



The Effect of Self-Regulated Learning Toward Students' Academic Stress in Malang

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Abstrak

Kesehatan mental merupakan faktor penting bagi siswa yang perlu mendapat perhatian dalam proses belajar mengajar. Apalagi, pandemi Covid-19 telah menggeser proses belajar mengajar menjadi pembelajaran online. Tidak dapat disangkal, kondisi tersebut mendorong siswa untuk lebih banyak melakukan kegiatan belajar mandiri atau self-regulated learning. Penelitian ini bertujuan untuk mengetahui pengaruh self-regulated learning terhadap stres akademik mahasiswa di Malang. Ada 99 mahasiswa yang berasal dari 19 Perguruan Tinggi di Malang yang menjadi subjek penelitian ini. Metode kuantitatif digunakan dalam penelitian ini. Untuk mengumpulkan data, dilakukan survei dalam bentuk kuesioner online yang terdiri dari beberapa pertanyaan. Skala Likert digunakan untuk mendapatkan skor dari setiap pertanyaan. Hasil penelitian menunjukkan bahwa self-regulated learning tidak terlalu berpengaruh terhadap stres akademik siswa. Data hasil kuisisioner dari 100 responden hanya menunjukkan korelasi sebesar 27%. Hal ini disebabkan oleh aspek lain yang berpengaruh seperti kurangnya motivasi siswa, manajemen waktu, dan hubungan yang tidak mendukung dengan orang-orang di sekitar. Berdasarkan tiga aspek yang menjadi fokus dalam self-regulated learning, responden cukup baik dalam melakukan metakognisi dengan memanfaatkan to-do list dalam pembelajaran. Namun, mereka juga menunjukkan bahwa kondisi belajar dan mengajar yang kurang mendukung untuk meraih prestasi lebih yang mendorong siswa menjadi kurang motivasi. Kebiasaan responden juga menunjukkan bahwa mereka cenderung untuk menyelesaikan masalah sendiri yang membawa mereka ke dalam stres akademik mereka. Selain itu, manajemen waktu dan lingkungan yang tidak mendukung juga dapat menjadi pemicu stres akademik.

Kata Kunci: belajar mandiri, stres akademik, pembelajaran online.

Abstract

Health mental is a crucial factor for student which needs attention in the process of teaching and learning. Moreover, the pandemic of Covid-19 has shifted the process of teaching and learning into online learning. Undeniably, that condition has pushed students to have more activities of independent learning or self-regulated learning. This research investigates the effect of self-regulated learning toward students' academic stress in Malang. There were 99 students coming from 19 Universities in Malang who participate as the subject of this study. The quantitative method was used in this study. To collect the data, survey was done in the form of online questionnaire consisting of several questions. The Likert scale was used to gain the score of each question. The result shows that self-regulated learning does not affect too much on students' academic stress. The data resulted from the questionnaire from 100 respondents show only 27% of correlation. This matter is caused by another influential aspects such as the lack motivation of the students, time management, and unsupportive relation of people around. Based on three aspects which become the focus in self-regulated learning, the respondents were quite good in doing metacognition by utilizing to-do list in learning. However, they also show that the learning and teaching condition is less supportive to gain more achievement which drives students to have lack of motivation. The habit of respondents also show that they tend to solve the problem on their own which bring them into their academic stress. Furthermore, their time management and unsupportive environment can also be the trigger of academic stress.

Keywords: self-regulated learning, academic stress, online learning.

Introduction

Mental health is the most important thing and is one of the concerns for people in the world, especially during this Covid-19 pandemic. Social isolation, financial worries, and the fear of being exposed to Covid-19 have made people become depressed and excessively anxious during the pandemic. A recent study in the Morbidity and Mortality Weekly Report showed that symptoms of depression and anxiety in the United States increased between April and June 2020, compared to the same period in 2019. Reported by [tirto.id](https://www.tirto.id).

The Association of Indonesian Mental Medicine Specialists (PDSKJI) conducted a survey on mental health through an online self-examination. Examinations were conducted on 1,552 respondents regarding psychological problems. The survey results showed that 46% of respondents experienced severe symptoms of psychological post-traumatic stress, 33% of respondents experienced moderate psychological post-traumatic stress symptoms, 2% of respondents experienced mild psychological post-traumatic stress symptoms, while 19% had no symptoms. Which can allow students to feel pressure to control themselves for learning during this Covid-19 pandemic.

Self-regulated learning or independent learning is one of the government's efforts to adapt to the current situation, but some people who face this self-regulated learning indirectly experience pressures that can result in mental health. Broadly speaking, this pandemic has a bad influence on a person's mentality which can have a domino effect in the future. For this reason, efforts and strategies are needed to maximize self-regulated learning (independent learning) and maintain the mental health of the community, especially students.

This study is intended to find out the effect of Self-Regulated Learning on academic stress of university students in Malang City. This research is also useful for digging up information about things that can trigger academic stress and solutions to overcome them.

Referring to the scientific article Self-Regulated Learning One of the Capitals for Successful Learning and Teaching according to Azmi (2016), Self-Regulated Learning is divided into 2 models, namely Individual and Social (Learning). It is said to be an individual paradigm because it is a personal internal factor of a student (learner) and a

social paradigm created by a teacher in classroom learning as a learning model/strategy to achieve optimal learning goals. The two paradigms cannot be separated from each other, the second paradigm is the creation of teachers in the learning process so that students can control their learning and foster processes to improve self-regulated learning.

According to Bandura (1977) Self-Regulated Learning is an attempt to deepen and manipulate associative networks in a particular field (which need not be limited to academic content), and to monitor and improve in-depth processes. This Self-Regulated Learning method emphasizes discipline by regulating and controlling oneself, so that it can trigger an attitude of initiative (Zimmerman, 2002), especially when facing tasks with above average difficulty levels. Self-regulated learning has several elements: motivation (motive), method (method), work results (performance outcome), and environmental or social conditions (social environment). Motivation is the core of self-management in learning, where through motivation students will act and take responsibility for the activities carried out (Smith, 2001). Based on the explanation about self-regulated learning, it can be concluded that self-regulated learning is a learning method that emphasizes discipline, activeness, initiative, and endurance.

Reflecting from the system, it will certainly encourage students to maximize independent learning. But behind the good effects, there are also bad effects that await, namely stress.

Stress is a condition caused by a mismatch (Garniwa, I. 2007) between the desired situation and the individual's biological, psychological or social system (Sarafino, 2006; Wardi, R., & Ildil, I. (2016). (Anggola & Ongori 2009; Pratama, MR, 2015; Siska, M., 2011). Stress is usually caused by excessive pressure on an individual or an individual who exceeds the limit of mental endurance, thus affecting the psychological state.

Stress that occurs in the school or education environment is usually referred to as academic stress (Sinaga, M. A. J. 2015; Rahmadani, C. S. M. 2014; Hikmah, Y. 2014;). Desmita (2010) states "Academic stress is stress caused by academic stressors". Academic stressors are stress experienced by students that come from the learning process or things related to learning activities such as: assessment, competition between students, task pressure, and so on.

Academic stress arises when expectations for academic achievement increase, both from parents, teachers and peers. These expectations are often not in accordance with the abilities of students, causing psychological pressure that affects learning achievement at school (Taufik, T., & Ildil, I. 2013; Muharrifah, A. 2009). Furthermore, according to Thurson (2005) academic stress can be caused by difficult subject matter for students, so students fear the teacher who teaches. Students with good levels of resilience (ability to adapt) to stress can have good learning outcomes. Pressure and demands that come from academic activities are called academic stress.

Method

The method used in this study is a quantitative method. Research in common language refers to the search for knowledge. Can also define research as a scientific and systematic search for pertinent information on a particular topic. In fact, research is an art of scientific investigation. (C.R. Kothari, 2004).

Research with quantitative methods is based on measuring the amount or value. This method applies to phenomena that can be expressed in terms of quantities. So that the theme taken is able to produce values in the form of numbers.

Data collection in this study used a survey method. The survey is a quantitative research using the same structured questions for everyone, then all the answers obtained by the researcher are recorded, processed, and analyzed. Structured questions are called questionnaires. The questionnaire contains questions that will be given to respondents to measure variables, relationships between existing variables, and can be in the form of experiences and opinions of respondents. Survey methods are usually used to obtain data from certain natural places, but researchers carry out treatments in data collection (questionnaires, tests, interviews, and so on), the treatment given is not the same in experiments (Sugiyono, 2014).

Research has been conducted in various universities in Malang, through an online system. Researchers distributed questionnaires through a Google Form link which could then be accessed openly for university students in Malang. The respondents are university students, so the more data and samples the researchers take, the more options and hypotheses the researchers have.

The questionnaire was used in collecting the data. The questionnaire consists of statements which direct the respondents into two variables. Control and independent variables. Control variable (X) regarding self-regulated learning. While the independent variable (Y) is the level of academic stress of each respondent.

This study uses 2 scales, namely the Self-Regulated Learning scale and Academic Stress. The scale in this study was replicated from the Online Self-Regulated Learning Questionnaire (OSLQ) (Barnard, et al., 2009) and the Academic stress inventory of students at universities and colleges of technology (Lin, Y. M. & Chen, F.S., 2009). The scale score used is a score of 1-5 with the following details:

Favourable Scale Score

1 = Strongly disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly agree

Unfavorable Scale Score

1 = Strongly Agree

2 = Agree

3 = Neutral

4 = Disagree

5 = Strongly disagree

Table.1 Self-Regulated Learning Scale

No.	Statement	Note
1.	I can get work done more easily if I create my own initiative system (timeline, list, etc.)	Favorable
2.	I always make goals per day so that the work is completed according to the timeline	Favorable

	during online lectures	
3.	I know about the best way to support my achievement during college	Favorable
5.	I don't have a problem with my quality even though the course has to be changed to online	Favorable
7.	I feel that online lectures require certain methods or regulations so that they can be carried out well	Favorable
9.	I discussed with my friends about our progress during online lectures	Favorable
10.	I find the learning system I use is different from my friends	Favorable

Table.2. Academic Stress Scale

No.	Statement	Note
4.	I am easily distracted by outside things that interfere with planned goals	Unfavorable
6.	I am more enthusiastic in achieving goals	Favorable

when I study online.

The target respondents of this study were the population with an age range of 18-25 years. This study examines the effect of self-regulated learning on student academic stress, so that the education level of the respondents is students. The sample data used in this study were students from several universities in the city of Malang with the following detail:

Table 3. Data Sample

No.	University	Number
1.	BINUS	48
2.	UB	10
3.	Gajayana University	2
4.	UM	14
5.	ABM	1
6.	UMM	2
7.	UNISMA	1
8.	STIEMK	1
9.	ASIA	1
10.	Ma-Chung	1
11.	UNITRI	1
12.	POLTEK	3
13.	POLTEKES	11
14.	UNMER	1
15.	Al-Hikam	1
16.	UWG	1

Finding and Discussion

Description of Data

This research was conducted to determine the effect of Self Regulated Learning on the level of academic stress of university students in Indonesia. Researchers distributed questionnaires through a Google Form link which could then be accessed openly for university students in Malang. The majority of respondents obtained came from Bina Nusantara University, Malang State University, Brawijaya University and Malang State Health Polytechnic (POLTEKES).

The questions consist of 10 items with 7 items discussing Self Regulated Learning and 3

items discussing academic stress. Testing this questionnaire was done with the help of the SPSS.

Descriptive Statistic

Descriptive statistics are methods related to the collection and presentation of a data set so as to estimate the quality of the data in the form of variables, summary statistics (mean, median, mode, standard deviation, etc.), distribution, and pictorial representation (graphs), without probabilistic formulas. anything (Walpole, 1993; Correa-Prisant, 2000; Dodge, 2006). Based on the results of research that has been conducted on 100 students in Malang City, obtained data that is processed using SPSS 25 for windows in the form of descriptive statistics as follows:

Table 4. Descriptive Statistic Data

Skor	Descriptives							
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
Self Regulated Learning	100	25.81	3.084	.308	25.20	26.42	17	32
Stres Akademik	100	7.73	1.890	.189	7.35	8.11	3	12
Total	200	16.77	9.415	.666	15.46	18.08	3	32

The output results of table 4 above show that the value of N or the amount of data used for research is 100 samples and all of them are valid. The Self Regulated Learning variable has 7 statement items with a minimum score of 17 and a maximum score of 32. The Academic Stress variable has 3 statement items with a minimum score of 3 and a maximum score of 12. The average result of Self Regulated Learning shows a number of 25.81 and a standard deviation of 3,084 . As for Academic Stress, the average result is 7.73 and the standard deviation is 1.890.

Reliability Test on Self-Regulated Learning and Academic Stress

According to Anastasia and Susana (1997), reliability is something that refers to the consistency of scores achieved by the same person when they are retested with the same test on different occasions, or with a different set of equivalent items, or under different test conditions.

Table 5. Reliability Statistic of Self-Regulated Learning

Reliability Statistics

Cronbach's Alpha	N of Items
.528	7

Reliability on the Self-Regulated Learning question, which consists of 7 items, shows a reliability value of 0.528. Based on Cronbach's Alpha, the Self-Regulated Learning questionnaire is below 0.6 and can be said to be inconsistent.

Table 6. Reliability Statistic of Academic Stress

Reliability Statistics

Cronbach's Alpha	N of Items
.281	3

Reliability on the Self-Regulated Learning question, which consists of 3 items, shows a reliability value of 0.281. Based on Cronbach's Alpha, the Self-Regulated Learning questionnaire is below 0.6 and can be said to be inconsistent.

Normality Test

Kolmogorov Smirnov Normality Test is a test conducted to determine the distribution of random and specific data in a population (Chakravart, Laha, and Roy, 1967). Following are the results of the calculation of the normality test of the two research variables using the Kolmogorov-Smirnov as follows:

Table 7. Normality Statistic

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.81992877
Most Extreme Differences	Absolute	.061
	Positive	.042
	Negative	-.061
Test Statistic		.061
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

By using the Kolmogorov-Smirnov method, the data obtained showed a significant figure of 0.2. The results of the normality test show that the

value obtained is greater than 0.05 (sig > 0.05), so it indicates that the distribution of the resulting data is normally distributed or the data is taken from a normal population.

Correlation Test

Correlation test is a statistical test only to find out whether there is a relationship between two or more variables from the study or how big the relationship is between research variables. The table above shows that Self-Regulated Learning has a significance of 0.007 and a correlation of 27% with academic stress. The significance number can be said to be normal if it is more than 0.005, then the distribution of the variables in the data can be said to be normal. The correlation value of 27% is in the range of 21% -40%, which in that range still has a relationship that is not strong enough.

Table 8: Statistical Correlation of Self Regulated Learning with Academic Stress

Correlations			
		Self Regulated Learning	Stres Akademik
Self Regulated Learning	Pearson Correlation	1	.270**
	Sig. (2-tailed)		.007
	N	100	100
Stres Akademik	Pearson Correlation	.270**	1
	Sig. (2-tailed)	.007	
	N	100	100

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

Discussion

From the many tests that have been done, the authors get the results that Self-Regulated Learning and Academic Stress have a correlation of 27%. The results that are not too much correlated are due to the many possibilities from other aspects that influence the results.

A person's self-regulated learning can be said to be high if the person can determine the strategies that will be used to remember, learn, solve problems and think processes and run them (Wolters et al., 2003) have high self-efficacy (Zimmerman, 1989), are able to seek assistance according to their needs (Karabenick & Sharma, 1994). Self-Regulated Learning has 3 main aspects that must be controlled and monitored, namely metacognition, motivation and behavior. Metacognition is the ability to understand what needs to be done, such as creating a timeline or list. This is in accordance with the answers of most respondents who have quite good metacognition because they have used a to-do list in learning.

Motivation is something that is considered important even though it looks trivial. Lack of motivation that students have is a problem that often arises. This motivation can be obtained from oneself, family and the environment. Motivation that comes from oneself in the form of perceptions of self-efficacy to become successful people because they believe in their abilities. Low self-efficacy in terms of academics can cause academic stress, because they perceive it to be pressure. In this case, it is also related to the condition of online lectures which according to respondents are less supportive for achievement.

Behavioral aspects in this study have a relationship with academic stress on students. Students who have Self-Regulated Learning tend to find solutions independently according to their needs and do not depend on others. Relationships with family, friends and mentors can also be a cause of academic stress. If the relationship with the people around is less supportive, it will have a negative impact on concentration and adversely affect student academics.

Lack of time management can also be one of the factors supporting high levels of academic stress. Tasks that accumulate with less work limits, the number of activities outside the classroom will be a challenge for students because they must still have good time management. With poor time management, there is a feeling of laziness and not being serious about doing tasks.

Conclusion

Based on the discussion that has been explained in the previous chapter, we as authors conclude that there is not too much influence of self-regulated learning on the level of academic stress of university students in Indonesia. Data obtained from 100 respondents through Google Form shows a correlation with a percentage of 27%. This is due to the many possible influencing aspects such as lack of motivation by students, less supportive relationships with people around them, and lack of time management. Based on the three main focus aspects that must be considered in self-regulated learning, respondents are quite good at doing metacognition using a list of things to do in learning. However, respondents also indicated that the lecture conditions did not support achievement so that there was a lack of motivation. Respondents in self-regulated learning also have a tendency to complete their own

solutions and do not depend on others, which can be a cause of academic stress if the relationship around them is not supportive. In addition, the lack of student time management can be a contributing factor to high levels of academic stress.

Based on the Self-Regulated Learning and Academic Stress Reliability Test according to Cronbach's Alpha, both questionnaires have a reliability value below 0.6, namely the Self-Regulated Learning questionnaire as much as 0.528 and academic stress as much as 0.281. This shows that the questionnaire can be said to be inconsistent so that further researchers should be able to create or use another scale that can be more reliable.

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