

Analysis of The Impact of Locus of Control and Academic Procrastination on Student Learning Achievement

Moh. Aziz Rohman^{1*}

Rudi Susanto²

^{1*,2}Politeknik Ilmu Pelayaran Makassar, Nautical Department, Makassar, Indonesia

aziz@pipmakassar.ac.id^{1*)}

2rudypoltekpelsulut@gmail.com²⁾

Abstract

Students must have high discipline, creativity, and work ethic when dealing with their tasks to become quality resources. However, some aspects that impact student performance include locus of control and academic procrastination. Therefore, this study aims to assess the extent of the impact of Locus of Control and Academic Procrastination on Student Learning Achievement. We used an analytic survey with a cross-sectional design. The study population was first-year students of the Nautical Study Program at Makassar Polytechnic of Shipping Science. The sampling technique used simple random sampling with a sample of 92 students. Data collection tools using questionnaires and tests. Data analysis techniques using multiple linear regression. The results showed that locus of control and academic procrastination significantly influence student achievement. In this case, locus of control has a positive relationship with student achievement, which means that the better the locus of control of students, the better student achievement. Academic procrastination has a negative relationship with student learning achievement; the higher the academic procrastination, the lower the student's learning achievement.

Keywords: Locus of Control, Academic Procrastination, Student Learning Achievement

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1. Introduction

Student life in higher education is inseparable from the Tri Darma of Higher Education: getting education, conducting research, and serving the community (Helaluddin, 2019). Maturity in their learning activities can be achieved if students mobilize the abilities and opportunities that exist in themselves (Rachman & Rosnawati, 2021). Students need to strive and develop skills and opportunities for themselves. Hasruddin et al., (2015) In this effort, guidance from lecturers is necessary so that he becomes an independent student in his learning activities and can complete his studies (Gasteiger et al., 2020). Students are one of the human resources expected to be the nation's successors. To become a quality resource, a student must have high discipline, creativity, and work ethic when dealing with his tasks (Razzouk & Shute, 2012). Therefore, students must study well in college to gain helpful knowledge. Students must be actively involved in learning to improve their academic performance.

Many factors affect student learning achievement. *First*, internal factors arise from within students, such as learning motivation ability, interest and attention, attitudes and learning habits, perseverance, and physical and psychological factors (Gasteiger et al., 2020). In contrast, external factors arise from outside students, such as the school environment, family environment, and community environment. Decreasing the level of learning achievement, not working optimally on every assignment given by lecturers, skipping class and needing to be able to utilize time properly are things that arise due to *locus of control*. *Locus of control* is a person's perception of the cause of success or failure in their work (Moon et al., 2013).

A person with an internal *locus of control* views everything he experiences, whether in the form of events, events, fate or destiny, as being due to his power (Sigurvinsdottir et al., 2020; Tseng et al., 2022; Uysal et al., 2022). He can control the situations and conditions that happen to him. In contrast, people who tend to External *locus of control*, he assumes that controlling external factors causes all events, events, destiny and fate (Reknes et al., 2019). He is unable to control the situations and conditions that occur around him.

Students in the context of being learners in higher education are expected from the start to be able to display productive behaviour, including completing various tasks related to the lectures they attend on time (Ovais, 2023; Reknes et al., 2019). Thus, any delay or delay in completing tasks will be a problem that must be addressed. Another problem is the existence of academic procrastination, which is a person's tendency to delay academic tasks or obligations

(Kesavayuth et al., 2020). Some forms of academic procrastination include learning tasks for exams, such as delaying study time when facing exams; reading tasks, such as delays in reading reference books related to academic tasks; administrative work, such as copying notes, filling out practicum attendance lists and so on and attending meetings such as delaying or being late when attending teaching and learning activities.

Academic procrastination, in the long run, if left unchecked, will negatively impact the image of universities, especially certain universities that are considered challenging to graduate their students on time (Hen & Goroshit, 2020; Madjid et al., 2021; Santyasa et al., 2020; Tao et al., 2021). Internally, students who experience academic procrastination in the long run tend to become liars, making excuses to avoid academic tasks that they do not like.

The results of a preliminary survey through observations of Makassar Polytechnic of Shipping Science students found that some students during their study hours did activities that were not too important, such as hanging out in the canteen, not attending lectures or playing *Facebook* to buy and sell *online* which could spend much time. From the results of interviews with students, it is known that the task load on students is felt to be very heavy even, according to him, beyond the limits of ability, thus making students do their tasks under pressure and feel lazy and feel less confident in doing these tasks. The formulation of problems in this study:

1. To what extent does locus of control influence student learning achievement?
2. To what extent does academic procrastination affect student learning achievement?
3. Is there an effect of locus of control and academic performance on student learning achievement?

The results of this study provide implications for educational institutions, which will be considered to anticipate the causes of academic procrastination and efforts to increase *locus of control* in students. In addition, the results of this study are expected to be information for students who conduct further research in the future.

2. Metode Penelitian

Type of Research

This study will examine 3 (three) variables, namely 2 (two) independent variables and 1 (one) dependent variable. The independent variables are *the locus of control* (X_1) and academic procrastination (X_2), while the dependent variable is learning achievement (Y). Given that the data was collected in numbers, the data analysis used was quantitative. Type This is an analytical survey research type analysis to determine the extent of the impact of the independent

variable (locus of control and academic procrastination) on the dependent variable (learning achievement). The design in this study is cross-sectional, which is a method of data collection carried out to obtain complete data simultaneously with different subjects in a relatively fast time).

Research Population and Sample

The population in this study were Level I students of the DIII Program at Makassar Polytechnic of Shipping Science, which amounted to 118 students. Sampling was carried out using *simple random sampling*, namely a random sampling method where all students were entitled to become sample members.

Instruments and Data Collection Techniques

Data was collected in the form of questionnaires and tests. The research instrument uses a closed questionnaire. A closed questionnaire is a questionnaire in which the respondent is only allowed to choose the answers that have been provided. The questionnaire is arranged based on the grid shown in the following table

Table 1. *Locus of control* questionnaire grid

Indicator	Item No.	Total
1. <i>Locus of control internal</i>	1,2,3,4,5,6	6
a. Motivation	7,8,9,10,11,12	6
b. Self-confidence	13,14,15,16,17,18	6
c. Employability		
2. <i>Locus of control external</i>	19,20,21,22,23,24	6
	25,26,27,28,29,30	6
a. Superior power		
b. Environment		
Total		30

Source: Primary Data June 2014

Table 2. Academic Procrastination Questionnaire Grid

Indicator	Item No	Total
Delay settlement Task	1,2,3,4,5,6,7,8	8
Delay/sluggishness in doing the task	9,10,11,12,13,14,15,16	8
Delay settlement Task	17,18,19,20,21,22,23	7
Performance time between plan and actual performance.	24,25,26,27,28,29,30	7
		30

Lattice of Test Questions KDK II Material Drug Administration.

Table 3. Lattice - Lattice of Test Questions KDK II Material Drug Administration.

Indicator	Item No.	Total
Definition and purpose of drug administration.	1, 5, 6, 7, 8, 2	6
Indications administration medicine.	3, 13, 14, 18	4
Principles of drug Administration.	4, 15, 16, 19, 9	5
Type and Dosage drug administration.	11, 12, 13, 17, 20	5

Data Analysis Technique

The data analysis techniques include prerequisite tests and hypothesis tests. The analysis requirement test is intended to test whether the collected data meets the requirements for analysis. Normality and linearity tests were used to normality to test the research data's analysis requirements. This test is carried out before data analysis is carried out for hypothesis testing. *First, the* normality test in this study used Kolmogorov Smirnov. If the Kolmogorov-Smirnov count is more significant than 0.05, then the data distribution is said to be close to normal or normal distribution. Conversely, if Kolmogorov-Smirnov is smaller than 0.05, the data distribution is said to be not close to normal distribution or abnormal. (Ghozali, 2009). *Second, the* Multicollinearity Test is intended to test whether the regression model correlates with the independent variables by paying attention to the *tolerance* value and VIF (*Variance Inflation Factor*). The regression model must have a *tolerance* value > 0.10 and a VIF value < 10 as a prerequisite. There is no multicollinearity; otherwise, if the *tolerance* value is 0.10 and VIF ≥ 10, there is multicollinearity (Ghozali, 2009).

Third, the linearity test is carried out by finding the regression line equation of the independent variable x against the dependent variable y. Based on the regression line that has been made, the meaning of the regression line coefficient and its linearity are then tested. If the *p-value* > 0.05, the relationship between the independent and dependent variables is linear. At the same time, if the *p-value* is > 0.05, the relationship between the independent and dependent variables is linear. <0.05 0.05, then the relationship between the independent and dependent variables is < linear (Ghozali, 2009).

Next, we conducted a Hypothesis Test with Multiple Linear Regression Analysis. This analysis determines the effect of the independent variables (*locus of control* and academic procrastination) on the dependent variable (learning achievement). The formula used is :

$$Y = a + b X_{11} + b X_{22} + e$$

Description:

Y = Learning achievement
 a = Constant
 X_1 = *locus of control*
 X_2 = Academic procrastination
 $b_{1,2}$ = Regression coefficient
 e = *Error*

The t-test is used to partially prove the significance of the influence of the independent variables (*locus of control* and academic procrastination) on the dependent variable (learning achievement). The test criteria are:

H_0 accepted if $p\text{-value} \geq 0.05$

H_0 rejected if $p\text{-value} < 0.05$

By looking at the $p\text{-value}$, it can be determined whether the null hypothesis (H_0) is rejected or accepted. If the $p\text{-value} \geq 0.05$, H_0 is accepted. H_a is rejected, meaning there is no significant effect of the independent variable on the dependent variable; otherwise, H_0 is rejected if the $p\text{-value} < 0.05$. H_a is accepted, meaning that the independent variable dependent variable has a dependent variable.

The F test is used to prove the significance of the influence of the independent variables (*locus of control* and academic procrastination) on the dependent variable (learning achievement) together. The test criteria are:

H_0 accepted if $p\text{-value} \geq 0.05$

H_0 rejected if $p\text{-value} < 0.05$

By looking at the $p\text{-value}$, it can be determined whether the null hypothesis (H_0) is rejected or accepted. If the $p\text{-value} \geq 0.05$, then H_0 is accepted, and H_a is rejected, meaning that there is no independent variable together with the dependent variable; otherwise, if the $p\text{-value} < 0.05$, then H_0 is rejected, and H_a is accepted, meaning that the independent variables significantly affect the dependent variable.

3. Results

Description Data Locus of Controls

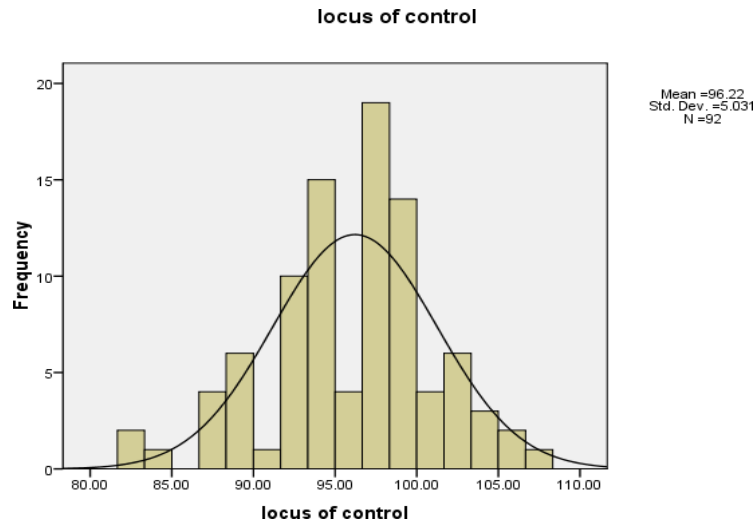
Based on research data on locus of control, the following descriptive statistical results can be obtained:

Table. Descriptive Statistics *Locus of Control*

Mean	Median	Mode	Stdev	Min	Max
96.22	97.00	98.00	5.03	83.00	107.00

Source: Data Primary June 2014

The chart histogram from the locus of controls can seen as follows:



Description Data Procrastination Academic

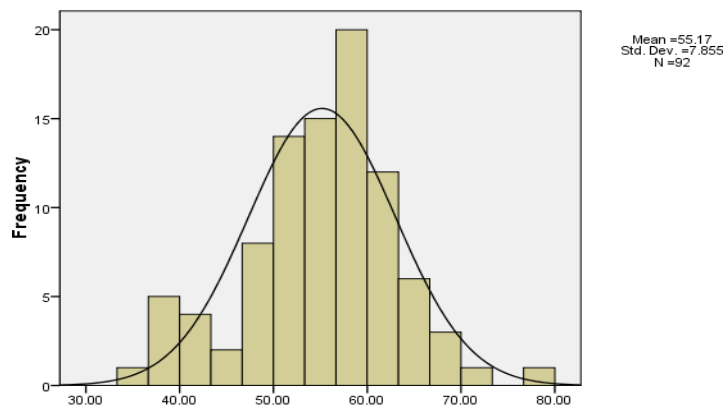
Based on research data on academic prescriptions, The following descriptive statistical results were obtained:

Table 2. Statistics Descriptive Procrastination Academic

Mean	Median	Mode	Stdev	Min	Max
55.17	56.00	54.00	7.86	36.00	78.00

Source: Data Primary June 2014

The histogram graph of academic procrastination can be seen as follows:



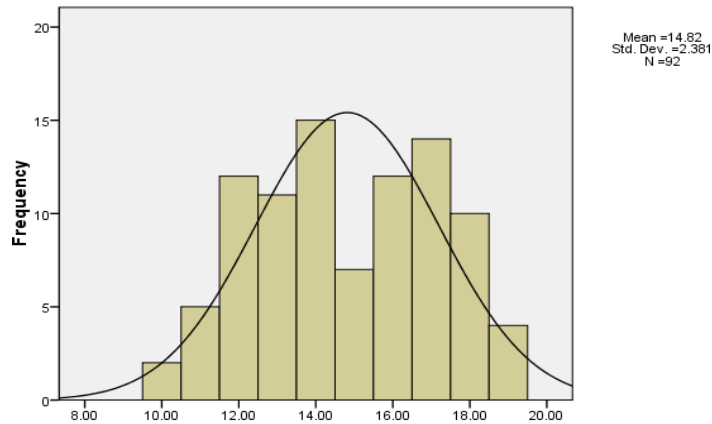
Description Data Performance Study

Based on data study about performance Study can obtain The results of descriptive statistics are as follows:

Table 3. Statistics Descriptive Performance Study

Mean	Median	Mode	Stdev	Min	Max
14.82	15.00	14.00	2.38	10.00	19.00

The chart histogram from the performance Study can seen as follows:



Test Research Prerequisites

The prerequisite tests, including normality, multicollinearity, and linearity tests, were conducted to ensure the validity of the research. These tests were carried out using the SPSS computer program.

Normality Test

Normality test results using Kolmogorov-Smirnov. Based on the results calculation can be known results like Those seen in the following table. The results of the normality test show that *the p-value is* $0.184 > 0.05$, which means the data is usually distributed.

Table 4. Test Normality with Kolmogorov Smirnov

One-Sample Kolmogorov-Smirnov Test			
			Unstandardized zed Residual
N			92
Normal Parameters ^a		Mean	.0000000
		Std. Deviation	1.65503543
Most Extreme Differences	Extreme	Absolute	.114
		Positive	.114
		Negative	- .048
Kolmogorov-Smirnov Z			1,093
Asymp. Sig. (2- tailed)			,184

Multicollinearity Test

Results test multicollinearity obtained results as follows:

Table 5. Multicollinearity Test		
Collinearity Statistics		
Variable	Tolerance	VIF
<i>Locus of control</i>	,992	1,008
Procrastination Academic	,992	1,008

Based on the results test in the known results test, multicollinearity is as follows: The locus of the control variable obtained a tolerance value of $0.992 < 0.10$ and a VIF value of $1.008 < 10$, meaning that multicollinearity did not occur. Variable procrastination academic obtained mark tolerance $0.992 < 0.10$ and a VIF value of $1.008 < 10$ means multicollinearity does not occur.

Test Linearity

The linearity test is used to see whether the model specifications conform to a linear line. The linear regression model uses an alpha level of 0.05, and two variables are said to have a linear relationship if the significance value of linearity deviation is more significant than 0.05. The results of the linearity test can be seen in the table below:

Table 6. Test Linearity					
Information		F count	The gAlpha aInformation		
Achievement	* Locus of control	1.07	0.39 3	0.05	Linear
achievement *		0.750	0.80 0	0.05	Linear
Academic Procrastination					

Based on this table, it can be concluded that each result is as follows: Variable *locus of controls* obtained mark F count 1,077 with *p value* $0.393 > 0.05$, so the data on learning achievement and *locus of control* are linear. The academic procrastination variable obtained a calculated F value of 0.750 with *p value* $0.800 > 0.05$ so that the data on learning achievement and academic procrastination are linear.

Hypothesis Testing

Hypothesis testing in this study using multiple linear regression was used to determine the relationship between *locus of control* and academic procrastination with student learning achievement. Calculations using the SPSS program. The results of the multiple linear regression equation are as follows:

Influence locus of controls to performance student learning

Locus of control regression coefficient (b_1) is 0.098. It has a positive sign, meaning that

each increase in *locus of control* by one unit can increase student learning achievement by 0.098, assuming the academic procrastination variable is considered constant.

The test results obtained the *calculated t value* 2.800 or *p-value* $0.006 < 0.05$, then H_0 is rejected, meaning there is a relationship between *locus of control* and the learning achievement students. Hence, the hypothesis states that there is a relationship between *locus of control* with good learning achievement and the truth.

Influence procrastination academic to performance Study student.

The research results show that the regression coefficient for academic procrastination (b_2) is -0.214 and has a negative sign, meaning that increasing academic procrastination by one unit will reduce student learning achievement by 0.214, assuming the academic procrastination variable is considered constant. The test results obtained the *calculated t value* -9.559 or *p-value* $0.000 < 0.05$, then H_0 is rejected, so the hypothesis that there is a relationship between academic procrastination and student learning achievement is proven to be true. The influence of *locus of control* and academic procrastination on student learning achievement. The F test and coefficient of determination were used to determine the relationship between *locus of control* and academic procrastination with student learning achievement. The results of the F test obtained a calculated F value of 47.595 with a p-value of $0.000 < 0.05$ so that the hypothesis, which states that there is a relationship between *locus of control* and academic procrastination with student learning achievement, can be proven to be true. The results of the coefficient of determination can be seen in Table 4.7 from mark R^2 , i.e., 0.517, which means that the *locus variable of control* And procrastination influence achievement. Study students as big as 51.7%. In contrast, as big as 48.3% is influenced by other variables outside the research model.

The research results show that the effective contribution of the independent variable to the dependent variable is as follows:

1. The practical contribution of the *locus of control variable* to student learning achievement is 3%, meaning the *locus of variable control* has a 3% effect on student learning achievement, and the effect is positive. The effective contribution of academic procrastination variables to student learning achievement is as significant as 48.7%, meaning that the Academic Procrastination variable has a 48.7% influence on student learning achievement, and academic procrastination has a negative influence.
2. Donations Relatively (SR) *locus of control variable* on student learning achieved by 5.8%. The relative contribution of academic procrastination variables to student learning achievement is 94.2%.

4. Discussion

Based on the results of the study that *locus of control* and academic procrastination have a significant relationship with student learning achievement, the results of this study imply that the institution, in this case, is that to improve student learning achievement, the college must pay attention to internal factors and external factors from the student. The college needs to increase students' *locus of control* through various trainings or seminars related to improving student achievement or the academic side of students. In contrast, to reduce the occurrence of academic procrastination in students, it is necessary to impose penalties or sanctions for students who submit assignments not precisely according to the specified time.

The effect of *locus of control* on student learning achievement.

The results showed that *locus of control* has a relationship with student learning achievement, obtained a t_{count} value of 2.800 or $p\text{-value}$ of $0.006 < 0.05$, so H_0 is rejected, meaning that there is a relationship between *locus of control* and student learning achievement, so the hypothesis which states that there is a relationship between *locus of control* and student learning achievement, is proven correct. The result of *locus of control* is positive, which means that the better the *locus of control* of students, the better the student's learning achievement. Each increase in *locus of control* by one unit can increase student learning achievement by 0.098. This figure is obtained from the regression coefficient value of the *locus of control* with student learning achievement.

This research is showing that there is a relationship between *locus of control* and student academic achievement, as well as in their research it is known that there is a positive and significant influence on accounting learning achievement (Kesavayuth et al., 2020). It is also known that the learning performance of students with an internal *locus of control* is high (Schlechter et al., 2023; Sharma et al., 2022). They are more proactive and effective during the learning process. The factors that influence learning achievement include factors contained within students (internal factors) and factors consisting of outside students (external factors). One of the factors from within students is *locus of control* (Arsini et al., 2023; Schlechter et al., 2023). There is conformity from the results of the research mentioned above and several theories that have been put forward. The theory and the results of this study show that *locus of control* influences learning achievement, especially among students, and the effect is positive.

The effect of academic procrastination on student learning achievement.

The results showed that academic procrastination is related to student learning achievement, which is negative with the value obtained $t_{\text{count}} - 9.559$ or $p\text{-value}$ $0.000 < 0.05$. H_0 is rejected, so the hypothesis that there is a relationship between academic procrastination and

student learning achievement is proven, which means that the higher the academic procrastination, the more student learning achievement decreases. The regression coefficient value of academic procrastination (b_2) is -0.214 and has a negative sign, meaning that increasing academic procrastination by one unit will reduce student learning achievement by 0.214. This research is corroborated by research, academic procrastination is negatively related to student academic achievement, and higher procrastination can affect student academic achievement (Ashraf et al., 2023; Hen & Goroshit, 2020; Türel & Dokumaci, 2022).

The effect of locus of control and academic procrastination on student learning achievement

The results showed that the calculated F value of 47.595 with a p -value of $0.000 < 0.05$ means that there is a relationship between *locus of control* and academic procrastination with student achievement. The coefficient of determination is 0.517, which means that the *locus of control* and academic procrastination variables influence student learning achievement by 51.7%; in comparison, other variables outside the research model influence 48.3%. Learning achievement is the level of success of students in learning subject matter at school or boarding school, expressed in the form of scores obtained from test results regarding a certain amount of subject matter (Türel & Dokumaci, 2022) as well; as student learning achievement is the result obtained from the teaching and learning process. With the learning process, learning achievements will be obtained that change behavioural skills or abilities that can increase over time and are not caused by the growth process. However, in learning situations, manifestations in the learning process results can be in the form of oral or written solutions and skills and problem-solving that can be directly measured or assessed using standardized tests (April et al., 2012). Declining levels of learning achievement, not working optimally in every task given by lecturers, skipping class and needing to utilize time properly arise due to *locus of control*. *Locus of control* is a person's perception of the cause of success or failure in their work and academic, Caswell as a nation (Voutsina, 2012). Academic procrastination tends to delay academic tasks or obligations (Türel & Dokumaci, 2022). It can be seen that there is a match between the theory and the results of this study that *locus of control* and academic procrastination.

Influences learning achievement, especially in this study

The results of the effective contribution of the *locus of control* variable to learning achievement is 3%, and the effect is positive, so if in students there is an increase in the *locus of control* variable, it will affect the increase in learning achievement by 3% of 100%. Meanwhile, the academic procrastination variable has an effective contribution to student learning achievement of 48.7%, and the effect is negative, so if in students there is an increase

in the academic procrastination variable, it will affect the increase in learning achievement by 48.7% of 100%. When summed up from the total acquisition of *locus of control* and academic procrastination results on student learning achievement, the total value is 51.7%, which means that the two independent variables affect the dependent variable by 51.7%, and the remaining 48.3% is influenced by other variables outside the context of the research conducted.

5. Conclusion

Based on the results of data analysis and discussion above, it can be concluded that *locus of control* has an influence on student learning achievement with the results of *locus of control* is positive (t_{count} value 2.800 or $p\text{-value}$ 0.006 < 0.05 then H_0 is rejected) which means that the better the *locus of control* of students, the better student learning achievement, in this study, namely students Academic procrastination has an influence on student learning achievement with the results of academic procrastination is negative (t_{count} value -9.559 or $p\text{-value}$ 0.000 < 0.05 then H_0 is rejected) this shows that the higher the academic procrastination, the lower the student's learning achievement in this study students. *Locus of control* and academic procrastination variable influence student learning achievement; in this study, students with a calculated F value of 47.595 with a p-value of 0.000 < 0.05 and a coefficient of determination of 0, 517, which means that the *locus of control* and academic procrastination variable influence student learning achievement by 51.7%. In comparison, other variables outside this research model influence 48.3%.

Researchers have made maximum efforts to obtain valid, objective and universal truths to legitimize the generalization of a research result. However, the generalizations taken in this study cannot be applied in the broader Environment because there are still limitations in researching that the population targeted by this researcher is a small-scale population, namely limited to students at the Makassar Polytechnic of Shipping Science so that the results of this study can only be generalized to the targeted population group and cannot reflect the same results elsewhere. Therefore, there is an opportunity to develop and continue more comprehensive research. Another limitation is that this study needs more details about the factors that can cause academic procrastination in students because it is only based on the questionnaire results. Therefore, further research is required to determine the factors associated with student academic procrastination activities.

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