



Metacognitive Strategies in Learning English: A Think-Aloud Protocol in Completing Grammar Tasks

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Abstract

This study explores metacognitive strategies used by students in learning English grammar. The participants of this study were students of a private university in East Java from three different batches (2020, 2021, and 2022). There were two stages of research conducted: (1) a survey questionnaire and (2) a think-aloud protocol. The survey questionnaire was conducted for all the participants (N=30) using Google Forms. The think-aloud protocol was employed with six selected participants. In the think-aloud stage, the six participants were required to complete a grammar task in the form of sentence combining. While they were working on the task, they said aloud their thought processes. The think-aloud process while they were completing the task was observed and recorded. The questionnaire data were analyzed by means of descriptive statistics, and the transcribed data from the think-aloud protocol were analyzed thematically to find out the metacognitive strategies used in solving the grammar task. The results of this study indicate the usefulness of metacognitive strategies in learning grammar, especially in solving grammar tasks. The findings support previous studies that high achievers in foreign language learning tend to use various metacognitive strategies in their learning.

Keywords: Grammar task; Metacognition; Metacognitive strategies; Think-aloud protocol; EFL learners

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INTRODUCTION

Learning and teaching the English language requires grammatical accuracy as well as fluency (Huang & Zhang, 2022; Jones & Oakey, 2024). English mastery can be gauged by how a person uses accurate grammatical expressions and uses them effectively for various communicative purposes. In this conception, grammar can be defined as a set of rules that describe how words and word groups can be composed to form sentences in a particular language (Svalberg, 2015). Understanding basic English grammar is a basic foundation that will help a person in composing correct sentences and in improving their writing and speaking skills (Celce-Murcia, 1991; Sun, 2022). In addition, grammar is necessary to express precise meanings in discourse, enhancing the fluency in using the language (Huang & Zhang, 2022).

The grammar mastery, then, is required, and it can be achieved through various ways as reflected in the competing methods and techniques of teaching and learning grammar. Azizmohammadi and Barjesteh (2020) assert that good learners often use strategies that will suit their learning style and the purpose of learning. They further explain that students should understand their learning, hence the need to

use language learning strategies, including metacognitive strategies (Ramadhanti & Yanda, 2021; Sabnani & Goh, 2021; Zhao & Liao, 2021). Metacognitive strategies refer to the methods and techniques that each learner uses to control or regulate their thinking processes (Anderson, 2012). Thus, metacognition is the knowledge that concerns one's cognitive processes and anything related to them. It is to say that these strategies involve thinking about and monitoring one's own thinking, learning, and solving problems. Thus, learners become aware of their thinking processes in order to make the necessary adjustments to improve their performance.

Grammar is the basis of expanding words and sentences (Daulay & Octa, 2021). However, for EFL learners, English grammar is often difficult because of its complexity and its distance from the learners' mother tongue. For that reason, there is a need to use the proper strategies in order to support the learning process. Metacognitive strategies are one of them. They are general skills through which learners try to learn a certain subject by managing, directing, regulating, and guiding their learning. They include deliberate thinking strategies such as planning, monitoring, and evaluating one's thinking processes (Rahimi & Katal, 2012).

While metacognition has been widely investigated in the field of psychology and education, its importance and relevance are still resonating in the field of language education. It is important because the success of language learning is due in part to the successful metacognitive strategies used by the learners. It is still relevant because there are still gaps in teaching and learning evidence, indicating continuing needs for research in the field.

Considering the continuing inquiry on evidence-based learning related to metacognition, this study delves into metacognitive strategies used by students when they solve grammar tasks in combining sentences. Therefore, this study addresses the main question related to the use of metacognitive strategies in completing grammar tasks: What metacognitive strategies were used in completing grammar tasks?

Metacognition in Language Education

Metacognition was first introduced by Flavell (1979), who identified that metacognition is the students' ability to recognize their thinking functions, control them in the process, and monitor and evaluate them to be in line with their needs in the learning process. It has been theorized widely from the informal theories, formal theories, and the inclusion of sociocultural factors—the current development in metacognitive theories (Dypedahl, 2018; Haukås, 2018). In summary, metacognitive theories integrate one's knowledge about cognition and its regulation (Schraw & Moshman, 1995). It means that there is a relatively systematic structure of knowledge that can be used to explain and predict a wide range of cognitive and metacognitive phenomena. Metacognition, then, refers to the ability to think about one's thinking.

In language learning, metacognition plays a vital role in understanding the material according to the learners' perception. In line with this conception, Zhang & Zhang (2018) suggest that metacognition can lead students to direct their thinking, connect new information to previous knowledge, and intentionally seek thinking abilities. Furthermore, Anderson (2012) states that since metacognition plays an important role in successful learning, there is a need to study metacognitive activities and development in order to identify the way how students should be taught, raising the awareness of metacognition in learners and teachers (Rimun & Yumarnamto, 2024). In that way, language education will be more engaging and effective as well as empowering for both students and teachers.

Following the pioneer in the field, metacognition in this study is understood in terms of understanding our thinking that allows us to connect information with previous knowledge, direct our learning, set up goals, and eventually raise the awareness of our learning.

Metacognitive Strategies

In language education, metacognitive strategies have been used for various purposes and enhancing the development of language skills in students such as their writing (Rimun & Yumarnamto, 2024), their reading (Carrell et al., 2002; Soto et al., 2019; Williams & Atkins, 2009), their listening (Cross, 2015; Goh,

2018; Vandergrift & Goh, 2012), and other aspects of language competence and language teacher education (Dydedahl, 2018).

Metacognitive strategies are methods and techniques that learners use to regulate their thinking process. They are techniques used to assist students' understanding of their ways of learning more effectively (Hornby, 2022). These strategies help learners to be aware of their learning process, habits, and ways of thinking; thus, learners are enabled to adjust their approach and learn to do problem-solving that will improve their way of learning. Metacognitive strategies help learners to manage the plans that they have chosen, monitor their learning activities and their development or advancement, and evaluate their learning processes (Rahimi & Katal, 2012). He further states that this series of stages will enhance learners' attitude and approach to learning as well as their mental processes. In that way, learners can understand effectively because they use their metacognitive strategy according to their needs and pace. In addition, metacognitive strategies can be classified into three main facets or skills. They are planning, monitoring, and evaluating (Cummins et al., 2005; Dydedahl, 2018; Farahian & Avarzamani, 2018; Knospe, 2018; Ruan, 2013).

1. *Planning in Metacognitive Strategies*

Planning involves selecting an appropriate strategy and putting on resources that will affect one's performance. It includes establishing one's goals and reviewing the knowledge and activities (Knospe, 2018). Planning in metacognitive strategies requires students to think of their learning goals and how to achieve and fulfil them. It will come about only if they have learning plans. Planning makes the goals concrete and obtainable. It consists of specific tasks to do and a set timeline. It also serves as a big step to begin a learning process. Moreover, it strengthens students' attention, focus, and motivation in order to enrich their learning performance.

2. *Monitoring in Metacognitive Strategies*

Monitoring refers to the awareness of one's thinking abilities and the performing of tasks. An example of this is doing a self-test while learning. Monitoring also includes self-management and self-evaluation, which enables learners to control their actions and analyse their level of achievement in the learning process. Studies also show that monitoring ability improves with constant training and practice (Baker & Cerro, 2000; Schraw & Moshman, 1995). In this strategy, learners follow the development of their learning by constant checking and understanding tasks and content. Monitoring is a formative, diagnostic, and repetitive assessment of any action and behaviour (Haukås et al., 2018). They also assert that it is the strategic tool that would lead to the evaluation stage. To sum up, monitoring enables learners to assess the quality of their learning process and attain their specific learning objectives, which will lead to satisfying results and more effective evaluation.

3. *Evaluating Metacognitive Strategies*

This refers to assessing the results and the process of one's learning. An example would be re-evaluating one's work through rereading and revisions (Schraw & Moshman, 1995). Evaluating includes assessment of students' strengths and weaknesses in the learning process. They can analyse the plus factors that should be maintained as well as the minus factors they have to improve. In evaluation, students can obtain rewards in order to have greater motivation in learning. It is also the time to see what needs to be reviewed and revised in their work, what improvements to make, and what the next steps to take are. In addition, evaluation helps expand the learning target, as this will drive learners to perform better in their future learning activities. It will also show students' progress each day, which will satisfy their achievement. Belet and Guven (2011) compare evaluation as problem solving in metacognition. Hence, by evaluation, students learn to cope with their problems and challenges in learning. They can obtain the best results if they maintain a good evaluation in their process of using metacognitive strategies.

Metacognitive Strategies in Learning English Grammar

Learning English grammar is quite daunting because of its complicated and inconsistent rules. It is not so easy to learn, especially if English remains a foreign language to students. Sometimes, it is exhausting and confusing to remember the rules and to verbalize the words based on those said rules. Hence, it is important to have some strategies and techniques that will support the students in learning English grammar. It is believed that there is no foreign or second language grammar learning without the consideration of learning strategies (Abbasian & Esmailifard, 2013). Therefore, it is favoured that a strategic approach should accompany grammar instruction. One of the crucial learning approaches or strategies is called metacognition or metacognitive strategies. Given the wide range of techniques and strategies in learning, metacognitive strategies seem to be more friendly and feasible to study, as well as being more effective and practical in acquiring learning skills. It is, therefore, applicable in learning English grammar.

There are several studies conducted in order to explain and test the effectiveness of metacognitive strategies. However, very few have researched the use of the said strategies in learning English grammar. Many studies focused on metacognitive strategies and relating them to reading, writing, and listening skills. Hence, in this study, the author reviews some articles related to the topic, though not very exactly. There are actually some points that can be considered and applied to this chosen topic. Since this research is a descriptive study, the author chose one related study that focuses on explaining what metacognitive strategies are and their role in learning English. The other studies to be reviewed deal with using metacognitive strategies in learning English grammar and are experimental.

Relevant Previous Studies

The first research study that is relevant to the current study is one conducted by Okmawati (2021). This study describes in detail the metacognitive strategy, its definition according to experts, its roles in learning English, and its three main facets: planning, monitoring, and evaluating. It also tackles the latest research on metacognitive strategies, which deals with the use of these strategies in different aspects of learning, such as improving language awareness on stress and intonation, using metacognitive strategies in writing essays, in reading comprehension achievement, in listening skills, in vocabulary, and many others. Most of those studies used a quantitative type of research using either an experimental or correlational method. The data were collected using questionnaires, pre-tests, post-tests, and a set of interviews.

The result of this study shows that metacognitive strategy is significant and effective in the learning process. It confirms that previous studies supported the ideas and theories that favoured the use of metacognitive strategies to enhance students' language skills, such as listening, speaking, reading, and writing. Furthermore, the findings of this study emphasize that metacognitive strategies increase students' self-awareness of their learning strategies, which raises their academic achievement and boosts their self-confidence. Lastly, this study gives a list of practical suggestions to teachers on how to improve students' metacognition. One of which is letting the students reflect on their learning by having a personal journal. This would fall on the theory of metacognition, which is planning, monitoring, and evaluating. Hence, the related study above is useful for the author to be able to answer the problem statements, which are to describe what a metacognitive strategy is and its usefulness in language learning. Even though it does not explain using a metacognitive strategy in English grammar, still, many points can still be considered helpful for this study.

Another study related to the author's chosen topic is entitled "*A Synthetic Approach to the Infusion of Metacognitive Strategy in Teaching Grammar*" (Abbasian & Esmailifard, 2013). This study is conducted to validate empirically the effect of infusing metacognitive strategies to enhance grammar achievement. However, before going on to describe in detail the metacognitive strategy, this research gives a comprehensive explanation of what learning strategies are so as to differentiate metacognitive strategies from other learning strategies. For that reason, the necessity of using metacognitive strategies in learning the English language, especially the grammar aspect of it, is emphasized. It is a quantitative study that used cluster sampling with 44 participants who are homogenous in terms of both language proficiency and grammar abilities. These participants were from the sixty Iranian EFL learners majoring in English

Translation Studies. They were chosen in random order from all the first-year students of the Islamic Azad University of South Tehran Branch. They were composed of both males and females, with an age range of 18-34. They had registered for a grammar course and were screened after receiving the 2003 version of the TOEFL. Purpura's metacognitive questionnaire (Purpura, 2013) as well as the grammar subtest of TOEFL were used to collect and analyse the data. Aside from that, the Metacognitive Strategy Questionnaire by Item Type (MSQIT) was also used. This study used a quasi-experimental design, going through different steps to come up with a control and experimental group. One of the steps, which is the final one, was to expose the control group to conventional pure grammar instruction on the target grammar points selected from a textbook. The target points were taught explicitly and deductively. On the other hand, the experimental group had a synthetic approach instruction. It means that there is an integration of grammar and metacognitive strategy instruction.

While metacognition and metacognitive strategies have been widely investigated, the context of metacognition used in solving grammar tasks in Indonesia has not been thoroughly researched and investigated thoroughly, creating a gap of knowledge in the field.

RESEARCH METHODS

This study is a qualitative research study to explore metacognitive strategies used by English learners in Indonesia. The major aim is to describe the use of metacognitive strategies in completing grammar tasks of sentence combining. To achieve it, two stages of data collection were conducted: (1) a questionnaire and (2) a think-aloud protocol (Abdel Latif, 2018; Wolcott & Lobczowski, 2021).

The questionnaires were given to the subjects to determine if they were using metacognitive strategies in learning grammar and if they were benefiting from using them. The questionnaire was adapted from the questionnaire used in a study conducted by Stephen and Singh (2010). The questionnaire includes a set of reflective questions that would lead to planning, monitoring, and evaluating the learning process, as well as the usefulness of using metacognitive strategies in learning grammar. This questionnaire was distributed to the students of a private English Education program in East Java, Indonesia, batch 2020, 2021, and 2022. During this study in 2024, the students have taken various courses related to English language skills and grammar, ensuring their familiarity with various grammar tasks.

The other instrument was the grammar task for the think-aloud protocol (Zhang & Zhang, 2020). It was a set of sentences that needed to be combined to produce a meaningful narrative. To validate the instrument for the think-aloud protocol, it was tried out on four participants, and the results of the trial required adjustments for the duration and clearer instructions for the participants. With that grammar task, students could use their knowledge of grammar and anything related to it, like parts of speech and types of sentences, among others. This instrument aimed to enrich the description of students' metacognitive strategies in learning grammar. A think-aloud protocol is a trustworthy research method to explore learners' thinking processes (Rose et al., 2019). Importance should be given to training the research participants for them to know how to carry out the think-aloud protocol while completing a task.

The participants for the think-aloud protocol were six students selected from those who completed the questionnaire. The selection was conducted purposefully, involving three types of participants: high achievers, average achievers, and low achievers. The identification of the three types of participants was based on their grades related to grammar and language skills. During the implementation of the think-aloud, they were given a grammar task of sentence combining. In doing so, they speak out loudly about what they were thinking while answering the grammar problems. The process was recorded and transcribed for further analysis.

The two types of data, the questionnaire and the recorded and transcribed think-aloud, were analysed descriptively. First, the results of the questionnaires were analysed using descriptive statistics such as percentages and averages. The results of the questionnaire were interpreted based on each facet of the metacognitive strategies, such as planning, monitoring, and evaluating. Second, the think-aloud protocol responses were analysed using thematic content analysis based on the following steps: (1) Familiarization (reading through the transcriptions to get an overall understanding of them and it took more than once for

better comprehension); (2) Categorization (grouping the responses according to themes; the categories used in this study were planning, monitoring, and evaluating in relation to metacognitive strategies), (3) Interpretation (the summarized data within each theme while identifying patterns and insights; the points on survey questionnaire were referred to as basis in identifying what kind of metacognitive strategies was used in each theme), (4) Synthesis (summarizing the main findings and conclusions from the think-aloud protocol responses; this included discussing the implications of the findings and their relevance to the research objectives).

RESULTS AND DISCUSSION

This section reports the results and discussion of those findings to understand the use of metacognitive strategies in completing grammar tasks among EFL students. The first part reports the results of the questionnaire, and the second one the results of the think-aloud protocol.

Results

Findings from the Questionnaire

The open-ended reflective questions drew interesting responses regarding the use of metacognitive strategies and their benefits to students' learning (see Table 1). In general, they found that each strategy under planning, monitoring, and evaluating is useful for progressing in learning grammar.

Table 1. The Summary of Metacognitive Strategies and Their Perceived Usefulness (N=30)

Metacognitive Strategies	Students' Metacognitive Strategies in Learning Grammar	Usefulness of Metacognitive Strategies
Planning	reflection of grammar weaknesses and working on them	very useful to set specific goals in improving one's grammar skills
	seeking out opportunities to apply grammar rules in real-life situations	very useful to seek out opportunities to practice grammar in real-life situations
Monitoring	using grammar resources such as books, online tutorials, and grammar checkers, among others, to improve the understanding of grammar rules	using grammar resources such as books, online tutorials, and grammar checkers, among others, to improve their understanding of grammar rules is useful
	reviewing and revising their written work specifically for grammar and sentence structure	Reviewing and revising the written structure are very useful.
	To self-correct and ask for feedback from others regarding grammar learning	Seeking feedback from others is useful.
Evaluating	to monitor one's progress in learning grammar by keeping track of the topics learned and mastered	to monitor one's progress in learning grammar by keeping track of the topics learned and mastered is less useful
	seeking feedback from teachers, language partners, and grammar resources to evaluate their grammar proficiency	very useful to seek feedback from teachers, language partners, and grammar resources in order to evaluate their grammar proficiency
	reviewing and revising their grammar exercises and written work in order to improve them	To review and revise one's grammar exercises and written work in order to correct errors and to improve them is useful.

Notes: This table is a summary of respondents' answers to the open questions

While the summary in Table 1 provides the general summary of respondents' perception on metacognitive strategies and usefulness in terms of qualitative data, Table 2, Table 3, and Table 4 describe in detail their agreement with statements indicating the strategies.

Table 2 Metacognitive Strategies on Planning (N=30)

No.	Questions On Planning	Strongly Disagree	Disagree	Agree	Strongly Agree
Q1	I reflect on my grammar weaknesses and actively work on improving them.	1 (3.33%)	1 (3.33%)	20 (66.67%)	8 (26.67%)
Q2	I reflect on my grammar strengths and use them to sustain my grammar proficiency.	1 (3.33%)	1 (3.33%)	17 (56.67%)	11 (36.67%)
Q3	I create a plan or schedule for my grammar learning activities.	5 (16.67%)	14 (46.67%)	11 (36.67%)	0 (0%)
Q4	I set specific goals or objectives for improving my grammar skills.	3 (10%)	12 (40%)	13 (43.33%)	2 (6.67%)
Q5	I actively seek out opportunities to practice and apply grammar rules in real-life situations.	2 (6.67%)	2 (6.67%)	19 (63.33%)	7 (23.33%)
Q6	I create a plan to accomplish my learning activities.	4 (13.33%)	10 (33.33%)	13 (43.33%)	3 (10%)

Table 2 shows that the respondents employed metacognitive planning strategies in learning grammar. Most of them answered 'Agree' to all the questions, with Q1 getting the highest percentage of 66.67% followed by Q5 with 63.33%. Q3, the question related to planning learning activities, has the highest percentage of disagreement, it being 46.67% in contrast to 0% of 'Strongly Agree.' Furthermore, 'Strongly Disagree' has a consistent low score compared to other values.

Table 3 Metacognitive Strategies on Monitoring (N=30)

No.	Questions On Monitoring	Strongly Disagree	Disagree	Agree	Strongly Agree
Q1	I use grammar resources (such as grammar books, online tutorials, or grammar checkers) to improve my understanding of grammar rules.	0 (0%)	1 (3.33%)	18 (60%)	11 (36.67%)
Q2	I consciously apply grammar rules and principles while writing or speaking.	0 (0%)	4 (13.33%)	18 (60%)	8 (26.67%)
Q3	I review and revise my written work specifically for grammar and sentence structure.	0 (0%)	3 (10%)	17 (56.67%)	10 (33.33%)
Q4	I engage in self-correction when I notice a grammatical mistake in my speech or writing.	1 (3.33%)	3 (10%)	18 (60%)	8 (26.67%)
Q5	I seek feedback from others regarding the grammar of my written work.	1 (3.33%)	5 (16.67%)	18 (60%)	6 (20%)
Q6	I monitor my progress in learning grammar by keeping track of the topics or concepts I have mastered.	2 (6.67%)	10 (33.33%)	16 (53.33%)	2 (6.67%)

Table 3 indicates similar responses among the students. The students used the monitoring of metacognitive strategies in learning grammar, as most of them answered 'Agree' with the highest percentage and an estimate average of 60% in all the questions, followed by 'Strongly Agree' with an estimate average of 9%, the difference being 51%. On the other hand, 'Strongly Disagree' has the lowest percentage with 0% from Q1-Q3. In addition, Q6 has the highest percentage of 'Disagreement' with 33.33% compared to other questions, with an average of only 12%. The

responses show that most respondents employed monitoring strategies to help them in learning English grammar.

Table 4 Metacognitive Strategies on Evaluating (N=30)

No.	Questions On Evaluating	Strongly Disagree	Disagree	Agree	Strongly Agree
Q1	I analyse my writing to identify and correct grammatical errors.	1 (3.33%)	3 (10%)	17 (56.67%)	9 (30%)
Q2	I analyse sentences or texts written by others to identify grammatical patterns or structures.	1 (3.33%)	7 (23.33%)	19 (63.33%)	3 (10%)
Q3	I seek feedback from teachers, language partners, or grammar resources to evaluate my grammar proficiency.	1 (3.33%)	4 (13.33%)	15 (50%)	10 (33.33%)
Q4	I review and revise my grammar exercises or written work to identify and correct grammar errors.	0 (0%)	4 (13.33%)	18 (60%)	8 (26.67%)
Q5	I evaluate my progress and celebrate my achievements in improving my grammar skills.	1 (3.33%)	9 (30%)	15 (50%)	5 (16.67%)
Q6	I evaluate whether I have achieved my goals in learning grammar.	1 (3.33%)	7 (23.33%)	18 (60%)	4 (13.33%)

Similarly, Table 4 describes the use of evaluating metacognitive strategies among the respondents. All the strategies under evaluating were agreed, with Q2 getting the highest percentage of 63.33%, followed by Q4 and Q6. On the contrary, 'Strongly Disagree' has the lowest percentage, with Q4 having 0% and the same 1% for all the other questions in that value.

Findings from the Think-Aloud Protocol

The think-aloud protocol was employed to collect data about the metacognitive strategies while the participants were working on completing a grammar task in the form of sentence combining. From the three different groups (see Table 5), the high achievers employed more strategies compared to average and low achievers, indicating the usefulness and importance of metacognitive strategies for successful learners. Interestingly, low achievers were not employed in planning metacognitive strategies, indicating that planning can be very important in learning grammar.

Table 5 The Summary of Think-Aloud Results (N=6)

Case	Metacognitive Strategies		
	Planning	Monitoring	Evaluating
Student 1 (High Achiever)	Reflecting on one's grammar strengths and using them to sustain one's grammar proficiency	Applying grammar rules in answering the task	Revising work to correct grammatical errors
Student 2 (High Achiever)	Creating a plan to solve the problem	applying grammar rules and correcting oneself	evaluating if goals in grammar learning are achieved
Student 3 (Average Achiever)	Creating a plan for accomplishing a learning activity	Consciously applying grammar rules	applying the grammar principle and revising one's work
Student 4	Creating a plan to do a grammar activity	NONE	Evaluating one's goals in learning grammar

Case	Metacognitive Strategies		
	Planning	Monitoring	Evaluating
(Average Achiever)			
Student 5	NONE	NONE	analyzing sentences written by others
(Low Achiever)			
Student 6	NONE	Consciously applying grammar rules and principles while writing or speaking.	NONE
(Low Achiever)			

From Table 5 above, this study points out the corresponding level of English proficiency and the use of metacognitive strategies. It can be seen that high-achiever students, both student 1 and student 2, used the English language most of the time during the think-aloud protocol. The average-achieving students used both English and Indonesian while they were completing the task in the think-aloud process. Lastly, the low-achieving students used mixed languages as well; student 5 used Indonesian, while student 6 used English with many grammatical errors and struggled with fluency and often opted to use Indonesian.

To illustrate the use of metacognitive strategies in completing grammar tasks as reflected during the think-aloud protocol, the following tables (Tables 6 to 7) provide a detailed summary of what the participants thought during the process, describing different strategies employed among the high, average, and low achievers. Student 1 (High Achiever) used all elements of metacognitive strategies (planning, monitoring, and evaluating).

Table 6 The Summary of Think-Aloud Results of Student 1 (High Achiever)

Metacognitive Strategies	Student 1 (High Achiever)
Planning	<i>And then I think the sentence is supposed to be a paragraph. Furthermore, the next four sentences are four. Oh, this is supposed to be the second paragraph. And then the third paragraph.</i>
Monitoring	<i>Okay, I think I get what it is about the first paragraph here about the empty capital car. It describes or explains the process of how the empty capital car is like moving along the tracks. That is why it says that it climbs. It is well because an empty car, car is like making sounds quite loud. Sounds like the bell. So, the second paragraph is telling about the process of slowing down the cable car as it gets closer to the people in line. Furthermore, the last paragraph, most of the tourists, this describes who people waiting in line.</i>
Evaluating	<i>The pressing is exciting. Uh, what does it mean? Pressing is excited? Uh, the pressing is exciting. Oh, I see. It refers to the sentence before the press to get a good view.</i>

In Table 7, Student 3 (average achiever) shows that she planned her grammar learning by reading the instructions first. She also monitored it by analysing what she was about to answer by mentioning that there were three sentences. Aside from that, she consciously applied grammar rules by saying that she needed to add a conjunction. Lastly, she evaluated her work by applying the grammar rules and coming up with a revised structure.

Table 7 The Summary of Think-Aloud Results of Student 3 (Average Achiever)

Metacognitive Strategies	Student 3 (Average Achiever)
Planning	<i>Combine the following sentences into a narrative that shows what happens on the cable car trip to Fisherman's Wharf in San Francisco.</i>
Monitoring	<i>OK, so there are three sentences.</i>

Metacognitive Strategies	Student 3 (Average Achiever)
	<i>In both sentences, I need to add the conjunction. Thus, this line, this one, is simple.</i>
Evaluating	<i>So it becomes the empty cable car approaches and it grinds its wheel.</i>

The low achievers indicated a lack of metacognitive strategies while they were completing the grammar task. To illustrate, Table 8 belongs to student 6 (a low achiever). She did not plan or evaluate her grammar task. Though she tried to analyse each sentence by stating the subject and the verb, she failed to give the connection among those sentences. Hence, she was not able to solve the grammar task well.

Table 8 The Summary of Think-Aloud Results of Student 1 (Low Achiever)

Metacognitive Strategies	Student 6 (Low Achiever)
Planning	None
Monitoring	<i>There are twelve sentences. First of all, the empty cable car approaches the empty cable car is the subject, and the approach is the verb. Second, it clangs its bell. It is a pronoun and clings to its verb.</i>
Evaluating	None

From the illustrations of what the participants thought during the think-aloud (Table 6-8), it is clear that high achievers used more metacognitive strategies, indicating the underlying knowledge and awareness about their learning.

Discussion

From the findings, two main points pertinent to the practical implications of metacognitive strategies are discussed: 1) high achievers used more metacognitive strategies, and 2) the need to teach metacognitive strategies.

High Achievers Use Various Metacognitive Strategies

As reflected in the findings, high-achieving students used various metacognitive strategies, and they recognized the benefits of using them to complete grammatical tasks of sentence combining effectively. This finding is in line with Okmawati (2021), who found that those who use various metacognitive strategies are the ones who gain higher achievement in their studies. While a causal relation may not be able to be drawn from the current study, it is safe to suggest that the use of metacognitive strategies could facilitate student learning, especially in solving grammatical problems in the form of sentence combining.

In all aspects of metacognitive strategies (planning, monitoring, and evaluating), higher achievers gained benefits and led them to become successful problem solvers. According to Okmawati (2021), students think of their learning goals and how to go about doing them, which serves as a head start in the learning process. This self-awareness about goals and own learning, indeed, facilitates the success in completing the given grammatical tasks, indicating learners' autonomy and self-regulation (Murray et al., 2011; Oyelana et al., 2022). From the results of the think-aloud protocol, students who had planned how to solve the grammar task ended up finishing it well compared to those students who did not plan how to answer the task. This also indicates that planning can strengthen students' attention and motivation in their learning performance (Dornyei & Al-Hoorie, 2017; Kormos & Csizér, 2013; Murray et al., 2011; Rahmati et al., 2018).

Second, in monitoring strategy, students follow the development of their learning by constantly checking and understanding the tasks and contents of their work (Schraw & Moshman, 1995). This leads to language use awareness, making sure the correct production of the given task, such as sentence combining. Finally, in evaluating strategy, students get the chance to review and revise their work in order to improve it (Abbasian & Esmailifard, 2013; Huang & Zhang, 2022; Knospe, 2018; Rahimi & Katal,

2012; Ramadhanti & Yanda, 2021). In addition, evaluating also expands students' learning targets for their future performance, enhancing learning autonomy and motivation for further success.

The Need to Teach Metacognitive Strategies

From the findings, the major implication is the need to teach metacognitive strategies as part of language instruction. The findings, while they do not indicate a causal relation between successful learners and metacognitive strategies, highlight the significant benefits high-achieving students gain from the use of metacognitive strategies. These strategies—such as planning, monitoring, and evaluating one's learning—enable students to take control of their learning process (Daradoumis & Arguedas, 2020; Okmawati, 2021; Üstünbaş & Alagözlü, 2021), leading to improved grammar mastery and language performance. The correlation between the use of such strategies and academic success suggests that they play a crucial role in effective learning, particularly in language acquisition. This reinforces the need to prioritize metacognitive strategy instruction in educational contexts, especially in English language teaching.

While the current study focuses on understanding the use of metacognitive strategies in completing grammar tasks, in other language elements and skills, these strategies are also used for developing skills (Holzknecht & Harding, 2023; Huang & Zhang, 2022; Üstünbaş & Alagözlü, 2021; Villanueva, 2022). In a real English classroom, students must develop the ability to understand texts, communicate effectively, and reflect on their learning progress. Teaching metacognitive strategies equips learners with tools to approach these tasks more strategically (Chong, 2020; Daradoumis & Arguedas, 2020; Lee & Mak, 2018; River & Whitehead, 2018). For example, students who are trained to set goals before completing grammar tasks or other language performance tasks, monitor their understanding, and assess their performance afterward are more likely to retain information and apply it effectively. Thus, incorporating metacognitive instruction into the curriculum can lead to more independent, reflective, and successful learners.

Furthermore, metacognitive strategies can help bridge the gap between high achievers and those who struggle academically. While high-achieving students may naturally adopt these strategies, many others do not use them unless explicitly taught. By integrating metacognitive training into English language instruction, teachers can provide all students—regardless of their starting point—with equal opportunities to enhance their learning. This approach fosters a more inclusive and supportive learning environment, where students become aware of their thinking processes, highly motivated to succeed, and more autonomous to learn (Murray et al., 2011; Oyelana et al., 2022).

In summary, the findings of the current study emphasize the importance of metacognitive strategies in promoting academic success, particularly in the context of English language learning. The implication is clear: educators must intentionally and systematically teach these strategies to students and integrate them into the curriculum. Doing so not only supports language development but also cultivates lifelong learners who are capable of adapting and thriving in diverse educational and real-world settings (Murray et al., 2011; Oyelana et al., 2022). As such, metacognitive strategy instruction should be an integral part of every English language teaching program.

CONCLUSION

This study is a descriptive qualitative study that focuses on describing in depth students' metacognitive strategies in learning grammar. It aims to shed light on the usefulness of the said strategies in grammar learning. The findings indicate that most students think that they used various metacognitive strategies, as shown in their level of agreement on statements related to planning, monitoring, and evaluating. Further findings from the think-aloud protocol indicate that high-achieving students used all elements of metacognitive strategies while low-achieving students used fewer. From the findings, the main implication is that language classrooms should integrate metacognitive strategies in the curriculum and instruction, providing a much-needed knowledge and skills for low-achieving students to succeed.

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