), and "strategy of taking notes while reading (M=3. 72). Interestingly, the lowest mean was coming from the strategy of reading aloud (M=2.86). In terms of problem-solving strategies, cadets were highly aware of "adjusting the reading speed based on the reading ambience (M=3.82)", then "re-reading to maintain the understanding (M=3.65). Meanwhile the rest of strategies received in the medium level such as "guessing" (M=3.48), "getting back on track (M=3.41) and "stopping time to time (M=3.41). Moreover, "checking the content" represented the highest scale of a category of global reading strategies (M=3.65) followed by "using typographical aids" which remained higher (M=3.58) respectively. While previewing text and evaluating the text critically showed the same (M=3.41) and keeping goal in mind remains lowest (M=3.17). In other words, the result indicated that cadets mainly perceive the variation of support reading strategies more in highest usage, meanwhile other two strategies in moderate usage.

Qualitative Findings

The questions were used to explore how the cadets from high, mid, and low scorer applied the metacognitive reading strategies while processing the reading material. The questions asked about action taken in utilizing reading strategies prior reading and during the reading, which revealed the variation of metacognitive reading strategies among them. The high scorers were coded C1 (500) and C2 (497), mid scorers were C3 (450) and C3 (430), and low scorers were C5 (365) and C6 (350). The result leads to three situations in which reading covers action taken prior deeper comprehension, problems they encountered when reading, and how to deal with those situations. These represented different forms of strategies orchestrated by the participant to actively engage in academic-related material. In addition to the first question, the cadets from high, mid, and low scorers perceived to show prior comprehension of the whole text with different variations.

Excerpt 1

"I usually begin with comprehending the headline or title of the text before reading the whole text as a starting point." - C1

Excerpt 2

Another high scorer added,

"If it is multiple-choice items, I prefer reading the options first to discover the purpose of processing the text, reading the direction and previewing the content." - C2

Excerpt 3

In different perspective, mid scorers stated,

"Skimming and scanning the material or text given as a way to minimize mistakes in completing the task later." -C3 and C4

Excerpt 4

One of them extended,

"I also try to understand the questions first prior to reading the whole text." -C3

The following excerpts represented that both high and mid scorers showed readiness, previewing the text, immersing themselves with passage and task, which belong to global reading strategies. In addition, lower scorers generally said that they sometimes comprehend the questions first to seek their understanding toward the passage (C5). However, one of lower scorer interestingly roughly showed a significant preparation due to the response as follows,

Excerpt 5

"I tend to directly discuss the material with others to check my understanding." - C6

Following the next response, cadets with high scores have good cognition and sufficient awareness of metacognitive reading strategies. They were confident and efficient during comprehending the reading text.

Excerpt 6

"I faced difficulty in guessing unfamiliar words or phrases. I will read and reread the text more frequently than usual reading activity (reading for pleasure/fun), add more references for comparing-contrasting the idea and discuss it with friends in order to strengthen my understanding. I will look up unknown words in the dictionary." – C1

Excerpt 7

In similar vein, another point was added by higher scorer.

"I love watching movies and reading regularly, so I roughly find significant difficulties while processing the text so far, only some unfamiliar words which was normal to experience that one. So, I usually read and underline or give a

mark toward certain words to make it easier and proceed to the dictionary and discuss the material with others." - C2

The high scorers declared that they have self-cognition and confidence in solving the problems, they possess more than one action; re-reading, marking words, looking for additional references and discussing to help them solve the issue in reading. It means that they are carefully aware of actions taken and encompass various strategies (problem-solving strategies and support reading strategies). In different cases, cadets who got mid score interestingly possess adequate self-management and are conscious toward their ability as they utilize three various strategies simultaneously when facing difficulties. For instance, one of them contended that

Excerpt 8

"Uncommon words were quite challenging for me to interpret the whole parallel sentences." I easily get confused when it comes to multiple choice distractors because the options seem directed to the right answer. I usually preview the listed options slowly and try to mix and match the options with the available keywords so I can eliminate and end up with the correct one. Also, I read the first and last sentence in each of them often to understand what the text mainly discusses. "Google translate or dictionary are the optional tools that I prefer to use." C-4

Mid scorers interestingly got back on track because they easily get distracted, reread, adjusted speed which belong to PSS. They previewed, critically analyzed (GRS), and they applied SRS such as discussing and using additional materials. On the contrary, low scorers demonstrate lower confidence and insufficient capability in reading. They roughly varied their actions that can help them in processing the text just passively work by themselves. As in illustration, one of responded

Excerpt 9

"I lacked understanding, so it is hard for me to grasp the information described in the certain passage or even to nail down the meaning of sentences of the whole text. I will re- read and get back on track. A translation app is an essential tool that I will always use although I also face difficulty in interpreting the text even by translating word by word." – C6

The above quote evidenced the lower scorer, C6's difficulties in the classroom context of reading comprehension. C6 was aware of having insufficient knowledge regarding vocabulary. As a consequence, lower scorers tend to focus on SRS (using complementary apps) and PSS (re-reading & getting back on track) with less variation amidst reading.

Discussion

The study aimed at investigating the metacognitive reading strategies awareness among cadets majoring in aviation engineering in one of the polytechnics in Indonesia. Referring to the theoretical framework from Mokhtari et al. (2018), the awareness reflects students' preference of reading strategy employed in general within the context of academic-related material. The finding of the first investigation uncovered that metacognitive awareness of reading strategies is genuinely perceived by aviation cadets in Indonesia. The overall result remained 3.43 mean scale which

indicates that aviation cadets favoured in average awareness level. It can be claimed that cadets are moderately having insufficient understanding toward the metacognitive reading strategies and the use of each strategy in reading.

Moreover, taking into specifically on each subvariety, support reading strategies acknowledged as the highest strategies that aviation cadets are aware of (M=3.50). They were enlightened in utilizing a dictionary as supplementary reading equipment, marking important details on text, having discussions, and preparing notes amidst the reading activity. This finding is similar to Al-Mekhlafi (2018) that the SRS is perceived as the fundamental support to maintain EFL learners' understanding, thus it is much contributed and applied by most readers specifically. Moreover, reading aloud was the least strategy used (M=2.86). It may happen because this type of academic text is more than a usual reading which needs concentration and deeper understanding, thus reading works best in silent mode. Deliany and Cahyono (2020) highlights the tendency of adjusting their reading mode due to type of texts. For instance, reading in tertiary level is more likely higher order understanding which asks students to deeply engage with the text, thus their preference in reading goes to silent-reading which is more effective (Deliany and Cahyono, 2020). Another viewpoint can be because students were in tertiary level, and mature enough to have their own preference in adjusting their mode, yet understanding reading material works best in silence mode.

On the other hand, the SRS strategies receive the least strategy use in the context of EFL students (Aşıkcan & Saban, 2018; Dangin, 2020). Although less favorable, the mean scale acknowledged in the high level (M=50). The EFL readers, in this case, were typically maintaining their awareness of each strategy usage and aware of the significance of each utilization which assists them in taking important headlines toward the reading. It can also happen since the students specifically in Turkey have received sufficient training regarding reading strategies at the university level, so they have sufficient understanding toward the strategies in the highest portion with the mean around 3.50 - 3.70. (Asikcan & Bacan, 2018). As a consequence, tertiary students there demonstrate more understanding than the aviation cadets in the present study. In addition, PSS strategies are perceived in the second-order strategy. Adjusting speed of reading and re-comprehending text are the most strategies used by aviation cadets. The majority of cadets tend to be aware of demonstrating the changing of reading speed and re-reading more often while working on difficulties compared to the rest of three strategies. This result goes along with Fitria (2021) who revealed that inability to deal with problems is the reason behind employing the PSS strategy. The strategy works for reading fluency as readers unable to recognize uncommon words, they will read over again, delay the process to think further step and make an adjustment toward their reading mode for better comprehension (Fitria, 2021). Furthermore, it might have occurred since they have not received particular training or course on reading strategies application, thus they only have control toward their cognition by the two strategies based on their habit in reading and their familiarity within the strategies variation. Deliany and Cahyono (2020) concluded that the readers are regulating their brain to take control over solving problems, thus the readers empower themselves toward the utilization of each aspect of this strategy or regulating other ways or actions. Moreover, GRS was in the least-order strategy among other two strategies. This result is understandable since Mokhtari et al. (2018) featured the characteristic of GRS strategies as actions and techniques that are mostly used for setting the initial stages of reading, one of which focuses on discovering objective prior reading, previewing text to check content. The two dominant strategies are content checking and using typographical aid like bold face. This may happen since the cadets' reading activities mostly asked them to read authentic material by using computers and gadgets. Therefore, readers use the two strategies for marking essential information.

To conclude the first objective, the aviation cadets are having moderate awareness of metacognitive in terms of reading strategies. This moderate level also reflects the awareness toward the procedures or strategies that cadets' use to facilitate them in monitoring and managing their reading as to complete the task given in general.

The second objective in this study is unveiling how cadets demonstrate the awareness of the variety of actions taken in reading activities within the English language context. Interestingly, cadets who got high, mid, and low scores demonstrated dissimilar awareness toward the utilization of the metacognitive reading strategies. The awareness regarding the number of strategies used and the significance of each strategy taken by cadets. In the qualitative finding, participants intentionally prepared themselves by utilizing each variation of GRS, PSS and SRS while processing the text. Numerous researchers have underpinned those three elements of metacognitive reading strategies are significantly attributed to facilitate readers in reading (Dangin, 2020; Deliany & Cahyono, 2020; Ghaith & El-Sanyoura, 2019; Khurram, 2018; Kusumawardana & Akhiriyah, 2022; Sinom & Kuswandono, 2022; Talwar et al., 2023).

At the early stages, both high and mid scorers showed more variation on the utilization of global reading strategies compared to lower scorers prior comprehending the whole text (Excerpts 1-5). The actions taken were systematically organized. They previewed and checked direction, title, and the items of task given. Scanning and skimming were done in order to pick out essential points to learn and remember. The high scorers showed more confidence and cognition while working with text (Excerpts 6 & 7) because they already understand how to regulate several strategies in order to help them succeed in completing the task given. Both of the high scorers took a further step in describing the strategies' awareness by integrating other actions such as re-reading and adding more references, underlining and marking text which belong to PSS and SRS strategies. Having discussions with friends was also done by them for deeper understanding. In this case, high scorers managed to be socially engaged within the text. This finding is in line with Hamidin and Saukah (2020) discovering that a successful reader has such confidence compared to two groups. Zhang in previous study mention, self-confidence works as a bridge which facilitates successful readers to have higher results because they have a conscious feeling toward their ability to proceed the task (Hamiddin & Saukah, 2020) Moreover, action taken by mid scorers demonstrated that they are really aware of their own limitations. As a result, they set their readiness prior comprehension activity by checking the material given carefully (see Excerpts 3). It can be said that mid scorers were a strategic reading because they choose the procedures to assist themselves effectively. Sinom and Kuswondono (2022) add that learners who manage to choose best working methods for them are able to adjust themselves under certain circumstances and learn better regards as a strategic reader with adequate self-knowledge. It can be concluded that mid scorers have sufficient knowledge and a strategic reader. On the other hand, one low scorer reflected their planning by identifying the task elements to know what it is about. However, another seemed roughly ready to work with the text given as seeking assistance from others to check their understanding (see Excerpt 5). These actions reflected less exploration and passiveness in using other strategies. One of them, furthermore, was also roughly confident to try working with the text independently.

All three strategies are interestingly produced by cadets who received average scores in order to facilitate them in tackling problems within the text. The mid scorers seem conscious toward their weakness and problem occurs in reading therefore they were carefully adaptable to change one into other actions (Excerpt 8). Starting to discover their limitation in getting distracted, changing the reading speed is done by them. They continue to possess different strategies to strengthen their understanding by looking at dictionaries and sharing perspectives with others. This interpretation has just proved the contrary finding revealed by Ghaith and El-Sanyoura (2019) where PSS was an indicator, which affect participant the most, whereas the mid scorer applied GRS, PSS, and SRS simultaneously to boost their mastery although the portion are not equal to each of them. Interestingly, lower scorers were lacking in confidence although they have realized their capability was far from satisfactory. They were reluctant to utilize other actions, just relying on one strategy of SRS, the translation application more. It can be seen that the low scorers roughly have an eagerness to improve their capability to be successful readers. Nor adjusting their behavior or action to assist them better, they seemed accustomed to focus on common strategies although encountering difficulties. According to Al-Mek(Supriani & Dardjito, 2018) hlafi (2018), the more positive self-concept readers have in mind toward the reading strategies the more competent the reader in reading performance. It interprets that a successful reader genuinely has a positive mindset, while someone who has a negative mindset is regarded as an unsuccessful reader. It can be concluded that low scorers have far from positive self-concept as a reader. Moreover, the strategy of re-reading belongs to PSS (Excerpt 9). It reflects ineffectiveness of metacognitive reading strategies utilization which can support them in getting higher scores, as a result they got unsatisfactory results which are far from standard. Interestingly, those three groups experienced the same difficulties pertaining to inadequate vocabulary, they faced unknown words that are difficult to predict. This find similar that lack of vocabularies are the main challenges within Indonesian students in understanding and interpreting an English text (Supriani & Dardjito, 2018).

A researcher proved that although cadets perceive reading activity as unattractive, several weeks of metacognitive reading strategies instruction may boost cadets' skill level in reading (Rochmawati et al., 2022). Thus, learning metacognitive reading strategies can empower cadets to be more autonomous and efficient in reading and it has been proved by many empirical studies (Al-Mekhlafi, 2018; Rochmawati et al., 2022; Talwar et al., 2023). Furthermore, the fact that cadets have not been provided with adequate training toward the reading strategies, perceived as logical reason proving only several cadets got satisfactory scores. This points out the significance of having awareness of metacognitive reading strategies is an effective way to assist aviation cadets to comprehend every aspect of complex texts as to overcome problems faced amidst comprehension activities (Deliany & Cahyono, 2020; Kusumawardana & Akhiriyah, 2022). This paper highlights the importance of

understanding the learner' views and how they possess the reading which determine the final result of their performance in possessing the text.

CONCLUSION AND SUGGESTION

The discovery of this study confirms that awareness of metacognitive reading strategies among all aviation cadets is at a moderate level. It also indicates that the cadets who are enrolled in Aviation Program generally perceive the reading strategies in the ordinary usage within the English language context. The strategy used was dominated by support strategies, followed by problem strategies, and global strategies as the least. Having dictionaries for supporting reading and marking information were the two dominant support strategies used by the cadets. In terms of problem strategies usage, cadets were dominantly modifying reading speed and recomprehending text for understanding the text deeper. Meanwhile for global strategies, cadets mostly utilized the content checking and using additional boldface tools for picking keywords and examining the text prior to reading.

Taking into more detail, there was a noticeable distinction among cadets from high, mid, and low scorers. Both high and mid scorer cadets were strategic readers and demonstrated sufficient knowledge in integrating the strategies used of PSS, GRS, and SRS compared to low scorers. High cadets encompassed more awareness toward the utilization of support reading strategies and other strategies for tackling problems as they were accustomed to discuss with others as part of maintaining their understanding, marking important or key information, and adding further references. It can be concluded that they also tried to be socially engaged with the text. In addition, mid scorer cadets also were strategic readers although they roughly employed a large array of metacognitive reading strategies as what high scorers did. On the other hand, cadets with low scorers were regarded as ineffective readers because they were passive in integrating the three strategies. They seemed to roughly realize the significance of every strategy taken although they acknowledged their limitations in reading activity. In terms of GRS strategy, comprehending questions and seeking for assistance were the strategies used to check their understanding prior reading. While encountering difficulties, re-reading and adding a translation dictionary was the most strategies used for getting back on track. As a result, they were far from confident to work on the task independently.

This study offers fruitful information for English instructors and cadets' curriculum makers pertaining to cadets' awareness and their demonstration toward the use of reading strategies in the academic reading context, thus an adjustment can be added to the further curriculum development. The instrument of this study also can be useful to assess students' understanding toward the existence of reading strategies that can be used for them in the learning process, as to map how far they can go with the reading.

On the other hand, the findings of the exploration may be restricted to the context in which the study is carried out. Dividing cadets' performance based on the reading score remains simple and may lead to inequitable generalization. Moreover, since the cadets have not received adequate knowledge or training pertaining to the metacognitive reading strategies, the difference in utilization of the strategies does not completely because they have varied in terms of reading score test but it might be due to several hidden factors. Therefore, similar studies employing data triangulation and in-depth investigation are encouraged to understand the cadets' variation in

depth. Besides, conducting classroom action and research experimental design are also promising to check the effectiveness of metacognitive reading strategies on cadets' reading competence.

ACKNOWLEDGEMENTS

The writer would like to acknowledge lecturers and cadets, and staffs of the aviation program and colleagues who has helped and assisted in completing the data collection. This research did not receive any funding either from institutions or third parties.

REFERENCES

- Ali, A.M., & Razali, A.B. (2019). A review of studies on cognitive and metacognitive reading strategies in teaching reading comprehension for ESL/EFL Learners. *English Language Teaching*, 12(6), 94. https://doi.org/10.5539/elt.v12n6p94
- Ardiani, W. (2022). Reading ability of Senior Air Traffic Control Cadets as measured by ICAO English Language Proficiency Test at CASEA of Makassar. *Teaching English as a Foreign Language Overseas Journal*, 10(1), 67–74. Https://doi.org/10.47178/teflo.v10i1.1624
- Aşıkcan, M., & Saban, A. (2018). Prospective teachers' metacognitive awareness levels of reading strategies. *Cypriot Journal of Educational Sciences*, 13(1), 23–30. https://doi.org/10.18844/cjes.v13i1.3310
- Clandinin, D.J., & Caine, V. (2013). Narrative inquiry. In *Reviewing qualitative* research in the social sciences (pp. 166-179). Routledge.
- Creswell, J.W. (2014). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage
- Dangin, D. (2020). Students' Awareness of metacognitive reading strategies in Academic Reading. *Journal of English Teaching and Learning Issues*, 3(1), 33. https://doi.org/10.21043/jetli.v3i1.7145
- Darjito, H. (2019). Students' metacognitive reading awareness and academic English reading comprehension in EFL context. *International Journal of Instruction*, 12(4), 611–624.
- Deliany, Z., & Cahyono, B.Y. (2020). Metacognitive reading strategies awareness and metacognitive reading strategies use of EFL university students across gender. *Studies in English Language and Education*, 7(2), 421–437. https://doi.org/10.24815/siele.v7i2.17026
- Duong, U.D.T., & Nguyen, K.D. (2022). Effect of EFL students' use of metacognitive strategies in extensive reading tasks on their reading performance and attitudes. *European Journal of Foreign Language Teaching*, 6(3). https://doi.org/10.46827/ejfl.v6i3.4440
- Fitria, A. (2021). Submitted in Fulfillment of the Requirements for the Degree of Sarjana Pendidikan (S. Pd) English Education Program.
- Flavell, J.H. (1976). Metacognitive aspects of problem solving. In L. B. Resnick (Ed.), *The nature of intelligence* (pp. 231-236). Hillsdale, NJ: Erlbaum.
- Ghaith, G., & El-Sanyoura, H. (2019). Reading comprehension: The mediating role of metacognitive strategies. *Reading Comprehension*, 31(1).
- Hamiddin, H., & Saukah, A. (2020). Investigating metacognitive knowledge in reading comprehension: The case of Indonesian undergraduate students.

- *Indonesian Journal of Applied Linguistics*, 9(3), 608–615. https://doi.org/10.17509/ijal.v9i3.23211
- Khurram, B.A. (2018). Relation between reading performance and metacognitive awareness and strategy use of University Level ESL students of Pakistan. *Kashmir Journal of Language Research*, 21(2), Article 2.
- Kusumawardana, Z.R., & Akhiriyah, S. (2022). EFL university students' metacognitive awareness of reading strategy and its correlation with their reading comprehension. *Linguistics and ELT Journal*, 10(1), 1–15.
- Limbong, S. (2021). Perspective of cadets towards Maritime English at Polytechnics of Makassar Merchant Marine. *English, Teaching, Learning, and Research Journal (ETERNAL)*, 7(2), 340-349.
- Mokhtari, K. (2016). Improving Reading Comprehension through Metacognitive Reading Strategies Instruction. Rowman & Littlefield.
- Mokhtari, K., Dimitrov, D.M., & Reichard, C.A. (2018). Revising the Metacognitive Awareness of Reading Strategies Inventory (MARSI) and testing for factorial invariance. *Studies in Second Language Learning and Teaching*, 8(2), 219–246. https://doi.org/10.14746/ssllt.2018.8.2.3
- Mokhtari, K., & Sheorey, R. (2002). Measuring ESL students' awareness of reading strategies. *Journal of Developmental Education*, 25, 2–10.
- Rahmat, N., & Jincheng, Z. (2022). Investigating the use of metacognitive reading strategies using Think Aloud Protocol. *International Journal of Academic Research in Business and Social Sciences*, 12, 772–784. https://doi.org/10.6007/IJARBSS/v12-i10/14990
- Rochmawati, L., Fatmawati, F. (2022). Metacognitive reading strategies of English Lesson at Indonesian Civil Aviation Polytechnic. *International Journal of Instruction*, 15(1), 583–600. https://doi.org/10.29333/iji.2022.15133a
- Sheikh, I., Soomro, K., & Hussain, N. (2019). Metacognitive awareness of reading strategies, reading practices and academic attainments of university students. *Journal of Education and Educational Development*, 6(1), 126–137. https://doi.org/10.22555/joeed.v6i1.2749
- Sinom, P.A.P., & Kuswandono, P. (2022). Indonesian EFL undergraduate students' interest towards metacognitive strategy in reading academic comprehension. *Journal of English Language Teaching and Linguistics*, 7(1), 83. https://doi.org/10.21462/jeltl.v7i1.728
- Sukma, M.M. (2018). Increasing cadet's reading comprehension through questioning and answering method. *Jurnal Penelitian*, *3*(3), Article 3. https://doi.org/10.46491/jp.v3i3.46
- Supriani, N., & Dardjito, H. (2018). EFL Instructional Process and 2018 Examination Writing for Junior High School in Yogyakarta.
- Talwar, A., Magliano, J. P., Higgs, K., Santuzzi, A., Tonks, S., O'Reilly, T., & Sabatini, J. (2023). Early academic success in college: Examining the contributions of reading literacy skills, metacognitive reading strategies, and reading motivation. *Journal of College Reading and Learning*, 53(1), 58–87. https://doi.org/10.1080/10790195.2022.2137069
- Tedjo, E. W., Teopilus, S., Hartani, T., & Sulindra, E. (2022). Metacognitive reading strategy awareness and reading performance of vocational lecturers. *VELES Voices of English Language Education Society*, *6*(1), 67–77. https://doi.org/10.29408/veles.v6i1.5247

Zhang, X., & Guo, L. (2020). Cognitive and metacognitive reading strategies training in EFL reading. *Proceedings of the International Conference on Education, Economics and Information Management (ICEEIM 2019)*. International Conference on Education, Economics and Information Management (ICEEIM 2019), Wuhan, Hubei, China. https://doi.org/10.2991/assehr.k.200401.028

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