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STUDENTS' METACOGNITIVE STRATEGIES AWARENESS AND SPEAKING ABILITY: A CORRELATIONAL STUDY

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Abstract

The primary aim and the focus of this study were to investigate students' metacognitive strategies awareness and their relationship with speaking ability. The participants were 31 Indonesian junior college students who have taken speaking course. The study gained that students' metacognitive strategies awareness was categorized on good awareness with 77.9 % of use. Following that, the research used Correlational Research design and found that there was a positive correlation between the variables. In addition, the correlation was categorized in strong association. It meant that students' level of awareness in planning, monitoring, managing, solving and evaluating the learning process in order to reach the goal significantly affect their ability.

Keywords: Metacognitive awareness, speaking ability, correlational study.

Metacognition has become a critical component in today's educational paradigm (Donndelinger, 2008.). In the current study, metacognition research has become a critical topic. Recent study has discovered that metacognition is linked to additional subjects beyond language teaching. For example, Dabarera (2014) discovered that metacognition had a strong relationship with students' problem solving in reading comprehension. After that, Jayapraba & Kanmani (2013) discovered that students in scientific classes have a high level of metacognitive awareness. This passage, on the other hand, will focus on metacognition and literacy, specifically speaking ability.

Many professionals in metacognition scope define metacognition differently in the preceding investigations. Metacognition is defined by Jacob & Paris (1987), Anderson (2002), Livingston (2003), McDowell (2015) and Dangin (2020) as thinking about one's own thinking process. Metacognition, on the other hand, was defined by Baker & Brown (1980) and O'Malley & Chamot (1995) as knowledge of cognition or the regulation of cognition.

In education environment, metacognition is broadly related to many scopes or skill in language learning. For example Abdellah (2014), he attempted to find the relation between students' metacognitive awareness and students' achievement. He found that metacognition has significant role in students' achievement. This kind of finding is assumedly found in speaking aspects. Thus, this study found that there was an opportunity to investigate students' metacognitive strategies awareness during learning process and their relationship to speaking ability.

Metacognitive strategies

As mentioned before that metacognition is simply defined as thinking about one's own thinking process. The early concept of metacognition was concerned by Flavell (1979), Baker & Brown (1980) and Paris & Jacob (1987). They believe that beyond one's cognition, there is another side that can manage and regulate the way cognition works. It can be construed that metacognition takes a role as the manager, supervisor or even helper of someone's cognition.

Recently, there are many researchers who tried to go to deeper investigation related to metacognition. But, long way before, most academics that are interested in metacognitive scope divide metacognitive terms into two categories. Flavell (1979), for example, divides metacognition into metacognitive knowledge and metacognitive experience. In addition, Jacob and Paris (1987) divide metacognition into two categories: self-appraisal of metacognition and self-regulation of metacognition. Furthermore, Schraw & Moshman (1995) and Dangin (2020) distinguished metacognitive knowledge from metacognitive regulation. In order to distinguish between those many distinctions, this study uses the phrase "metacognitive strategy types" to refer to knowledge of cognition and regulation of cognition.

Knowledge of Cognition

Knowledge of cognition refers to 3 main components of metacognition (Paris & Jacob, 1987). The first component is declarative knowledge that refers to understanding of what the strategies are and why user should use it. The next component is procedural knowledge where users or students get the idea how to use the strategies. The last component is conditional knowledge that has relevance to where and when users or students can apply the strategies.

Regulation of Cognition

It has to do with the regulatory process of using strategies. Schraw & Moshman provide regulatory skill of metacognition as 3 main points. First point is planning. In this point, students should have ideas of what and how to face the task or upcoming materials. The next point is monitoring. In this point students try to re track and monitor the way they execute the task or materials. Moreover, the last point is evaluation where students analyze and evaluate their own path in facing and executing the materials or task. Furthermore, Schraw & Denisson (1994) gave additional aspects of it into planning, comprehension monitoring, information management strategies, debugging strategies and evaluation. Thus, this study combined those aspects of regulation of cognition as the main points of investigation.

Additionally, in an effort to develop metacognitive awareness, Schraw (1998) provides a simple instructional aid for promoting metacognitive awareness. He presents a *strategy evaluation matrix*, a short review of metacognitive information that he believes will increase students' capacity to grasp learning goals. In fact, this schema incorporated metacognitive knowledge patterns developed by previous pioneers such as Flavell (1979), Brown & Baker (1980), and Jacob & Paris (1987). The matrix can be seen as follow:

Table 1: A strategy evaluation matrix (Schraw, 1998)

Strategies	How to use	When to use	Why to use
Skim	Search for headings, highlighted words, previews, summaries	Prior to speaking an extended ideas	Provide conceptual overview, helps to focus one's attention
Slow down	Stop, read, and think about information	When information seems especially important	Enhances focus of one's attention
Active prior	Pause and think about what	Prior to speak or an	Makes new information easier

knowledge	you already know, ask what you don't know	familiar task	to learn and remember
Mental integration	Relate main ideas. Use these to construct a theme or conclusion	When learning complex information or a deeper understanding is needed	Reduces memory load. Promotes deeper level of understanding.
Diagrams	Identify main ideas, connect them, list supporting details under main ideas, and connect supporting details.	When there is a lot of interrelated factual info	Helps identify main ideas and organize them into categories. Reduces memory load.

Metacognitive strategies and Speaking

The speaking task necessitates the use of metacognitive methods such as speech planning, speech monitoring, and speech evaluation. When a student is planning a speech, he or she can also engage in the other two learning strategies of taking notes, resourcing, elaborating, and communicating with peers and teachers. Metacognitive strategies, along with affective and social strategies, fall into the category of indirect strategies (Brown, 1990). He claims that a successful language student must engage in some metacognitive processes prior to doing speaking. Teachers and textbooks use a variety of approaches to help students improve their speaking skills, ranging from direct approaches that focus on specific features of oral interaction (e.g., turning-take, management of the topic, and strategies to deliver questions) to indirect approaches that use group work, task work, and other strategies to create conditions for oral interaction (Richards, 2008). According to this classification, metacognitive strategies aid in the management of cognitive strategies during the learning process by performing an executive function. The tactics allow pupils to regulate their own cognition, whether they use them directly or indirectly.

Previous studies

Related to the issues of metacognition investigation and its relations with particular skills, some researches have been done in various scope of education. The findings indicate that metacognition and metacognitive awareness have significant role in the development of students' skill and creativity. It seems that metacognition has become crucial aspects in education that brings students into more critical.

Akbarzadeh et.al (2020) and Aglina et.al (2020) conducted investigation to find metacognitive awareness role in writings development. They found that metacognition has significant role in students' writing development. Another research in this scope research was also done by Dangan (2020). He conducted survey related metacognitive reading strategies awareness in academic reading. It was found that students' unconsciously have good awareness concerned on the Problem solving and preparation aspects.

Furthermore, Urban et.al (2021) directed a experimental research focused on metacognitive to improve students creativity. They found that metacognition has significant rle in improving students' creativity. The last research is from Sabani & Goh (2021). They exerted themselves to develop young learners' metacognitive awareness for speaking. They found that students' metacognitive awareness has increased and developed.

In order to reach and focus the goals of this study, there are 2 research questions that are intended to get the data of students' metacognitive awareness level and its relationship with students' speaking ability.

- 1) What are the levels of students' metacognitive strategies awareness in speaking skill?

- 2) Is there any relationship between students' metacognitive strategies awareness and students' speaking ability?

METHOD

Research design

This study applied correlational study as the main research design. It took metacognitive strategies awareness and speaking skill as the main variables of the research. It was purposed to investigate whether there was significant relationship between students' metacognitive awareness and speaking ability.

Place and participants

In order to get accurate data, the study only focused on the college students. This study took place at English Education Department of Universitas Mercu Buana Yogyakarta. The participants were 31 junior college students (14 male & 17 female) who have taken speaking course in their class.

Data collecting technique

Related to the aim of this study, there are two types of data collection. The first data concerned on students' awareness level, the study will adopt Metacognitive Awareness Inventory (MAI) proposed by Schraw & Denisson (1994). Afterwards, the data for students' speaking ability were taken from the test score of students' test by the speaking course. Moreover, to assess students' speaking ability, this study adopted Practical Rating Rubric of Speaking Test (PRRST) by Latifa et.al (2015).

Data analysis technique

There were 2 data analysis techniques according to the collected data. The score of metacognitive strategies awareness and speaking ability will be analyzed using descriptive statistic that focuses on description of the data. Moreover, in order to get the relationship between both variables, Pearson correlation with two-tailed test of significant will be conducted using spss version 22.

RESULTS AND DISCUSSION

Students' Metacognitive Strategies Awareness Level

In this section, there are three main points related to students' metacognitive strategies awareness applied on learning process. The first point serves the overview of the metacognitive strategies use. Then, it is followed by five strategies mostly used by students list and five strategies mostly unused by students.

Table1. Students' metacognitive strategies awareness

N	Valid	31
	Missing	0
Mean		40.5161
Median		43.0000
Std. Deviation		7.40662
Minimum		24.00
Maximum		51.00

Table 1 shows the overview of descriptive data of students' metacognitive strategies during learning process. The average use of metacognitive strategies is on 40.5 of 52 strategies. Moreover, the minimum point of use is 24 strategies used from 52 strategies. Eventually, the maximum point of use of metacognitive strategies has reached on the 51 of 52 strategies.

Table 2. Students' knowledge of cognition

No	Categories	Percentage
1	Procedural knowledge	85.7
2	Declarative knowledge	83.6
3	Conditional knowledge	72

Table 2 provides data related to students' awareness on knowledge of cognition. There are three categories included in this point. Procedural knowledge becomes the mostly used category that has been utilized by students with 85.7% of use. The next mostly used category is declarative knowledge with 83.6% of use. The last and the lowest use of knowledge of cognition is conditional knowledge with 72 % of use.

Table 3. Students' regulation of cognition

No	Categories	Percentage
1	Debugging strategies	83.9
2	Comprehension monitoring	82.9
3	Information management strategies	80.3
4	Planning	77.9
5	Evaluation	72.4

Table 3 points out to students' awareness of regulation of cognition. It can be seen that there are 5 categories related to this point. Debugging strategies and comprehension monitoring have mostly been employed by students with the number of use 83.9 % and 82.9 %. Afterwards, information management strategies category becomes the third mostly applied by students with 80.3 % of use. It has been followed by planning and evaluation categories as the 2 lowest on the percentage of use with 77.9% and 72.4%.

Table 1,2 and 3 showed the level of students' awareness in using metacognitive strategies. For the overall level of awareness, it was in line with Garret et.al (2007), Cakici (2018) and Dangin (2020) that students showed good awareness in using metacognitive strategies for academic performance. Furthermore, students also demonstrate the awareness of knowledge of cognition and regulation of cognition.

From the result, conditional knowledge, planning and evaluating categories got the lowest use by students. The finding is different from Lapele (2022). In her study, she found that the most favorable strategies used by students were planning about the strategies that may be really needed before the learning process. It can refer that students tend to use practical strategies that can be used during the learning process. They show tendency to ignore the planning and evaluating process on their work.

Relationship between students' metacognitive strategies awareness and students' speaking ability

Before conducting the correlational analysis, normality test has been conducted as below:

Table 4. Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
SPEAKING	.148	31	.080	.950	31	.161
MAI	.147	31	.084	.944	31	.106

Lilliefors Significance Correction

Table 1 shows the normality of the data both from students' speaking ability and metacognitive awareness. It can be seen that by means of *Kolmogorov-Smirnov*, students' both speaking ability and

metacognitive strategies awareness have significant levels on 0.086 and 0.084. Those significant levels indicate that the data were categorized on normal and could be processed into the correlational statistics.

Table 5. Correlational analysis using Pearson Correlation

		SPEAKING	MAI
SPEAKING	Pearson Correlation	1	.748**
	Sig. (2-tailed)		.000
	N	31	31
MAI	Pearson Correlation	.748**	1
	Sig. (2-tailed)	.000	
	N	31	31

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows the correlation between students' speaking ability and metacognitive awareness. The significant value indicates that there is a positive correlation between the variables. The correlation is categorized in strong association.

The finding of correlational analysis reveals that there is positive relationship between two variables. It is in line with Abdellah (2014) and Zarrabi (2017) that metacognitive awareness is also positively related to students' learning style and academic achievement. It demonstrates that students actually have already practiced and applied metacognitive strategies whilst in learning process. It can be seen that students who have high awareness on metacognitive strategies awareness would increase their performance in academic. It is in accordance with Jo An & Cao (2014) and Aglina & Syamsiah (2020). They also found that metacognitive awareness provide positive impact on the development of students' specific English skills writing, speaking or even problem solving skill.

It is suggested that students should be aware of metacognitive awareness since it will help them to reach the goal of the study and improve ability in digesting the materials. It is also supported by Brown (1990) and Özçakmak et.al (2021) that a successful language student must engage in some metacognitive processes prior to doing speaking. Hence, this finding could be followed by the application of metacognitive scaffolding for those who still get doubt in the use of metacognitive strategies.

CONCLUSION

The study has found that students' metacognitive strategies awareness referred to good awareness. It pointed to their ability in preparing the materials and strategies before learning, monitoring their activities during the learning process and evaluating their work to get better development. The study also revealed that there was positive relationship between students' metacognitive strategies awareness and their speaking ability. It meant that their level of awareness in planning, monitoring, managing, solving and evaluating the learning process in order to reach the goal significantly affect their ability.

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