

EFL Students' Metacognitive Knowledge of Speaking Strategies

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Abstract

This study investigated EFL students' metacognitive knowledge in speaking, focusing on the most frequently used strategies and the areas requiring improvement. Using a descriptive quantitative design, data were collected from 102 English Education students at Muhammadiyah University of Gresik through the Metacognitive Awareness Speaking Questionnaire (MASQ). The findings showed that students most frequently used Strategic Knowledge, particularly problem-solving, planning, and Evaluation strategies, indicating a strong ability to manage and regulate their speaking performance. In contrast, lower levels were found in Person Knowledge and Mental Translation, suggesting limited self-awareness of speaking abilities and continued reliance on first-language translation. These results indicate that while students are generally effective in controlling and adapting their speaking strategies, greater emphasis is needed on developing self-awareness and reducing translation dependency to support more autonomous and fluent English speaking.

Keywords: *Metacognitive; Metacognitive knowledge; Metacognitive knowledge in speaking.*

1. Introduction

Speaking is a fundamental skill for EFL learners because it enables effective communication in social, academic, and professional contexts and serves as a key indicator of communicative competence. Speaking involves both imitative and productive aspects, allowing learners to practice language patterns and refine communication strategies (Becker & Roos, 2016). Despite its importance, many EFL learners struggle to speak due to limited vocabulary, low self-confidence, Anxiety, and a lack of meaningful practice opportunities. These challenges indicate that successful speaking development requires not only linguistic competence but also strategic control over the speaking process.

Metacognitive knowledge plays a crucial role in supporting effective speaking development, as it involves learners' awareness and understanding of their cognitive processes. Flavell (1979) explains that metacognitive knowledge consists of declarative, procedural, and conditional knowledge, which enable learners to manage their learning more effectively. In the context of EFL speaking, metacognitive knowledge allows learners to plan their speech, monitor their performance, and evaluate outcomes, thereby promoting self-regulated learning and improving speaking proficiency.

Although the role of metacognition in language learning has been widely acknowledged, most previous studies have focused on reading and listening comprehension rather than speaking (Pressley & Afflerbach, 1995; Vandergrift, 2003). Research on speaking often emphasizes cognitive components such as grammar, vocabulary, and pronunciation, while giving limited attention to learners' ability to regulate their use of speaking strategies (Goh & Burns, 2012).



Furthermore, existing studies tend to concentrate on advanced learners, leaving beginner and intermediate learners relatively underexplored (Zhang & Goh, 2006; Cohen, 2011).

To address these gaps, this study aims to investigate EFL students' metacognitive knowledge of speaking strategies, identifying the most frequently used strategies and the areas that require further development. The study employs a descriptive quantitative method and collects data using the Metacognitive Awareness Speaking Questionnaire (MASQ) developed by Sulistyowati et al. (2022). By focusing on students from different semesters, the study is expected to contribute to a deeper understanding of metacognitive strategy use in EFL speaking and to provide practical implications for learners, teachers, and future researchers (Goh & Vandergrift, 2021).

Metacognitive Knowledge

Metacognitive knowledge refers to an individual's awareness and understanding of their own cognitive processes. The term was introduced by Flavell (1979), who defined it as "knowledge concerning one's own cognitive processes and products or anything related to them." This form of knowledge enables learners to reflect on how they learn, allowing them to monitor, control, and evaluate their performance during learning tasks.

Flavell (1979) categorized metacognitive knowledge into three main components: 1) Person knowledge: understanding one's own strengths, weaknesses, and beliefs in learning. 2) Task knowledge: understanding the demands of a task and what is required to complete it. 3) Strategic knowledge: knowledge of strategies that can be used to accomplish learning goals effectively.

Wenden (1998) describes metacognitive knowledge as a stable, early-developing system of ideas that guides learners in managing their learning. Learners who possess this knowledge tend to be more self-regulated, reflective, and strategic. They are capable of selecting appropriate strategies, adjusting them when needed, and evaluating outcomes to improve future performance (Schraw & Dennison, 1994; Young & Fry, 2012).

Metacognitive Knowledge in Speaking

In the context of language learning, metacognitive knowledge has been widely studied in relation to reading and listening. However, its application in speaking remains underexplored (Goh & Burns, 2012). Speaking requires real-time processing and quick decision-making, making it a complex skill to manage. Learners who apply metacognitive strategies in speaking are better able to plan what they want to say, monitor their fluency and coherence, and evaluate their output for improvement.

Goh (2002) emphasizes that speaking proficiency is not only about linguistic competence but also about the ability to regulate one's speaking process. Learners who are aware of their speaking strategies are more likely to overcome difficulties such as Anxiety, hesitation, or limited vocabulary. Zhang and Goh (2006) further argue that metacognitive speaking strategies can reduce speaking Anxiety and promote fluency and confidence.

Thus, metacognitive knowledge in speaking allows learners to take control of their oral communication. It helps them understand their abilities, recognize the nature of speaking tasks, and apply strategies to manage performance. This study investigates how students use such strategies and which areas require further development.

Components of Metacognitive Speaking Strategies

This study adopts the framework of metacognitive knowledge in speaking proposed by Sulistyowati et al. (2022) and develops the Metacognitive **Awareness Speaking Questionnaire (MASQ)**. The framework identifies three main components:

1. Person Knowledge (PK)

Person knowledge refers to learners' self-awareness regarding their speaking abilities. It includes their beliefs, confidence, motivation, and attitudes toward speaking. Learners with high self-knowledge are aware of their speaking strengths and challenges, and they tend to set personal goals for improvement. They are also better at managing Anxiety and maintaining a positive mindset during speaking tasks (Wenden, 2001).

2. Task Knowledge (TK)

Task knowledge involves understanding the characteristics of speaking tasks and the factors that affect task completion. It includes two subcomponents:

Mental Translation (MT) refers to the tendency to translate from the first language into English during speech mentally. This strategy often disrupts fluency, leading to unnatural or inaccurate expressions. It is generally used by beginners and considered an inefficient strategy (Zhang & Goh, 2006).

Direct Attention (DA) refers to learners' ability to focus on the speaking task and maintain attention during communication. It includes staying on topic, listening actively, and responding appropriately. Learners who apply direct attention strategies are better able to manage interaction and stay engaged in the conversation.

3. Strategic Knowledge (SK)

Strategic knowledge refers to learners' understanding and application of specific strategies to manage speaking tasks effectively. It includes:

Planning and Evaluation (PE) involves setting goals before speaking, preparing relevant vocabulary or ideas, and evaluating performance afterward. Learners with strong planning and evaluation strategies tend to reflect on what went well and what needs improvement (Goh, 2008).

Problem-Solving (PS) refers to learners' ability to cope with communication difficulties. It includes asking for clarification, paraphrasing, using synonyms, and adjusting speech to enhance understanding. Problem-solving strategies are essential in real-time communication where unexpected issues often arise (Cohen, 2011).

These five subcomponents, such as PK, MT, DA, PE, and PS, form the basis of the analysis in this study.

Factors Influencing the Use of Metacognitive Speaking Strategies

Various learner-related and contextual factors influence the use of metacognitive strategies in speaking. These factors help explain why students use some strategies more frequently than others. First, language proficiency level: learners with higher language proficiency are more likely to apply metacognitive strategies effectively. Advanced learners have greater awareness of their strengths and can regulate their speaking more fluently (Vandergrift, 2006). Then, motivation and self-efficacy, students who are confident and motivated tend to engage in goal-setting, self-monitoring, and Evaluation during speaking (Wenden, 1998). Strategy Instruction learners who have received explicit instruction in strategy use are more aware of how to manage their speech and regulate their performance. Goh (2008) emphasizes the importance of explicitly teaching metacognitive strategies.

Speaking, high levels of Anxiety may hinder learners from using strategies such as planning or monitoring. Anxiety can disrupt focus and prevent learners from applying strategies effectively (MacIntyre & Doucette, 2010). Learning environments that promote reflection, peer interaction, and teacher feedback encourage learners to use metacognitive strategies in speaking. Supportive environments facilitate self-regulated learning. Understanding these factors is important for interpreting students' use of metacognitive strategies and for designing instructional interventions that promote strategy use.

Previous Related Study

This section reviews relevant studies that provide the theoretical and empirical foundation for this research. The studies are grouped into three categories: (1) research on metacognitive knowledge in language learning, (2) research on metacognitive strategies in listening and reading, and (3) research on metacognitive strategies in speaking.

1. Studies on Metacognitive Knowledge in Language Learning

Foundational studies in metacognitive knowledge have emphasized its importance in learning success across various domains. Flavell (1979) introduced the concept of metacognition and classified it into person knowledge, task knowledge, and strategic knowledge.

Wenden (1998) applied this framework to language learning, emphasizing the role of learner awareness in self-directed learning and strategy use. Schraw and Dennison (1994) developed the Metacognitive Awareness Inventory (MAI) to measure metacognitive components, further supporting the idea that learners who monitor and control their learning process are more effective and autonomous.

These early studies have laid the groundwork for understanding how learners can regulate their learning through conscious strategic planning, monitoring, and Evaluation. However, most of these foundational works focus on general learning processes rather than specific language skills such as speaking.

2. Studies on Metacognitive Strategies in Listening and Reading

A substantial number of empirical studies have examined receptive language skills, particularly listening and reading. For instance, Rahimi and Katal (2012) investigated Iranian EFL learners' metacognitive awareness in listening and found a significant correlation between higher proficiency and greater use of metacognitive strategies. Similarly, Ratebi et al. (2013) explored the relationship between listening comprehension and metacognitive strategy use, identifying problem-solving as one of the most used strategies among students.

These studies reinforce the value of using metacognitive strategies to improve language performance. However, the emphasis has been mostly on listening or reading, where learners have more time to reflect and apply strategies compared to the spontaneous nature of speaking.

3. Studies on Metacognitive Strategies in Speaking

Compared with studies on metacognitive strategies in listening and reading, those on speaking are relatively limited. Goh (2008) highlighted that speaking, as an active, time-constrained skill, poses greater challenges for metacognitive application. Zhang and Goh (2006) conducted a study on speaking strategy instruction and found that students trained in metacognitive strategies demonstrated improved fluency and reduced Anxiety.

In classroom contexts, Putri (2019) conducted action research on guided metacognitive reflection, demonstrating improved student confidence and speaking outcomes. Sabnani and Goh (2021) examined how primary school students used speaking strategies and concluded that metacognitive awareness could be nurtured even at early stages of learning.

Most relevant to this study, Sulistyowati et al. (2022) developed the Metacognitive Awareness Speaking Questionnaire (MASQ), which assesses the use of metacognitive strategies in speaking across three major components: person knowledge, task knowledge, and strategic knowledge. Their research showed that students vary in their use of strategies, and certain components such as planning and Evaluation were found to be less frequently used.

While previous studies confirm the importance of metacognitive strategies in language learning, most have focused on listening or reading skills. There remains limited empirical research on speaking, especially using structured instruments such as the MASQ. In addition, studies exploring metacognitive strategy use among university-level EFL students in the Indonesian context are still scarce.

This study seeks to address this gap by analyzing the frequency and nature of metacognitive strategy use among EFL students using the MASQ framework. It also aims to identify which strategy areas are well-developed and which require further improvement, thereby contributing practical insights for both learners and educators.

This chapter has reviewed key concepts related to metacognitive knowledge, particularly its application in speaking. The framework used in this study is based on Sulistyowati et al. (2022), which classifies metacognitive speaking strategies into five subcomponents: Person Knowledge, Mental Translation, Direct Attention, Planning and Evaluation, and Problem-Solving. These components serve as the focus of the current research, which aims to analyze the frequency and quality of strategy use among EFL students. Additionally, this chapter discussed the factors that may influence strategy use and reviewed previous studies that support the need for further investigation in this area.

2.Method

Research Design

This research applies a descriptive quantitative design, aiming to explore students' metacognitive knowledge in speaking strategies. The study focuses on identifying which strategies are most frequently used and determining which areas of metacognitive awareness need further development.

According to Arikunto (2006), descriptive research is a method that seeks to describe phenomena as they occur in their natural settings without manipulating variables. Narbuko and Ahmadi (2015) similarly state that descriptive quantitative research involves collecting numerical data to systematically and accurately describe the characteristics of a group or phenomenon.

Since the data are collected via a structured questionnaire (MASQ) and presented as means and standard deviations, this design is appropriate for analyzing the use of metacognitive strategies among EFL students.

Population and Sample

The study's population consists of students in the 1st, 3rd, 5th, and 7th semesters of the English Education Department at the University of Muhammadiyah Gresik. These four groups were selected because they had taken speaking-related courses such as Public Speaking, Academic Speaking, and Presentation Skills, which make them relevant for investigating the use of speaking strategies.

The total number of students involved in this study is 102, distributed as follows: 29 from the 1st semester, 22 from the 3rd semester, 24 from the 5th semester, and 27 from the 7th semester.

Since all members of the population were included in the study, total population sampling was used. No random or stratified sampling techniques were applied, as the entire accessible population was surveyed. This approach was chosen to ensure comprehensive and representative data on the metacognitive speaking strategies employed across different levels of study.

Research Instrument

The researcher uses a single instrument, a questionnaire, to collect the data. According to Ary et al. (2010), a questionnaire is a tool in which respondents provide written answers to questions or select responses that best represent their views. This method allows researchers to collect data efficiently from multiple participants while ensuring consistent, standardized responses. Using a questionnaire allows the researcher to analyze participants' perspectives in a structured manner, making it a widely used approach in quantitative research.

The primary instrument used in this study is the Metacognitive Awareness Speaking Questionnaire (MASQ), developed by Sulistyowati et al. (2022). The MASQ is designed to measure students' metacognitive awareness in speaking through five subcomponents that reflect three major types of metacognitive knowledge: person knowledge, task knowledge, and strategic knowledge.

The questionnaire consists of 19 items, each rated on a 5-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

The questions are categorized into the following subcomponents such as Person Knowledge (PK): 3 & 13, Mental Translation (MT): 4, 9, & 16, Direct Attention (DA): 2, 10, & 14, Planning and Evaluation (PE): 1, 8, 12, 18, & 19, and Problem Solving (PS): 5, 6, 7, 11, 15, & 17.

The components of Mental Translation and Direct Attention are part of Task Knowledge, while Planning & Evaluation and Problem Solving fall under Strategic Knowledge. This classification aligns with the theoretical framework adopted in this study, as discussed in Chapter II.

The instrument is used to address both research questions:

1. To determine which metacognitive speaking strategies are used most frequently by EFL students, and
2. To identify which metacognitive areas need further improvement.

Data Collection

The data in this study were collected through the administration of the Metacognitive Awareness Speaking Questionnaire (MASQ) to students from the 1st, 3rd, 5th, and 7th semesters in the English Education Department at the University of Muhammadiyah Gresik.

The questionnaire was distributed in person during class sessions with prior permission from the lecturers. Respondents were given clear instructions and were encouraged to answer each item honestly based on their personal experiences in speaking English. The completion time ranged from 15 to 20 minutes.

All items in the questionnaire were closed-ended and measured using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The students' responses were collected and prepared for analysis to address the research questions regarding their use of metacognitive speaking strategies.

This procedure ensured that data collection was conducted consistently, ethically, and with focus, in alignment with the study's purpose and scope.

Data Analysis

After collecting the data, the researcher analyzed the students' responses using descriptive statistical analysis through SPSS software. The main statistical tools used were the mean and standard deviation for each item and subcomponent of the Metacognitive Awareness Speaking Questionnaire (MASQ).

The analysis aimed to identify which metacognitive speaking strategies students used most frequently and to determine which components of metacognitive awareness showed lower average scores and may require further development.

Each of the five subcomponents—Person Knowledge (PK), Mental Translation (MT), Direct Attention (DA), Planning and Evaluation (PE), and Problem Solving (PS)—was analyzed separately. The results were then presented in tables and interpreted based on the mean score ranges.

To assist with interpretation, the following criteria were used: Mean ≥ 4.00 → High frequency of use; Mean 3.00–3.99 → Moderate frequency of use; and Mean < 3.00 → Low frequency of use.

This approach enabled the researcher to provide a detailed description of students' metacognitive awareness in speaking without classifying them into levels, which aligns with the descriptive nature of this study.

3. Findings and Discussion

Metacognitive Speaking Strategies Frequently Used by EFL Students

The findings of this study reveal important insights into EFL students' metacognitive awareness when speaking English, particularly regarding their knowledge and application of different strategies. The analysis begins with Person Knowledge, which highlights how well students understand their own speaking abilities. The data showed mixed perceptions: while some students moderately acknowledged their strengths and weaknesses (as seen in Question 3), others displayed uncertainty or difficulty in self-assessment, as indicated by the notably lower and more varied responses to Question 13. This suggests that self-awareness is inconsistent among learners, which could affect their confidence and their ability to self-regulate during speaking activities.

Moving into Task Knowledge and Strategy Knowledge, the findings indicate a more active application of metacognitive strategies. Regarding task understanding, many students still rely on mental translation, though responses varied, suggesting that while it remains a common habit, its use differs from student to student. Conversely, direct attention strategies received generally higher ratings, showing that most students make a conscious effort to focus during speaking. In the area of strategy use, particularly planning, Evaluation, and problem-solving, the results were strongly positive. Students reported high awareness of the need to prepare before speaking and reflect afterward, as well as the ability to handle difficulties effectively. These strong scores indicate a high level of metacognitive engagement, enabling students to navigate speaking tasks more successfully, even when they face communication challenges.

	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Question1	100	3.00	2.00	5.00	415.00	4.1500	.06872	.68718	.472	-.393	.241	-.106	.478
Question2	100	3.00	2.00	5.00	411.00	4.1100	.06340	.63397	.402	-.334	.241	.477	.478
Question3	100	3.00	2.00	5.00	342.00	3.4200	.06843	.68431	.468	.778	.241	.196	.478
Question4	100	3.00	2.00	5.00	358.00	3.5800	.07410	.74101	.549	-.205	.241	-.183	.478

Question5	100	4.00	1.00	5.00	422.00	4.2200	.08713	.87132	.759	-1.008	.241	.833	.478
Question6	100	4.00	1.00	5.00	369.00	3.6900	.07875	.78746	.620	-.273	.241	.442	.478
Question7	100	4.00	1.00	5.00	378.00	3.7800	.06754	.67540	.456	-1.108	.241	2.864	.478
Question8	100	4.00	1.00	5.00	390.00	3.9000	.09482	.94815	.899	-.667	.241	-.031	.478
Question9	100	3.00	2.00	5.00	338.00	3.3800	.07886	.78855	.622	.596	.241	-.053	.478
Question10	100	2.00	3.00	5.00	392.00	3.9200	.05976	.59764	.357	.026	.241	-.165	.478
Question11	100	3.00	2.00	5.00	407.00	4.0700	.08558	.85582	.732	-.530	.241	-.534	.478
Question12	100	3.00	2.00	5.00	418.00	4.1800	.08212	.82118	.674	-.682	.241	-.278	.478
Question13	100	4.00	1.00	5.00	295.00	2.9500	.10766	1.07661	1.159	.299	.241	-.597	.478
Question14	100	3.00	2.00	5.00	328.00	3.2800	.09110	.91099	.830	.147	.241	-.808	.478
Question15	100	3.00	2.00	5.00	404.00	4.0400	.08636	.86363	.746	-.558	.241	-.414	.478
Question16	100	4.00	1.00	5.00	334.00	3.3400	.10752	1.07516	1.156	-.271	.241	-.156	.478
Question17	100	3.00	2.00	5.00	386.00	3.8600	.07916	.79162	.627	-.492	.241	.061	.478
Question18	100	3.00	2.00	5.00	385.00	3.8500	.08689	.86894	.755	-.362	.241	-.513	.478
Question19	100	4.00	1.00	5.00	395.00	3.9500	.09143	.91425	.836	-.871	.241	1.282	.478
Valid N (listwise)	100												

Table 1. Descriptive Statistics of the Metacognitive Awareness Questionnaire

The Person Knowledge Strategy focuses on students' self-awareness of their English-speaking abilities. Based on the responses to Questions 3 and 13, there appears to be a notable difference in students' perceptions. Question 3 received a moderate mean score of 3.42 with a relatively low standard deviation of 0.68, indicating that many students somewhat recognize their speaking strengths and limitations. However, Question 13 recorded the lowest mean score among all questionnaire items at 2.95 and showed the highest standard deviation (1.07), suggesting a wider range of responses and less agreement. This inconsistency implies that while some students may feel confident in evaluating their abilities, others may struggle with self-assessment or have unclear perceptions of their speaking competence.

The Task Knowledge Strategy includes how students understand and respond to the demands of speaking tasks, specifically through mental translation and direct attention. Mental translation, as examined in Questions 4, 9, and 16, yielded moderate mean scores (ranging from 3.34 to 3.58), indicating that students still frequently rely on translating ideas from their first language into English. The higher variability in responses, especially for Question 16 ($SD = 1.07$), shows that this strategy is used differently among students. On the other hand, direct attention—measured by Questions 2, 10, and 14—showed generally higher mean scores (ranging from 3.28 to 4.11), particularly with strong agreement in Question 2. This suggests that most students actively concentrate during speaking tasks, though some may struggle to maintain consistent focus, possibly due to anxiety or topic complexity.

The Strategy Knowledge Strategy reflects how students plan, evaluate, and solve problems during speaking. Planning and evaluation strategies (Questions 1, 8, 12, 18, and 19) had consistently high mean scores, such as 4.15 for planning (Question 1) and 4.18 for Evaluation (Question 12), showing that most students are aware of the importance of preparing and reflecting on their speaking. Meanwhile, problem-solving strategies (Questions 5, 6, 7, 11, 15, and 17) were also highly rated, with Question 5 standing out at 4.22. These findings indicate that students are generally well-equipped to manage speaking challenges through effective techniques such as adjusting their language, seeking alternatives, or clarifying meaning. Overall, this category demonstrates a strong level of metacognitive engagement in overcoming communication barriers during English-speaking tasks.

From the data, the most frequently used metacognitive knowledge strategy among students is Strategy Knowledge, which includes planning, Evaluation, and problem-solving strategies. This category consistently showed the highest mean scores, such as 4.15 for planning (Question 1), 4.18 for Evaluation (Question 12), and 4.22 for problem-solving (Question 5), indicating that students are highly aware of the importance of preparing before speaking, reflecting on their performance, and applying practical solutions when facing communication difficulties. This suggests they actively monitor and control their speaking process, a sign of strong metacognitive regulation. These results directly address the first research question regarding the most frequently used metacognitive speaking strategies, as defined by the MASQ framework. The high use of Strategic Knowledge indicates that students are not only aware of their speaking process but also capable of managing and adjusting it in real time to achieve communication goals.

In comparison, Task Knowledge strategies—such as mental translation and direct attention—were used moderately, and Person Knowledge showed the least consistent responses, suggesting lower levels of self-awareness in

evaluating speaking abilities. These results suggest that students are most confident and active in using strategies that directly help them manage and improve their speaking performance, rather than those that require internal self-reflection.

Areas of Metacognitive Knowledge That Require Improvement

The descriptive statistics presented offer insights into students' metacognitive knowledge in speaking, categorized into five strategy types: Person Knowledge, Mental Translation, Direct Attention, Planning and Evaluation, and Problem Solving. Among these, Problem Solving recorded the highest mean score ($M = 23.66$, $SD = 2.95$), indicating that students frequently engage in strategies to overcome challenges in speaking tasks. Planning and Evaluation also received a relatively high mean ($M = 20.03$, $SD = 2.51$), suggesting that students often prepare and reflect on their speaking performance. Direct Attention ($M = 11.31$, $SD = 1.53$) and Mental Translation ($M = 10.30$, $SD = 1.91$) show that learners also use attention-focusing and language-switching strategies, though with more moderate frequency. In contrast, Person Knowledge received the lowest mean score ($M = 6.37$, $SD = 1.47$), indicating that students may have lower self-awareness of their own speaking strengths and weaknesses. The relatively high skewness (0.545) and moderate kurtosis (-0.443) suggest that responses were slightly concentrated among lower scores, highlighting variation in how well students understand their personal capabilities. This contrast implies that while students are fairly active in managing tasks and solving problems during speaking activities, their foundational self-awareness—their metacognitive knowledge about themselves as learners—may be underdeveloped. This imbalance suggests a need to strengthen personal knowledge as a core part of metacognitive awareness in the development of speaking skills.

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness	Kurtosis			
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic			
Person Knowledge	100	6	4	10	6.37	.147	1.468	2.155	.545	.241	-.443	.478
Mental Translation	100	8	7	15	10.30	.191	1.910	3.646	.927	.241	.393	.478
Direct Attention	100	7	8	15	11.31	.153	1.529	2.337	.049	.241	-.378	.478
Planning and Evaluation	100	11	14	25	20.03	.251	2.512	6.312	-.194	.241	-.547	.478
Problem Solving	100	16	14	30	23.66	.294	2.945	8.671	-.838	.241	1.844	.478
Valid N (listwise)	100											

Table 2. Title of the table Descriptive Statistics of Metacognitive Awareness Strategies

The data shows that students frequently use certain areas of metacognitive knowledge more than others when engaging in speaking tasks. The most frequently used area is Problem Solving, with the highest mean score of 23.66, indicating that students often rely on strategies to overcome difficulties during speaking. This is followed by Planning and Evaluation ($M = 20.03$), suggesting that many students actively prepare and assess their speaking performance. These two areas reflect strong metacognitive regulation, highlighting that students tend to focus more on managing their speaking tasks and monitoring their progress.

The next level in the hierarchy is Direct Attention ($M = 11.31$), which refers to how students maintain focus during speaking. It is moderately used, followed closely by Mental Translation ($M = 10.30$), showing that some students still depend on translating from their first language when speaking English. Person Knowledge has the lowest mean score ($M = 6.37$), suggesting that students are less aware of their own strengths and weaknesses in speaking. This pattern reveals that students most frequently apply metacognitive strategies related to action and task management, while strategies that require deeper self-awareness and language reflection are used less frequently.

While most strategies showed high or moderate use, two specific areas demonstrated relatively lower mean scores: Person Knowledge and Mental Translation. For instance, Question 13 under Person Knowledge received the lowest average score (2.95), indicating that many students are not fully aware of their personal strengths or limitations in speaking English. Likewise, Mental Translation items had mean scores slightly below 3.5, suggesting moderate use but with room for improvement.

Therefore, this supports the second research question by indicating which metacognitive areas require further improvement. These findings highlight that while students are capable of planning and solving problems, they may lack self-awareness about their speaking abilities and still depend on translating from their first language when communicating in English.

In summary, the data indicate that students most frequently use metacognitive strategies related to **Problem Solving**, Planning, and Evaluation, with a strong focus on managing and monitoring their speaking tasks. **Direct Attention** and **Mental Translation** are used at a moderate level, suggesting that students still rely on concentration and occasional translation from their first language during speaking. However, **Person Knowledge** is the least frequently used, indicating limited self-awareness about their speaking abilities. Overall, students tend to apply strategies to perform speaking tasks effectively, but there is a noticeable gap in their awareness of personal strengths and weaknesses, underscoring the need to strengthen this foundational aspect of metacognitive knowledge.

Discussion

The findings of this study provide a comprehensive understanding of EFL students' metacognitive awareness in speaking, especially regarding their knowledge and use of various strategies. The results reveal that students most frequently use Strategy Knowledge, which includes Planning, Evaluation, and Problem Solving. These strategies consistently received the highest mean scores—such as 4.22 for problem-solving (Q5) and 4.18 for Evaluation (Q12)—indicating that students are generally well-prepared to manage speaking challenges by planning ahead, assessing their performance, and adapting when difficulties arise. This aligns with Flavell's (1979) theory that metacognitive control involves active planning and monitoring, and with Wenden's (1998) argument that learners with strong metacognitive regulation tend to be more effective language users. This strong performance in strategy use reflects a high level of metacognitive regulation, suggesting that students are actively engaged in improving their speaking performance through conscious strategy use.

The results also mirror the findings of Sulistyowati et al. (2022), who reported that Indonesian EFL students used planning and problem-solving strategies more frequently than others. Similar results were observed in a study by Putri et al. (2024), which found that students tend to engage more with strategic aspects of speaking when given clear goals and supportive environments.

In contrast, strategies involving Task Knowledge—such as Mental Translation and Direct Attention—were used at a moderate level. While direct attention showed stronger and more consistent use, reliance on mental translation varied among students, suggesting different levels of dependence on their first language. The lowest scores were found in Person Knowledge, particularly in self-assessment items such as Question 13 ($M = 2.95$), indicating a lack of consistent awareness of their own speaking abilities. This imbalance highlights that while students are confident and skilled in applying practical strategies during speaking, they struggle more with internal self-awareness. Therefore, to enhance overall metacognitive awareness, more emphasis should be placed on developing students' understanding of their personal language strengths and limitations. On the other hand, the relatively low scores in Person Knowledge and Mental Translation signal areas that need improvement. According to Zhang and Goh (2006), over-reliance on mental translation may impede fluency and reduce spontaneous speech. Likewise, low person knowledge may reflect limited self-assessment or lack of reflection on personal speaking progress.

The findings of this study align with existing literature that emphasizes the critical role of metacognitive awareness in enhancing EFL students' speaking proficiency. Paterson (2022) conducted a 15-week intervention using reflection diaries and found that learners with well-developed metacognitive skills—particularly in goal-setting, strategy use, and self-reflection—tended to exhibit greater fluency and complexity in spoken English. Similarly, Putri et al. (2024) reported that EFL learners frequently engage in planning and evaluation strategies to regulate their cognitive processes during speaking tasks, highlighting these strategies as essential for managing performance and improving articulation. The current study reinforces these conclusions by showing that students most frequently employ Strategy Knowledge, with notably high mean scores for problem-solving ($M = 4.22$) and Evaluation ($M = 4.18$). These results suggest that students are not only aware of their speaking challenges but are actively managing them through deliberate strategy use, reflecting a high level of metacognitive regulation. These findings imply that EFL instructors should pay closer attention to developing students' metacognitive self-awareness and reducing translation dependency. Implementing classroom strategies such as reflective speaking journals, peer feedback, and guided self-assessment could enhance person knowledge. Meanwhile, encouraging more spontaneous speaking tasks may help students reduce their reliance on internal translation.

Despite these similarities, the present study offers unique contributions by providing more detailed quantitative insights into the specific strategies employed by EFL learners. While Paterson (2022) noted variability in learners' responsiveness to metacognitive prompts, the current findings suggest a consistently high level of strategy use across participants. This may reflect either a more homogenous sample or the effectiveness of instructional practices that promote metacognitive strategy use. Furthermore, unlike broader categorizations found in earlier research, this study quantifies strategy use with precision, highlighting the prominence of problem-solving and evaluation strategies. This level of granularity adds depth to our understanding of how metacognitive awareness is operationalized in EFL speaking contexts and suggests that targeted strategy instruction may yield more uniform benefits across diverse learner profiles. In summary, this study highlights both the strengths and weaknesses in students' metacognitive awareness. While students show strong control over speaking through planning and Problem solving, greater efforts are needed to build their internal awareness and independence in English speaking.

4. Conclusion

This study investigated the metacognitive speaking strategies most frequently used by EFL students and identified areas requiring further development. The findings showed that students demonstrated strong strategic knowledge, particularly in problem solving and planning and Evaluation, indicating a high level of ability to manage, regulate, and adapt their speaking performance. However, lower scores in person knowledge and mental translation suggest that many students have limited awareness of their own speaking abilities and still depend on first-language translation, highlighting important areas for improvement.

Based on these results, it is recommended that lecturers place greater emphasis on developing students' metacognitive awareness, especially in enhancing self-awareness and reducing reliance on mental translation. Reflective activities, self-assessment, peer feedback, and increased opportunities for spontaneous speaking can support this development. Students are also encouraged to actively monitor and reflect on their speaking processes to become more autonomous speakers, while future research may explore metacognitive speaking strategies in greater depth through qualitative methods or across different language skills and learner populations.

5. References

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