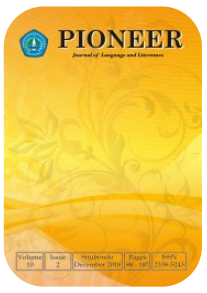

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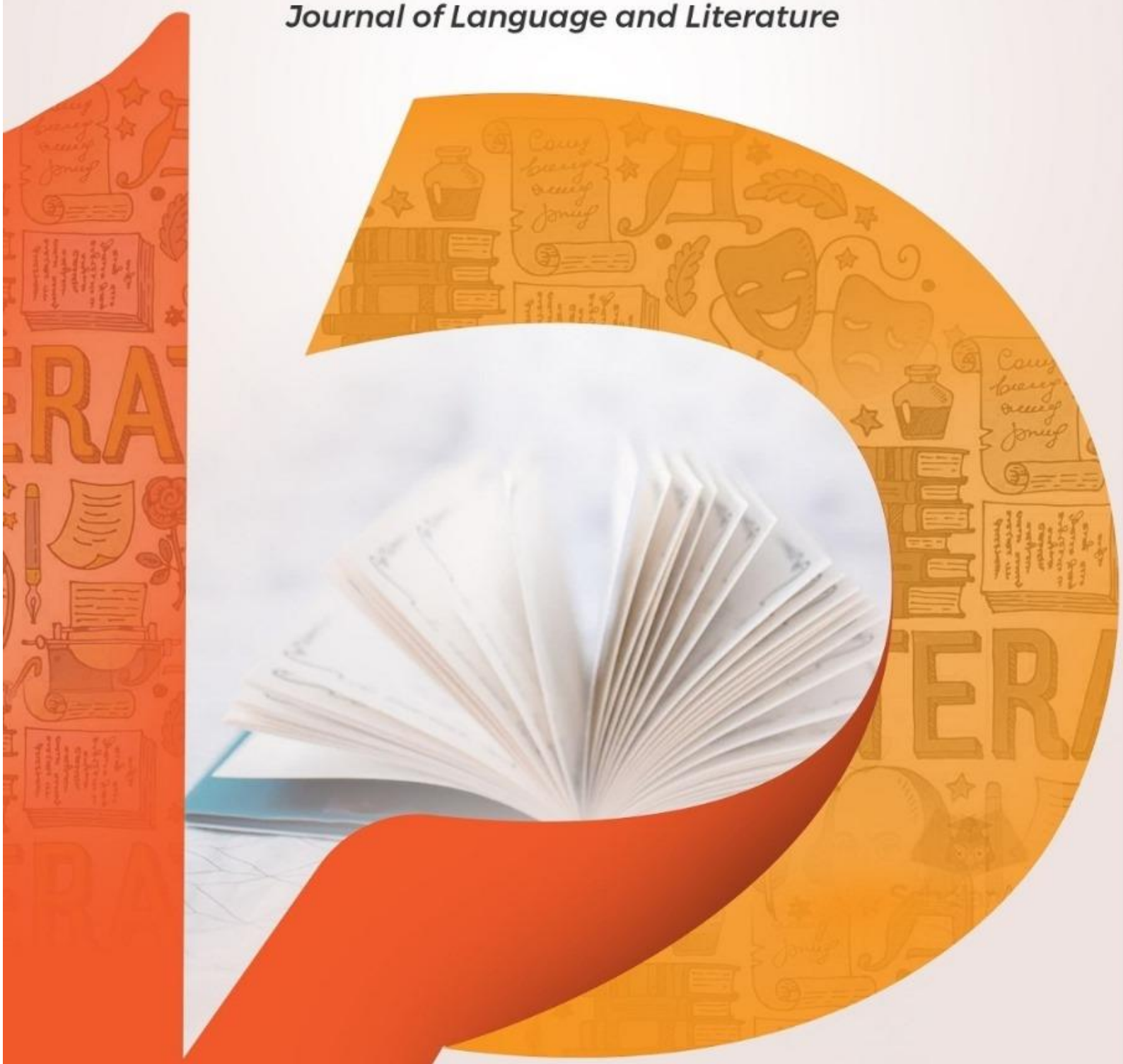

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EFL STUDENTS' PERCEPTIONS OF THEIR METACOGNITIVE AWARENESS IN ENGLISH LANGUAGE LEARNING

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Abstract: Effective English language teaching demands proficient teachers, as pre-service teachers in the English Education department must possess strong English proficiency to teach effectively. This study investigates the perceptions of metacognitive awareness among pre-service EFL teachers in an Indonesian context. Quantitative data were collected using Balcikanli's Metacognitive Awareness Inventory (MAI), and qualitative data were gathered through semi-structured interviews. The findings reveal that pre-service teachers in the English Language Education department display varying levels of metacognitive awareness, which impacts their ability to effectively teach English. 60% of participants have a moderate perception of their metacognitive awareness, while 40% exhibit a high level. Key aspects of metacognition, including declarative, procedural, and conditional knowledge, as well as regulation of cognition through planning, monitoring, and evaluating, were examined. It highlighted that the pre-service teachers are generally aware of their learning strengths and weaknesses but face challenges in regulating learning effectively. The study contributes to the field of English language learning and teaching by emphasizing the role of metacognitive awareness in achieving successful language acquisition and suggests that ongoing support and training are essential for pre-service teachers to become effective educators.

Keywords: *English language learning, EFL learners, metacognitive awareness*

INTRODUCTION

Effective English language teaching demands a proficient teacher. As stated, "teachers cannot teach what they don't know", pre-service teachers in the English

Education department must possess a strong English proficiency to effectively teach English in their future classroom (Wulyani et al., 2019; Renandya et al., 2018). Moreover, in the Indonesian context, where English is considered a foreign language, challenges emerge for pre-service EFL teachers to prepare themselves with sufficient English proficiency as well as their pedagogical skills (Hadi, 2019). Thus, it is crucial for pre-service EFL teachers to develop a strong awareness of their English language proficiency by examining their strengths and weaknesses, identifying learning strategies, and developing their self-regulation in learning.

From previous studies, challenges in developing the language for pre-service English teachers were varied in particular skills. For instance, they had difficulty listening to English news owing to unfamiliar vocabulary, varied accents, quick speech tempo, or complicated ideas given (Zulfikar et al., 2020). Due to a lack of vocabulary, grammar understanding, fluency, anxiousness, and self-confidence, EFL students also had difficulties in strengthening their speaking skills (Syafi'i, 2020). Furthermore, EFL students need help with reading challenges, such as distinguishing main ideas and supporting details, understanding cross-cultural texts, and identifying unfamiliar vocabulary (Anwar & Sailuddin, 2022; Ramadhianti & Somba, 2023). Hence, in order to learn effectively, EFL learners must be able to regulate their own learning to be successful by developing their metacognitive awareness (Dardjito, 2019). Arguably, metacognition is seen as a vital determinant of English language learning success (Zhang, et al., 2021). When they are aware of their metacognition process, the learners will be able to define their learning goals, apply suitable strategies to achieve them and track their progress toward achieving the goals. Additionally, it enables EFL learners to look back on their learning, which leads to more independent and confident learning (Wardoyo et al., 2021; Fritzsche et al., 2018).

Metacognition has been identified as a skill that EFL pre-service teachers must develop to achieve efficient English language learning. These are the basic competencies that learners must acquire to study successfully. Some research has investigated students' metacognitive awareness and its effects on language learning. In their study, Mäkipää, Kallio, and Hotulainen (2021) discovered that students with higher levels of metacognition may get higher grades in foreign language classes. Also, Pramesti, Susanto, and Sukmaningrum (2023) further discovered that metacognitive awareness

influences students' writing skills. Moreover, Hamiddin and Saukah (2020) discovered that successful learners had greater metacognitive knowledge, awareness, and motivation than less successful learners. It means that low-performing learners often lack metacognitive skills which leads to difficulties in regulating and staying engaged in their learning. In another study, Hidayatulloh et al. (2020) discovered that the capacity to assess the way one learns differentiates people with high and poor metacognitive awareness.

The findings of the previous research suggested that improving metacognitive awareness is critical for students to pause and reflect upon what they already understand and must understand to accomplish their learning objectives. However, these studies mostly involved secondary students and focused on particular English skills. Thus, this study intends to examine the metacognitive awareness level of pre-service EFL teachers in the English Language Education department. To find the answer to the research objective, the researcher proposed one research question; 'What are the perceptions of pre-service EFL teachers regarding their level of metacognitive awareness in English language learning?' This study focused on the student's assessment of their own cognitive strengths and weaknesses, accomplishments of tasks, and self-regulation to plan, monitor, and evaluate their language learning process as they are expected to teach this language as teachers. The findings of this study should make a significant contribution to the field of English language learning and teaching, especially for both language learners and educators. This study was designed to help language learners sharpening the awareness of their metacognition knowledge and skills. This study also aimed to help teachers understand the relevance of metacognitive awareness in helping students achieve better language acquisition.

REVIEW OF LITERATURE

Metacognition in Learning

Metacognition, as described by Flavell (1976), is "one's knowledge concerning one's own cognitive processes and products". Meanwhile, Brown (1987) defined metacognition as the awareness and comprehension of one's own mental process. Haukås, Bjørke, & Dypedahl (2018) further assumed that metacognition refers to awareness of and thoughts on one's knowledge, experiences, emotions, and learning. Metacognition is

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then divided into two parts: knowledge of cognition and regulation of cognition (Uppal & Kumar, 2020; Jia et al., 2019; Kallio et al., 2018).

Knowledge of cognition appears to be the ability to understand one's own cognition. It was made up of discovered knowledge regarding a person, a task, and a strategy. Knowledge of cognition includes a person's comprehension of what, how, when, and why they are learning. It also includes the comprehension of what a strategy is and when it might be used in their learning. Furthermore, knowledge of cognition anchores three other elements of knowledge. Declarative knowledge is the first type of metacognitive knowledge which refers to students' understanding of what they are studying (Mäkipää et al., 2021). It also involves their understanding of themselves, their tasks, and their learning processes (Eriyani, 2020). The second type of knowledge is procedural knowledge, which refers to student knowledge of how to accomplish things. It is about how students can reach their learning objectives through the use of strategies and other methods (Kallio et al., 2020). Lastly, conditional knowledge refers to students' understanding of what, how, why, and when specific methods can be employed in certain contexts (Alt & Raichel, 2020). It is related to the understanding of the time, place, and reason to choose specific strategies in learning.

Regulation of cognition is another significant aspect of metacognition. Successful learning hinges on students' ability to regulate their cognition, which includes monitoring and managing their learning process (Stephanou & Mpiontini, 2017). It encompasses managing knowledge, planning, monitoring, and assessing their learning, as well as employing techniques for improvement. Specifically, regulation of cognition is divided into three sub-dimensions: planning, monitoring, and evaluating (Kurdi et al., 2021). Firstly, planning involves selecting appropriate strategies and resources to enhance learning performance. Secondly, monitoring refers to assessing one's learning and the strategy used to ensure knowledge comprehension. Finally, evaluating is a process of analyzing a student's performance and strategy effectiveness. According to Alt and Raichel (2020), metacognition indicates our ability to spot what we already are aware of and are unaware of, alongside an understanding of our cognitive processes. Research indicates that students who understand their personal learning process outperform those who lack this awareness (Jaleel & Premachandran, 2016). This is because metacognition of regulation enables students to understand their own learning strengths and weaknesses,

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to create and implement effective learning strategies, and to track their progress toward their learning objectives.

Metacognition and Academic Achievement

Metacognition activities are unable to stand alone in the learning process or task completion. It is intimately related to cognition (Eriyani, 2020). Cognition is the brain's activity or process of acquiring knowledge and understanding by employing thinking, experience, and senses. While metacognition is the awareness of one's own cognitive process. It means that metacognition comes first, followed by cognition. If cognition is the realization and understanding of something, then metacognition is the realization and understanding of how someone learns and understands something. In a nutshell, metacognition is a person's understanding of his cognition process and product cognition, as well as his ability to regulate and manage it. When metacognition is at a high degree, cognition functions effectively. It means that metacognition, rather than cognition, defines one's achievement.

Metacognitive abilities, as well as knowledge and experience, are required. Students' demands and strategies for achieving learning objectives can be determined by their knowledge. Metacognitive experiences address how and in what situations these students' abilities and strategies must be deployed (Aisyi et al., 2021). Metacognition has been found in several studies to promote learning. In general, it is shown that good students are metacognitive skillful, whereas metacognitive poor persons are faulty in their approach. According to Devika and Singh (2019), a comprehensive understanding of how to utilize skills is metacognitive awareness. It not only aids students in learning about their cognitive processes, but it additionally regulates their learning activities.

There have been studies undertaken to investigate students' learning achievement as a result of metacognitive awareness. Sawhney and Bansal (2015) conducted research by using Schraw and Dennison's Metacognitive Awareness Inventory (MAI). The findings demonstrated a significant difference in learning outcomes between undergraduate students with strong metacognitive awareness and those with low metacognitive awareness. Another study by Kurdi, Latief, and Astuti (2021) explored the relationship between undergraduate students' metacognitive awareness and grammar achievement using the MAI questionnaire and the TOEFL test. From the correlation analysis, it was found that there is a significant correlation between the two variables. It

implied that students with a higher level of metacognitive awareness scored better in grammar. However, this result cannot be generalized because only a third of all students' grammar achievement can be predicted accurately. Also, the study discovered that the higher the students' preference for evaluation, the higher the score they can get in grammar achievement. In another English skill, Al-Mekhlafi (2018) used the Metacognitive Awareness of Reading Strategies Inventory (MARSI) and the Survey of Reading Strategies (SORS) to assess the level of metacognitive awareness of Omani 74 EFL students participating in reading. According to the study, EFL students utilized three types of reading methods: support reading strategies, global reading strategies, and problem-solving strategies. It was claimed that students employ several types of reading strategies depending on the level and purpose of their reading. Similarly, a study by Kusumawardana and Akhiriyah (2022) examined the relationship between EFL university students' metacognitive awareness of reading strategy and reading comprehension. Using the MARSI questionnaire, which is a revised version, and students' Test Proficiency Level (TEP), they discovered that the majority of the students have a high level of metacognitive awareness with Problem-Solving Strategies (PRS) as the most used strategy in reading. It indicates that the EFL students are paying attention to their reading and keeping track of their comprehension. However, it showed that there is no correlation between metacognitive awareness of reading strategy and reading comprehension because they lack knowing what reading strategies to use, and how and when to use them.

METHOD

A mixed-method approach was used to investigate the metacognitive awareness of the pre-service teachers in the English Language Education Study Program (ELESP). There was a total of 45 pre-service English teachers involved in this study. Creswell (2014) defines the mixed approach as "an appropriate method for examining a phenomenon that entailed quantitative and qualitative data to answer the research questions". By combining the two types of data, a more nuanced and complete picture of pre-service teachers' metacognitive strengths and weaknesses, their understanding of their own learning process, and the influences of these factors on their learning experiences could be gained. Initially, quantitative data was collected using a modified

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version of Balcikanli's (2011) Metacognitive Awareness Inventory in Teaching. There were 24 statements covering the two primary components of metacognition. The Knowledge of Cognition component includes subcategories such as Declarative Knowledge, Procedural Knowledge, and Conditional Knowledge, while Regulation of Cognition includes Planning, Monitoring, and Evaluating. The questionnaire used a 5-point Likert scale of 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). The descriptive statistic was employed in analyzing the students' perceptions of their metacognitive awareness in learning English. The mean category in the table below was used to interpret the data following a similar study by Mbato and Triprihatmini (2022) that utilized Balcikanli's Metacognitive Awareness Inventory.

Table 1. Mean Category

Mean Range	Interpretation
3.68-5.00	A high degree of perception
2.34-3.67	A moderate degree of perception
1.00-2.33	A low degree of perception

Subsequently, the qualitative data was obtained through semi-structured interviews to clarify the quantitative data and gain more in-depth information related to the research questions. The questions to obtain the qualitative data were based on the questionnaire. Triangulation was conducted by comparing quantitative data and qualitative data to identify consistency and discrepancies in students' perceptions. Previous research by Lomi and Mbato (2021) also used this methodological triangulation to achieve validity and reliability where the results from the questionnaire, and interviews were triangulated. By integrating both quantitative and qualitative data, the researcher could gain a deeper comprehension of pre-service EFL teachers' metacognitive awareness in learning English. Also, richer data could be obtained from interviews to help the researcher interpret the data by understanding the challenges faced, the specific strategies employed, and the underlying reasons for their use in their English language learning.

FINDINGS AND DISCUSSION

Findings

The results obtained from the questionnaire and interviews were reported and discussed in this part. Table 2 shows the results of the level of students' perception of

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their metacognitive awareness obtained through the Likert-scale questionnaire. The result of the questionnaire revealed that 60% of pre-service EFL teachers demonstrated a moderate degree of perception about their metacognitive awareness and 40% of them appeared to have a high level of perception about metacognitive awareness. However, none of the participants showed a low perception of metacognitive awareness. These findings imply that pre-service EFL teachers are generally aware of their learning process and actively engaged in metacognitive activities.

Table 2. Pre-service EFL Teachers' Perception of Their Metacognitive Awareness

Level	N	Percentage
High	18	40%
Moderate	27	60%
Total	24	100%

EFL Students' Perceptions of Knowledge of Cognition

In this part, the researcher presented the data and discussion of students' perceptions of their knowledge of cognition. This part covered three main components of Knowledge of Cognition; Declarative, Procedural, and Conditional which would be described in different parties.

Table 3. Declaration Knowledge

	Statement	D (%)	N (%)	A (%)	MS	SD
Decl1	Awareness of strengths and weaknesses in learning	6.7	13.3	80	4.00	0.826
Decl2	Knowing the most important skills in learning	11.1	28.9	60	3.62	0.936
Decl3	Having control over learning	22.2	28.9	48.9	3.38	1.029
Decl4	Knowing the expectations in learning	6.7	17.8	75.5	3.93	0.837

Table 3 shows that students demonstrated a high and a moderate degree of perception toward declarative knowledge. Two statements had high results, such as Decl1 (80%, MS=4.00), and Decl4 (75.5%, MS=3.93) which revealed that most of the students are aware of their strengths and weaknesses in their English learning, and they also have expectations in their learning. However, the other two statements had a moderate level, in which 60% of the students know the important skills in their learning (Decl2, MS=3.62) and only 48.9% of them have control over their own learning (Decl3, MS=3.38). These findings are supported in the interview sections with the students in understanding of knowing themselves and their goal of learning English.

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"I think I know that I'm good at some skills, like speaking or reading. But I don't really have a schedule to learn outside campus. I think I only learn when I have assignments or homework. So, I am sometimes confused about what I have to learn." (St.1, St.5)

Table 4. Procedural Knowledge

	Statement	D (%)	N (%)	A (%)	MS	SD
Proc1	Trying to use proven learning techniques	4.4	22.2	75.5	3.89	0.859
Proc2	Having a specific reason for using a learning technique	8.9	28.9	62.2	3.67	0.826
Proc3	Awareness of the learning techniques while learning	11.1	35.6	53.3	3.53	0.842
Proc4	Using learning techniques automatically	6.7	33.3	60	3.73	0.863

As reported in Table 4, students' perceptions of procedural knowledge were also at moderate and high levels. The statements Proc1 and Proc4 are those at a high level, in which the students try to use the learning techniques that are effective for them (75.5%, MS=3.89) and use them automatically in their learning (60%, MS=3.73). Meanwhile, two statements had moderate results. Firstly, Proc2 (MS=3.67) reported that 62.2% of the students agreed to have a specific reason for using certain techniques. Secondly, 53.3% of the students agree with the statement Proc3 (MS=3.53) which implies that they are aware of their own techniques in their learning while 11.1% of them were not. Some students further explained their awareness of using different learning techniques to help them learn.

"I know that I can learn better by listening to music. So, I need to hear sounds whenever I learn. But I prefer to study alone. With music or sound, I think I can focus on my work." (St.4)
"For me, to learn better and understand better about the topic I learn, I have to use my voice to drill or speak the words that I read. In other words, I try to say out loud my understanding so that I know whether I fully understand it or I need to read it again." (St.5)

According to Table 5, students' perceptions of their conditional knowledge were mostly at a moderate level. The data asserted that about 60% of the students agree that they use their strengths to compensate for their weaknesses (Con1. MS=3.67), and they can motivate themselves to learn (Con2, MS=3.62). However, 31.1% of the students did not know which techniques effectively work on them so they chose neutral (Con4, MS=3.53). However, only one statement had a high level, in which the students agreed that they use different techniques in different situations (Con3, 80%, MS=3.91). The

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students further explained that they use the techniques depending on the task they have to complete and the skills they want to improve. Some interviewees supported these findings by elaborating on their experiences.

Table 5. Conditional Knowledge

	Statement	D (%)	N (%)	A (%)	MS	SD
Con1	Compensating strengths for weaknesses	11.1	28.9	60	3.67	0.905
Con2	Being able to motivate him/herself when having to learn and when need to learn	13.3	24.4	62.3	3.62	0.960
Con3	Using different learning techniques as required by the situation	6.7	13.3	80	3.91	0.763
Con4	Knowing when each learning technique is most effective	11.1	31.1	57.8	3.53	0.786

> *"I don't really know what my strengths are, so I can't use them to compensate for my weaknesses in learning. I don't really know about how I'm learning because I just learn and try to finish what I'm started. I'm just going with the flow."* (St.1)
> *"I think I'm not really motivated to learn unless I have a task or assignment to submit. It's difficult for me to set a schedule to learn and improve something because I just follow the instructions from the lecturer. So, I found that I'm a less motivated person."* (St.2)

EFL Students' Perceptions of Regulation of Cognition

The second part presented the data and discussion of students' perceptions of their regulation of cognition. This part covered three main components, such as Planning, Monitoring, and Evaluating.

Table 6. Planning

	Statement	D (%)	N (%)	A (%)	MS	SD
Plan1	Pacing him/herself in learning to have enough time	24.4	33.3	42.2	3.22	0.876
Plan2	Determining specific teaching goals before learning	20.0	33.3	46.7	3.44	1.013
Plan3	Asking questions about learning materials	8.9	31.1	60	3.73	0.986
Plan4	Organizing time to accomplish learning goals	31.1	26.7	42.2	3.13	1.100

Table 6 reported that students have a moderate degree of perception about Planning. In this aspect of the regulation of cognition, about 20% to 30% of the students were not aware of pacing their own learning so they couldn't organize the time to accomplish their learning goals. Also, they did not have any specific goals to achieve before learning. Meanwhile, around 26% to 33.3% of the students chose neutral on all of the statements. Despite this, many of the students (60%, MS=3.73) ask themselves about

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the materials or topics they will learn. These findings gained support from the interview sessions with the students explaining their planning steps for learning.

> *"…I think I don't really determine the goals and set plans to learn because I rarely learn on my own. I can say that I learn when I have assignments. So, my goal is to complete the assignment and submit it…"* (St.1)
> *"Sometimes it's difficult to stick to my plan to learn something. I have already organized the time that I should finish in two hours. But, even before that time, I give up and start to do anything else."* (St. 2)

Table 7. Monitoring

	Statement	D (%)	N (%)	A (%)	MS	SD
Mon1	Asking periodically if learning goals are being met	17.8	33.3	48.9	3.49	0.991
Mon2	Assessing how useful the learning techniques	20.0	33.3	46.7	3.38	0.936
Mon3	Regular checking of own comprehension	33.3	26.7	40	3.07	1.009
Mon4	Self-questioning while learning	15.6	26.7	57.7	3.56	0.918

For the monitoring aspect, a moderate degree of perception was found in all the statements being asked. In table 7, it showed in Mon1 and Mon2 that many students (48.9%, MS=3.49 and 46.7%, MS=3.38) agree that they periodically ask themselves about their goal accomplishment and assess the effectiveness of the learning techniques they used. Despite this, some students (17.8% and 20.0%) were not aware of their own learning. Even in statement Mon3, many students did not check their own comprehension of the topic every time they learned (33.3%, MS=3.07). It can be assumed that some students are still lacking in monitoring their own learning, checking understanding, and adjusting techniques. Then, interviewees elaborate on their experiences which support the findings.

> *"Of course, in the middle of learning, I can change my strategies or techniques. As long as I don't find it helpful, I will try to find the other ways to get a better understanding or finish my task."* (St. 4)
> *"In monitoring my learning, I don't think that I regularly check my understanding because my main goal is just to finish the task. As long as I finish it, then I think I understand. I don't know whether I really mean it or not."* (St. 5)

Lastly, in the evaluating aspect, students demonstrated a moderate degree of perception which suggested that some students were not aware of them evaluating their learning. In table 8, it shows that in evaluating the goal accomplishment (Eval1, MS=3.38), only 48.9% of the students asked themselves whether they had completely

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reached the goals or not. Then, after learning, many students were aware of asking whether or not they could use different learning techniques (Eval2, 48.9%, MS=3.40) and considered those techniques as effective (Eval4, 46.7%, MS=3.36).

Table 8. Evaluating

	Statement	D (%)	N (%)	A (%)	MS	SD
Eval1	Asking him/herself about learning goal accomplishment	20.0	31.1	48.9	3.38	0.984
Eval2	Asking him/herself if different techniques could have been used	22.2	28.9	48.9	3.40	1.053
Eval3	Asking him/herself for more effective subsequent learning	22.2	37.8	40	3.29	1.014
Eval4	Asking him/herself if all possible techniques have been considered	27.8	35.6	46.7	3.36	0.933

> *"I like to reflect on my own learning right after I get the result of my work. After that, I will recall my strategies, my sources, or my experiences in doing that work. From this step, I think I noticed something wrong and try to think of different goals or strategies."* (St.3)
> *"For me, evaluating my own learning is very important. I know my learning quality after I get the results of my work and I try to analyze which part still I lack. Here, I ask myself whether or not my goal is accomplished, or whether I understand the topic I learn."* (St.4)

Besides, it can be seen that around 28% to 38% of students did not really know about their evaluation process and decided to choose neutral. Then, in evaluating the quality of their learning, only 40% of the students were aware of the importance of that process (Eval3, MS=3.29). The interview results assisted in explaining these findings.

> *"I think I've never asked myself about how well I learn or how effective the techniques I used. It's because right after I finish learning and submit the work, then I'll forget about it. As long as I submit it on time, and I achieve my goal, then I assume all is good."* (St. 1 and St. 2)

Discussion

This study aimed to answer the research question 'To what extent did the students perceive their metacognitive awareness in English learning?' To comprehend better, the discussion was then divided into two parts, namely students' metacognitive awareness of knowledge of cognition, and regulation of cognition.

EFL Students' Knowledge of Cognition

The first part of the findings reported that students' perceptions of their knowledge of cognition varied in each statement. Starting from declarative, and procedural, to

conditional knowledge, all the aspects had both moderate and high results which indicated inconsistencies in students' understanding of their learning.

Declarative knowledge refers to students' understanding of who are they as learners, what they are studying, and how they learn (Mäkipää et al., 2021; Eriyani, 2020). The findings show that many students are aware of their strengths and weaknesses, as well as their expectations in learning English in ELESP. However, there was a disparity in students' understanding of how they take control of their learning. From the interview results, those who had high levels of metacognition agree that they control their learning because they recognize their need and take steps to learn. Meanwhile, moderate-level students find it difficult to have the learning process as a routine. It can be said that those who have higher metacognitive awareness will understand themselves better leading to the success of their learning. Accordingly, some studies found that those with a high level of metacognitive awareness have the ability to assess their learning process (Hamiddin & Saukah, 2020; Hidayatulloh et al., 2020).

The second knowledge is procedural knowledge which refers to students' knowledge of how to reach their learning goals by using their strategies and methods (Kallio et al., 2020). From the findings, it was shown that the students use learning techniques or strategies to help them learn better. Some students who perceive a high level of metacognitive awareness show their high confidence in utilizing different strategies that can help them improve their English skills. Through the interview, they explained that they know the best strategies and learning styles that are suitable for attaining their learning objectives. Similarly, Aisyi et al. (2021) in their study reported that students who have a high level of awareness tend to know what important skills need to be improved and how to do that by determining the best strategies they can use.

Lastly, conditional knowledge refers to students' understanding of what, how, why, and when specific methods can be employed in certain contexts (Alt & Raichel, 2020). In conditional knowledge which covered the how, why, and when the students learn and use certain techniques, three out of four statements were reported as moderate. It indicates that some students did not know how to use their strengths to compensate for weaknesses to help them learn better. Some students also did not always feel motivated to learn, except for completing tasks. Moreover, many students agree that they use different techniques in different situations, but some do not know the effectiveness of

their learning techniques. The student's lack of awareness of the effectiveness of learning strategies might be due to their dependency on lecturers which limits their exposure to effective learning strategies (Tanjung, 2018). Furthermore, this can lead to a reliance on extrinsic motivation in learning.

From the findings of knowledge of cognition, it can be concluded that the student's awareness of declarative, procedural, and conditional knowledge was moderate. All the statements showed only some of the students who are fully aware of themselves as EFL learners, the skills they need to improve, and how they learn. The results further showed a moderate level of awareness toward learning techniques which is supported by the qualitative results where the students recognize their learning style to choose the best techniques.

EFL Students' Regulation of Cognition

Regulation of cognition covered the students' ability to plan their learning objectives, choose the strategies, and organize the time. Other than that, this ability is also about monitoring and evaluating the learning process. According to the results, students' regulation of cognition tends to be at a moderate level showing that almost all the statements have moderate mean scores.

In the planning part, only one statement was agreed by 60% of students which is about the student's awareness of what they will learn or about the learning materials. However, in the other three statements, around 40% of the students agreed that they organize and pace their learning to have enough time. Also, they agreed that they determine specific goals before learning. It was indicated that more students chose neutral and disagreed with these statements. This result suggested that many of the students were not aware of taking steps to make plans before learning. The students who have moderate awareness tend not to have a learning plan. The students also mentioned that they did not know how to start learning with a plan because they did not know what to learn as they had a lack of understanding of their strengths and weaknesses. Moreover, some students explained that they would learn only when they had exams or deadlines. A study reported that exam has a role in increasing students' motivation to study. Students increasingly implement surface learning strategies more than deep learning strategies because they are more motivated by fear of failure (Capelle et al., 2023).

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In the monitoring part, similar results were found, where few of the students regularly monitored and checked their learning process. From the findings, it was found that one of the statements in the monitoring part received the lowest mean score which demonstrated that some students did not regularly check their own comprehension of the topic they learned. Therefore, other statements also get moderate results where only some of the students who checking their goals and accomplishments, the usefulness of their techniques, and self-questioning while learning. It means that the students did not put more effort into assessing and self-checking themselves during learning. These results are then supported by Abdelrahman (2020) who said that the students who are skillful at self-checking will have better improvement in their learning than those who are less skillful at self-checking.

Moreover, in the evaluating part, the mean scores of all the statements were at moderate levels. The results indicate that the results were varied and the students had different levels of awareness in evaluating their learning process. From the interview results, the students who have a high level of metacognitive awareness responded that it is important to ask if the goals were reached and if the strategies helped know the quality of the learning process. They tried to evaluate their learning techniques and achievements. Meanwhile, those who possess moderate levels explained that they stopped once the goals were met and would not evaluate how well their plans, and techniques met the goals. As stated by Stanton et al. (2021), students tend to only evaluate their learning based on the final results, not the overall study plans and the effectiveness of their learning process. The students tend to skip the evaluation process and do not reflect on their own learning. It indicates that they lack understanding of the effectiveness of their learning, the techniques used, and their accomplishments.

Overall, students' metacognitive awareness in both knowledge of cognition and regulation of cognition tends to be at a moderate level. From the quantitative and qualitative data, the students indicated that they were not fully aware of what, when, and how they learn English in the English Language Education department which led to similar results in regulating their learning, such as planning, monitoring, and evaluating. The findings further show evidence that there is room for improvement for the students to develop their awareness of their metacognition knowledge and regulation to be successful in learning.

CONCLUSIONS AND SUGGESTIONS

The purpose of this study was to examine how pre-service EFL teachers perceived their level of metacognitive awareness in learning English. Through the data collection and analysis, it was discovered that pre-service EFL teachers' metacognitive awareness needs to be improved. The findings revealed that many pre-service EFL teachers exhibit a moderate level of metacognitive awareness, while the rest exhibit a high level of awareness toward their metacognition in learning English. Nonetheless, the information about the pre-service EFL teachers' perception of their Knowledge of Cognition and Regulation of Cognition highlighted inconsistencies in their answers. They displayed an awareness of their learning strengths and weaknesses as well as the ability to utilize effective strategies in learning English. In contrast, many pre-service EFL teachers suffer from poor learning regulation. Hence, for learning to be at their best, pre-service EFL teachers need to have diagnostic ability toward their learning. For that, they still require the lecturers' support and guidance to help them develop their metacognitive awareness in their English language learning process.

A significant limitation of the study was the inconsistent findings regarding declarative, procedural, and conditional knowledge, hindering definitive conclusions. It is potentially due to the reliance on self-report questionnaires which introduce a range of response biases. Thus, longitudinal research is recommended to address this inconsistency and provide a more comprehensive understanding of knowledge acquisition and retention. Furthermore, the absence of learning plans among most students underscores the need for targeted interventions. Incorporating deliberate and extensive learning strategy training into the curriculum can potentially enhance students' metacognitive abilities and overall academic performance.

REFERENCES

Abdelrahman, R. M. (2020). Metacognitive awareness and academic motivation and their impact on academic achievement of Ajman University students. *Heliyon*, *6*(9), e04192. https://doi.org/10.1016/j.heliyon.2020.e04192

Aisyi, A. N., Suwandi, S., & Andayani, A. (2021). Metacognitive aspects in Indonesian learning in senior high schools in Jember. *RETORIKA: Jurnal Bahasa, Sastra, dan Pengajarannya*, *14*(1), 14. https://doi.org/10.26858/retorika.v14i1.16491

Al-Mekhlafi, A. M. (2018). EFL learners' Metacognitive awareness of reading strategies. *International Journal of Instruction*, *11*(2), 297-

308. https://doi.org/10.12973/iji.2018.11220a

Alt, D., & Raichel, N. (2020). Reflective Journaling and Metacognitive Awareness: Insights from a Longitudinal Study in Higher Education. *Reflective Practice*, *21*(2), 145-158. https://doi.org/10.1080/14623943.2020.1716708

Anwar, I. W., & Sailuddin, S. P. (2022). Academic Reading Difficulties in Higher Education. *Journal of Languages and Language Teaching*, *10*(2), 309-314. https://doi.org/10.33394/jollt.v10i2.4849

Balcikanli, E. (2011). Metacognitive awareness inventory for teachers (MAIT). *Electronic Journal of Research in Educational Psychology*, *9*(3), 1309-1332. http://doi.org/10.25115/ejrep.v9i25.1620

Brown, A. (1987). Metacognition, Executive Control, Self-Regulation, and Other More Mysterious Mechanisms. In F. Weinert & R. Kluwe (Eds.), *Metacognition, Motivation, and Understanding* (pp. 65–116). Hillsdale, New Jersey: L. Erlbaum Associates

Capelle, J., Senker, K., Fries, S., & Grund, A. (2023). Deadlines Make You Productive, but What Do They Do to Your Motivation? Trajectories in Quantity and Quality of Motivation and Study Activities among University Students as Exams Approach. *Frontiers in Psychology*, 14. https://doi.org/10.3389/fpsyg.2023.1224533.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. California: SAGE Publications.

Dardjito, H. (2019). Students' Metacognitive Reading Awareness and Academic English Reading Comprehension in EFL Context. *International Journal of Instruction*, *12*(4), 611-624. https://doi.org/10.29333/iji.2019.12439a

Devika, & Singh, R. (2019). Influence of Metacognitive Awareness on Engineering Students' Performance: A Study of Listening Skills. *Procedia Manufacturing*, *31*, 136-141. https://doi.org/10.1016/j.promfg.2019.03.021

Eriyani, E. (2020). Metacognition awareness and its correlation with academic achievement of educational students. *Indonesian Research Journal in Education*, *4*(1), 78-90. https://doi.org/10.22437/irje.v4i1.8573

Flavell J.H. (1976). Metacognitive Aspects of Problem Solving. In Resnick L.B. (Ed.), The nature of intelligence (pp. 231–235). Hillsdale, MI: Lawrence Erlbaum Associates.

Fritzsche, E. S., Händel, M., & Kröner, S. (2018). What do second-order judgments tell us about low-performing students' metacognitive awareness? *Metacognition and Learning*, *13*(2), 159-177. https://psycnet.apa.org/doi/10.1007/s11409-018-9182-9

Hadi, A. (2019). Exploring Preparation of Pre-Service Teachers' English Proficiency and Pedagogy: Stories from an EFL Teacher Education Program. *The Qualitative Report*, *24*(8), 1946-1966. https://doi.org/10.46743/2160-3715/2019.3771

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

Haukås, Å., Bjørke, C., & Dypedahl, M. (2018). *Metacognition in language learning and teaching*. Routledge.

Hidayatulloh, M. K. Y., Aftoni, A., & Çobanoğlu, Ö. (2020). The Effect of Problem-Based Learning Model and Blended Learning Model to Metacognitive Awareness as a Reflection Towards a New Normal Era. *Jurnal Pendidikan Teknologi Dan Kejuruan, 26*(2), 183-188. https://doi.10.21831/jptk.v26i2.32783

Jaleel, S., & Premachandran, P. (2016). A study on the Metacognitive awareness of secondary school students. *Universal Journal of Educational Research*, *4*(1), 165-172. https://doi.org/10.13189/ujer.2016.040121

Jia, X., Li, W., & Cao, L. (2019). The role of Metacognitive components in creative thinking. *Frontiers in Psychology, 10*. https://doi.org/10.3389/fpsyg.2019.02404

Kallio, H., Kallio, M., Virta, K., Iiskala, T., & Hotulainen, R. (2020). Teachers' support for learners' metacognitive awareness. *Scandinavian Journal of Educational Research*, 1-17. https://doi.org/10.1080/00313831.2020.1755358

Kallio, H., Virta, K., & Kallio, M. (2018). Modelling the components of metacognitive awareness. *International Journal of Educational Psychology*, *7*(2), 94–122. https://doi.org/10.17583/ijep.2018.2789

Kurdi, A., Latief, M. A., & Astuti, U. P. (2021). Undergraduate Students' Metacognitive Awareness and Grammar Achievement. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, *6*(1), 55-63. http://dx.doi.org/10.17977/jptpp.v6i1.14382

Kusumawardana, Z. R., & Akhiriyah, S. (2022). EFL University Students' Metacognitive Awareness of Reading Strategy and Its Correlation with Their Reading Comprehension. *Linguistics and English Language Teaching Journal, 10*(1), 1-15. http://dx.doi.org/10.31764/leltj.v10i1.8879

Lomi, A. N. K., & Mbato, C. L. (2021). Investigating Indonesian pre-service English teachers: perceptions and motivations to enter the teaching profession. *Journal on English as a Foreign Language, 11*(1), 125-151. https://doi.org/10.23971/jefl.v11i1.2396

Mäkipää, T., Kallio, M., & Hotulainen, R. (2021). Finnish general upper secondary students' metacognitive awareness in foreign language learning. *Reflective Practice*, *22*(4), 446-458. https://doi.org/10.1080/14623943.2021.1913720

Pramesti, F., Susanto, D., & Sukmaningrum, R. (2023). The Analysis of Metacognitive Awareness of The Students' Writing Competence. *Language and Education Journal*. https://doi.org/10.52237/lej.v8i2.485

Ramadhianti, A., & Somba, S. (2023). Reading Comprehension Difficulties in Indonesian EFL Students. *Journal of English Language Teaching and Literature (JELTL), 6*(1), 1-11. https://doi.org/10.47080/jeltl.v6i1.2477

Renandya, W. A., Hamied, F. A., & Nurkamto, J. (2018). English language proficiency in Indonesia: Issues and prospects. *The Journal of Asia TEFL*, *15*(3), 618–629. https://doi.org/10.18823/asiatefl.2018.15.3.4.618

Sawhney, N., & Bansal, S. (2015). Metacognitive Awareness of Undergraduate Students in Relation to their Academic Achievement. *International Journal of Indian Psychology, 3*(1), 112-119. https://doi.org/10.25215/0301.136

Stanton, J. D., Sebesta, A. J., & Dunlosky, J. (2021). Fostering Metacognition to Support Student Learning and Performance. *CBE-Life Sciences Education, 20*(2), 1-7. https://doi.org/10.1187/cbe.20-12-0289

Stephanou, G., & Mpiontini, M. (2017). Metacognitive Knowledge and Metacognitive Regulation in Self-Regulatory Learning Style, and in Its Effects on Performance Expectation and Subsequent Performance across Diverse School Subjects. *Psychology, 8*, 1941-1975. https://doi.org/10.4236/psych.2017.812125

Syafi'I, A. (2020). Investigating Indonesian Pre-Service Teachers' Speaking Anxiety in EFL Classroom. *Journal of English Education and Literature, 2*(1), 11-19. https://doi.org/10.51836/journeel.v2i1.74

Tanjung, F. (2018). Language Learning Strategies in English as a Foreign Language Classroom in Indonesian Higher Education Context. *Language and Language Teaching Journal*. https://doi.org/10.24071/LLT.V21ISUPPL.966.G981

Uppal, N., & Kumar, A. (2020). Metacognition: A Key Determinant of Self-Regulated Learning. *An International Bilingual Peer Reviewed Refereed Research Journal, 10*(40), 101-105.

Wardoyo, C., Narmaditya B. S., & Wibowo, A. (2021). Does Problem-Based Learning Enhance Metacognitive Awareness of Economics Students?. *Pegem Journal of Education and Instruction, 11*(4), 329-336. https://doi.org/10.47750/pegegog.11.04.32

Wulyani, A. N., Elgort, I., Coxhead, A. (2019). Exploring EFL teachers' English language proficiency: Lessons from Indonesia. *Indonesian Journal of Applied Linguistics, 9*(2), 263-274. https://doi.org/10.17509/ijal.v9i2.20217

Zhang, W., Zhang, D., & Zhang, L. J. (2021). Metacognitive Instruction for Sustainable Learning: Learners' Perceptions of Task Difficulty and Use of Metacognitive Strategies in Completing Integrated Speaking Tasks. *Sustainability, 13*(11), 6275. https://doi.org/10.3390/su13116275

Zulfikar, Z., Aulia, C. T., & Akmal, S. (2020). Exploring EFL students' problems in listening to English news broadcasts. *Language Literacy: Journal of Linguistics, Literature, and Language Teaching*, *4*(2), 340-352. https://doi.org/10.30743/ll.v4i2.2940