THE RELATIONSHIP BETWEEN SELF-REGULATED LEARNING AND STUDENTS' ACADEMIC ACHIEVEMENT OF BATCH 2017

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Abstract

Students' academic success is highly prioritized, as it represents the outcome of their academic performance in a form of their academic achievement. To successfully acquire the desired academic achievement they need to employ learning strategies and must be motivated as well. Students also need to regulate and control their learning. In order to do that, students must establish a self-regulated learning. The researcher conducted this research aiming to find out about the relationship between students' self-regulated learning and students' academic achievement. The subjects of this research were 96 students of English language education program batch 2017 at Lambung Mangkurat University. The researcher used a quantitative correlation research design and the instruments were Motivated Strategies for Learning Questionnaires (MSLQ) for self-regulated learning and documentation of students' GPA for academic achievement. The result showed that there was a positive correlation between students' self-regulated learning as the independent variable (X) and students' academic achievement as the dependent variable (Y). This was indicated by the result of correlation calculation with the value of correlation coefficient (r) = 0.215 with significance value (p) = 0.035, where the correlation is accepted if the significance value is (p) < 0.05. Therefore, there was a positive correlation between the independent and dependent variables where (p) value = 0.035 with a low correlation coefficient (r) = 0.215. And with a value of (r^2) = 0.036, it is confirmed that self-regulated learning influenced students' academic achievement. In conclusion, the alternative hypothesis (Ha) of this research is accepted, which is there is a correlation between students' self-regulated learning and their academic achievement. As for suggestions, students need to improve their learning to achieve their academic goals and for future researchers to conduct an interview as additional information to the questionnaire, the research can also be conducted by using a different methodology.

Keywords: Self-Regulated Learning, Academic Achievement.

INTRODUCTION

Students are the essence of learning processes, they perform a vital role in transforming their learning toward higher academic achievement. According to Pintrich (1988) to elevate students' academic achievement, students' learning motivation, strategies as well as regulation are crucial as they act as the main force to elevate their academic achievement, Thus, to obtain a successful academic achievement, motivation, learning strategies and a regulated learning are needed to be utilized by students to support their learning. Self-regulated learning is a very active and positive activity for learners in which they need to set their objectives in learning and monitor, regulate, and control cognitively, motivationally, and behaviorally, corresponding with their learning objectives and environment background (Pintrich, 2000). Hence, a self-regulated learning strategy is where students learn how to approach academic achievement by utilizing

behavior, motivation, and cognition strategies. A lot of research has already been conducted on the relationship between self-regulated learning and students' academic achievement in middle school and high school (Al-Abdullatif, 2020; Alafghani & Purwandari, 2019; Saki & Nadari, 2018). However, self-regulated learning is more suitable in a university context since a self-regulated learning process can be incredibly challenging and demanding. Most university students have established a higher cognitive effort in learning and control over their study and time management. There is also more independence in learning for university students than middle school or high school students. For that reasons, the researcher wants to understand the relationship of students' self-regulated learning strategies to achieve academic successes by examining the correlation between students' self-regulated learning and students' academic achievement of English Language Education Program batch 2017 of Lambung Mangkurat University. The researcher is convinced that the students of English Language Education Program batch 2017 are capable and can perform self-regulated learning in order to achieve their academic goals and be successful English learners. Therefore, the students of English Language Education Study Program batch 2017 of Lambung Mangkurat University are considered to be appropriate for the subject of this research.

Research Problem

1) Is there any correlation between students' self-regulated learning and students' academic achievement of English Language Education Program students' batch 2017?

The objective of the Problem

1) To investigate and find out the degree of correlation between two variables; namely students' self-regulated learning and students' academic achievement of English Language Education Program students' batch 2017.

Review of Literature

Self-Regulated Learning

According to Ramdass and Zimmerman (2011), self-regulated learning is an extremely active activity, where learners are required to direct and arrange their ideas, emotions, behaviours, and environment to fulfill their learning goals. Thus, self-regulated learning emphasizes on the process of how learners can control, organize and manage their academic learning motivationally, meta-cognitively and behaviourally to achieve their academic goals.

As stated by Pintrich (1995), accordingly, students need to adjust themselves to the demands of a subject or class. Therefore, to control and manage their motivational beliefs (e.g learning efficacy and goal orientation) is necessary in motivation. Additionally, students are able to learn to deal with emotions and influences (e.g anxiety) in ways that enhance learning. Metacognition concerns on controlling different cognitive strategies, this includes the utilization of deep processing strategies for a stronger learning performance than learners exhibited formerly. As for behaviour, it includes in actively controlling several resources accessible to students, namely time, learning environment (such as, where to study), and the utilization of others such as classmates or instructors to help them with their learning. (Garcia and Pintrich, 1994; Pintrich, Smith, Garcia, and McKeachie, 1993).

Components of Self-Regulated Learning

Self-Regulated Learning theories and model designs have expanded significantly since the first study in the educational field. There are many self-regulated learning models developed by notable researchers that have been widely used, such as theories and models suggested by Zimmerman (1998), Pintrich (2000) and Winne and Hadwin (1998). Compared to all these designs, Pintrich's (2000) design is appraised to be the most comprehensive design since it covers all cognitive and metacognitive learning characteristics along with social, contextual characteristics of the academic environment.

In Pintrich's Self-Regulated Learning model (2000), self-regulation has two main components. They are motivation and learning strategies. Motivation is made of three subcomponents, the first is expectancy which focuses on learner confidences regarding their ability and responsibility to an assignment, and learning performance. The second is value which focuses on learner credence regarding the importance, interest and their goals of the assignment. The third is affective which concerns on their emotional responses to the assignment.

As for learning strategies, it is composed of three subcomponents, the first is cognitive learning strategies which focus on rehearsal, elaboration, and organizational strategies concerned to learning performance. Rehearsal strategies help learners review and choose important information in lists and texts and activate it in working memory, even if it does not portray an exceptional processing level. Elaboration strategies help learners paraphrasing or summarizing what they are learning, drawing analogies or writing general notes, explain ideas to others from what they have learned, ask questions or answer questions to others. Organizational strategies help learners, behaviorally, choosing important ideas from the material, describing the text or material that is being studied, or using various specific techniques to choose and organize ideas from the material.

The second is metacognitive learning strategies which is composed of three main forms of strategies; planning, monitoring, and regulating. Planning help learners use their cognitive strategies and activate or prepare related characteristics of their previous knowledge, making it easy for learners to organize and understand their learning material. Monitoring help learners to keep track of their attention as they read texts or listen to lessons, self-testing using questions from the material to confirm their comprehension while studying, monitoring lessons comprehension, and using strategies of test-taking. And regulation strategies are almost linked to monitoring strategies. Accordingly, to achieve learners' goal or standard in learning, they have to monitor their learning and performance. Therefore, this monitoring process indicates the necessity for regulation processes to help lead back behavior in order with their objective or academic standard. The last is resource management strategies which focus on strategies which learners utilize to control and organize their academic environment.

Phases of Self-Regulated Learning

Pintrich (2000) stated that self-regulated learning has four phases. They are forethought, planning, and activation, after that monitoring, then control and the last is reaction and reflection. In forethought, planning, and activation, learners identify their goals, directing their goals, manage their time and area, identify the impact of the assignments and the motivational consequences. In monitoring, learners

understand their cognitive awareness. In control, learners know and use the correct learning strategies. And in reaction and reflection, learners know how to make judgments and evaluations cognitively.

Characteristics of Self-Regulated Learners

Generally, self-regulated students have the following characteristics. Firstly, learners are aware and understand in applying a sequence of cognitive strategies to assist their learning (Winne, 1995). Secondly, they understand in applying control and aim their mental process to their learning goals (Corno, 2001). Thirdly, they know how to direct their motivational beliefs into their learning, thus they can control and modify their learning environment (Weinstein, Husman & Deirking, 2000). Fourthly, they understand the importance to create and arrange their learning environment to their favor (Zimmerman, 2001). Fifthly, they demonstrate considerable efforts to control and regulate their learning environment (Corno, 2001). Lastly, self-regulated learners can apply volitional strategies to avoid distractions, both internally and externally so they can maintain their concentrations (Weinstein, Husman, & Deirking, 2000). In conclusion, self-regulated learners are responsible, active, self-motivated and using strategies to obtain their learning performances that they want.

Academic Achievement

In general, academic achievement is defined as accomplishing a particular result in a task, exam, class, or degree, and is normally conveyed in terms of a numerical grade or grade point average (Richardson, Abraham, & Bond, 2012). Therefore, academic achievement is an outcome or indicator of success in learning. Academic achievement is the accomplishment of students' academic performance by successfully using effort, skills and knowledge developed through their learning. The extent of students' learning progress is found in their academic achievement, it is often measured with grades through the academic years.

Grade Point Average (GPA)

According to the regulation from the Ministry of Education and Culture of Indonesia No.49 Year 2014 about National Standard of Higher Education in Chapter 2, Section 5 about learning assessment standard, Article 23, No. 5 and No. 7, it is stated that Grade Point Average (GPA) or Indeks Prestasi Kumulatif (IPK) is the results of one's learning achievement at the end of a learning program. As stated in Lambung Mangkurat University Academic Guidance (2017), Indeks Prestasi Kumulatif (IPK) or Grade Point Average (GPA) is an aptitude measurement that has been calculated from the multiplication of letter grade of each subject and it is University Credit Unit then is divided with the total of University Credit Unit within the curriculum.

METHODOLOGY

Participants

According to Fraenkel, Wallen & Hyun (2012) in correlational studies, a sample of no less than 50 is needed in proving the existence of a relationship. However, since the population was 96 which was less than 100. Then, the researcher took all the population to be considered as the representative sample. The

representative sample for this research was 96 students from English Language Education Program Batch 2017 of Faculty of Teacher Training and Education, Lambung Mangkurat University.

Technique and Instrument for Data Collection

This research was conducted by using a quantitative correlational research design. In this research, there were two variables which researcher sought to measure the relationship existed. They were students' self-regulation learning as independent variable and students' academic achievement as dependent variable. The instrumentations to gather the necessary data for this research were a self-report questionnaire, which was Motivated Strategies for Learning Questionnaire (MSLQ) is originated from Pintrich and De Groot in 1990 to measure students' self-regulated learning and documentation, which was students' academic achievement as calculated by their grade point average (GPA). MSLQ is made of 81-item. The questionnaire answer is calculated using a 7-point Likert scale spanning from 1 "not at all true of me" and 7 "very true of me".

MSLQ is composed of two main parts, motivation part and learning strategies part which constitutes to a total 81 items. The motivation part is composed of 31 items and the learning strategies part is composed of 50 items. The motivation part is categorized into three sub-parts; value with 14 items that consist of intrinsic, extrinsic goal orientation and task value, expectancy with 12 items that consist of control beliefs and self-efficacy, and affective with 5 items that consist of test anxiety. On the other hand, learning strategies part is categorized into two sub-part; cognitive and metacognitive strategies with 31 items that consist of elaboration, rehearsal, critical thinking, organization, metacognitive self-regulation and resource management with 19 items that consist effort regulation, time and study environment, hel-seeking and peers learning.

Data Analysis

In analyzing the data, before the researcher conducted a correlation test analysis on SPSS (Statistic Program for Social Science) 21.0 for windows to test the hypothesis, the researcher conducted a reliability and normality test by using SPSS. The reliability test resulted that the Cronbach's alpha was 0.942 which indicated a high level of internal consistency and the normality test resulted that the data were normally distributed with (p) = 0,149 in students' self-regulated learning and (p) = 0.200 in students' academic achievement. Hence, the data were reliable and normally distributed to be used.

FINDING AND DISCUSSION

The Result of the Students' Self-Regulated Learning

The data from respondents were tabulated by using descriptive statistics on SPSS to examine the verified data of research.

Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Self-Regulated Learning	96	262	547	397.28	48.131
Academic Achievement (GPA)	96	2.647826	3.772887	3.27427924	.218808850

The result showed that the maximum score of students' self-regulated learning was 547, the minimum score was 262, the mean was 397.28 and the standard deviation was 48.131. Based on the descriptive statistics above, the data then were categorized into 3 categories, which were bottom, middle and top by using this formula:

$$Bottom = X < M\text{-}SD$$

$$Middle = M\text{-}SD \leq X < M\text{+}SD$$

$$Top = X > M\text{+}SD$$

Categories and Frequency Distribution of Students' Self-regulated Learning

Categories	Score Range	Frequency	Percentage
Bottom	$X < 349,149$	15	15.6%
Middle	$349,149 \leq X < 445,411$	62	64.6%
Top	$X \geq 445,411$	19	19.8%
Total		96	100%

Based on the table above, from the 96 students, it can be seen that 15 students (15.6%) are in the bottom category. The majority of students are in the middle category with 62 students (64.6%) and 19 students (19.8%) are in the top category. It can be concluded that most of the students were average achievers in term of self-regulated learning which means that the utilization of motivation and strategies in their learning was neither strikingly high nor low yet there was still usage of motivation and learning strategies on moderate amount based on their scores.

The Result of Students' Academic Achievement

The data from respondents were tabulated by using descriptive statistics on SPSS to examine the verified data of research.

Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Self-Regulated Learning	96	262	547	397.28	48.131

Academic Achievement (GPA)	96	2.647826	3.772887	3.27427924	.218808850

The result showed from the 96 students, the highest GPA score was 3.772887 and the lowest score was 2.647826. Based on the descriptive statistics below, the data then were categorized into 3 categories, which were bottom, middle and top by using this formula:

Bottom = X < M-SD

Middle = M-SD ≤ X < M+SD

Top = X > M+SD

Categories and Frequency Distribution of Students' Academic Achievement

Categories	Score Range	Frequency	Percentage
Bottom	X < 3.05	12	12.5%
Middle	3.05 ≤ X < 3.49	70	71.9%
Top	X ≥ 3.49	15	15.6%
Total		96	100%

The table above indicated that from 96 students, there were 12 students (12.5%) in the bottom category, 70 students (71.9%) in the middle category and 15 students (15.6%) in the top category. It can be concluded that most of the students were average achievers academically since many of their GPAs were between 3.05 and 3.49.

The Result of Hypotheses Testing

Result of Pearson Product Moment Correlation

Correlations		Students' Self-regulated Learning	Students' Academic Achievement
Students' Self-regulated Learning	Pearson Correlation	1	.215[*]
	Sig. (2-tailed)		.035
	N	96	96
Students' Academic Achievement	Pearson Correlation	.215[*]	1
	Sig. (2-tailed)	.035	
	N	96	96

*. Correlation is significant at the 0.05 level (2-tailed).

The correlation between students' self-regulated learning as independent variable and students' academic achievement as dependent variable resulted in the value of correlation coefficient (r) = 0.215 with significance value (p) = 0.035. In testing the hypothesis, if the significance value is (p) < 0.05, it indicates a correlation between the variables tested, however, if the significance value (p) > 0.05 it indicates no correlation between the variables. Therefore, this result showed that there was a positive correlation between the two variables where (p) value = 0.035. For that reason, the alternative hypothesis (Ha) of this research is accepted and the null hypothesis (Ho) is rejected, where there is a correlation between students' self-regulated learning and students' academic achievement. The researcher also calculated coefficient determination on SPSS with the result of (r2) = 0.036. As for to determine the degree of correlation coefficient, the researcher adapted this coefficient correlation interpretation as stated in the table below to determine the degree of coefficient correlation:

Coefficient Correlation Interpretation

Interpretation Coefficient	Correlation
0.00 – 0.199	Very Low/ No Correlation
0.20 – 0.399	Low
0.40 – 0.599	Moderate
0.60 – 0.799	High
0.80 – 1.000	Very High

(Sugiyono, 2010)

The value of coefficient correlation (r) is 0.215. Therefore, the r value is classified into a low correlation where the coefficient value is between 0.20 – 0.399.

Hence, from the result, it can be stated that students' self-regulated learning influenced their academic achievement since there was a positive correlation. Accordingly, to achieve their academic objectives the process of self-regulated learning was involved. However, with a low level correlation coefficient value of 0.215 indicated that there might be other components besides motivation and learning strategies that influenced students' academic achievement since the MSLQ only focused on two components which were motivation and learning strategies. Based on the value of coefficient determination (r2) = 0.036, it explained that self-regulated learning influenced students' academic achievement by 3.6% (0.036) with the rest of 96.4% might be influenced by other components. Thus, it also confirmed that self-regulated learning was one of the factors that contributed to students' academic achievement.

The researcher also found that the majority of students were in the middle category in both self-regulated learning and academic achievement aspects with 62 (64.6%) students and 70 (71.9%) students consecutively. Whereas, the rest of the students were divided almost equally in bottom and top category, in the bottom category there were 15 (15.6%) students and 12 (12.5%) students consecutively in both self-regulated learning and academic achievement. For the top category there were 19 (19.8%) students in self-regulated learning and 15 (15.6%) students in academic achievement. The pattern of this result indicated

the majority of students were above the bottom category in terms of their self-regulated learning scores and GPA scores. In self-regulated learning 81 (84,4%) students were above the bottom category and in academic achievement 85 (87,5%) students were above the bottom category.

CONCLUSION

The researcher concludes that there is a positive correlation between students' self-regulated learning as independent variable (X) and students' academic achievement as dependent variable (Y). This was indicated by the result of correlation calculation with the value of correlation coefficient (r) = 0.215 with significance value (p) = 0.035, where the correlation is accepted if the significance value is (p) < 0.05. On that account, the alternative hypothesis (Ha) of this research is accepted, which is there is a correlation between students' self-regulated learning and students' academic achievement of English Language Education Study students' batch 2017. Accordingly, the null hypothesis (Ho) is rejected, which is there is no correlation between students' self-regulated learning and students' academic achievement of English Language Education Program students' batch 2017 in academic year 2020/2021.

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