

# Undergraduate Students' Metacognitive Awareness and Grammar Achievement

Amin Kurdi<sup>1</sup>, Mohammad Adnan Latief<sup>1</sup>, Utari Praba Astuti<sup>1</sup>

<sup>1</sup>Pendidikan Bahasa Inggris-Universitas Negeri Malang

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### Alamat Korespondensi:

Amin Kurdi  
Pendidikan Bahasa Inggris  
Universitas Negeri Malang  
Jalan Semarang 5 Malang  
E-mail: aminkurdi05@gmail.com

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## ABSTRAK

**Abstract:** This paper aims to find out the correlation between metacognitive awareness and grammar achievement. It employs the correlational design and involves 87 first-semester undergraduate students of English Department. The result reveals that there is a significant positive correlation between students' level of metacognitive awareness and their grammar achievement. It is also found that evaluation is the most dominant positive predictor in predicting students' grammar achievement.

**Abstrak:** Artikel ini bertujuan untuk mengetahui korelasi antara *metacognitive awareness* dan *grammar achievement*. Penelitian ini menggunakan metode korelasi dan melibatkan 87 mahasiswa semester satu program S1 dari Prodi Pendidikan Bahasa Inggris. Hasil analisis menunjukkan bahwa ada korelasi yang signifikan dan positif antara *metacognitive awareness* dan *grammar achievement*. Selain itu, *evaluation* diketahui sebagai prediktor yang paling dominan dan positif dalam memprediksi *grammar achievement* mahasiswa.

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Grammar is a vocal component in monitoring learners' English competency (Harmer, 2001). It is believed that intemperate inadequacy of learners' grammar might hinder them in delivering their message. These statements show the central feature of grammar, as a part of a system, in English. Although language skills mastery is commonly taken as a way of assessing the growth of learners' language acquisition, grammar mastery is absolutely the one enhancing their growth. Grammar is taught in junior and senior high schools as shown in Regulation of Ministry of Education and Culture Number 24 Year 2016 about the revised Curriculum 2013 regarding core competence and basic competence of English subject. It is stated that students learn grammar inclusively in language skills in regard to the topics. For example, they learn about comparative and superlative adjectives under the topic of preference. They only learn grammar explicitly once they choose to take a degree in English-related majors. Furthermore, the demand for grammar mastery is high as undergraduate students have to conduct research and assemble it into a thesis (for which students are required to write in standard language) as cited on Regulation of Ministry of Research, Technology, and Higher Education Number 44 Year 2015.

Grammar mastery generally revolves around word classes or parts of speech, phrases, and sentence structures (Altenberg & Vago, 2010). This applies to undergraduate EFL learners where they are firstly introduced to parts of speech first followed by subjects of phrases and sentence structures. There are several findings on the level of students' grammar mastery or ability in Indonesia. A correlational study by Fitria (2011) found that the students' grammar ability is still on average to poor level with an average score of 64.25 and only two students scored 85 above. Marlina (2014) conducted a preliminary study on her experimental study wishing to know the participants' recent grammar ability. Although the result shows that the average score is passably decent, there are some students having difficulties in a certain grammar subject, namely tenses. Another research by Effendi et al. (2017) also found that students have a fair level of grammar mastery. Similarly, there are still some problems found among students learning such as L1 interference, students' aspects, lecturers' aspects, methods, and timing aspects.

From the studies above, it can be said that although Indonesian EFL learners majoring in English-related studies have been taught grammar explicitly, it seems to be not enough for them to catch up with their grammar mastery goals. This might be due to how grammar learning during junior and senior high school integrated into language skills. This notion is also supported by the fact that English as a foreign language is rarely practiced by students outside class. The lack of time spent in inducing oneself to the language might also hinder students in mastering the language.

Students' shortcomings in grammar are also supported by several studies. Hamzah (2012) conducted research to find students' grammatical errors in their writing. He divided the errors into mild and severe errors. The initial category consisted of subject-verb agreement, pronoun agreement and dropping, relative clause, possessive, copula omission, and mechanic. The latter part is word choice and verb group (particularly related to irregularity), article, preposition, plurality and spelling. Correspondingly, Widianingsih & Gulö (2016) found similar results. Students still produced errors in basic grammar such as plural markers, articles, verbs, and tenses. Those studies' results correlate with the prior assumption that Indonesian EFL learners still lack English exposure in real situations, especially grammar while having quite demanding goals as mentioned before, resulting in poor mastery level when they study in a tertiary level.

Though the problems regarding the time allocation in inducing English seem unsolvable since there is standard regulation on each college, there are other aspects that can be used to help develop students' grammar mastery such as learning strategies. They may vary on each student's preference, yet the teacher's guidance may help students in applying suitable learning strategies based on the subject. Ellis (2010) describes learning strategies as learners' particular technique or approach used in learning L2, either behavioral or mental. The first term refers to strategies employed in practice, while the other is strategies in students' thinking process. Moreover, Troike (2012) also believes that employing learning strategies varies for each learner. The variations may be influenced by learner's aspects such as motivation, cognitive style, and personality, along with specific contexts of use and opportunities for learning. In addition, some definitive factors; age, sex and aptitude; also influence them.

According to O'Malley & Chamot (1993), learning strategies are divided into three namely; metacognitive, cognitive and social/affective. Firstly, metacognitive refers to the process of regulating language learning by monitoring and planning. Then, cognitive refers to the process of utilizing direct analysis or synthesis of linguistic aspects. Lastly, social/affective refers to the process of engaging oneself in interaction with others. Furthermore, Dornyei (2005) prefers to separate social and affective into different terms besides agreeing on the term cognitive and metacognitive. Oxford (2003) proposes two additional learning strategies i.e. compensatory strategy and memory-related strategy. Although the initial terms are specifically related to speaking and reading in which learners make use of linguistic factors such as synonym to make up for missing knowledge, it is still relevant as it is also a part of L2 learning. The latter part relates to learners' learning process by linking one language concept to another while not necessarily involving deep understanding.

Among those strategies, metacognitive is quite relatable to grammar mastery. For instance, grammar, as the system of English, seems to emphasize systematic learning since the concept of grammar is definitive. Brown (2001) believes that teaching grammar mostly involves a form-focused task. In other words, it encourages drilling students' awareness toward the pattern of standard language through task completion. Hence, students are frequently given practices or exercises, instead of expressing their competence through spoken or written performance. The assessment itself is usually objective in which the answer is either correct or incorrect. Likewise, Oxford (2003) explains that metacognitive strategy consists of identifying one's own learning preferences and needs, planning for an L2 task, gathering and organizing materials, arranging a study space and a schedule, monitoring mistakes, evaluating task success, and evaluating the success of any type of learning strategy. The last three activities are most likely to be done by students during their grammar drills. Furthermore, it is stated that metacognitive strategy is superior to cognitive strategy when it comes to task completion (Purpura, 1997).

Many discussions emerge among academics on the term of metacognitive. Some of them try to construct the concept by defining metacognition itself. According to Richards & Schmidt (2013), metacognition is knowledge of one mental process in different kinds of learning. It believes in learners' capability in recognizing their own mental processes. It includes the ability to recognize their handicap in a learning task, appropriate approach in different contexts, and problem-solving. Dawson (2016) describes metacognition as thinking about thinking. He then defines that metacognitive skills are shaped from several interrelated competencies for learning and thinking. Those skills are apparently needed in active learning, critical thinking, reflective judgment, problem-solving, and decision making. Furthermore, Anderson (2002) even emphasizes that metacognition is 'the main key' in organizing students' learning. It helps them recognize what and how to learn.

Flavell (1979) deconstructs metacognitive into four phenomena; metacognitive knowledge, metacognitive experience, goals/tasks, and actions/strategies. He believes that by dividing them, it is easier for academics to understand and make use of metacognition in learning. Metacognitive knowledge refers to one's knowledge or understanding on the process of thinking or learning and factors that affect them. On the other hand, metacognitive experiences are one's conscious experiences relevant to any intellectual process cognitively or affectively. Goals are simply the objective of one's learning process, while actions are one's behavior done to achieve the goals.

Those four terms are categorized as metacognitive awareness consists of knowledge and experience or regulation (Goh, 2008; Schraw & Moshman, 1995) and metacognitive strategies consist of goals and actions (Oxford, 2003). The two are closely related in spite of the different scopes. Metacognitive awareness can be said as students' aptitude in metacognition and the degree of how well they apply metacognitive strategies.

The concept of both knowledge and regulation within metacognitive awareness is broken down into several dimensions. The initial term is divided into declarative, procedural, and conditional knowledge, while the other is divided into planning, information management strategies, monitoring, debugging strategies, and evaluation (Schraw & Moshman, 1995; Schraw & Sperling, 1994). This breakdown without a doubt helps academics to evaluate their understanding toward metacognition in learning. Each term covers a more specific dimension which as a whole provides a larger area of significances. Additionally, the former study developed Metacognitive Awareness Inventory (MAI) to measure students' apprehension in metacognition to further widen the possibility of studying the case of metacognition.

Declarative knowledge is similar with the origin of metacognitive knowledge. However, this dimension makes its distinct feature in which it focuses on factors affecting one performance rather than on the learning process. For instance, a learner with an over-user monitor tends to be afraid to speak in order to avoid making apparent grammatical errors while they realize that the fear may affect their speaking performance. Meanwhile, procedural knowledge, as it sounds, is one's knowledge of employing procedural skills in learning. Students with high procedural knowledge tend to be better at applying them autonomously and effectively. Moreover, they are more proficient in utilizing better strategies in problem-solving. On the other hand, conditional knowledge can be described as knowledge in which both declarative and procedural knowledge are integrated. It refers to one's ability to identify the condition (i.e. when and why) to apply cognitive actions. It can be described as a declarative knowledge of applying cognitive procedures.

The sub-dimensions of metacognitive regulation begin by planning. It refers to the process of selecting the appropriate strategy and allocating resources affecting one's performance. Then, monitoring refers to the process of assessing one's learning and his strategy use toward comprehending the knowledge. The last one is evaluation, which refers to the process of analyzing one's performance and strategy effectiveness after every learning session. Apparently, Schraw & Sperling (1994) propose two additional sub-dimensions when it comes to assessing metacognitive awareness. They are information management strategies and debugging strategies. The former refers to the process of applying skills and strategy sequences to process information more efficiently, while the latter refers to the process of applying strategies to correct mastery and performance errors.

Several studies review the influence of metacognitive in language learning. A study by Al-Jarrah et al. (2019) explore the significance of metacognitive strategies toward writing performance along with external factors of L1 transfer, motivation, and anxiety. The finding shows significant results on how metacognitive strategies correlate to the external factors. Moreover, the important role in developing students' writing falls upon metacognitive strategies. Additionally, a study by Tok, Özgan, and Dös (2010) shows that metacognitive awareness and learning strategies play an important role in students' success rate in an online English course. It is also found that only evaluation within metacognitive awareness factors is statistically significant in affecting academic success. Moreover, Eded (2017) explores the possibility of a relationship between metacognitive awareness and listening performance. Although the result shows that students have a moderate level of metacognitive listening awareness, but there is a positive correlation between the two variables. Furthermore, planning and evaluation are used more often than problem-solving and directed attention. Meanwhile, Khatatbeh et al. (2016) view students' metacognition development in listening as the barometer of students' listening development. They believe MALQ (Metacognitive Awareness Listening Questionnaire) can be used as a regular checklist over a period of time to measure their development.

Stephen and Singh (2010) implemented metacognitive strategies in grammar courses intended to develop autonomous learning. The finding showed corresponding results. They also believed that engaging students towards metacognition would help them improve their learning process quality. In doing so, students would autonomously search for the best method or strategies to be applied in different subjects. Furthermore, Takallou (2011) conducted an experimental research intending to improve students' reading performance and metacognitive awareness through metacognitive strategies. She found that the strategies can improve both variables after the subjects have been given the instruction on 'planning' and 'self-monitoring'.

Some studies present contradicting results revealing the insignificant role of metacognition in learning. Dardjito (2019) found that there was no correlation between students' metacognitive reading awareness and their reading comprehension. The result demonstrates opposing findings in which their metacognitive reading awareness scores were high while they had low-cohort of reading. Students only used the former variable related to finding out the meaning of words. Another study found that the use of various metacognitive reading strategies does not vary among learners of different levels (Almekhlafi, 2018). Learners from various levels (elementary, intermediate, and advanced) used the strategies equally. However, in terms of gender, female participants are found to be keener in employing the strategies than the male participants are.

Those studies above illustrate just how significant the role of metacognitive in learning is. Although those previous studies mostly attempted to find the significance of metacognition toward language four skills, especially the receptive ones, there is a fine line among the studies that the assessment involved in measuring students achievement is usually in form of an objective test, taking an example of TOEFL which measure listening, reading and grammar which applies multiple choices. Hence, this common occurrence also applies to grammar. Additionally, the positive side of an objective test is that there is a pattern in every section of the test. It is definite in either the answer is correct or wrong, so that metacognitive actions such as monitoring and evaluation can be easily applied. Thus, this presumed pattern might be the underlining idea that connects both

metacognition and grammar. Furthermore, analyzing metacognitive awareness as a representation for students' aptitude in metacognitive may be more meaningful by acknowledging that students' ability in applying such metacognitive actions may result in the growth of their grammar as well.

The notion above attracts researcher to conduct research on the correlation between metacognitive awareness and grammar and further correlate between students' grammar achievement with the eight factors within metacognitive awareness. Moreover, it is believed that confirming the significant role of metacognition on grammar learning has a better result in fortifying the theories, instead of comprehending its effect on the mentioned field. Hence, this paper brings the research question, is the higher the level of metacognitive awareness the students have the better they score in grammar?

## METHOD

As mentioned before, this research intends to find out the correlation between students' metacognitive awareness and grammar achievement. In particular, this study aims to point out the possibility of students' level of metacognitive awareness as a measurement to predict their grammar achievement. It can be inferred that it applies a correlational research design to see the relationship between trajectory and prediction variables. This particular design focuses on analyzing the tendency or pattern of two or more variables or sets of data to vary consistently (Creswell & Guetterman, 2018). Furthermore, Latief (2012) describes that one of the correlational research quirks allows researchers to predict the progress of one variable through other variables.

87 first-semester undergraduate students majoring in the English department were involved in the data collection. They are believed to be in the initial period of adulthood which allows them to recognize and comprehend their mental process easier than children (Dulay et al., 1982). Therefore, it is believed that subjects do not have any difficulty in expressing their preference on metacognitive awareness. They were divided into five classes; A1, A2, A3, A4, and A5. The data was collected in each class in one meeting. The instruments were the Metacognitive Awareness Inventory (MAI) questionnaire used to measure students' level of metacognitive awareness and a grammar test based on TOEFL used to measure students' grammar achievement. Originally, MAI consists of 52 items, but they are regarded as unidimensional. Only 19 items, representing the eight sub-dimensions of metacognitive awareness, are considered to be the optimal subsets to measure the sub-dimensions separately (Harrison & Vallin, 2018). Meanwhile, the grammar test was distributed into 15 items of sentence completion and 25 items of error identification with 15 testing points within the whole test; noun phrase, word order, subject + verb, verb/verb phrase, adjective phrase/clause, conjunction, parallel construction, adverb phrase/clause, comparison, infinitive/gerund, preposition/prepositional phrase, superlative, negative, conditional, and pronoun. Furthermore, the instruments were proofread and validated by the expert of the field. The data analysis applied SPSS 23 involving normality test and correlational analysis.

## RESULTS

The result of the normality test is presented in table 1 regarding the level of significance from both variables.

**Table 1. The Result of the Normality Test**

N		Metacognitive Awareness	Grammar Test
87		87	87
Normal Parameters <sup>a,b</sup>	Mean	2.9546	53.1322
	Std. Deviation	.30431	14.11239
Most Extreme Differences	Absolute	.056	.091
	Positive	.055	.074
	Negative	-.056	-.091
Kolmogorov-Smirnov Z		.526	.853
Asymp. Sig. (2-tailed)		.945	.461

Table 1 shows that the level of significance from metacognitive awareness is found at .945 and the grammar test is .461. Both variables have a greater level of significance than .05 implying that the data distribute normally. Hence, Pearson analysis is applied later on.

The result of the analysis provides two values, level of significance and correlation index (see table 2). The research question that should be answered is "do the higher the level of metacognitive awareness students have, the better they score in grammar?"

**Table 2. The Result of Correlational Analysis**

		<b>Metacognitive Awareness</b>	<b>Grammar Test</b>
Metacognitive Awareness	Pearson Correlation	1	.577**
	Sig. (2-tailed)		.000
	N	87	87
Grammar Test	Pearson Correlation	.577**	1
	Sig. (2-tailed)	.000	
	N	87	87

Table 2 reveals that the level of significance is .000 and the correlation index is .577. First, it implies that there is a significant correlation between students' level of metacognitive awareness and their grammar achievement. Then, it is also found that the correlation is positive ( $r = .577$ ). It can be inferred that the higher the level of metacognitive awareness the students have, the better they score in grammar. Furthermore, the degree of accuracy in the prediction is found at 33.29% ( $r^2 \times 100$ ). It implies that only a third of all the students' grammar achievement can be predicted accurately through their level of metacognitive awareness. A correlational analysis is also done between the eight factors of metacognitive awareness and grammar achievement. Table 3 presents the result of the analysis.

**Table 3. The result of correlational analysis on factors of metacognitive awareness**

<b>Factors</b>	<b>Correlation Index</b>	<b>Sig.</b>
Declarative Knowledge	0.345	0.001
Procedural Knowledge	0.370	0.000
Conditional Knowledge	0.352	0.001
Planning	0.220	0.041
Information Management Strategies	0.257	0.016
Monitoring	0.222	0.039
Debugging Strategies	0.313	0.003
Evaluation	0.494	0.000

Table 3 shows that evaluation is the most dominant positive predictor with correlation index .494 (24.40% degree of accuracy), and planning is the least dominant positive predictor with correlation index .220 (4.84% degree of accuracy).

## DISCUSSION

Learning grammar is by no means always related to instruction and practice or exercise (Altenberg & Vago, 2010; Harmer, 2001). Grammar comes from two different sides of a coin, namely competence and performance (Harmer, 2001). In the process of assessing students' grammar mastery, a test is usually delivered. The result of the test describes students' growth in grammar mastery. Students' grammar competence is developed through a number of drills either through spoken or written. These drills attract students to review and evaluate their grammar mastery which is also known to be the actions of metacognitive. The more students do this cycle of practice and self-reflection, the better they score in the future on similar subjects or topics. These practices or exercises are usually in the form of objective tests such as true or false statements, multiple choices, fill-in-the-blank questions. All those forms have a definite correct answer where they require students to analyze the language form of each item. Thus, students may review their results on the test and analyze their error in the process more easily as the answer is either correct or wrong. Moreover, the existence of patterns when students produce errors or when they answer incorrectly will emphasize them to recognize and evaluate their error. These actions are closely related to metacognitive phenomena. These similarities are the foundations of conducting the current study.

The result of the research confirms the researcher's aforementioned assumption. There is indeed a positive significant relationship between the two variables. It also supports the theories stating that students who apply metacognitive strategies can handle a task completion better than the others (Purpura, 1999 as cited in Oxford, 2001). As mentioned before, learning grammar is mostly about instructions and practices. So, the learning process provides many practices to see the relevance between students' competence and performance.

Additionally, this result is also relevant to the study by Eded (2017), though the study focuses on listening performance as the dependent variable. However, listening performance is also measured through an objective test in general, taking an example from the listening section in TOEFL. The result claims that students who have high metacognitive listening awareness tend to score better in their listening performance.

Another point of view that should be considered is that first semester students who are in the initial period of adulthood had already built their metacognitive awareness in learning. This is inferred from the study findings that although students have moderate to high metacognitive awareness in general, the result shows a variation in responses. This result is more apparent in table 3.2 and 3.3 as viewed on the two dimensions and eight factors.

This result confirms that adult learners are superior to children when it comes to understanding their own mental processes (Brown, 2001; Dulay et al., 1982). In other words, students have no difficulty in expressing or describing their thinking habits when it comes to learning. The findings may also be affected by the fact that students during their junior or senior high school have been introduced to a higher level of thinking. It is stated on Regulation of Ministry of Education and Culture Number 24 Year 2016 about the revised curriculum 2013 regarding core competence and basic competence of English subject in junior and senior high school, that students are required to develop a higher level of thinking related to the learning process. Students may not be familiar with metacognitive, but they have come across several metacognitive strategies such as problem-solving or critical thinking. This strategy usually involves metacognitive action such as planning, monitoring, reviewing, and evaluating which results in the current findings.

This notion is important since the impact of the prediction will be more significant when students' metacognitive awareness is measured in the initial period of their study. By expressing their preference on the metacognitive level, lecturer can accommodate their shortcomings in the learning process based on which factors of metacognitive awareness they are lacking. Likewise, developing students' metacognitive awareness even in the early stage of college level is not questionable at all. Although metacognitive awareness is significantly correlated with students' grammar achievement, not all of the factors have a similar degree of relation. From the result, it is found that evaluation is the most dominant positive predictor among the eight factors. On the other hand, planning is the least dominant positive predictor on grammar achievement among the factors. Since the correlation on the two dimensions is not analyzed statistically, then there is no conclusion made to find out the most dominant factor. It is considered to be less beneficial to do so than to analyze the more specific findings on the correlation between the factors and grammar achievement.

The finding on the factor dominancy may be related to the previous notion that students may gain more in the grammar drills when they review their errors in the process. Brown (2001) stated that corrective feedback in written performance may be more delicate to handle than oral performance, yet it also plays a significant role in students' successful language acquisition. Since the subject of this research is students in the early period of adulthood, corrective feedback has more positive effects rather than negative ones. As mentioned by Dulay et al. (1982), adult learners are superior in terms of cognitive. They are more capable in abstract thinking, classifying, and generalizing. In other words, students are able to understand the patterns or rules in English through corrective feedback. They have built the capacity to analyze the patterns whether in the standard language or in their errors. In addition, the correction may encourage students' habits of monitoring and evaluating their performance. Self-assessment may lead students to develop their autonomous learning, though it still requires the teacher's guidance to be more effective. Thus, the result above is within the researcher's expectations and confirms the said theory.

A study by Tok et al. (2010) supports the theory as it also found that evaluation is the dominant positive predictor, though it involves English mastery in general. Respectively, Eded (2017) also found that planning and evaluation strategies are more often used by those with a high listening comprehension test. From these findings, it can be said that evaluation is an important metacognitive action when it comes to the students' success in learning grammar, even English in general. As mentioned before, evaluation of one's own learning may encourage students' autonomy. This conclusion is also supported by Stephen and Singh (2010) where they employed metacognitive strategies in learning grammar. The result shows an affirmative findings that developing students' autonomy through metacognitive strategies is effective.

On the contrary, another research by Takallou (2011) shows a contradictive result. It implemented metacognitive strategies to improve students' reading competence and metacognitive awareness. It is found that planning and self-monitoring have an important effect on students' reading and metacognitive awareness. This result opposes the finding in the current study that planning is the least dominant predictor of students' grammar achievement. These results may be affected by the different variables in the studies. Though, it can be said that different metacognitive action has a different role in a different subject. Taking into account that reading is the dependent variable in the study above, this result is to be expected.

Developing reading skills revolves around students' ability in understanding the main idea and supporting ideas of the text. Thus, students have a habit to plan which information should be perceived from the text first and what steps follow after that. Meanwhile, grammar drills do not encourage this kind skills as it is a form-focused task. These differences are believed to cause the contradicting results above.

Metacognitive actions or phenomena seem to have different roles on certain subjects. Although this notion may be lacking in terms of empirical data, this can be inferred from the existing data and supported theoretically by the logic and patterns that follow. For instance, a subject that revolves around patterns and formula such as grammar is better comprehended by those who have high monitoring and evaluation skills. On the other hand, a subject that revolves around text comprehension such as reading and listening is better done by those who have high declarative knowledge and planning or information

management strategies. This may also apply to the subject that revolves around text performance such as writing and speaking. When it comes to language performance, it may require different metacognitive action actions or phenomena such as planning and monitoring or procedural and conditional knowledge. These inferences may seem logical as they abide by the notion that different fields require different expertise, though it still needs more empirical data to come to such conclusions.

There are two conclusions to be made based on the discussion above. Since the result indicates that the levels of metacognitive awareness can predict students' grammar achievement, developing the former variable can also help students in their grammar learning. One of the possible actions to develop it is by engaging students to metacognitive strategies in the learning activity. It is supported by Takallou (2011) that engaging students in metacognitive strategies have significant effects in developing their metacognitive awareness. This is due to metacognitive awareness can be referred to as students' aptitude in applying metacognitive strategies. So, the two are closely related to each other. Furthermore, it can also be inferred that different subjects may result in differences in terms of the dominant factor. These varied results may be due to the differences on the frequent activities done during the subject learning.

However, there is a limitation to what extent the finding can be applied in the field. It is bound by the subject and variables. That being said, not all English department students may produce similar results and not all subjects have similar relations to metacognitive strategies. Since the subject of the research is first-semester students of the English department in Teacher Training and Education Faculty of Universitas Lambung Mangkurat, this result may become less relatable to those from different majors or different levels of education such as junior and senior high school. This refers to the notion above that learners from different age levels have different aptitudes or capabilities in expressing their cognitive processes.

Variable-wise, another limitation is that it only concerns grammar achievement as the trajectory variable. Thus, its result does not apply to other subjects in English. As described before, the tendency toward the relationship between metacognitive awareness and English-related subjects seems to be consistent considering the results from the studies above. However, certain subjects have different tendencies on the relationship between the said subject and the eight factors of metacognitive awareness though this result may constitute the notion of metacognitive role in English language learning.

In terms of grammar achievement, the instrument focuses on grammar mastery in general for beginner-level students. This is regarding students' background knowledge considering what they have learned in junior and senior high school. Although it attempts to measure students' general competence in grammar, it may have a contradictory result when the instrument focuses on the narrower and more specific scope such as students' competence in English tenses comprehension.

Metacognitive-wise, this study is also limited to the instrument used to measure the variables. Although this study applied MAI as the instrument, it only distributed 19 items of the total items. This is due to the study objective that aims to find out the tendency on the eight factors separately toward grammar achievement. More or less, this elimination may affect the results on metacognitive awareness in general. Moreover, there are other instruments that can be used to measure metacognitive awareness. Thus, the result of the study is only bound to the one within the scope of MAI considering the different statements provided in each instrument.

## **CONCLUSION**

The objective of the study is to find out whether there is any significant positive relationship between students' metacognitive awareness and their grammar achievement. It concerns the predictive relationship between the variables. The result reveals that there is a significant positive relationship between students' metacognitive awareness and their grammar achievement. In other words, it can be concluded that the higher the level of metacognitive awareness students have, the better they score in grammar. Also, evaluation within metacognitive regulation is the most dominant positive predictor of students' grammar achievement. So that, it can be inferred that students who have a high preference on evaluation will score better in grammar.

There are some suggestions made based on the result and the discussion They are for both lecturers and future researchers regarding what should be considered in engaging or making use of what has been found in the study. For lecturers, the consideration is within how to employ or implement metacognitive in teaching grammar. One of the firm methods to do so is by engaging students in metacognitive strategies. As mentioned before, doing so can develop students' metacognitive awareness. In a way, students can get familiar with metacognitive knowledge and regulations. This will develop their habit of implementing metacognition, or a higher level of thinking, in their learning. Another concern is that the finding reveals evaluation as the dominant positive predictor among other factors. Hence, lecturers should put more attention to students' evaluation skills when it comes to learning or practicing grammar without neglecting the development of other factors.

For future researchers, the finding of this study opens up wider possibilities regarding the role of metacognitive awareness in grammar achievement. Besides its prediction capability, this study also fortifies the foundation of exploring metacognition in the grammar field. An experimental study on the role of metacognitive strategies in developing students' grammar competence may be accomplished in regards that metacognitive awareness, representing students' aptitude in metacognitive, has such a role toward the subject. Furthermore, applying the whole items of MAI may also have different

results in spite of disregarding the capability to analyze each factor separately. Likewise, other instruments such as Motivated Strategies for Learning Questionnaire (MSLQ) and Learning and Study Strategies Inventory (LASSI) may be used to measure students' metacognitive awareness.

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