Fraud triangle, misuse of information technology and student integrity toward the academic cheating of UM student during the pandemic Covid-19

Dodik Juliardi ^{(a)*} Triadi Agung Sudarto ^(b) Rahmatullah at Taufiqi ^(c)

^(a,b) Ph.D., School of Business, State University of Malang, Jl. Semarang, No: 5, Malang, 65145, Jawa Timur, Indonesia

^(c) School of Business, State University of Malang, Jl. Semarang, No: 5, Malang, 65145, Jawa Timur, Indonesia

ARTICLE INFO

Article history:

Received 15 August 2021

Received in rev. form 17 Sep. 2021

Accepted 19 Sept 2021

Keywords:

Fraud Triangle, Misuse of Information Technology, Student Integrity, Academic Cheating

JEL Classification:
O15

ABSTRACT

There are many forms of academic cheating that occur among students, especially the practice of cheating. There are many factors that encourage students' academic cheating practices, especially with the aim of getting a targeted high score. Therefore, the researcher tries to find out the factors that influence the actions of academic cheating among students by referring to the fraud triangle theory which is relevant to the theme of this research. The variables observed in this study were: pressure (X1), opportunity (X2), rationalization (X3), misuse of information technology (X4), and student integrity (X5) as independent variables (independent), while the dependent variable (dependent) used behavior academic cheating on students (Y). This study used an instrument in the form of an open questionnaire with a Likert scale. The population that took as many as 500 accounting students, UM, and samples collected as many as 30 samples that have been filtered according to the criteria (purposive sampling). Analysis of the data used is multiple linear regression analysis. The results show that simultaneously, the variables of pressure, opportunity, rationalization, misuse of information technology, and student integrity have an influence on student academic fraud. The partial test shows that only the misuse of information technology has an effect on academic cheating of accounting students, ME, while the other variables have no significant effect. This is because when students learn online during the Covid-19 pandemic, they are able to take advantage of technological sophistication in this globalization era, especially in the current industry 4.0 era to carry out academic cheating actions that are oriented towards targeted values (GPA).

© 2021 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

Introduction

A phenomenon that is quite interesting in universities today and is quite threatening to the world of academic education is that there are many fraudulent practices that occur, and are commonly referred to as academic cheating (Santoso & Adam, 2014). Academic cheating behavior has been studied extensively by several previous researchers because it presents an interesting topic due to the high level of academic deficiency in universities in many countries. Academic fraud is unethical behavior carried out intentionally by students/students including violations of the rules given in completing exams and assignments in a dishonest way, cheating, plagiarism, stealing and falsifying something related to academics (Nursalam, Bani & Munirah 2013). A study conducted by Ahmed (2018) provides empirical evidence that in the Middle East as many as 65% of students commit academic violations using electronic devices. In addition, the Cyber University in South Korea also proved that 80% of its students were found to have committed academic violations. The high cases of academic cheating in many places is the important factor of why this research need to be conducted by researcher.

Based on the Fraud Triangle theory (Cressey, 1953) which discusses various factors that cause fraud, including pressure, opportunity, and rationalization (Albrecht, 2012). The pressure factor is a situation in which a person is pressed and needs to commit fraud with

* Corresponding author. ORCID ID: 0000-0001-6021-9934

the demands to get the best value and the influence of the environment of those closest to him. The opportunity factor emphasizes that academic fraud can occur because there is an opportunity or situation by using a position to do so that this act will not be known. The rationalization factor is a condition in which the fraud perpetrator realizes that the fraudulent act committed is illegal or violates the law. However, the perpetrators already have confidence that the fraudulent act can be carried out because it is considered legal. Academic fraud is also influenced by the student's integrity. Integrity relates to the morality, obedience and honesty of students. The low student integrity will lead to cheating and dishonesty behavior in the future.

Previous studies linking stress and the occurrence of academic cheating experienced inconsistent results. Muhsin et al.(2018) found that the pressures experienced by students such as plagiarism, data falsification, and wrong collaboration encourage academic cheating. While the study of Sabli et al. (2018), Budiman (2018) and Hariri., et al (2018) experience the opposite. Several previous researchers such as Hariri., et al (2018), Muhsin et al. (2018), Munirah and Nurkhin (2018), Dewi (2016), Nursani (2014), Becker (2006) obtained the results that opportunity will lead to academic cheating, while the opposite for previous researchers, namely Zam-zam, et al. al. (2017), Zaini, et al. (2015). The same result also occurs in the variable Rationalization that there is an inconsistency of results. Several researchers have found that rationalization affects the occurrence of academic cheating. Hariri, et al (2018), Murdiansyah & Sudharma (2017), Dewi (2016), Nursani (2014), Fitriana and Baridwan, (2012). In contrast to the results of research from Zam-zam, et al. (2017), Zaini, et al. (2015) which resulted in the opposite conclusion. With the inconsistency of results in previous studies on the variables of pressure, opportunity and rationalization of the academic cheating variable, this is the reason why it is necessary to retest.

The development of digital technology in the current industrial era 4.0 is marked by the rapid use of technological advances in various fields. In the field of education, it has provided positive benefits including providing support for learning resources for students in a fast and appropriate way through the use of computer technology, smart phones and gadgets. In addition to providing positive benefits on the contrary, it also provides negative benefits or what is referred to as the misuse of technology and information. Research that examines the misuse of Technology and Information on academic cheating has been carried out by Purwono (2014) with the results that there is an effect of Abuse of Technology and Information on cheating behavior. The misuse of information technology need to be tested again with the aim of knowing how far the sense of responsibility was when doing exams and their assignments during online lectures during the covid-19 pandemic The student integrity variable was chosen as the independent variable because it is the foundation that determines whether a person will be able to act professionally and behave ethically. The student's integrity needs to be known considering that accounting students are the next generation as public accountants who are expected to play a role and act ethically or make correct, appropriate, and fair decisions.

This study develops research from Ningsih and Simbolon (2019). The reason for re-testing is because the misuse of information technology has no significant effect on academic cheating. The difference between this study and the research of Ningsih and Simbolon (2019) is that this study adds three new variables, namely pressure, opportunity and rationalization which will be tested at the same time with the variables Misuse of technology and information and student integrity. Because most of the previous research objects were students, therefore in this study students majoring in accounting, state university of Malang were used with the aim of knowing how far the student's sense of responsibility was when doing exams and their assignments during online lectures during the covid-19 pandemic.

This study has a general objective to confirm the validity of Donald Cressey's fraud triangle theory in 1953 and specifically to examine the effect of pressure, opportunity, opportunity, misuse of information technology and student integrity on Academic Cheating of Student. The Research methodology use in this study is explanatory research by using the multiple linier regression to test the hypothesis between the independent variable and dependent variable. Data was collected by using open questionnaire The sample of student was chosen by using purposive sampling with several criteria.

This paper organizes into five parts. After introduction, the literature review in the second section. The third section is devoted to Methodology. Then, the Forth section is results and discussion, and at the last is the conclusion in fifth section.

Literature Review

Theoretical and Conceptual Background

Fraud Triangle Theory

Cressey (1953) put forward the idea of a fraud triangle caused by pressure, opportunity, and rationalization. Pressure is a person's motivation to commit fraud that occurs because of demands, incentives, and the need to commit fraud. Opportunity is a situation that opens up opportunities for fraud to occur. The opportunity for fraud to occur is due to weak internal controls, lack of supervision, and abuse of authority. An individual's opportunity to commit fraud can be minimized by implementing control procedures and early detection of fraud. Rationalization (Justification / Rationalization) is an attitude or character used by fraud perpetrators to find justification for fraudulent acts. Aspects of justification carried out by perpetrators of fraud are based on the feeling that the actions taken are things that other people are used to, so that something that is wrong becomes right.

Misuse of Information Technology

Information technology is developing very quickly so as to encourage the development and dissemination of knowledge. Misuse of information technology is an individual act in abusing and diverting knowledge in the field of information and computer-based (Latip and Riyanto, 2010: 4). The misuse of ICT in the academic field includes the use of devices to search, send, and receive answers during exams. The use of computers to copy other people's answers and replace and acknowledge the work of others as a result of their work is a form of abuse of information and communication technology (Jamal, 2010).

The impact of the Misuse of information technology for students is a sense of laziness in learning and doing assignments (Wibisono, 2013). Due to the misuse of internet facilities to play social media, students tend to prefer interacting with their devices than interacting directly with the surrounding environment. Misuse of Information and Technology also causes a decrease in students' sense of responsibility in completing their work

Student Integrity

Integrity is an element of character that forms the basis for the emergence of professional assessments. Integrity emphasizes the suitability of an individual's actions with certain principles or values he chooses. According to Supriyadi (2016) there are six aspects of academic integrity, including honesty (honesty), trust (trust), fairness (fairness), respect (responsibility), and humility (humble). Integrity is behavior that is consistent with organizational values and policies as well as professional code of ethics. The existence of integrity in students shows that students are able to become individuals with honest and correct behavior in accordance with the existing code of ethics.

Academic Cheating

During their education, students will not be separated from having to carry out assignments and exams. This opens up opportunities for academic cheating that occurs among students. Academic cheating is a deviant behavior and violates the rules that is done dishonestly to avoid academic failure in order to get an advantage for himself. Academic cheating committed by students can be in the form of cheating behavior, either done alone or in collaboration with other colleagues. Academic cheating cannot occur spontaneously but is done consciously and intentionally. According to Wolfe and Hermanson (2004), this deviant behavior occurs due to several factors, including: (1) Positioning, namely the existence of a person's position that provides an opportunity to commit fraud, (2) Intelligence and Creativity, namely the ability and knowledge to deceive internal control in commit fraud, (3) Confidence, namely the ability to have a strong sense of self-confidence in committing fraud, so that he will manipulate his behavior with his confidence, (4) Coercion, namely fraud committed by forcing other people to remain silent because they know their fraudulent actions, (5) Deceit, namely the encouragement of someone to commit fraud to maintain the consistency of lies that have previously been done, such as maintaining value consistency, and so on, (6) Stress, and (7) Marks Arrogance, namely someone feels that the value he has should be higher from other people, therefore he must do the cheating.

Effect of Pressure on Academic Cheating

Based on the Fraud Triangle Theory that academic cheating comes from pressure from an individual to achieve what he wants. Pressure can arise from the family environment and the environment where students interact a lot. The demands of the place of study to get high grades cause students to tend to commit academic cheating. An individual who feels pressured will take actions that tend to ignore the rules so as to encourage the individual to commit fraud. This is in accordance with studies (Minarcik and Bridges, 2015; Costley, 2019). Likewise, the study by Fransiska and Utami (2019) showed that the fear of failure makes students have the courage to cheat. The survey results found that the factors behind cheating by students include demands from parents, the hope that good grades will make it easier to get a job, the requirements for getting scholarships, and concerns about the views of the community. Therefore, the proposed hypothesis is as follows:

H1: pressure has a significant effect on academic cheating in UM accounting students

Effect of Opportunity on Academic Cheating

According to the Fraud Triangle Theory, opportunity is a situation where a person has a combination of situations and conditions that allow fraud to occur and is not detected. so there is an opportunity to do something that may not be detected by others. Opportunities can arise because of a weak control system, ineffective management supervision, lack of examination by Albrecht (2012) in Zam zam et al., (2017), supervision that is not strict, and lack of strict sanctions (Budiman, 2018). The existence of these situations and conditions will provide opportunities for academic cheating. Therefore, the proposed hypothesis is as follows:

H2: opportunity has a significant effect on academic cheating in UM accounting students

Effect of Rationalization on Academic Cheating

Based on the Fraud Triangle Theory, rationalization is self-justifying behavior for what someone does, whether it's right or wrong. This rationalization is the reason why students are truly committed as a strong reason and fits the student's point of view. Academic fraud is behavior that violates ethics and norms because the perpetrator justifies bad behavior as a habit with reasons that can be accepted by reason (Jeniffer, 2019). Fraud perpetrators assume that the actions taken are right as long as they do not harm other

parties. Some of the reasons students commit fraudulent acts are due to a lack of understanding of the material, the absence of uniform assessment standards among lecturers, the belief that assignments and exams are not actually checked by the lecturer. The justification for cheating behavior by students is also based on the pattern of the questions being tested that are not the same as the material that has been studied. This supports students to give reasons that their actions are justified because they were done by many other students (Fransiska & Utami, 2019). Therefore, the proposed hypothesis is as follows:

H3: Rationalization has a significant effect on academic cheating in UM accounting students

The Effect of Misuse of Information Technology on Academic Cheating

It is an act of abusing computer-based knowledge which is developing very rapidly and violates the existing code of ethics. The technology used can be based on smart phones, androids and computers which have recently developed rapidly to help access information. However, the use of such technological assistance violates the applicable academic code of ethics. The misuse of ICT for playing, exchanging messages, and other activities causes students to lose track of time so they forget their obligation to learn. Conditions like this cause students to be unprepared for the exam so students will choose to cheat to get good grades. Misuse of information technology that occurs in the academic field, for example, is using cellphones to find answers during exams, using cellphones to send or receive exam answers and using a laptop or computer to copy-paste a friend's assignment. Other studies also agree that the misuse of information technology has an influence on academic cheating, such as Jannah., et al (2020), and Melasari (2019). Therefore, the proposed hypothesis is as follows:

H4: technology abuse has a significant effect on academic cheating in UM accounting students

Influence of Student Integrity on Academic Cheating

Integrity can be interpreted as the honesty or correctness of the actions taken by students in accordance with the existing code of ethics, so that the more honest a person is, the higher his professionalism will be in the sense that someone will act on his individual interests so that the more someone who has high professionalism will be trusted by the public and used as a benchmark. Likewise, the integrity possessed by students will determine the level of cheating committed by students so that the higher the level of professionalism of a student, the student will not act to commit academic fraud. This relationship is supported by research by Probovury (2015) which found that student integrity has a negative effect on cheating behavior. Therefore, the proposed hypothesis is as follows:

H5: Student Integrity has a significant effect on academic cheating in UM accounting students

Research and Methodology

This research can be classified as research that uses quantitative research methods with the type of research that is explanatory research. The relationship that will be tested in this study is to determine the effect of pressure, opportunity, rationalization, misuse of information technology and student integrity on the occurrence of academic cheating in accounting students at the Faculty of Economics, State University of Malang. There are about 30 students used as samples in this study. Data was collected using an open questionnaire which was distributed to students of the Accounting study program at the Faculty of Economics, State University of Malang which includes the 2017 class - 2020 class. The 2017 class was chosen as the population because of the consideration that the 2017 class in general have or are currently programming the thesis at the KRS (Study Plan Card).). While the 2018 to 2020 batches. The sampling technique in this study used purposive sampling with the following criteria

1. Class of 2017 students have programmed a thesis at KRS
2. Students of the 2018-2019 class who have taken or are currently taking auditing courses and ethics and business courses

From a population of 500 students, only 30 students met the criteria by using purposive sampling. This study tested the hypothesis by using multiple linear regression method. Multiple linear regression method was chosen on the grounds that the dependent and independent variables will be tested for influence, so that the appropriate method is multiple linear regression. The research Model and variables used are, among others:

Research Model

Figure 1: Research Model

Data Analysis Technique

The model of data analysis in this research is as follows:

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$$

Where:

β = Coefficient

X_1 = Pressure

X_2 = Chance

X_3 = Rationalization

X_4 = Misuse of Information Technology

X_5 = Student Integrity

Y = Academic Cheating

Pressure is a situation where a person is already in a situation of urgency due to demands, incentives, and the need to commit fraud due to compulsion due to demands to get the best grades and the influence of the environment of the closest people such as parents, friends or relatives. The size of this variable uses a measure that has been used in the research of Murdianyah & Sudharma (2017); Sabli et al., (2018). Opportunity is a situation when a person feels that there is a combination of situations and conditions that allow him to commit academic cheating that he thinks will not be detected. Measurement of this variable uses the indicators used by Sabli, et al., 2018, Munirah & Nurkhin, 2018, Budiman 2018, and Murdiansyah and sudharma, 2018. While rationalization is a situation where the fraud perpetrator realizes that the fraudulent act committed is illegal or violates the law. However, the perpetrators already have confidence that the fraudulent act can be carried out because it is considered legal. Measurement of this variable uses a measure that has been adopted by Becker et al., (2006); Misuse of Information Technology is the act of using smart phone, android and computer-based technology which has recently grown rapidly to help access information. However, the use of such technological assistance violates the applicable academic code of ethics. Measurement of this variable uses the indicators used by Probovury (2015), namely the level of knowledge or skills, technological progress and sophistication, and the duration of using information technology. Student integrity is the level of honesty or correctness of the actions taken by a student which becomes the emergence of professional recognition because the student's actions are in accordance with the applicable code of ethics. Measurement of this variable uses the indicators used by Probovury (2015), namely Loyalty to small things, being able to find the truth when others are loyal to gray areas, having responsibility, having a culture of trust, being honest and humble, fair, and adhere to ethical standards.

Validity and Reliability Test

Based on the data from the questionnaires that have been collected, the researchers found that the level of reliability and validity is less fit or the results of goodness of fit are not appropriate, so the data must be readjusted, precisely by eliminating some of the questionnaire data on variables X_1 and X_5 to achieve good numerical descriptions. After further adjustment, the validity and reliability tests have met the valid and reliable criteria with a reliability test value of 0.769 (> 0.6 by using Cronbach's Alpha method (Nunnaly, 1994), if the alpha is between 0.70 - 0.90 then it can be said to be high reliability. But if 0.50 – 0.70 then moderate reliability. If seen in table 4 above, it can be concluded that all variables X_1 , X_2 , X_3 , X_4 and X_5 are all of them have a high level of reliability.

Classic Assumption Test

Before being tested using the multiple linear regression method, it must first pass the classical assumption test consisting of normality, heteroscedasticity and multicollinearity tests. The normality test with a normal probability plot graph by comparing the cumulative

distribution of the Normal distribution shows that the data spreads around the diagonal line and follows the direction of the diagonal line, so the assumption of normality can be fulfilled (Ghozali, 2011). Meanwhile, the heteroscedasticity test using a test with a scatter plot also does not show symptoms of heteroscedasticity if the test results do not show symptoms of points spreading below and above or around number 0, not forming a wavy pattern that narrows, then widens and narrows again. below only (Ghozali, 2016,: 134).

To test for symptoms of multicollinearity, can used the VIF (variance of inflation factor) indicator. If the VIF value does not exceed 10, it can be concluded that there are no symptoms of multicollinearity (Gujarati, 2007:157). For the VIF number of each variable, it can be concluded that nothing exceeds the number 10.

There are 7 (seven) assumption test for this research results.

- i. Normality Test
- ii. Multicollinearity Test
- iii. Heteroscedasticity Test
- iv. Hypothesis Test
- v. Simultaneous Hypothesis Test (F)
- vi. Partial Hypothesis Test (Test-t)
- vii. Coefficient of Determination

Result and Discussion

Normality

Below is the result of normality test using Kolmogorov-Smirnov from the variables of culture, communication, leadership style and job satisfaction:

Table 1: Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Residual Unstandardized
N		55
Normal Parameters^{a,b}	Mean	8,91 – E16
	Std. Deviation	,0,910
Most Extreme Subsequently	Absolute	,097
	Positive	,097
	Negative	-,091
Kolmogorov-Smirnov Z		,717
Asymp. Sig. (2-tailed)		,794
a. Test distribution is normal.		
b. Calculated from data.		

Based on the data on the table above, the variable of pressure, opportunity, Rationalization, Misuse of Information Technology, and Student Integrity have the value of $Sig. = 0,794 > 0.05$ thus declared as normally distributed. Other data normality test in this research used histogram and graphics (*Normal P-P Plots*).

Figure 2: Histogram

Based on the image of the results of the above SPSS output, histogram diagram formed rounded normal curve and thus the residual is declared normal and normality assumption is met

Figure 3: Normal P-P Plots

Base on the histogram graph above gives a distribution pattern that deviates to the right which means that the data is normally distributed. Furthermore, the P-Plot image shows that the points follow and approach the diagonal line so that it can be concluded that the regression model meets the assumption of normality.

Multicollinearity Test

The results of data processing from multicollinearity test is presented in the following table:

Table 2: Multicollinearity Test

Correlations			Collinearity	Statistics
The Zero-order	t	Part 5	Tolerance	VIF
	,681			
X1B	-,089	,044	,285	3.506
X2	,602	,224	,268	3,734
X3	,014	,496	,366	2,734
X4	1,995		,454	2.204
X5B	-,493		,751	1.322

The above table shows that *no the tolerance value* under 10% and the value of *Variance Inflation Factor* (VIF) is no more than 10, which indicates that this regression model of these variables shows no multicollinearity problems.

Heteroscedasticity Test

How to predict heteroscedasticity in a model can be seen using Scatterplot pattern below:

Figure 4: Heteroscedasticity test.

From the above figure, it is seen that the points are spread at random and spread out above or under 0 on the Y axis. It is concluded that heteroscedasticity does not occur in a regression model leaving the regression model feasible to predict job satisfaction based on variable of cultural organization and employee satisfaction.

T-test (Partial)

The t-test used to test whether there is a significant impact between independent variables and dependent variables separately. The first hypothesis obtained the value of $t_{count} (-,089 < t_{table} (2,007584))$ and the significance value (SIG) of $0,930 > 0,05$, which lead to the conclusion that an pressure has no effect on academic cheating. The second hypothesis obtained the value of $t_{count} (0,602) < t_{table} (2,007584)$ and the significance value (SIG) of $0,553 > 0,05$, which lead to the conclusion that opportunity has no significant effect on academic cheating. The third hypothesis obtained the value of $t_{count} (0,014) < t_{table} (2,007584)$ and the significance value (SIG) of $0,989 > 0,05$, which lead to the conclusion that rationalization has no significant effect on academic cheating. The fourth hypothesis obtained the value of $t_{count} (1,995) < t_{table} (2,007584)$ and the significance value (SIG) of $0,048 < 0,05$, which lead to the conclusion that an Misuse of Technologies and Information has a significant effect on academic cheating. The fifth hypothesis obtained the value of $t_{count} (-,493 < t_{table} (2,007584))$ and the significance value (SIG) of $0,626 > 0,05$, which lead to conclusion that student integrity has no significant effect on academic cheating.

Table 3: T-test Coefficients

Model		T	Sig.
1	(Constant)	,681	,503
	X1	-,089	,930
	X2	,602	,553
	X3	,014	,989
	X4	1,995	,048
	X5	-,493	,626

Note: Dependent Variables: academic cheating

F Test (Simultaneous)

Below are the results of hypothesis tests simultaneously from the variables in this research:

Table 4: F Test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	331,217	5	66,243	2,930	,033 ^b
	Residual	542,650	24	22,610		
	Total	873,867	29			

a. Dependent variables: Y

b. Predictors: (Constant), X5B, X4, X1B, X3, X2

The total of F_{Table} in this research is as follows: F_{table} in accordance with F Table is 2,786229. The above table shows that the value of F_{count} is 2,930 with probability 0,000. Since its probability is smaller than 0.05 and $F_{count} (2,930) > F_{table} (2,786229)$ then H_0 is rejected or H_a is accepted which means that variables of pressure, opportunity, rationalization, Misuse of Information and Technologies, and student integrity style have a significant effect on on Academic Cheating.

Multiple Linear Regression Analysis

Below is the table of the results of the processed

Table 5: Multiple Linear Regression Test Results Coefficients

Model		Unstandardized Coefficients	Standardized Coefficients	
		B	Std. Error	Beta
1	(Constant)	5,468		
	X1B	0,044	0,492	-,027
	X2	,266	0,442	0,187
	X3	,006	0,404	0,004
	X4	,635	0,318	0,476
	X5B	-,089	0,180	-,092

Note: Dependent Variables: Academic Cheating

Data for multiple linear regression test of these variables: The regression equation formed from the data on the above table is as follows:

$$Y = 5,468 + 0,044X_1 + 0,266X_2 + 0,006X_3 + 0,635X_4 - 0,089X_5 + e$$

The above equation leads to the following results:

- i. Constanta (a) = 5,468 which means that although the independent variable (X₁) ; pressure and independent variable X₂, : opportunity and the independent variable X₃ : rationalization and independent variable X₄ : Misuse of Technology Information and independent variable X₅ : student Integrity are 0, then Academic Cheating(Y) remains to be 5,468
- ii. Coefficient X₁ (b₁) = 0.044 and positive value. This means that each pressure variable improvement by 1 leads to the increased Academic Cheating (Y) by 0.044
- iii. Coefficient X₂ (b₂) = 0,266 and positive value. This means that each opportunity variable improvement by 1 leads to the increased Academic Cheating (Y) by 0,266
- iv. Coefficient X₃ (b₃) = 0.006 and positive value. This means that each rationalization variable improvement by 1 leads to the increased Academic Cheating (Y) by 0.006
- v. Coefficient X₄ (b₄) = 0.635 and positive value. This means that each Misuse of Information Technology variable improvement by 1 leads to the increased Academic Cheating (Y) by 0.635
- vi. Coefficient X₅ (b₅) = -0,089X₅ and negative value. This means that each student Integrity variable improvement by 1 leads to the decreased Academic Cheating (Y) by -0,089

Based on the processed data above, it is revealed that the variable with the most dominant effect on Academic Cheating is Misuse of Information Technology as its coefficient regression value is bigger than other independent variables.

Coefficient of Determination

Coefficient of Determination is obtained with the help of SPSS Program:

Table 6: Coefficient of Determination Coefficients

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,.616 ^a	,.379	,250	4,75504

Note: Dependent Variables: X5B, X4, X1B, X3, X2

The value of coefficient of determination (R Square) in the table 6 revealed that academic cheating mutually influenced by an pressure, opportunity, rationalization, misuse of information technology and student integrity by 0,250 or 25% while the remaining 75% is influenced by other factors beyond the scope of this research.

Based on the data analysis previously mentioned, it is discovered that the variable of an pressure the value of $t_{count} (-,089) < t_{table} (2,007584)$ and the significance value (SIG). $0,194 > 0,05$ which lead to the conclusion that pressure has no effect but insignificant on job satisfaction. The second hypothesis obtained the value of $t_{count} ((0,602) < t_{table} (2,007584)$ and the significance value (SIG). $0,553 > 0,05$, which lead to the conclusion that opportunity has no significant effect on academic cheating. The third hypothesis obtained the value of $t_{count} (0,014) < t_{table} (2,007584)$ and the significance value (SIG) of $0,989 > 0,05$ which lead to the conclusion that rationalization style has no significant effect on academic cheating. The fourth hypothesis obtained the value of $t_{count} (1,995) < t_{table} (2,007584)$ and the significance value (SIG) of $0,048 < 0,05$, which lead to the conclusion that an Misuse of Technologies and Information has a significant effect on academic cheating. The fifth hypothesis obtained the value of $t_{count} (-,493 < t_{table} (2,007584)$ and the significance value (SIG) of $0,626 > 0,05$, which lead to conclusion that student integrity has no significant effect on academic cheating.

Meanwhile the value of F_{table} in table 4 is in line with F Table which is 2,786229. The above table shows that the value of F_{count} is 282,517 with probability of 0,000. Since its probability is smaller than 0.05 and $F_{count} (2,930) > F_{table} (2,786229)$ then H_0 is rejected or H_a is accepted which means that the variables of pressure, opportunity, rationalization, misuse information technology and student integrity have a significant effect on academic cheating. The multiple linear regression equation formed is $Y = 5,468 + 0,044X_1 + 0,266X_2 + 0,006X_3 + 0,635X_4 - 0,089X_5 + e$. From this equation, it can be seen that the variable of misuse information technology as its coefficient regression is bigger than other independent variables. The extent of the influence can be seen from the coefficient of determination value. The value of coefficient of determination (R Square) showed that academic cheating simultaneously influenced by pressure, opportunity, rationalization, misuse information technology and student integrity by 25% while the remaining 75% is influenced by other factors beyond the scope of this research. The results of the study showed that, pressure, opportunity, rationalization, misuse information technology and student integrity have significant effects on academic cheating of accounting student of State University of Malang and the variable misuse information technology is more dominant than other four independent variables. From this it could be imply that during the online learning the students are able to take advantage

of technological sophistication in this globalization era, especially in the current industry 4.0 era to carry out academic cheating actions that are oriented towards targeted values (GPA)

Conclusion

The results of statistical tests show that pressure, opportunity, rationalization, and student integrity do not affect significantly toward academic cheating. Meanwhile misuse of information technology affect on academic cheating. This finding has make a new contribution to the auditing fields especially for fraud part, that student are able to take advantage of technological sophistication in this globalization era, especially in the current industry 4.0 era to carry out academic cheating actions that are oriented towards targeted values (GPA). This has made the need of a new policy for student when doing their work by using gadget, smartphone and computers. The accounting department need to know the activity of the student when doing the exam or works by controlling by using camera or open video. Then the activity of the students can be controlled.

References

- Ansar, R. & Zamzam, I. M. (2017). Effect of Diamond Fraud and Level of Religiosity on Academic Fraud. *Scientific Journal of Civilization Accounting*, 3(2).
- Ahmed, K. (2018). Student Perceptions Of Academic Dishonesty In A Privat Middle Eastern University. *Higher Learning Research Communications*, 8(1), 16-29. <https://doi.org/10.18870/hlrc.v8i1.400>
- Albrecht, W. S. (2012). *Fraud Examination. South-Western*. Retrieved Oktober 11, 2016, from Cengage Learning.: <https://ebshost.com>
- Becker, D. C. (2006). Using The Business Fraud Triangle To Predict Academic Dishonesty Among Business Students. 10(1), 18. Retrieved from <https://www.questia.com/library/journal/1G1-166778518/using-the-business-fraud->
- Budiman, N. (2018). Student Academic Fraud Behavior: Fraud Diamond Dimensions and Gone Theory Akuntabilitas. 11(1). <https://doi.org/10.15408/akt.v11i1.8135>
- Carolina , Z., & Setiawan. (2015). Analysis of the Effect of Diamond Fraud and Gone Theory on Academic Fraud (Case Study of Accounting Students in Madura). *National Accounting Symposium XVIII*, (pp. 1-20).
- Cressey, D. R. (1953). *Other People's Money; A Study Of The Social Psychology Of Embezzlement*. Free Press.
- Dewi, P. (2016). Academic Fraud Behavior in Undergraduate, Masters, and Doctoral Students of Accounting Department FEB UB Based on the Fraud Diamond Concept. *Student Scientific Journal of the Faculty of Economics and Business Universitas Brawijaya*, 4(2).
- Fitriana, & Baridwan. (2012). Academic Fraud Behavior of Accounting Students: Fraud Triangle Dimensions. *Journal of Multiparadigm Accounting*, 3(2).
- Fransiska, Iga, S., & Utami, H. (2019). Perilaku Kecurangan Akademik Mahasiswa. *Perspektif Fraud Diamond Theory*.
- Ghozali, I. (2011). *Multivariate Analysis Application with IBM SPSS 23 Program(8th ed.)*. IBM SPSS 23(8th ed.). Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, I. (2016). *Multivariate Analysis Application with IBM SPSS 23(8th ed.)*. Semarang: Badan Penerbit Universitas Diponegoro.
- Gujarati, & Damodar. (2011). *Basic of Econometrica*. Jakarta: Erlangga Publisher.
- Hariri., d. (2018). Detecting Academic Fraud Behavior With Fraud Diamond Theory Perspective. *JU-Ke*, 2(1).
- Jannah. , N. M., & dkk. (2020). The Influence of Learning Motivation, Misuse of Information Technology and Student Integrity on Academic Fraud Behavior of Accounting Students as Accountants Candidates (Study on Accounting Students. *E-JRA*, 9(6).
- Latip, & Riyanto. (2010). *Education Information Technology*. Yogyakarta: Gava Media.
- Melasari, & Ranti. (2019). The Effect of Learning Motivation, Misuse of Information Technology and Student Integration on Academic Fraud Behavior of Accounting Students as Prospective Accountants (Study on Accounting Students at Indragiri Islamic University). *Jurnal Akuntansi dan Keuangan*, 8(1).
- Muhsin, K. M., & Nurkhin A. (2018). What are the Determinants of Academic Fraud Behavior? From Fraud Triangle to Fraud Pentagon Perspective. *KnE Social Sciences*, 3(10), 154. <https://doi.org/10.18502/kss.v3i10.3126>
- Munirah, A., & Nurkhin, A. (2018). The Effect of Diamond Fraud Factors and Gone Theory on Academic Fraud. . Retrieved from <https://journal.unnes.ac.id/sju/index.php/eeaj/article/view/22862>
- Murdiansyah, I. & Sudarma, M. (2017). The Effect of Diamond Fraud Dimensions on Academic Fraud Behavior (Empirical Study on Master of Accounting Students. *University Brawijaya Jurnal Akuntansi Aktual*, 4(2), 13. Retrieved from <http://journal.um.ac.id/index.php/jaa/article/view/9814/4648>
- Ningsih, H. T., & Simbolon, A. O. (2019). The Effect of Misuse of Information Technology and the Integrity of Accounting Students as Prospective Accountants. *Journal of Multiparadigm Accounting Research (JRAM)*, 6(2).
- Nunnally, J.C. & Bernstein, I. H. (1994). *Psychometric theory (3rd ed)*. New York: McGraw-Hill.
- Nursalam, Bani, S. & Munirah. (2013). Bentuk Kecurangan Akademik (Academic Cheating) Mahasiswa PGMI Fakultas . *Jurnal Riset Akuntansi Multiparadigma (JRAM)*, 6(2).
- Nursani, R. & Irianto, G. (2015). Student Academic Fraud Behavior: Fraud Diamond Dimensions. *Multiparadigm Accounting Journal*, 3(2), 161-331.

- Nursani, R. (2014). Student Academic Cheating Behavior: The Diamond Fraud Dimension . *Jurnal Ilmiah Mahasiswa Fakultas Ekonomi dan Bisnis Universitas Brawijaya*, 2(2).
- Pamungkas, D. (2015). The Influence of Factors in Fraud Triangle Dimensions on Academic Fraud Behavior of Class Xi Accounting Students at SMK Negeri 1 Paste 2014/2015 Academic Year. In *Thesis*. Yogyakarta: Faculty of Economic Universitas Negeri Yogyakarta.
- Pradila, P. (2016). Analysis of Academic Fraud Behavior in Accounting Students Using the Fraud Diamond Concept (Study on Accounting Students at Private Universities in Southern Sumatra). In *Thesis*. Faculty of Economic and Business University of Lampung.
- Prawira, & Irianto. (2015). Analysis of the Effect of Diamond Fraud Dimensions on Student Academic Fraud Behavior Case Study on Undergraduate Students of Accounting Department, State University of Malang City. In *Thesis*. Malang: Universitas Brawijaya.
- Probovury, R. (2015). "The Effect of Misuse of Information Technology and Student Integrity on Academic Fraud Behavior of Accounting Students as Prospective Accountants. In *SI Thesis*. Yogyakarta: Universitas Negeri Yogyakarta.
- Purnamasari, D. (2014). Analysis of the Effect of Fraud Triangle Dimensions on Student Academic Fraud Behavior During Exams and Methods of Prevention. *Student Scientific Journal of the Faculty of Economics and Business University of Brawijaya*, 2(2).
- Purwono, H. (2014). The Influence of Mobile and Learning Discipline Levels on Cheating Behavior. *Education Vitae*, 1(1).
- Ridhayana., d. (2018). The Effect of Fraud Triangle and Level of Religiosity on Academic Fraud Behavior (Study on Undergraduate Students of Khairun University). *Journal of Accounting Research*, 5(2).
- Sabli, N., Hamid, N. A., Haron, N. H., & Wahab, R. (2018). Academic Cheating Among Undergraduate Accounting Students: Fraud Diamond Theory Perspective. 6. Retrieved from <http://jrhnamscsca.icu/index.php/hnamscsca/article/view/527>
- Supriyadi, D. (2016). *Academic Integrity*. Yogyakarta: Gadjah Mada University.
- Wardana., G. (2017). The Influence of Learning Motivation, Student Integrity And The Misuse Of Information Technology On Academic Fraud Behavior. *Accounting Student Scientific Journal UNDIKSHA*, 8(2). <http://dx.doi.org/10.23887/jimat.v8>
- Wolfe, D., & Dana R, H. (2004). The Fraud Diamond: Considering The Four Elements Of Fraud. *The CPA Journal*.
- Yudiana, Putri , A., & Hexana, S. (2016). Analysis of the Effect of Diamond Fraud Dimensions on Academic Fraud Behavior of Economics Faculty Students. *National Seminar and Call Paper, Faculty of Economics, UNIBA Surakarta*.
- Zaini, C., & Setiawan. (2015). Analysis of the Effect of Diamond Fraud and Gone Theory on Academic Fraud (Case Study of Accounting Students in Madura). *National Accounting Symposium XVIII*, 1-20.
- Zamzam, I, M., & Ansar, R. (2017). Effect of Diamond Fraud and Level of Religiosity on Academic Fraud. *Scientific Journal of Civilization Accounting*, 3(2).

Publisher's Note: SSBFNET stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

© 2021 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

International Journal of Research in Business and Social Science (2147-4478) by SSBFNET is licensed under a Creative Commons Attribution 4.0 International License.