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**THE EFFECT OF ACADEMIC SELF-EFFICACY ON ACADEMIC BURNOUT
ON ENGINEERING STUDENTS WHO WORK**

Author

Ro'ichatu Luthfia¹, Nadhirotul Laily², Ima Fitri Sholichah³

Psychology Faculty, Universitas Muhammadiyah Gresik

roichatuluthfia@yahoo.com¹, nadhirotul.laily@umg.ac.id², ima_fitri@umg.ac.id³

ABSTRACT

Students who work are required to be able to carry out their duties and responsibilities well, starting from time management between the time spent in college and work, discipline, both in lectures and in work, and paying attention to physical health conditions because students have to divide roles between become a student and employee. Going to college while working is not easy. So that when students are not able to carry out these dual roles, it will lead to academic burnout. This study aims to prove empirically the Effect of Academic Self-Efficacy on Academic Burnout. This study uses quantitative methods with a population of 131 students. In this case, the researcher used a non-probability sampling technique with incidental sampling technique, which resulted in a total of 69 students working. The data collection method is in the form of a questionnaire collected online using google form. The scale used is the Likert scale with 4 (four) alternative answers. Test the validity of the scale using content validity. The scale reliability test uses the Cronbach alpha technique. The data analysis technique uses simple linear regression. The results of the study indicate that there is a significant negative effect between the academic self-efficacy variable and academic burnout, which means that the higher the academic self-efficacy, the lower the academic burnout. This research is expected to enrich the reader's knowledge about the topic of Burnout, especially the Effect of Academic Self-Efficacy on Academic Burnout on Students of the Faculty of Engineering, University of X who are working. In addition, the results of the existing research are expected to be a reference for further research. This study uses incidental sampling technique so that it cannot be ascertained that the subjects are representative of all study programs. It is hoped that future researchers will use subjects from all study programs so that research results can be generalized.

Keywords: Academic Self-Efficacy, Academic Burnout, Student Work.

1. INTRODUCTION

Students who are studying in college are faced with various demands that will later help them to adapt to the real work environment. In carrying out their studies, students must adapt to the education system, learning methods, and social skills that are very different from the previous level of education [1]. The busyness of students is not only limited to studying on campus, but also working or entrepreneurship outside campus [2]. To meet various needs as students, sometimes many of them look for extra money by working part-time in order to be able to divide their time with college. The phenomenon of the dual role of students, namely learning while working has been found [3]. Students who work are individuals who study at the university level and have active status who are also running a business or are trying to do a task that ends with the fruit of the work that the person concerned can enjoy [4]. the learning activities of students who do not work are higher than those of students who work, besides that the academic achievements of students who work tend to be lower than those of students who do not work [5]. two views on studying while working. At first glance, studying while working will be a bad thing if it provides distance between students and other important activities, such as lecture activities and time with family. The second view is that studying while working is a good thing if carried out in small doses, because too much work will be very risky for the individual's role as a student [6]. As for the problems that can have a negative impact if students are too busy working, where studying while working can be one of the inhibiting factors for graduating from college [7]. Students who study while working are vulnerable to a decrease in academic achievement, causing them to drop out or drop out [8]. On the other hand, the problem that working students need to be aware of is that work can make students neglect their main task, namely studying [9].

The drop out rate from 2001 to 2007 at the Open University reached 85.08%, the majority of which was influenced by student learning endurance [10]. On average, about 10 percent of students at ITB per batch or two percent per year drop out, mostly due to academic problems. To overcome this, KM-ITB held counseling for those who were threatened with dropping out. Meanwhile, YARSI University's Faculty of Psychology has opened a psychology consultation clinic for students to consult on academic and personal problems that they have experienced during their studies and the average problems consulted are academic problems [10]. Academic burnout in working students does not form by itself, but there are several factors that influence academic burnout apart from personality factors, namely the workload factor [11]. If students are not able to handle problems in lectures and work efficiently, it will make students vulnerable to burnout. The impact of burnout is in the form of expulsion of students from college or what is known as drop out [10]. Students who experience burnout will take actions such as absenteeism, loss of motivation to do assignments, and drop out of college [12]. Burnout in the context of education or experienced by students or students is called academic burnout [13].

In this study, researchers chose the Faculty of Engineering. This is because of the number of students who have dropped out from all faculties at University X, the Faculty of Engineering has the most dropouts from the 2018 class as much as 32% and the 2019 class as much as 20% (Academic Administration Agency: 2021). The following is the data for students who have dropped out in all Study Programs at University X:

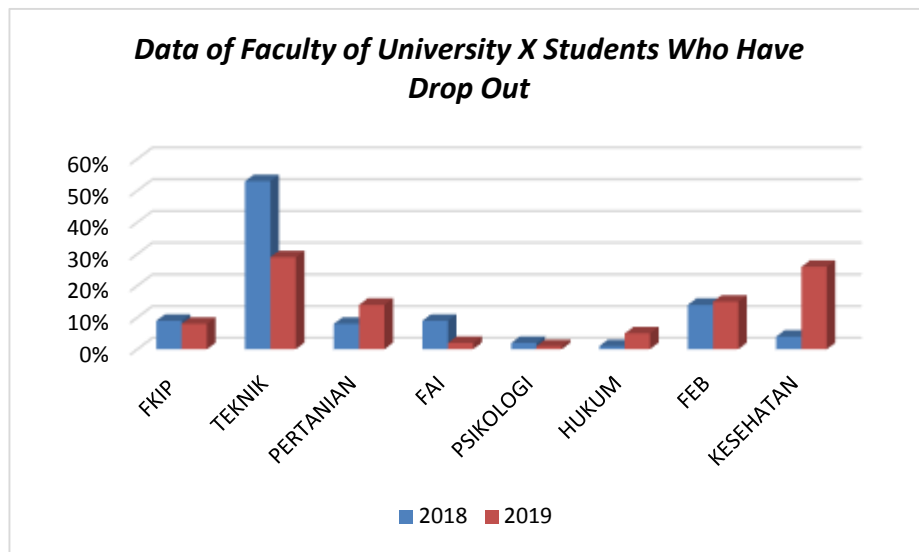


Figure 1. Diagram of Student Data Drop Out (BAA, 2021)

Each campus certainly has its own policies, such as SKS (Semester Credit System) for each semester, assignments in each course, the minimum value limit for each course, as well as the time limit for completing courses. University X itself has a deadline for dropping out of students, namely if students have a study period exceeding 14 semesters. In addition, students are also faced with demands to carry out PKL (Field Work Practice), KKN (Real Work Lectures) and thesis work. University X provides lecture programs that are held in the morning and evening with the majority of students studying while working. In 2017 there were 4242 active students from all majors enrolled in the morning and evening class program from the 2017-2020 class [14].

Academic burnout as a person's lack of interest in fulfilling tasks, low motivation, and fatigue due to educational requirements, resulting in unwanted feelings and feelings of inefficient [15]. There are three dimensions of academic burnout, namely emotional exhaustion, caused by excessive emotional and psychological demands and usually side by side with feelings of frustration and tension. Aversion to study or cynicism, refers to insensitivity or cynicism to the work at hand. Cynicism can also be defined as a student's apathy or indifference towards coursework, assignments, and responsibilities. And reduced desire for achievement, reduced desire for achievement occurs when a person displays a tendency to negative self-evaluation, a decreased feeling of job competence, and an increased feeling of inefficacy [13].

There are two main factors causing students to experience Academic Burnout, namely: 1) Situational factors, in this factor there are job characteristics (diversity of skills, task identity, task meaning, autonomy and feedback), job characteristics, and organizational characteristics; and 2) individual factors, these factors include demographic characteristics (gender, ethnic background, age, marital status, educational background), personality characteristics (low self-concept, excessive self-needs, low ability to control emotions, locus of external control, introvert, self-confidence and work attitude [16].

Based on the factors above, there are individual factors, namely from personality characteristics that can affect burnout. One of the individual factors that can cause burnout is self-confidence. The belief

in self-ability by Bandura is referred to as self-efficacy [17]. Burnout is a syndrome of physical, emotional and mental exhaustion supported by low self-esteem and self-efficacy [18]. In addition, demographic factors, namely gender that men have a higher risk of experiencing academic burnout compared to women and are reported to have higher scores on the dimensions of cynicism and inefficacy [19]. Another opinion also states that women are more prone to academic burnout than men [20]. Meanwhile, the statement put forward by other researchers revealed that gender could not be a strong predictor in causing burnout. Burnout is more common among young people than among those aged 30 or 40 years and among highly educated people compared with less educated people, these results suggest that college students are in the intended category and have a greater risk of experiencing burnout. [16].

Academic self-efficacy refers to students' belief in students' abilities in carrying out academic tasks such as preparing for exams and compiling papers [21]. Students with good academic self-efficacy can generate and are able to test various alternative actions when students do not achieve success at first. Students with high levels of academic self-efficacy when facing academic problems will not easily give up and try to find the right solution to solve student problems [22]. On the other hand, students with low academic self-efficacy tend to judge problems as more difficult than they actually are, are more prone to stress, depression and have poor problem-solving skills. This shows that academic self-efficacy plays a role in reducing academic burnout in students [23].

According to the results of interviews conducted by researchers on engineering faculty students who are at work, the results show that students feel physically and mentally tired from their busy routine. Like leaving for college after a long day of work and students also feel unable to control their emotions so they feel less concerned about others. and also Students said they wanted to leave their excessive activities so they wanted to choose one of their routines. Students also said that sometimes lectures add to their workload. Students of the Faculty of Engineering are faced with one type of task given in the form of a particular project. As in the Informatics Engineering study program, students are required to complete a project within the timeframe set by the course lecturer. The given project has more weight than the daily task given, students who cannot complete the given project will get a low score. Project work requires students to make more efforts, such as asking supervisors, doing assignments with friends and seeking answers from various sources. Likewise with the Civil Engineering Study Program where the department must study mathematics, biology, physics, environmental science to computers. Not only that, Civil Engineering students also have to learn how to design, build, and renovate infrastructure and buildings in accordance with human movement and needs without ignoring environmental conditions. Meanwhile, in the Electrical Engineering Study Program, students in this department must practice directly tinkering with electrical circuits and also understand programming languages (coding). In general, engineering is a science that studies the design and manufacture or construction of objects that can be used help and facilitate human life. Starting from the manufacture of transportation, technology, public facilities, to resources can be explored more deeply according to the chosen engineering major. Students of the Faculty of Engineering who work have a fairly heavy burden, in addition to the demands of their work and academics, they are also faced with very heavy task demands. If students are not able to handle problems in lectures and work efficiently, it will make students vulnerable to burnout [10].

Seeing the problems that exist in engineering faculty students who work. So researchers are interested in raising the title "The Effect Of Academic Self-Efficacy On Academic Burnout On Engineering Students Who Work".

2. METHODS

This research design uses a quantitative approach. Quantitative research methods are methods used to examine certain populations or samples, data collection using research instruments, statistical data analysis to test a specified hypothesis. The quantitative approach is carried out through a survey, namely filling in the scale by research subjects [34].

The variables in this study were academic burnout (dependent variable), academic self-efficacy (independent variable). The research subjects were 69 students of the engineering faculty who worked. The sampling technique in this study is Non-Probability sampling, namely incidental sampling, which means that the determination of the sample is based on chance, namely who the researcher meets by chance and feels that it fits the research criteria, so it can be used as a sample [35]. The measuring instrument used is the academic burnout scale based on the theory according to Schaufeli, Martinez, Pinto, Salanova, Bakker (2002) and the academic self-efficacy scale based on the theory of Zajacova, Lynch, & Thomas (2005). Before the research was carried out, the researcher tested the instrument from the academic self-efficacy scale and the academic burnout scale. The instrument test was given to 32 respondents from engineering faculty students who worked. The analysis in this study uses simple linear regression analysis with the help of the SPSS 21 program. The data collection method is in the form of a questionnaire collected online using google form. The scale used is the Likert scale with 4 (four) alternative answers. Test the validity of the scale using content validity. The scale reliability test uses the Cronbach alpha technique. The data analysis technique used simple linear regression.

3. RESULT AND DISCUSSION

a. Research Data Reliability

The academic burnout scale shows the Crobanbach's Alpha coefficient of 0.926. While the Academic Self-Efficacy Scale shows the Crobanbach's Alpha coefficient of 0.893. Based on the results of the reliability coefficient, the reliability of the Burnout Academic Scale data and the Academic Self-Efficacy Scale data can be said to be good [36].

b. Description of Research Data

This research was conducted on 69 working engineering students. Research data collection takes place in June 2021.

c. Hypothesis testing

The results of data analysis using simple linear regression analysis. Researchers tested the regression between variables with the help of the IBM Statistical Packages For Social Science (SPSS) 20 For Windows application.

Table 1. ANOVA Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
1	3909,424	1	3909,424	86,342	,000 ^b
	3033,649	67	45,278		
	6943,072	68			

Sumber: SPSS 20 *for windows*

Based on the results of the ANOVA analysis in table 1. The results of the F test analysis obtained the calculated F value of 86,342 with a probability of $0.000 < 0.05$, because the probability is less than 0.05, the regression model can be used in predicting the academic self-efficacy variable that affects academics burnout [37].

Table 2. Regression Test Results

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	,750 ^a	,563	,557	6,729

Sumber: SPSS 20 for windows

Based on table 2. Explains the magnitude of the correlation or relationship value on the R value of 0.750. The results of the regression test obtained an Rsquare value of 0.563 or in other words 56.3% of academic self-efficacy affects academic burnout.

Table 3. Regression Coefficient Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	112,024	6,096		18,377	,000
	EFIKASI	-,922	,099	-,750	-9,292	,000

a. Dependent Variable: BURNOUT

In table 3 it can be seen that the coefficient value is 112,024 and the academic self-efficacy value is -0, 922. Thus, these results show the regression line equation between academic self-efficacy and academic burnout which can be formulated as follows [37] .

Based on the results of a simple linear regression analysis that has been carried out by the researcher, it can be seen that there is an influence of academic self-efficacy on academic burnout for students of the Faculty of Engineering X who work. There is an influence of academic self-efficacy on academic burnout, as evidenced by the results of the regression coefficient test, there is a change in the regression coefficient of the influence of the variable X (academic self-efficacy) on Y (academic burnout). This study shows that the regression coefficient Rsquare or coefficient of determination is 0.563 with a significance value of 0.000. This means that academic self-efficacy can predict or measure the level of academic burnout of 56.3%. The coefficient of academic self-efficacy and academic burnout is -0.922. The results showed a negative effect. That is, if the academic self-efficacy of students is low, the tendency to experience academic burnout is high and vice versa if academic self-efficacy is high, the tendency to experience academic burnout is low. In line with previous research that there is a significant negative relationship between academic self-efficacy variables and academic burnout, which means that the higher the academic self-efficacy, the lower the academic burnout for students [10]. Previous research has shown a significant negative relationship between academic self-efficacy variables and academic burnout [11]. While the results of the categorization of academic self-efficacy are high

categorization of 7.2%, medium category of 78.2%, and low category of 14.4%. In the categorization of the academic burnout variable, the high category is 21.2%, the medium category is 71.0%, and the low category is 8.6%. The results of this categorization show that most of the working students have moderate academic self-efficacy and moderate academic burnout.

Regarding the dimensions contained in academic burnout, namely emotional exhaustion, aversion to study or cynicism, and lack of desire to excel [26]. Academic burnout in working students does not form by itself, but there are several factors that influence academic burnout. One of the individual factors that can cause burnout is self-confidence. The belief in self-ability by Bandura is referred to as self-efficacy [17]. Burnout is a syndrome of physical, emotional and mental exhaustion supported by low self-esteem and self-efficacy [18]. In addition, demographic factors, namely gender that men have a higher risk of experiencing academic burnout compared to women and are reported to have higher scores on the dimensions of cynicism and inefficacy [19]. However, different results were expressed by previous researchers who stated that women were more prone to academic burnout compared to men [20]. Meanwhile, the statement put forward by previous researchers revealed that gender could not be a strong predictor in causing burnout. Burnout is more common among young people than among those aged 30 or 40 years and among highly educated people compared with less educated people, these results suggest that college students are in the intended category and have a greater risk of experiencing burnout. 16].

The concept of self-efficacy also applies in an academic context, so it can also be referred to as academic self-efficacy. Academic self-efficacy refers to students' belief in their ability to carry out academic tasks such as preparing for exams and compiling papers [21]. Students who do not have adequate academic self-efficacy become vulnerable to academic burnout and lack the ability to adapt [23]. Students with good academic self-efficacy can produce and are able to test various alternative actions when students do not achieve success at first. Students with high levels of academic self-efficacy when facing academic problems will not easily give up and try to find the right solution to solve student problems [22]. On the other hand, students with low academic self-efficacy tend to judge problems as more difficult than they actually are, are more prone to stress, depression and have poor problem-solving skills. This shows that academic self-efficacy plays a role in reducing academic burnout in students [23].

4. COCLUSIONS

Based on the discussion above, it can be concluded that there is a significant negative effect of academic self-efficacy on academic burnout, as indicated by the results of a simple linear regression test. The calculated T value is -9.292 with a significant value of 0.005 and a constant of 0.000 and the regression coefficient value is negative. So H_a is accepted and H_o is rejected. Namely, there is an influence of academic self-efficacy on academic burnout, the higher the academic self-efficacy, the lower the academic burnout and vice versa. The Rsquare coefficient value is 0.563, which means that there is an influence on academic self-efficacy to academic burnout by 56.3%. While the remaining 43.7% are influenced by other variables including demographic characteristics and personality characteristics consisting of self-concept, self-actualization, emotional intelligence, locus of control, introvert [16]. Norm of academic self-efficacy scale categorization tends to be moderate with a percentage of 78.2%. Meanwhile, the academic burnout scale also tends to be moderate with a percentage of 71.0%.

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