THE EFFECT OF SELF REGULATED LEARNING STRATEGY ON ACADEMIC RESILIENCE

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ABSTRACT
Students who are working on their thesis encounter many obstacles and challenges, including difficulties in making tools, difficulties in meeting supervisors, difficulties in time management, etc. Final year students need skills to survive in the academic process despite various challenges. A psychological variable that can explain an individual's academic resilience despite being in a difficult situation is called academic resilience. This study aims to determine the effect of the self-regulated learning strategy on the academic resilience of students at the University of X class of 2017 who are taking their thesis. This study uses a quantitative approach using incidental sampling techniques and obtains 34 samples. Methods of collecting data on self-regulated learning strategy variables and academic resilience using a questionnaire. The measurements instruments that are used in this study are academic resilience measurement and self-regulated learning strategy measurement. Data analysis using Simple Linear Regression Technique with the IBM SPSS 25.0 for windows program. Based on the results obtained academic resilience has a significant effect on self-regulated learning strategies. This means that the higher self-regulated learning strategy on final year students, the higher the academic resilience. This study intend to add information on the development of psychology; regarding the variables of Self-regulated learning and academic resilience. In collecting research data, the number of respondents is not much, so further researchers are expected to expand the population and number of samples for a better result. Future researchers who are interested in researching academic resilience can examine other constructs or other factors that can affect academic resilience.

Keywords : Self-Regulated Learning strategic, Academic Resilience , College Student
1. INTRODUCTION

Thesis is a research result compiled by students to fulfill the requirements as a Bachelor (S1) (Academic Manual, 2019). According to Poerwadarminta (1983:957) quoted from Rindang et al (2010) a thesis is a scientific work that is required as part of the requirements for academic education in higher education. Students who compose the thesis are required to be able to adapt to the existing learning process in the preparation of the thesis. The learning process in the preparation of the thesis takes place individually, so the demands for independent learning are very large [1].

In preparing the thesis, there are several difficulties experienced by students. Slameto (2010: 54) quoted from Cahyani and Akmal (2017) reveals that, "There are many types of factors that affect learning but can be classified into two groups, namely internal factors (physical factors, psychological factors, and fatigue factors) and external factors (family factors, academic factors and community factors)". Cahyani and Akmal (2017) stated that final year students also experienced difficulties in preparing thesis, starting from the difficulty of finding themes, titles, samples and measuring tools, difficulties in getting references, the emergence of laziness, low motivation, and the fear of meeting with supervisors [2].

A number of studies have been conducted on student populations in America (Dyson & Renk, 2006), Canada (Struthers, Perry & Menec, 2000), China (Tao, Dong, Pratt, Hunsberger & Pancer, 2000), Australia (Stallman, 2010), and England (Wilcox, Winn & Fyvie-Gauld, 2005) quoted from Utami (2020) highlight the many demands and challenges in higher education such as studying, taking exams, identity formation, and independence from parents affecting students' social, emotional, physical, and academic functioning. They found that the cycles of “disruption” and “reintegration” were considered as processes of resilience [3].

Final year students need skills to survive in the academic process despite various challenges. A psychological variable that can explain an individual's resilience despite being in a difficult situation is resilience [4]. Resilience generally leads to positive adaptation patterns during or after facing difficulties or risks [5]. Final year students need to adopt resilience skills to be able to adapt positively to academic difficulties [6]. This is in line with research conducted by Septiani and Fitria (2016) which states that there is a relationship between resilience and stress in students. Reivich and Shatte (2002) say that resilience is formed by the ability to regulate emotions, control desires, optimism, problem identification and rise from adversity [7]. Academic resilience in the context of higher education is defined as the ability to face challenges, difficulties, and pressures in an academic setting effectively [8].

Cassidy (2016) states academic resilience is the ability to increase success in education despite experiencing significant difficulties. Cassidy (2016:3) states that academic resilience measures cognitive-affective and behavioral responses to incidents of academic difficulty, where it represents protective factors such as a sense of mastery, belief that one's efforts can make a difference and effective approaches to learning [9].

Academic demands on final year students who are working on theses if not regulated properly will hinder the thesis process, so students need strategies in learning which are commonly called self-regulated learning (SRL). The basis for the emergence of independence in working on the thesis is to have the ability to self-regulated learning. This self-regulated learning ability must be possessed by students who are taking theses [10]. Wolters et al., (2003) define self-regulated learning as an active and constructive process in which learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals. and
The relationship between self-regulated learning strategies and academic resilience is stated in research conducted by several researchers. According to Garde et al., (2017) the relationship between self-regulated learning and academic resilience is significant and positive. Learning from mistakes (self-regulation) was a significant predictor of coping and self-confidence, resilience and adaptation, and tolerance for negative situations (resilience) [12].

The relationship between self-regulated learning and academic resilience is also in line with research conducted by Pattynama et al., (2019) which states that students need to have self-regulation in lectures, build a sense of involvement with the study process, and need to have resilience in order to have lower intentions to resign [13]. Previous research conducted by Karimi, Abedi and Farahbakh (2014) quoted from Masrifah & Hendriani (2017) revealed that self-regulated learning strategies can affect the realm of cognition and motivation so that these behaviors can have an effect on children's learning skills in the classroom, which ultimately leads to an academic learning environment and increases resilience student academics [14].

Based on the description above, the researcher is interested in knowing the effect of the self-regulated learning strategy on the academic resilience at the University of X class of 2017 who are taking their thesis.

2. RESEARCH METHODS

Based on the approach and the type of data used, this research is a quantitative research. The type of research used in this research is predictive correlational research. According to Rahman, (2016: 91) the predictive correlational research design shows that knowledge about a variable (independent or predictive variable) can be used to predict other variables (dependent variable or criterion) [20].

Independent Variable. Self-regulated learning strategies are activities where independent individuals, without assistance from others, actively develop and determine strategies used to achieve learning objectives, and evaluate learning outcomes. The indicators used by researchers to reveal self-regulated learning strategies are as proposed by Wolters et al. (2003) include: (1) Cognitive Regulation, (2) Motivation Regulation (3) Behavior [11].

Dependent Variable. Academic resilience is the ability of students to survive despite difficulties and be able to bounce back from adversity and increase success in education. The indicators used by researchers to reveal academic resilience as the dimensions proposed by Cassidy (2016) include: (1) Perseverance, (2) Reflecting and Adaptive Help-Seeking, (3) Negative Affect and Emotional Response [9].

The population in this study were 105 students and obtain 34 samples. The sampling technique used is incidental sampling. Incidental Sampling is a sampling technique based on chance, that is, anyone who coincidentally meets a researcher can be used as a sample, if it is deemed that the person who happened to be met is suitable as a data source [21].

Data collection techniques data in this study is to use a questionnaire. The data collection method used in this study is the scale method. The scale used is a Likert scale. The Self-Regulated Learning scale used in this study was prepared by the researcher himself using the aspects described by Wolters, et al (2003). The Academic Resilience Scale used in this study is the Academic Resilience Scale-30 (ARS-30) scale developed by Cassidy (2016) which was adapted to Indonesian by Kumalasari et al., in
2020 [16]. Regression analysis can predict one criterion variable by using one predictor variable (simple regression).

3. RESULT AND DISCUSSION

The results of data processing on the scale of self-regulated learning strategies are known that the mean value is 107.32 and has a standard deviation of 19.186. The following presents the norms for classifying subjects based on the mean and standard deviation of the self-regulated learning strategy scale:

<table>
<thead>
<tr>
<th>Category</th>
<th>Norm Categorization</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>X &lt; 88,137</td>
<td>6</td>
<td>17.6%</td>
</tr>
<tr>
<td>Moderate</td>
<td>88,137 ≤ X &lt; 126,509</td>
<td>24</td>
<td>70.6%</td>
</tr>
<tr>
<td>High</td>
<td>X ≥ 126,509</td>
<td>4</td>
<td>11.8%</td>
</tr>
</tbody>
</table>

Based on the table above, it can be seen that the majority of the subjects were in the medium category, as many as 24 subjects with a percentage of 70.6%. Meanwhile, in the high category there are 4 subjects with a percentage of 11.8%. In the low category there are 6 subjects with a percentage of 17.6%. Through this normalization, it can be seen that the subjects did not significantly score high self-regulated learning strategies, but the subjects tended to or the majority had moderate self-regulated learning strategies.

The results of data processing on the academic resilience scale are known that the mean value is 138.24 and has a standard deviation of 7.648. The following presents the norms for classifying subjects based on the mean and standard deviation of the academic resilience scale:

<table>
<thead>
<tr>
<th>Category</th>
<th>Norm Categorization</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>X &lt; 130,592</td>
<td>1</td>
<td>2.9%</td>
</tr>
<tr>
<td>Moderate</td>
<td>130,592 ≤ X &lt; 146,888</td>
<td>29</td>
<td>85.3%</td>
</tr>
<tr>
<td>High</td>
<td>X ≥ 146,888</td>
<td>4</td>
<td>11.8%</td>
</tr>
</tbody>
</table>

Based on the table above, it can be seen that the majority of the subjects were in the moderate category, as many as 29 subjects with a percentage of 85.3%. Meanwhile, in the high category there are 4 subjects with a percentage of 11.8%. In the low category there is 1 subject with a percentage of 2.9%. Through this normalization, it can be seen that the subject does not significantly have a high academic resilience score, but the subject tends or the majority has moderate academic resilience.

The validity test of self-regulated learning was carried out three times where in the third validity test there were 44 valid items out of 44 items in the self-regulated learning variable. Items are considered valid because they meet a minimum correlation coefficient of 0.25. Valid items are indicated by the r value which ranges from 0.25-0.86. The academic resilience validity test was carried out twice where in the second validity test there were 28 valid items out of 28 items on the academic resilience variable.
Items are considered valid because they meet a minimum correlation coefficient of 0.25. Valid items are indicated by the r value which ranges from 0.25-0.75.

Self-regulated learning strategy instrument found a reliability value of 0.957, which means reliable, while on academic resilience instruments found a reliability value of 0.921, which means reliable. According to [22] a scale or research instrument is considered reliable, it should at least have a reliability coefficient value of 0.70 or more.

The analysis process used in this study uses the IBM SPSS version 25.0 computer program facility for windows.

**Table 3. Regression Test**

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>F</th>
<th>Sig</th>
<th>t</th>
<th>Unstandardized Coefficient B</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.484</td>
<td>0.234</td>
<td>9.777</td>
<td>0.004</td>
<td>17.489</td>
<td>117.540</td>
<td>6.721</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.127</td>
<td>193</td>
<td>0.062</td>
</tr>
</tbody>
</table>

Based on table 1, the results of the F test analysis obtained an F value of 9.777 with a significance of 0.004 < 0.05, because the significance is less than 0.05, the regression model can be used to predict the self-regulated learning variable that affects academic resilience.

The value of R Square or the coefficient of determination used to determine the percentage of the influence of the independent variable (predictor) on changes in the dependent variable is 0.234 which comes from the square of the correlation value of 0.484. The R Square value of 0.234 means that the magnitude of the influence of the independent variable (self-regulated learning) on changes in the dependent variable (academic resilience) is 23.4%, while the remaining 76.6% is influenced by other variables not examined.

The constant value (B) of the Unstandardized Coefficients in this study is 104.615. This value is a constant value which means that if there is no self-regulated learning strategy (X), then the academic resilience value is 117,540. The regression coefficient of 0.193 indicates that for each addition (because of the + sign) 1%, the self-regulated learning strategy will increase academic resilience by 0.193. So that it can be interpreted that the effect of variable X (self-regulated learning strategy) on variable Y (academic resilience) is positive, through an increase or change in the self-regulated learning strategy will be followed by an increase or change in academic resilience.

Based on the data in table 1 of the regression coefficient test, it is known that the tcount = 3.127. The regression results are said to be significant if the significance value is <0.05 [23]. The decision-making requirements for measuring the regression coefficient are as follows:

1. If probability > 0.05 then Ho is accepted, Ha is rejected
2. If probability < 0.05 then Ho is rejected Ha accepted

Based on the decision-making requirements described above, it can be concluded that the significant value of the independent and dependent variables has a significant level below 0.05, so Ha is accepted and Ho is rejected. This means that there is an influence between self-regulated learning strategies and academic resilience on students of the University of X Class of 2017 who are taking their thesis.
Based on the results of the simple linear regression analysis that has been carried out, it can be seen that there is an influence of self-regulated learning strategies on academic resilience in the class of 2017 University X students who are taking their thesis. This shows that Ha in this study is accepted. The influence of the self-regulated learning strategy on academic resilience is evidenced by the results of the data analysis of the regression coefficient test results in table 4.9. there is a change in the regression coefficient of variable X to variable Y, the regression equation \( Y = 117.540 + 0.193 \times X \), meaning that the effect of variable X (self-regulated learning strategy) on changes in variable Y (academic resilience) is a positive effect, where there is an increase or change in the strategy self-regulated learning will be followed by an increase or change in academic resilience.

Previous research conducted by Garde et al., (2017) showed that there was a significant and positive relationship between self-regulated learning and academic resilience. Learning from mistakes (self-regulation) was a significant predictor of coping and self-confidence, resilience and adaptation, and tolerance for negative situations (resilience) [12].

The relationship between self-regulated learning and academic resilience is also in line with research conducted by Pattynama et al., (2019) which states that students need to have self-regulation in lectures, have a sense of involvement with the learning process, and need to have resilience so that students have strong desires, low for dropping out of college [13].

In this study, the coefficient of determination \( (R^2) = 0.236 \), which means that the contribution of the variable self-regulated learning strategy with academic resilience to the 2017 Gresik University Muhammadiyah students who are working on the thesis is 23.6%, while the remaining 76.4% is influenced by other the variables which not investigated. Rojas (2015) in his research explains that there are 2 main factors that influence academic resilience in individuals, risk factors and protective factors. Risk factors related to poverty and low economic status, family dysfunction, family conflict, lack of social support, marital conflict and domestic violence, level of discipline and lack of parenting skills. While the protective factors are related to low family stress levels, high expectations, intelligence levels, a safe environment, good family support and good communication [24]. In addition, Everall et al., (2006) describe that there are 3 factors that influence academic resilience in final year students: individual factors, family factors and community factors [19].

4. CONCLUSION

Based on the research data and the results of data analysis using simple linear regression that has been carried out in this study, it can be concluded that the research results show that \( F = 9.777 \) significance level \( (p) < 0.000 \) with the regression line equation \( Y = 117.540 + 0.193 \times X \) is good fit to predict the value the level of academic resilience based on the predictor of the level of self-regulated learning strategies. It can be concluded that H0 is rejected and Ha is accepted so that the regression analysis shows that there is a significant effect between the variables X and Y. The magnitude of the coefficient of determination \( (R^2) \) between self-regulated learning strategies (X) in influencing academic resilience (Y) is 23.4%, while the remaining 76.6% is influenced by other factors not involved in this study. The effect of variable X (self-regulated learning strategy) on changes in variable Y (academic resilience) is positive, where an increase or change in the self-regulated learning strategy will be followed by an increase or change in academic resilience.
REFERENCES


