

The Problems of Students in Finishing Study within the Covid-19 Pandemic

(Case Study of Students Department of Electronics Engineering Faculty of Engineering UNM)

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ABSTRACT

This research aims to determine the description of the level of students' academic completion during the pandemic compared to before the pandemic, identify the influence of internal and external factors that hinder the completion of studies for students in the Department of Electronic Engineering Education, Faculty of Engineering, UNM, and determine the combined influence of internal and external factors on students' academic completion. The subjects of this study were students from the 2015, 2016, and 2017 cohorts in the Department of Electronic Engineering Education who have not completed their studies, with a population of 83 and a sample of 42 students. The research design used was quantitative descriptive, employing a closed questionnaire as the research instrument. Based on the results of the Mann-Whitney test, the obtained Asymp. Sig. (2-tailed) value is $0.248 > 0.05$. This indicates that there is no significant influence on the level of students' academic completion, both before and during the COVID-19 pandemic. Furthermore, based on the t-test for internal factors, the obtained t-value ($3.560 > t\text{-table } (2.022)$), and for external factors, the obtained t-value ($6.365 > t\text{-table } (2.022)$). This implies that both internal and external factors have a significant influence on students' academic completion. The F-test resulted in an F-value ($45.707 > F\text{-table } (3.24)$). Therefore, it can be concluded that the difficulties faced by students, both in internal and external factors, collectively contribute to the completion of their studies.

Keywords: *Student Difficulties, Covid-19, Academic Completion.*

1. INTRODUCTION

The existence of the COVID-19 virus has caused a global uproar, affecting countries worldwide. The pandemic has restricted activities that were previously conducted outdoors, with some regions even implementing lockdown measures. This virus has had an impact on various sectors, including the education sector.

Many countries, including Indonesia, have implemented policies to suspend all educational activities, leading the government and relevant institutions to introduce alternative education processes for students who cannot engage in face-to-face learning within educational institutions [1].

Subsequently, the Indonesian Ministry of Education and Culture issued Circular No. 4 of 2020, stating that all learning activities should be conducted online or through

distance learning. Home has long been a center for informal learning, especially for children. However, in the current situation, studying from home has become the "new normal".

In relation to such policies, several universities have started implementing distance learning or online lectures, including mid-semester exams, final exams, laboratory work, guidance for final projects, theses, and dissertations. During distance learning, students and lecturers are required to engage in learning activities using various platforms such as applications, websites, social networks, and Learning Management Systems [2].

The process of learning from home through online learning is implemented to provide a meaningful learning experience [3].

The survey results indicate that all lecturers have conducted online learning during the COVID-19 prevention period. The majority of lecturers organize classes and discussions using social media applications [4].

Meanwhile, at Universitas Negeri Makassar, based on the Rector's Decree (SK-Rektor UNM) Chapter IV Article 23 regarding academic regulations, undergraduate students are required to complete a minimum of 144 credit hours (SKS) as part of their study load. The completion of undergraduate studies involves several stages, including face-to-face lectures, industrial practice, Teaching Practice Program (PPL), Community Service Program (KKN), and thesis writing [5].

With the emergence of the government's policy to learn from home during the pandemic, the learning process has faced its own challenges for students. It is not only the students who face these challenges, but the lecturers also need to consider suitable and rapid innovations to adapt the transition from offline to online learning without compromising the quality of education.

After this transition, students began to encounter significant challenges and obstacles in completing their studies. Some students who were unable to adapt promptly experienced delays in graduation, including postponed final exams. As a result, many graduates will face significant challenge

s due to the global hardships caused by the COVID-19 crisis [6].

[7], It is not uncommon for students to face challenges when participating in online classes. Apart from experiencing slow internet connections, which hinder their understanding of the material provided by the instructors, students often encounter difficulties. In the field, it is evident that many students have a limited understanding of the subject matter, and even if they want to ask questions, the slow internet connection hampers smooth communication between students.

One of the challenges faced during the pandemic is the difficulty for students to find companies and industries that offer internship opportunities. Internships are a crucial part of students' academic requirements, and completing an internship enables them to proceed to the next courses and take the final exam/thesis. However, many students still face challenges in finding internship opportunities due to the ongoing impact of COVID-19. Consequently, many students have had to postpone their internships as the companies and industries they intended to join were closed, and some have yet to receive confirmation from their desired internship placements.

Students have faced significant challenges in completing and evaluating their studies after transitioning from face-to-face learning to online learning. These challenges include delays in graduation

and the postponement of final exams. As a result, graduates will face significant challenges due to the global recession caused by the COVID-19 crisis [7].

Based on the issues mentioned above, this research aims to describe the level of students' academic completion during the pandemic compared to before the pandemic. It also seeks to examine the internal and external factors that hinder students' academic completion in the Department of Electronic Engineering Education at FT-UNM. Additionally, the study aims to identify the internal and external factors that can influence the duration of students' studies in general.

2. METHODS

This research is conducted at the campus of Universitas Negeri Makassar, specifically in the Faculty of Engineering, Department of Electronic Engineering Education, located at Jalan Daeng Tata Raya Parang Tambung, Kecamatan Tamalate, Kota Makassar. The study aims to explore the difficulties faced by students in completing their studies. It adopts a descriptive quantitative research design, with the research population consisting of students from the Department of Electronic Engineering Education, FT-UNM, from the 2015, 2016, and 2017 cohorts who have not completed their studies. The sample size for this research is 42 students, comprising 8 students from the 2015 cohort, 9 students from the 2016 cohort, and 25 students from the 2017 cohort.

3. RESULTS

The researcher collected data by using a closed-ended questionnaire survey administered to the students. The research findings consist of several test results, as follows:

3.1 Mann-Whitney Test

Table 1 Mann-Whitney Test

Test Statistics ^a	
	Hasil
Mann-Whitney U	1.000
Wilcoxon W	4.000
Z	-1.155
Asymp. Sig. (2-tailed)	.248
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

a. Grouping Variable: Kelompok

b. Not corrected for ties.

3.2 Descriptive Analysis

Table 2 Descriptive Analysis Test Result

Statistics		X1	X2	Y
N	Valid	42	42	42
	Missing	0	0	0
Mean		75.88	73.98	47.17
Std. Error of Mean		1.328	1.260	1.323
Median		75.00	75.00	48.00
Mode		79	71 ^a	44 ^a
Std. Deviation		8.609	8.167	8.571
Variance		74.107	66.707	73.459
Skewness		.899	.445	.267
Std. Error of Skewness		.365	.365	.365
Kurtosis		1.961	.510	-.440
Std. Error of Kurtosis		.717	.717	.717
Range		44	38	33
Minimum		58	60	32
Maximum		102	98	65
Sum		3187	3107	1981
Percentiles	25	71.00	66.75	40.75
	50	75.00	75.00	48.00
	75	79.25	78.50	52.50

a. Multiple modes exist. The smallest value is shown

3.3 Results of Multiple Linear Regression Analysis

Table 3 Results of Multiple Linear Regression Analysis

Model	Coefficients ^a				t	Sig.
	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta			
1 (Constant)	-27.433	7.928			-3.460	.001
Faktor Internal	.346	.097	.348		3.560	.001
Faktor Eksternal	.653	.103	.622		6.365	.000

Table 4 F-test Result

		ANOVA ^a				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2111.148	2	1055.574	45.707	.000 ^b
	Residual	900.686	39	23.095		
	Total	3011.833	41			

Tabel 5 T-test Result

Model	Coefficients ^a				t	Sig.
	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta			
1 (Constant)	-27.433	7.928			-3.460	.001
Faktor Internal	.346	.097	.348		3.560	.001
Faktor Eksternal	.653	.103	.622		6.365	.000

4. CONCLUSION

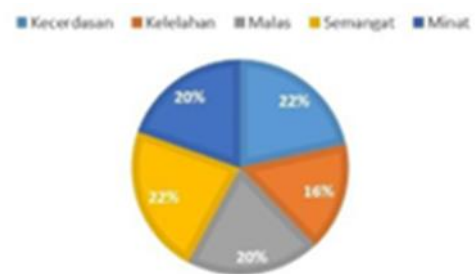
4.1 Description of the Level of Students' Academic Completion Before and During the Pandemic

Based on Table 1, the Asymp. Sig. (2-tailed) value obtained is 0.248, which is greater than 0.05. This indicates that there is no significant difference in the level of students' academic completion between the period before the pandemic and during the COVID-19 pandemic. In general, the level of students' academic completion was higher before the pandemic compared to during the pandemic. This may be attributed to the fact that the students who were enrolled before the pandemic had better academic preparedness compared to those during the pandemic.

4.2 Influence of Internal Factors on Students' Study Duration

Based on t-test results, it is found that the variables under the internal factor have a statistically significant influence on students' academic completion. This can be observed from the calculated t-value (thitung) of 3.560, which is greater than the t-table value with a significance level of 0.05/2, and degrees of freedom (df) of $n - k = 39$, where $t\text{-table} = 2.022$. Therefore, statistically, the null hypothesis (H_0) is rejected, indicating that the hypothesis stating that internal factors have a partial influence on students' academic completion in the Department of Electronic Engineering Education at FT-UNM is accepted.

Based on the explanation of each indicator within the internal factor variable, it can be concluded that the indicators with the greatest influence on students' academic completion are the indicators of motivation and interest, accounting for 22% of the influence. The indicators of enthusiasm and intelligence follow closely, contributing 20% to the influence on academic completion. Lastly, the indicator with the smallest impact is fatigue, accounting for 16% of the influence on students' academic completion.

**Figure 1** Description of the Influence of Internal Factors on Academic Completion

4.3 Influence of External Factors on Students' Study Duration

Based on the t-test results, it is found that the variables under the external factor have a statistically significant influence on students' academic completion. This can be observed from the calculated t-value (thing) of 6.365, which is greater than the t-table value with a significance level of 0.05/2, and degrees of freedom (df) of $n - k = 39$, where $t\text{-table} = 2.022$. Therefore, statistically, the null hypothesis (H_0) is rejected, indicating that the hypothesis stating that external factors have a partial influence on students' academic completion in the Department of Electronic Engineering Education at FT-UNM is accepted.

Based on the explanation of each indicator within the external factor variables, it can be observed that the family environment has the highest influence on students' academic completion, accounting for 21%. Following closely behind are the indicators of learning facilities and the community environment, both contributing 21% to the overall influence. The indicator of peer influence is also significant, with a 19% impact on academic completion. Lastly, the campus environment indicator has the least influence, accounting for 18% of the overall impact.

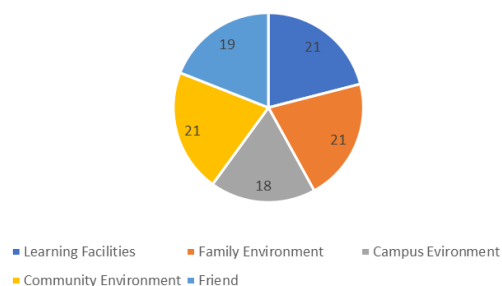


Figure 2 Description of the Influence of External Factors on Academic Completion

4.4 Influence of Difficulty Factors on Students' Academic Completion

In obtaining the calculated results, the researcher utilized multiple regression analysis. This analysis was conducted with the assistance of the SPSS software program, which enabled the derivation of the regression equation $Y = -27,433 + 0,346 + 0,653 + e$.

The next step is to perform an analysis of the F-test, which aims to examine the influence of variables and towards variable Y simultaneously. The obtained result for the F-table is 3.24. Upon observation, it is found that the value in the F-hitting is greater than the value obtained in the F-table ($45.707 > 3.24$). Therefore, the null hypothesis (H_0) can be rejected, and the alternative

hypothesis (H_a) is accepted. This means that both X_1 (internal factor) and X_2 (external factor) have a significant influence on the academic achievement of students (Y) in JPTA FT-UNM.

5 CONCLUSION AND SUGGESTION

5.1 Conclusion

In general, the student graduation rate was higher before the pandemic compared to during the pandemic. However, based on the Asymp. Sig. (2-tailed) value of 0.248, which exceeds 0.05, it can be concluded that the conditions regarding the student graduation rate do not show a significant difference, whether it is before or during the COVID-19 pandemic. In other words, the learning conducted during the pandemic is equally effective as the learning before the pandemic.

Based on the t-test results, it can be concluded that internal factors have a statistically significant influence on the duration of student study. This is supported by obtaining a t-hitting value greater than the t-table value. Among the internal factors, the indicators of enthusiasm and intelligence have the most significant impact on the duration of study, accounting for 22% of the variance. The indicators of motivation and interest follow closely with a 20% contribution, while the indicator with the least influence is fatigue, accounting for 16% of the variance.

Externally, statistically significant factors influence the duration of students' studies. This can be proven through the results of a t-test, where the obtained t-value is greater than the critical t-value. The most influential external factor on the duration of studies is the family environment, accounting for 21% of the influence. Next is the indicator of learning facilities and the indicator of the community environment, both accounting for 21% of the influence. Following that is the indicator of peer relationships, accounting for 19% of the influence. The indicator with the least influence is the campus environment, accounting for 18% of the influence.

Both internal and external factors have an influence on the duration of students' studies. This has been proven based on the result of F-test, where the obtained t-value $> t\text{-table}$.

5.2 Suggestion

Based on the previous research findings, the researcher has several recommendations to increase the number of students who can complete their studies on time at JPTA FT-UNM. These recommendations include: (1) students should be more serious in completing their studies by studying diligently, being

diligent in completing assignments, and prioritizing campus affairs over outside campus matters; (2) it is expected that academic advisors can engage in activities to prevent students from experiencing difficulties in completing their studies. One suggested activity is to conduct group guidance sessions where academic advisors can have scheduled direct contact with the students. This is done to identify the obstacles faced by students, which may hinder their progress in completing their studies; (3) providing understanding and care to the students under their guidance, so that they feel a sense of belonging and support from someone who provides guidance.

AUTHORS' CONTRIBUTIONS

In the case of the journal article entitled "The Future of E-Learning: Leveraging VR, AR, and AI for More Effective and Engaging Learning Experiences," the author contributions could be as follows:

Hansi Effendi: Conceived the idea for the study, conducted the literature review, and wrote the introduction, methods, and conclusion sections.

Yeka Hendriyani: Conducted the literature review, analysed the data, and wrote the results and discussion sections.

Jola Diva Humaira: Contributed to the conceptualization of the study, provided feedback on the manuscript, and edited the final version of the article.

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