

Factors Influencing Academic Among Sriwijaya State Polytechnic Students

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Abstract.

Academic dishonesty persists among students. The goal of this study was to determine the impact of information technology and academic integrity on student academic dishonesty. The subjects of this study were Sriwijaya State Polytechnic students. This study collects data through a questionnaire survey. The sample size was 104 people. Convenience sampling was used as a sampling technique. SPSS 22 is used to analyze the data. According to the study's findings, the use of information technology and academic integrity both affect academic dishonesty in some way. Academic dishonesty is influenced by 71.5 percent of the variables of information technology use and academic integrity, while 28.5 percent is influenced by other factors not examined in this study.

Keywords: *Academic dishonesty, academic integrity, utilization of IT*

I. INTRODUCTION

One of the goals of education is to help people reach their full potential and to be morally good. Unfortunately, unethical behavior among academics continues to be prevalent. The Academic Integrity Committee received 66 reports of incidents involving violations of the academic code of ethics, according to the <https://myusf.usfca.edu/academic-integrity/annual-report> page. This figure is higher than the number of reports received in 2018-2019.

Academic dishonesty is a persistent problem in higher education institutions worldwide (Ives et al., 2016), (Zhang et al., 2017). Academic dishonesty has become common among Kuwaiti College of Basic Education students, according to a study conducted by (Alsuaileh & Russ-eft, 2016). Academic dishonesty has emerged as a major issue in higher education. Cheating is a dishonest behavior practiced by individuals in order to obtain satisfactory results in accordance with their desires. This type of cheating is known as academic cheating in the academic world.

Students play an important role in higher education, which is one indicator of higher education's success in producing graduates of high quality and integrity. Students' ethical behavior during their education will carry over into their future careers, so it is critical to examine student behavior in relation to the issue of academic dishonesty (Lin & Wen, 2007).

Academic dishonesty refers to dishonest actions/actions in all academic activities, including teaching, learning, and research, carried out by all members of the academic community (Bernard E. Whitley & Spiegel, 2002). Academic dishonesty refers to any type of cheating that occurs in all formal academic activities. Academic dishonesty can take the following forms: 1) Plagiarism; the adoption/reproduction of another person's ideas, words, or statements without proper attribution. 2) Falsification of data, information, or quotations. 3)

Cheating is defined as the unauthorized use of information, materials, tools, or practices in the completion of academic activities. For instance, cheating and providing cheats. 4) Sabotage;

interfering with or destroying others' work so that others are unable to complete academic activities successfully. Cheating and facilitating academic dishonesty are the most common types of academic dishonesty committed by students (Firdaus & Solicha, 2018).

The advancement of information technology has a significant impact on the world of education, both positively and negatively. Academic dishonesty has the potential to be aided by the advancement of information technology. The rapid advancement of information technology makes it much easier to locate

and obtain information. Students abuse the ease of access provided by the advancement of information technology by engaging in negative activities such as cheating, distributing exam answers, and falsifying quotes or writings.

We frequently see students congregating to complete the lecturer's assignments, despite the fact that the assignments are individual. They copy or pass on answers from one student to the next. Many students also create assignments by copying writing from the internet without including the source of the writing and even directly copying the writing without any changes. This demonstrates how widespread dishonesty is among students today.

In addition to the advancement of information technology, students' academic dishonesty is undoubtedly influenced by their own academic integrity. According to (Turner et al., 2016), "academic integrity is the fundamental value of all educational programs, from the most basic preschool to the most advanced graduate or professional program." Academic integrity values include honesty, trustworthiness, fairness, respect, responsibility, and courage.

Academic integrity is a challenge for educational institutions in this digital age where information is so readily available. As a result, it is necessary to strengthen students' ability to think creatively. Students' creative and innovative abilities will be enhanced by developing an original way of thinking for them. Academic dishonesty is a common occurrence today, demonstrating students' lack of academic integrity. Students, as members of the academic community, are aware of the importance of developing their potential to become intellectuals, scientists, practitioners, or professionals who must uphold academic integrity.

Taking some of the findings from previous studies into consideration, it is interesting to know how academic dishonesty students from the Sriwijaya State Polytechnic (Polsri) are where the Sriwijaya State Polytechnic (Polsri) is one of the first six Polytechnics in Indonesia. The purpose of this study is to identify, test, and analyze the factors that influence academic dishonesty among Sriwijaya State Polytechnic (Polsri) students using information technology and academic integrity. The findings of this study can be used as input and consideration by the Sriwijaya State Polytechnic (Polsri) in developing academic dishonesty policies.

II. LITERATURE REVIEW

The Relationship Between IT Use (X1) and Academic Dishonesty

One of the fields associated with technological developments is information technology. The rapid advancement of information technology undoubtedly boosts creativity, effectiveness, and efficiency in all human activities. Technology plays a critical role in the field of education. In his article, (Dehn, 2003) stated that technology plays a role in increasing academic dishonesty. (Peytcheva-Forsyth et al., 2018) conducted a study at Sofia University Bulgaria on the impact of technology on cheating and plagiarism from the perspective of lecturers and students. The teSLA project questionnaire is used in this study as an online survey. According to the study's findings, technology has an impact on academic dishonesty. (Ningsi, 2018) discovered that information technology had an effect on academic dishonesty in the study. When a student uses technology positively, it increases the student's creativity and innovation progress; however, when a student uses information technology negatively in the form of abuse, all forms of student academic dishonesty increase. As a result, the use of information technology influences academic dishonesty. The hypothesis is then constructed as follows:

H1: The use of information technology has an impact on academic dishonesty.

Academic Dishonesty (X2) and Academic Integrity (X2)

Integrity is defined as a commitment to correct norms, morals, and ethics. Student academic integrity refers to a student's adherence to academic principles such as honesty, trust, fairness, responsibility, and honor. Students who are academically honest will never commit academic fraud. The higher a student's academic integrity, the lower the student's academic dishonesty (Ningsi, 2018)

(Hafizha, 2021) states in his article that academic dishonesty is caused by a lack of academic integrity. Academic cheating behavior was also influenced by students' integrity, according to research conducted by (Hadijah & Jamaluddin, 2020). As a result, academic integrity influences academic dishonesty. Then the following hypothesis can be developed:

H2: Academic integrity influences academic dishonesty in part.

Relationship between IT Use (X1) and Academic Integrity (X2) in the Face of Academic Dishonesty (Y)

Today's rapid development of information technology has resulted in a plethora of resources for students to obtain and exchange information. However, if all of these resources are abused, it will result in a variety of academic dishonesty. Students' high academic integrity will reduce the level of academic dishonesty. Academic dishonesty will increase as the use of incorrect information technology increases and students' academic integrity decreases. On the other hand, because students' academic integrity is high and the use of incorrect information technology is decreasing, academic dishonesty will be reduced (Ningsi, 2018). Thus, the use of information technology in conjunction with academic integrity has an effect on academic dishonesty. Then the following hypothesis can be developed:

H3: the use of IT in conjunction with academic integrity has an effect on academic dishonesty.

III. METHODS

Model for Research

The following is a description of this research model:

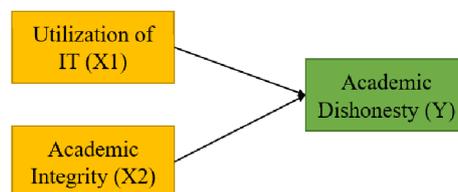


Fig 1. Research Model

Sample and Population

According to (Handayani, 2020), the population is the sum of all elements to be studied that share the same characteristics; this can include individuals from a group, an event, or something to be studied. The sample is a subset of the population. The participants in this study were Sriwijaya State Polytechnic students. The data for this study is gathered through a questionnaire survey. This study included 104 respondents who were chosen at random using the convenience sampling technique. Convenience sampling is a type of non-probability sampling in which people are chosen because they are a convenient source of data for the researcher.

Data Quality Test

In this study, the data quality test included a validity test and a reliability test.

Classic assumption test

In this study, the classical assumption tests included the normality test, multicollinearity test, and heteroscedasticity test.

Analysis of Multiple Linear Regression

A linear relationship exists between two or more independent variables and the dependent variable in multiple linear regression analysis. The goal of this analysis is to forecast the value and direction of the relationship between the independent and dependent variables. The regression coefficients were jointly tested (F test) in the multiple linear regression analysis, and the regression coefficients were partially tested (t test). The F test is used to determine whether the independent variables have a significant effect on the dependent variable when they are combined. The t test is used to see if the dependent variable has a partially significant effect on the dependent variable (Priyatno, 2017).

IV. DISCUSSION

Test Results for Validity and Reliability

The validity test is used to determine whether the items in the questionnaire are accurate in measuring what you want to measure. The validity test results are valid items. The validity of this study was

determined by examining the value of Corrected Item-Total Correlation. In this test, the value of r-count is compared to the value of r-table to make a decision. If $r\text{-count} > r\text{-table}$, the questionnaire items are said to be valid. In contrast, if the value of $r\text{-count} < r\text{-table}$, the questionnaire items are said to be invalid (Priyatno, 2017).

Table 1. Validity Test Results

| Item X1 | Corrected Item_Total Correlation | Item X2 | Corrected Item_Total Correlation | Item Y | Corrected Item_Total Correlation |
|---------|----------------------------------|---------|----------------------------------|--------|----------------------------------|
| X1.3 | 0.701 | X2.1 | 0.481 | Y1.1 | 0.957 |
| X1.4 | 0.720 | X2.2 | 0.343 | Y1.2 | 0.954 |
| X1.5 | 0.804 | X2.3 | 0.552 | Y1.3 | 0.956 |
| X1.7 | 0.726 | X2.4 | 0.581 | Y1.4 | 0.955 |
| | | X2.5 | 0.620 | Y1.5 | 0.954 |
| | | X2.6 | 0.658 | Y1.6 | 0.957 |
| | | X2.7 | 0.546 | Y1.7 | 0.955 |
| | | X2.8 | 0.393 | Y1.8 | 0.959 |
| | | X2.9 | 0.656 | Y1.9 | 0.955 |
| | | X2.10 | 0.564 | Y1.10 | 0.957 |
| | | X2.11 | 0.445 | Y1.11 | 0.955 |
| | | X2.12 | 0.440 | Y1.12 | 0.957 |
| | | X2.13 | 0.404 | Y1.13 | 0.954 |
| | | | | Y1.14 | 0.957 |
| | | | | Y1.15 | 0.963 |

Table 2. Reliability Test Results

| Variable | Cronbach's Alpha |
|----------|------------------|
| X1 | 0.878 |
| X2 | 0.840 |
| Y | 0.959 |

The reliability test is used to determine the consistency of the measuring instrument, or whether the measuring instrument used is reliable and remains consistent when repeated measurements. The Cronbach's Alpha method was used for reliability testing in this study (Priyatno, 2017). According to (Sekaran, 2006), reliability less than 0.6 is poor, 0.7 is acceptable, and reliability greater than 0.8 is excellent. According to table 2, Cronbach's alpha value is greater than 0.8, indicating that items X1, X2, and Y are reliable.

Results of the Normality Test

The normality test determines whether or not the data population is normally distributed. The normality test in this study was performed by inspecting the normal P-P plot diagram (Priyatno, 2017).

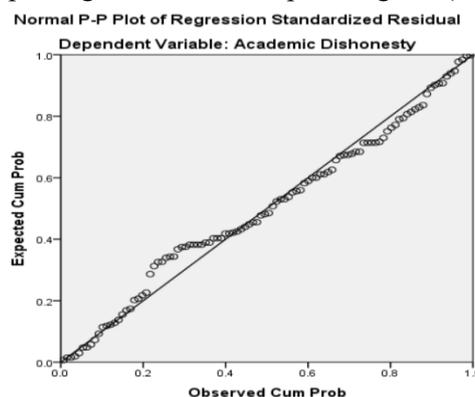
**Fig 2.** Normality Test Results

Figure 2 shows that the data is distributed close to the normal line. As a result, there is no issue with normality.

Results of the Multicollinearity Test

The multicollinearity test is used to determine whether or not the independent variables in the regression model have a linear relationship. The multicollinearity test was performed in this study by examining the value of the Variant Inflation Factor (VIF) in the regression model. If the VIF is greater than 10, the independent variable has a problem with multicollinearity with other independent variables (Priyatno, 2017).

Table 3. Multicollinearity Test Results

| Variable | Cronbach's Alpha |
|---------------------|------------------|
| Pemanfaatan IT | 1.833 |
| Integritas akademik | 1.833 |

If the VIF value in table 3 is less than 10, there is no problem with multicollinearity.

Results of the Heteroscedasticity Test

To determine whether the data spread randomly, the heteroscedasticity test was used. The scatter plot diagram revealed the heteroscedasticity test in this study (Priyatno, 2017).

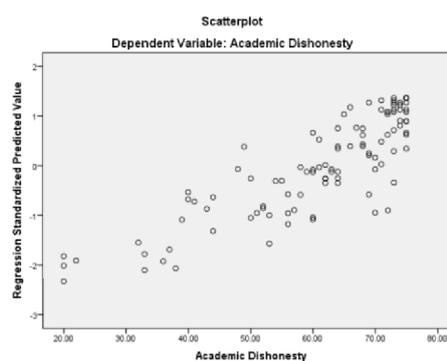


Fig 3. Normality Test Results

Figure 3 shows that the data does not form a specific pattern or spreads randomly, indicating that there is no heteroscedasticity problem.

Results of Multiple Linear Regression Analysis

Table 4. Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|--------------------|----------|-------------------|----------------------------|
| 1 | 0.849 ^a | 0.721 | 0.715 | 7.59665 |

The value of $R = 0.849$ in table 4 indicates that the correlation between the variables of academic integrity and the use of IT on academic dishonesty is 0.849, indicating a close relationship because the value is close to one. R is adjusted for the squared value of 0.715, which means that the percentage contribution of academic integrity and IT utilization on academic dishonesty is 71.5 percent, with the remainder influenced by other variables not included in this model.

Table 5. Anova

| | Sum of Square | df | Mean Square | F | Sig. |
|------------|---------------|-----|-------------|---------|-------------------|
| Regression | 15046.724 | 2 | 7523.362 | 130.367 | .000 ^b |
| Residual | 5828.662 | 101 | 57.709 | | |
| Total | 20875.346 | 103 | | | |

Table 5 shows that academic integrity and IT utilization have a combined effect on academic dishonesty, with a value of $F = 130.367$ (F count $>$ F table, F table = 3.086) and a significance of 0.000 (less than 0.05). The third hypothesis has been accepted.

Table 6. Coefficient

| Variable | Unstandardized B | Coefficient Std. Error | Standardized Coefficient Beta | t | Sig. |
|---------------------|------------------|------------------------|-------------------------------|--------|-------|
| Constant | -4.120 | 8.195 | | -0.665 | .508 |
| Pemanfaatan IT | 2.217 | 0.248 | 0.637 | 8.950 | 0.000 |
| Integritas Akademik | 0.570 | 0.146 | 0.277 | 3.892 | 0.000 |

Table 6 shows that the t-count for the IT utilization variable is 8.950, which is greater than t table (t table=1.66), and the t-count for the academic integrity variable is 3.892, which is greater than t table (t table=1.66), with a significance of both variables 0.000 (less than 0.05.) It can be concluded that the use of IT and academic integrity variables affect academic dishonesty in part. The first and second hypotheses are accepted.

IV. CONCLUSION

71.5 percent of academic dishonesty is influenced by IT utilization and academic integrity variables, while 28.5 percent is influenced by other variables not examined in this study. Academic dishonesty is influenced by both IT use and academic integrity. This is due to the fact that the majority of Sriwijaya State Polytechnic students use information technology for positive purposes such as finding lecture materials and completing lecture assignments. Students at Sriwijaya State Polytechnic do not use information technology to commit academic fraud such as seeking answers during exams, giving and receiving answers during exams, and so on.

The positive use of information technology cannot be separated from the high academic integrity of Polsri students. They are not willing to do academic cheating such as cheating if a friend invites them to do so, and they always prepare themselves by studying if there is a sudden exam. Students can commit various academic frauds with increasingly sophisticated information technology, but with high student academic integrity, this does not occur. The higher the academic integrity of the student, the lower the academic dishonesty behavior.

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