

Students Metacognitive Awareness on Speaking: Survey on English Department Students

Kaukabilla Alya Parangu¹

Dian Puisi²

Puput Jianggi Mahastu³

Renata Kenanga Rinda⁴

¹Universitas Sebelas Maret, Surakarta, Indonesia

^{2,3}Universitas PGRI Madiun, Madiun, Indonesia

⁴Politeknik Negeri Jember, Jember, Indonesia

Kaukabilla.20008@mhs.unesa.ac.id

Abstract

In metacognitive awareness, students reflect on their thought processes as they do speak activities, including their objectives, level of comprehension, and strategies for enhancing their ability to articulate their ideas clearly. The two main objectives of this research are: First, is there a correlation between students' self-awareness of their thinking processes and their proficiency in speaking? The second question is whether or not students' gender awareness is related to their level of self-consciousness. Students in their first economics semester at one of Ponorogo's colleges participated in the research. The course they were enrolled in was titled "Speaking for Materials." The study utilized a speaking exam, a questionnaire based on and built upon by Vandergrift et al., and a correlational quantitative research approach. The data was analyzed using SPSS. The first research objective was fulfilled because of the robust correlation between students' self-awareness of their thinking processes and their proficiency in speaking. According to the second research question, pupils' metacognitive awareness was unrelated to gender.

Keywords: Metacognitive awareness, speaking skill, EFL, university students

1. INTRODUCTION

Communicating is essential, especially now that speaking English lets people participate in global communication (Akther, 2022), get international job opportunities (Dwivedi & Sharma, 2023), and share culture and knowledge with people worldwide. Also see Griesbaum et al. (2023). With the growth of globalization and technology, communicating in English is becoming more and more critical. English is widely used internationally in business, education, technology, and other fields. The ability to speak clearly in English makes it possible to work together, share ideas, and find work on a global scale.

In the globalization and the mixing of cultures and economies, English has also become the common language of global business, academia, technology, and many other areas.

Corresponding author, email: Kaukabilla.20008@mhs.unesa.ac.id

Speaking and writing English well can help get jobs in other countries. English has become the primary language used for worldwide communication, making it easier for people from different languages and cultures to talk to each other. Learning English can help people from different cultures understand each other better and make it easier for people to share ideas, information, and experiences across countries. This skill improves personal and professional relationships and helps people work together, develop new ideas, and learn in many areas and industries worldwide. In this connected world, communicating clearly in English is necessary for anyone who wants to have a tangible impact on global dialogue and cultural exchange.

Metacognition has become increasingly recognized as a way to improve speaking skills in recent years. Being aware of and controlling brain processes is called metacognition. It dramatically affects how well students communicate (Proust, 2022). When students have much metacognitive awareness, they can better figure out their speaking strengths and weaknesses, make realistic goals for growth, and use planning strategies to improve (Dangin & Hartati, 2022). It is well known that awareness of thoughts and feelings is essential when speaking, but more study is still needed to determine how this relationship works in real life, especially in different fields.

Because of the unique needs and difficulties of communicating in economics, economics departments make an exciting setting for this kind of study. Economics students often have to explain complicated ideas and studies to a wide range of people, from other students to people who work in the field. To present study results, participate in class discussions, and work on projects with others, need to be able to speak clearly. To improve speaking skills in economics, students have to deal with difficulties like explaining complicated ideas clearly, avoiding disciplinary jargon, and changing their communication methods to fit the needs of different stakeholders.

In light of this, this poll aims to find out how aware Economics Department students are of their own speaking skills. Specifically, this study examines how healthy economics students understand, think about, and control their speaking processes. The goal is to explain how metacognition and speaking skills interact in economics education. This study wants to discover more about the connection between being aware of how to think and being good at talking about economics by looking at many poll data from Economics majors. Finding patterns, trends, and connections in student answers is the goal of this study. The results will help teachers improve their students' speaking skills and promote metacognitive growth in the Economics Department and beyond.

In conclusion, this background study shows how important it is to examine how students' metacognitive awareness affects their speech in Economics Departments. It discusses what this study might mean for academic practice and professional growth. In order to fill this gap in the research, this study aims to learn more about how metacognition and speaking skills work together. This will have implications for economics educators, researchers, and lawmakers.

2. LITERATURE REVIEW

2.1 Metacognitive Awareness

Metacognitive awareness refers to the conscious recognition and understanding of one's cognitive processes, including knowledge, thought strategies, and memory. Balashov, Pasicichnyk, and Kalamazh (2021) have defined metacognitive awareness as acknowledging and

comprehending one's cognitive processes. It involves being aware of one's cognitive and learning strategies and being able to observe, manage, and govern these processes to enhance learning and problem-solving. This consciousness necessitates pupils to contemplate their thoughts and comprehension actively, and it can be cultivated concurrently with their educational progression. The importance of metacognitive awareness in cultivating self-regulated learning was emphasized by Lajoie and Pitras (2014). It has been incorporated that in order to achieve tremendous success as learners, it is crucial to participate actively in self-regulated learning. Furthermore, developing metacognitive awareness methods is essential for attaining self-regulated learning.

Cohen and Parnrod (2011) defined metacognitive strategy as students' intentional approach to shaping their language acquisition. The process encompasses formulating learner activities, monitoring progress, and assessing outcomes. According to Cresswell (2020), the cultivation of metacognitive awareness facilitates an individual's conscious acquisition of knowledge and comprehension regarding their cognitive processes, specifically within the domain of oral communication activities. This study encompasses the concepts of self-monitoring, self-regulation, and self-evaluation in the context of speaking activities. It involves the application of cognitive methods and the recognition of students' verbal communication strengths and limitations. Investigating metacognitive awareness strategy in speaking performance involves examining how individuals understand and control their cognitive processes while engaging in oral expression.

The objective is to develop successful communication strategies and self-regulate spoken language activities. Research consistently shows a positive relationship between metacognitive awareness strategy and speaking performance. Wang and Chan (2021) have demonstrated that students with higher levels of metacognitive awareness tend to have better-spoken performance. This highlights the significance of cultivating metacognitive skills within the context of language instruction in order to enhance oral communication proficiency. The potential for enhancing speaking performance lies in incorporating metacognitive awareness tools into language teaching. Teachers can integrate explicit metacognitive training, prompting students to contemplate their speaking processes, establish objectives, track their advancement, and establish a conducive learning environment that fosters metacognitive awareness and facilitates practical speaking abilities. This study investigates the influence of metacognitive awareness on the speaking comprehension performance of English as a Foreign Language (EFL) learners.

2.2 Understanding of Speaking skill

Speaking skills are one of the critical aspects of human communication that enables individuals to convey thoughts, ideas, information, and emotions clearly and effectively through spoken language. This ability includes several interrelated elements to create successful communication. It involves using words clearly and precisely. This includes selecting appropriate words for the message to be conveyed and pronouncing them with sufficient clarity to be easily understood by the listener. Clarity in speaking is critical to ensuring the message is understood and understood.

In addition to clarity, speaking skills also require a high level of fluency. Fluency in speaking encompasses the ability to flow words at the right pace without any interruptions or hitches that could disrupt the flow of the conversation. This lets the speaker keep the listener's

attention and makes the communication run smoothly. Furthermore, speaking skills involve proper intonation, stress, and rhythm. Proper intonation can add an expressive dimension to the message, while stress on certain words can emphasize the desired meaning. In addition, proper rhythm in speaking can help maintain the listener's attention and enhance their understanding of the message being conveyed.

Furthermore, speaking skills also include listening actively and responding appropriately to messages received. The ability to listen well is critical to understanding others' perspectives and thoughts, while the ability to respond appropriately enables effective interaction in two-way communication. The development of speaking skills involves regular practice, receiving feedback, and constant self-reflection. It allows one to improve clarity, fluency, expression, and responsiveness in speaking and adapt their speaking style to specific audiences and communication purposes. By mastering speaking skills, individuals can improve their ability to communicate effectively in various contexts, build strong relationships with others, and succeed in their personal, academic, professional, and social lives.

2.3 The relationship between metacognitive awareness and speaking skill.

The relationship between metacognitive awareness and speaking skills interests researchers in language acquisition and education. Metacognitive awareness refers to the ability to reflect on and regulate one's cognitive processes while speaking skill pertains to the ability to articulate thoughts and ideas effectively in spoken language. Numerous scholars collectively suggest a positive relationship between metacognitive awareness and speaking ability. Seifoori (2016) discusses the impact of metacognitive awareness on the fluency of Iranian TEFL learners' task-based oral output. The study finds that metacognitive awareness enhanced fluency.

Additionally, the study examined the impact of metacognitive awareness training on the fluency of English speech among Iranian TEFL learners, showing significant improvement in fluency for those who received the training. The findings suggest that strategic investment in optimizing instructional opportunities can enhance oral performance in EFL contexts. The article also includes references for language teaching research and the author's research interests.

Hermayani Mbatu (2020) demonstrates that metacognitive awareness and self-regulated learning strategies are interrelated and beneficial for skill mastery, such as speaking. The importance of cooperative learning and the role of metacognitive awareness in facilitating self-regulated learning were highlighted. The findings suggested that cooperative learning can facilitate independent learning, and consistency is required to sustain self-regulated learning. The study acknowledged the limitations of the research and suggested further exploration of the relationship between motivation and self-regulation, as well as metacognitive awareness in the context of Civil Engineering students.

Dangin and Hartati (2022) explored the correlation between students' metacognitive strategies awareness and their speaking ability. The research was conducted with 31 Indonesian junior college students taking a speaking course, and a correlational research design was utilized to examine the relationship between metacognitive strategies and speaking ability. The findings indicate a positive correlation between students' level of awareness in planning, monitoring, managing, solving, and evaluating the learning process and their speaking ability. The study emphasizes the significant role of metacognitive strategies in enhancing students' speaking ability and academic performance. The study also provides an overview of students' metacognitive strategies awareness and their knowledge of cognition. Encouraging metacognitive awareness is considered advantageous. Educators can instigate strategies that assist students in reflecting on their learning processes, setting goals, and monitoring their understanding. This can lead to more

independent and effective learners who are better equipped to navigate various learning situations.

Overall, promoting metacognitive awareness among students is advantageous as it enables them to reflect on their learning processes, set goals, and monitor their understanding. Educators can employ strategies that foster metacognitive awareness, making more independent and effective learners better equipped to navigate diverse learning situations and excel in speaking proficiency. As such, further research in this area could provide valuable insights into practical strategies for promoting metacognitive awareness and improving speaking skills in language learners.

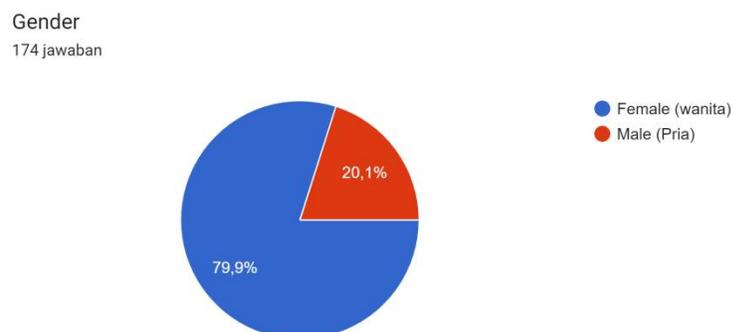
3. METHOD

3.1 Research design.

The research approach used in this research is quantitative with correlational design approach. It is a type of research design used to examine the relationship between two or more variables. In this study, correlational design is used to explore the relationships between students' metacognitive awareness, their speaking performances, and their gender. The aim of this study is to discover two things: The first objective is to investigate the correlation between students' metacognitive awareness and their speaking performances. This suggests that the study will measure both metacognitive awareness and speaking performances and examine whether there is a relationship between the two variables. The second objective is to explore the correlation between students' metacognitive awareness and their gender. This implies that the study will assess both metacognitive awareness and gender and examine whether there is a relationship between the two variables.

3.2 Participants

Participants in this study consisted of first-semester students enrolled in the economics program at the faculty of economics and business on campus. A total of 174 students participated in the research, comprising 139 female students (79.9%) and 35 male students (20.1%). Participants were selected based on their enrollment status in the specified program. Prior to participation, all students were provided with detailed information about the study and gave informed consent to participate. Confidentiality of participants' responses was strictly maintained throughout the research process, and all data were anonymized to ensure privacy.



3.3 Instruments

Researchers used several kinds of instruments to explore data in this study. The first instrument, researchers used the Metacognitive Awareness Speaking Questionnaire (MASQ), an instrument developed by Vandergrift et al. (2006). to measure the level of metacognitive awareness of students. The scale consists of 21 items designed to assess individuals' understanding of their cognitive processes and strategies. Participants were asked to rate each statement using a Likert scale from strongly disagree to agree strongly. In addition, a speaking performance assessment rubric was used which was created based on predetermined criteria to evaluate speaking ability.

These rubric covers aspects such as pronunciation, fluency, vocabulary, grammar, coherence, and engagement with the audience. Each aspect is rated on a scale from low to high, where higher ratings indicate a better level of proficiency in speaking. Finally, a demographic questionnaire was used to collect information on the gender of the participants. This was done to understand the correlation between metacognitive awareness and gender. This questionnaire included items that asked participants to indicate their gender as male or female.

3.4 Research Procedure

This study was conducted through a series of structured steps to collect data and analyze the relationship between students' metacognitive awareness, their speaking performance, and gender. First of all, data regarding students' metacognitive awareness was measured using the Metacognitive Awareness Speaking Questionnaire (MASQ). After that, students' speaking performance was evaluated using a prepared scoring rubric. Finally, demographic data such as participants' gender was collected through a questionnaire.

The instruments used, including MASQ, speaking assessment rubric, and demographic questionnaire, were compiled and prepared for administration to the participants. The study was conducted by inviting participants to participate in the measurement sessions of metacognitive awareness and speaking performance. Participants were asked to fill out the MASQ questionnaire, perform a presentation or speaking conversation according to the instructions, and fill out the demographic questionnaire. After the data is collected, the next step is data processing. Data from the questionnaires and speaking performance assessments will be analyzed using appropriate statistical techniques to answer the research questions.

The data will be analyzed to evaluate the relationship between students' metacognitive awareness, their speaking performance, and gender. Relevant statistical analyses, such as correlation, regression, or t-test, will be used to identify significant patterns or relationships in the data. The results of the data analysis will be interpreted to draw conclusions and implications from the study. Findings will be discussed in the context of relevant literature, and contributions to the understanding of metacognitive awareness and speaking performance will be evaluated.

4. RESULT

4.1 The correlation between students' metacognitive awareness and students' speaking performance.

The following information was obtained from students' responses to the Metacognitive Awareness Speaking Questionnaire (MASQ) administered to students. The data analyzed showed a strong correlation between speaking ability and MASQ, with the Pearson Correlation result being 0.789. For more details, the following table is generated from the calculation of bivariate correlation:

Tabel 1. The relationship between speaking ability and memory intelligence

		SPEAKING	MAIQ
SPEAKING	Pearson Correlation	1	.789
	Sig.(2-tailed)		.000
	N		174
		174	
MAIQ	Pearson Correlation	.789	1
	Sig.(2-tailed)		
	N	.000	
		174	174

The correlation coefficient serves to measure how close the relationship is between two variables, in this case, between "SPEAKING" (speaking ability) and "MAIQ" (memory intelligence). The resulting Pearson correlation coefficient value is 0.789, close to the maximum of 1. This indicates a very positive relationship between speaking ability and memory intelligence, meaning that when a person's speaking ability increases, their memory intelligence also tends to increase, and vice versa.

This value indicates how significant the correlation between the two variables is. In this case, the significance value is 0.000, smaller than the commonly used significance level (0.05). This indicates that the relationship between "SPEAKING" and "MAIQ" is statistically significant, likely not coincidental. The total number of samples or participants used in the correlation analysis was 174. The result is the same as the correlation between "SPEAKING" and "MAIQ" because the Pearson correlation is symmetrical, meaning it does not depend on the order of the variables. From these results, it can be concluded that in the sample studied, there is a solid and statistically significant relationship between speaking ability ("SPEAKING") and memory intelligence ("MAIQ"). This indicates that individuals with good speaking ability tend to have higher levels of memory intelligence and vice versa.

Table 2. The correlation between students' metacognitive awareness and gender

Correlations			
		Gender	Metacognitive
Gender	Pearson Correlation	1	-.048
	Sig. (2-tailed)		.533
	N	174	174

Metacognitive	Pearson Correlation	-.048	1
	Sig. (2-tailed)	.533	
	N	174	174

The Pearson correlation coefficient measures how close the relationship is between two variables. In the output above, the correlation coefficient between "Gender" and "Metacognitive" is -0.048. This value indicates the direction and strength of the relationship between the two variables. In this case, a negative value indicates a negative relationship, although a minimal value indicates that this relationship is fragile.

The significance value indicates how significant the relationship between the two variables is. The significance value is 0.533, more significant than the commonly used significance level (0.05). This indicates that the relationship between "Gender" and "Metacognitive" is not statistically significant at the 0.05 significance level. In other words, insufficient evidence exists to state that the relationship between gender and metacognitive awareness is statistically significant. The total number of samples or participants used in the correlation analysis was 174 for both variables, namely "Gender" and "Metacognitive." Thus, based on the output results, it can be concluded that in the sample studied, there is no statistically significant relationship between gender and metacognitive awareness ("Metacognitive"). Although a slight negative relationship exists, it is fragile and not statistically significant.

5. Discussion

The study revealed a strong and statistically significant link between speaking ability ("SPEAKING") and metacognitive awareness ("MAIQ"), as determined by students' responses to the Metacognitive Speaking Awareness Questionnaire (MASQ). The two variables have a strong positive association, as indicated by the Pearson correlation coefficient of 0.789. Conversely, a positive correlation exists between an individual's speaking proficiency and memory intelligence. Moreover, the low significance value (Sig.) of 0.000 suggests a statistically significant association between speaking ability and memory intelligence, with a significance level of 0.05. This suggests that the observed relationship is more than a mere coincidence but a regular and dependable association.

The findings of this study hold significant implications within educational and research settings. Within education, a more comprehensive comprehension of the association between oral proficiency and cognitive capacity for remembering might facilitate the formulation of enhanced pedagogical approaches. In the realm of research, this comprehension might yield enhanced insights into the interconnectedness between the two variables, serving as a foundation for subsequent investigations or the formulation of theoretical frameworks. Hence, these findings significantly contribute to comprehending the significance of metacognitive awareness in enhancing oral communication skills and cognitive memory.

The correlation analysis between the variables "Gender" and "Metacognitive" yielded a Pearson correlation coefficient -0.048. This statistic, known as the Pearson correlation coefficient, quantifies the degree of association between two variables. A negative value in this context signifies a negative correlation between the two variables. However, it is essential to note that the minimal value suggests this link is delicate. In addition, the obtained significance value (Sig.) is 0.533. The value above serves as an indicator of the level of significance in the relationship between the two variables.

In statistics, the prevailing significance level is typically set at 0.05. If the significance value exceeds the predetermined significance level, which in this instance is 0.05, the association between the two variables is deemed to lack statistical significance. The available evidence is insufficient to establish a substantial correlation between gender and metacognitive awareness within the examined population.

The correlation analysis utilized 174 samples or participants for both variables, specifically "Gender" and "Metacognitive." This suggests that the data being evaluated have a large sample size to yield dependable outcomes. The output results indicate no statistically significant correlation between gender and metacognitive awareness in the sample under investigation. While the two have a tiny negative correlation, it is delicate and lacks statistical significance. Therefore, it may be concluded that gender does not substantially impact the degree of metacognitive awareness within the scope of this research. Additional variables that impact metacognitive awareness must be considered for future investigation.

6. Conclusions

The analysis revealed a strong and statistically significant link between speaking ability ("SPEAKING") and metacognitive awareness ("MAIQ"). The two variables have a strong positive association, as indicated by the Pearson correlation coefficient of 0.789. As an individual's speaking proficiency improves, their memory intelligence also tends to improve, and vice versa. The obtained p-value of 0.000 suggests that the observed link is statistically significant at a significance level of 0.05. This finding suggests that the association between speaking proficiency and memory intelligence is not merely a result of random chance but a substantial and dependable correlation.

The findings of this study hold substantial significance within the realms of education and research. Enhancing comprehension of the correlation between speaking proficiency and recall intelligence might facilitate formulating more efficacious pedagogical approaches, such as incorporating metacognitive instruction within the educational framework to enhance students' oral communication skills. Furthermore, this comprehension can also aid educators in delivering more substantial criticism to pupils and fostering introspection regarding their educational journey. Within the realm of research, these findings offer significant contributions to understanding the interconnectedness of the two variables. These insights serve as a foundation for future investigations or the formulation of theoretical frameworks in metacognition and speaking acquisition.

Nevertheless, a limited and statistically insignificant association was observed between metacognitive awareness and gender. While a modest inverse correlation exists between the two variables, it is essential to note that this correlation lacks statistical significance within the scope of this particular study.

This finding indicates no substantial impact of gender on students' metacognitive awareness while considering their speaking proficiency. Hence, it is imperative to do additional studies to investigate additional variables that impact metacognitive awareness within the realm of speaking education and learning. Collectively, these findings provide a significant addition to comprehending the significance of metacognitive awareness in enhancing students' oral proficiency. The findings of this study have practical implications that can contribute to developing more efficacious learning strategies aimed at enhancing students' oral communication skills across different educational levels.

5. Acknowledgement

Students Metacognitive Awareness on Speaking: Survey on English Department Students
Kaukabilla Alya Parangu, Dian Puisi, Puput Jianggi Mahastu, Renata Kenanga Rinda

The researchers express their profound gratitude to the individuals and institutions listed below for their essential contributions to this study. We sincerely thank our supervisors and advisors for their crucial assistance, support, and comments throughout the study endeavor. The knowledge and perspectives they possess have played a crucial role in influencing the trajectory and results of this research. The first-semester students of the Economics Department at IAIN Ponorogo, who willingly participated in this study, are greatly appreciated. The collaboration and active participation of individuals have played a crucial role in the achievement of this research endeavor.

The authors and inventors of the Metacognitive Awareness Speaking Questionnaire (MASQ) and other research tools utilized in this work are duly acknowledged. Their research has furnished us with invaluable instruments for gathering and scrutinizing data. In conclusion, we thank our families, friends, and loved ones for their consistent support, encouragement, and comprehension during this research endeavor.

The individuals' display of patience, support, and understanding has been the fundamental basis for our unwavering determination and commitment. The successful completion of this research project was made possible due to the invaluable support and contributions provided by the individuals and institutions involved. We deeply value their participation and support in completing this study.

REFERENCES

- Wang, Y., & Chan, V. (2021). The Relationship between Metacognitive Awareness and Spoken Performance of EFL Learners in China. *TESOL Quarterly*, 55(2), 365-389.
- Creswell, J. W. (2020). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.
- Balashov, E., Pasichnyk, I., & Kalamazh, R. (2021). Metacognitive Awareness and Academic Self-Regulation of HEI Students. *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)*, 9(2), 161-172.
- Lajoie, S. P., & Poitras, E. (2014). Macro and Micro Strategies for Metacognition and Socially Shared Regulation in the Medical Tutoring Domain. *Design Recommendations for Intelligent Tutoring Systems*, 151.
- Parnrod, U. (2011). Metacognitive Strategies: What Do Graduate Students Encounter in Academic Writing? *Interdisciplinary Discourses in Language and Communication*, pp. 254–259.
- Dangin, D., & Hartati, E. (2022). Students Metacognitive Strategies Awareness and Speaking Ability: A Correlational Study. *IJLECR (International Journal of Language Education and Cultural Review)*, 8(1), 34-40. <https://doi.org/10.21009/IJLECR.081.05>
- Hermayani, T., & Mbato, C. L. (2020). Monitoring Civil Engineering Students' Metacognitive Awareness during Independent English Speaking Club Activities. *PROJECT*, 3(5), 553-564.
- Seifoori, Z. (2016). Metacognitive Awareness and the Fluency of Task-Based Oral Output across Planning Conditions: The Case of Iranian TEFL Students. *Iranian Journal of Language Teaching Research*, 4(1), 11–26.