THE EFFECT OF ACADEMIC FRAUD DIMENSIONS OF FRAUD PENTAGON'S ON ACCOUNTING STUDENTS

Raffie Rafnhar[1*]. Muslimin.[2]
Universitas Pembangunan Nasional "Veteran" Jawa Timur, Indonesia[12]
rafnharr@gmail.com[1*], musliminak@upnjatim.ac.id[2]

Abstract: This study aims to examine the factors that influence academic fraud behavior by college students accounting class 2018 National Development University "Veteran" East Java and accounting students class 2018 Airlangga University using factors namely pressure, rationalization, opportunity, competence, and arrogance called the concept Fraud Pentagon Theory. This study uses quantitative research methods. Collecting data in this study using questionnaires and data purposive sampling collection techniques. The regression model in this study is a multiple linear regression model using SPSS. The number of samples in this study as 82 students consisting of accounting students from the 2018 National Development University "Veteran" East Java as many as 40 students and accounting students from 2018 Airlangga University as many as 42 students who had taken the Accounting and Business Ethics Examination courses. The results of the study simultaneously showed that the Fraud Pentagon affected student academic fraud. Partially shows rationalization and competence to have a significantly positive influence on fraud academics. Pressure, opportunity, and arrogance have no significant effect on fraud academic.
Keywords: Accounting Student, Fraud Academic, Fraud Partial, Fraud Pentagon.

INTRODUCTION

In the world of education (academic fraud) there are still many frauds committed by students and even students. The Grade Point Average (GPA) is a benchmark for students in mastering a lesson so that not a few students try to get a good Grade Point Average (GPA) by using all efforts including committing academic fraud. Fitriana & Baridwan, (2012) Academic fraud is a disgraceful act carried out by students to violate the rules that apply to complete assignments or commit dishonest actions. Academic fraud is a bad action that will harm students. Examples of fraudulent actions such as fraud using cellphones or small notes, plagiarism from friends' assignments, and other frauds. With an academic accident, the evaluation results cannot explain the actual results. Because part of academic fraud includes fraud or plagiarism of friends' results.

Various kinds can influence students to commit fraud. there are three factors or causes for someone to commit fraud, namely pressure, rationalization, and opportunity which is called the fraud trianglein Sihombing & Budiartha, (2020) used the third element to research academic fraud. The results of the research conducted show that each element, namely pressure, rationalization, and opportunity has an impact on academic

disasters. Wolfe & Hermanson (2004) suggests that the additional element needed as a fourth or another element (competence) to increase competence is called fraud. These four factors are called fraud diamonds. Marks, (2012) in Cahyaningtyas & Achsin, (2018) adds one additional element that causes fraud, namely arrogance. And this idea is called the fraud pentagon.

Fraud according to the Black Low Dictionary in Lailiyah, (2016), is a statement of a truth or condition that is hidden from a fact that can influence other people to carry out harmful behavior, in general, it is a common mistake in some cases (done intentionally). possible is a crime. Ajzen (1991) in Wijayanti & Putri, (2016) suggests that rational decisions made by a person in certain actions are based on beliefs about their actions and expectations regarding positive outcomes after feeling involved in these actions.

In the Big Indonesian Dictionary (KBBI) it is defined as behavior or behavior that is dishonest, dishonest, unfair, and deceitful. According to in Zamzam et al., (2017) defines academic fraud is "Deceiving or depriving by trickery, defrauding, misleading or fooling another". If it is interpreted as academic fraud, it is an act done by students to deceive or deceive lecturers into thinking that what the student has done is the final result of the student. Howarth (2010) stated that the fraud pentagon is a refinement of the fraud triangle, in the fraud pentagon there are five elements: pressure, opportunity, rationalization, capcompetence, and arrogance. The emergence of the fifth element, namely arrogance in the fraud pentagon because the elements contained in the fraud triangle and fraud diamond are felt to be unable to be used in all aspects

Hypothesis
The Effect of Pressure on Academic Fraud
The results of the pressure element have a positive influence on academic fraud in the research conducted by Prawira & Irianto, (2016) using the fraud diamond perspective on accounting students at state universities in the city of Malang. Pressure from both inside and outside causes students to commit academic fraud. difficulty in receiving lecture material and wanting to get a good IP is pressure from within students. The number of task deadlines that must be completed at the same time, the influence of parental and active expectations as well as on organizational activities.

Research conducted by Motifasari et al., (2019), Dewi, (2017) Murdiansyah et al., (2017), Fadersair & Subagyo, (2019) also strengthen the research results. The results of this study suggest that pressure has an influence on academic fraud committed by accounting students. The pressure experienced by students during lectures makes it possible to commit academic fraud. Then the research hypothesis is as follows:
H1: Pressure has an effect on academic fraud.

The Effect of Rationalization on Academic Fraud
Wolfe & Hermanson, (2004) argue that rationalization is an attempt to justify individuals for their fraudulent actions. Zaini et al. (2015) argued that rationalization resulted in the perpetrators justifying the acts of fraud. Prawira & Irianto, (2016) get results about the rationalization variable that has an influence on academic fraud.

Research conducted by Saidina et al. (2017), Dewi (2016), Hariri et al. (2018), and Murdiansyah. Etc. (2017) stated that the results of rationalization research have an influence on academic fraud. Rationalization is one of the factors in committing acts of academic fraud committed by students in higher education. Then the research hypothesis is as follows:

H2: Rationalization has an effect on academic fraud.

The Effect of Opportunity on Academic Fraud

Wolve and Hermanson (2004) argue that opportunity is a condition or situation that supports the perpetrator to commit fraud. Zaini et al (2015) argue that opportunity is a condition or situation of a person who has the opportunity to commit fraud. Individuals will not commit fraud if there is no opportunity in certain situations, therefore the opportunity is the most important part of committing fraud. The higher the opportunities available, the greater the fraudulent activity will occur.

A study conducted by Murdiansyah, et al. (2017) using the fraud diamond perspective explains that the opportunity element has a positive influence on acts of academic fraud committed by accounting master students at Brawijaya University, Malang. The existence of opportunities such as weak internal control and no strict punishment for acts of academic fraud is the cause of students committing academic fraud. Then the research hypothesis is as follows:

H3: Chance affects academic fraud.

Effect of Competence on Academic Fraud

Wolve and Hermanson (2004) suggest that competence (competence) is a personal trait as the main role to commit acts of academic fraud. Opportunities are mentioned as entry points for committing fraudulent acts, while pressure and rationalization act as an impetus for committing fraudulent acts.

In Fadersair & Subagyo's research (2019) using the fraud pentagon perspective, it is explained that the element of competence has an influence on acts of academic fraud. The more individual experiences, the easier it is to get strategies in an effort to commit academic fraud.

The results of this study are also supported by research conducted by Hariri, et al. (2018), Zamzam et al (2017), Dewi (2016), Prawira and Irianto (2016) who suggested that competence (competence) had an effect on student academic fraud. It can be concluded that although individuals have pressure and opportunity but do not have competence, the occurrence of fraud is very small. Then the research hypothesis is as follows:

H4: Competence affects academic fraud.

The Effect of Arrogance on Academic Fraud

Mark (2012) suggests arrogance is an attitude of superiority that assumes that internal control does not apply to individuals. Achsin and Cahyaningtyas (2016) argue that arrogance arises when individuals feel superior and without any control that can thwart fraudulent actions causing individuals to commit academic fraud. That way, the

higher the arrogance, the greater a person's effort to commit academic fraud. Then the research hypothesis is as follows:

H5: Arrogance affects academic fraud.

METHODS

This study uses quantitative methods. The population in this study were accounting students from the 2018 National Development University "Veteran" East Java and accounting students from the 2018 Airlangga University who had taken accounting and business ethics examination courses. The objects in this study are pressure, rationalization, opportunity, competence, and arrogance against academic fraud. The sampling of this research used the purposive sampling method. The data used in this study is primary data in the form of answers from respondents to questions in the questionnaire. The number of samples in this study was 82 students consisting of 40 students from the National Development University "Veteran" East Java and 42 students from Airlangga University. The data analysis technique used in this research is multiple linear regression analysis using SPSS.

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

Description:
Y = Fraud Academic
α = regression constant
β = regression coefficient
X1 = pressure
X2 = rationalization
X3 = opportunity
X4 = competence
X5 = arrogance
ε = error

RESULTS AND DISCUSSION

Validity Test

Whether or not a questionnaire data has been filled in by the respondent is valid, a validity test is required. If the Corrected-Item Total Correlation > 0.3 is declared as valid. In this study the results of the validity test are as follows:

Table 1. Validity Test Results

Variable	Item	Corrected Correlation	Item-Total
Pressure	X1.1	.688	
	X1.2	.602	
	X1.3	.558	
	X1.4	.693	
Rationalization	X2.1	.678	
	X2.2	.477	
	X2.3	.682	
	X2.4	.738	
Opportunity	X3.1	.514	
	X3.2	.657	
	X3.3	.532	
	X3.4	.679	
Competence	X4.1	.612	
	X4.2	.670	
	X4.3	.656	
	X4.4	.716	
Arrogance	X5.1	.573	
	X5.2	.733	
	X5.3	.510	
Fraud Academic	Y1	.408	
	Y2	.513	
	Y3	.554	
	Y4	.554	
	Y5	.710	
	Y6	.667	

Source*:* SPSS

In table 1 all question items are declared valid because the Corrected Item-Total Correlation value is > 0.3.

Reliabilty Test

A relicompetence test is used to determine whether the questions in the questionnaire are reliable or not. The questionnaire is said to be reliable if the questionnaire is re-measured then the results obtained will be the same. The questionnaire can be said to be reliable if the Cronbach's Alpha value is greater (>) 0.6. The results of research testing can be seen in the following table:

Table 2. Relicompetence Test Results

Variabel	Cronbach's Alpha
Pressure	0.807
Rationalization	0.797
Opportunity	0.769
Competence	0.807
Arrogance	0.844
Fraud Academic	0.778

Source: SPSS

Table 2 shows that each variable is said to be reliable because each variable has a Cronbach's Alpha value greater than 0.6. Each variable deserves to be used as a questionnaire measuring tool in research.

Classic Asumption Test
Normality Test

To test normality in SPSS, Kolmogorov Smirnov's non-parametric statistical analysis was used. The results of the normality test can be seen in the table below:

Table 3. Relicompetence Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		82
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	2.65550952
Most Extreme Differences	Absolute	.074
	Positive	.074
	Negative	-.046
Test Statistic		.074
Asymp. Sig. (2-tailed)		.200[c,d]

Source: SPSS

Asymp Sig results. (2-tailed) of 0.200 where the results of this normality test can be said that the regression model is normally distributed because it exceeds 0.05.

Heteroscedasticity Test

This study uses the Scatterplots approach. Scatterplots are concerned with predicting plots from the distribution of residuals and variables. In scatterplots, if the points spread randomly above or below the number 0 on the Y axis, heteroscedasticity does not occur in the research regression model. The results of the heteroscedasticity test can be seen as follows:
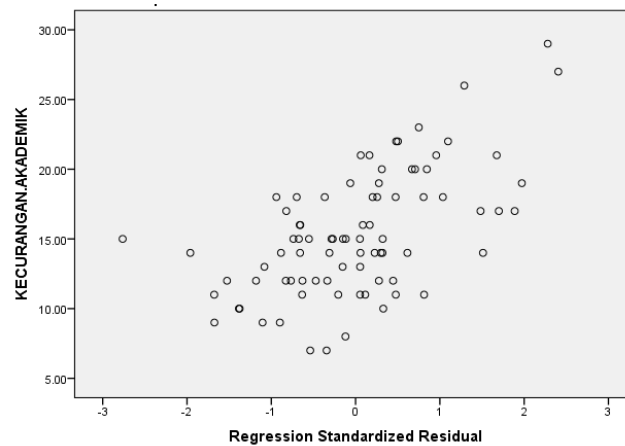

Figure 1. Heteroscedasticity Test Results
Source: SPSS

Multicollinearity Test

A good regression model does not have a correlation between the independent variables. The method used in this study is the Tolerance and VIF (Variance Inflation Factor) method. If the VIF value of a model is less than 10 or the tolerance value is more than 0.10, it can be concluded that the research model is free from multicollinearity. The results of the multicollinearity test can be seen below:

Table 4. Multicollinearity Test Results

Variable	Tolerance	VIF
Pressure	.424	2.360
Rationalization	.425	2.353
Opportunity	.463	2.158
Competence	.383	2.609
Arrogance	.512	1.954

Source: SPSS

In table 4 it is concluded that the five independent variables are multicollinearity because the tolerance value is more than 0.10 and the VIF value is less than 10.

Hypothesis Test
Techniques and Hypothesis Test Results
To find out whether or not there is an influence from the independent variable pressure, rationalization, opportunity, competence, and arrogance to the dependent variable, namely fraud academic. In the calculation of multiple linear regression analysis using SPSS. The calculation results are as follows:

Table 5. Multicollinearity Test Results

Model		Unstandardized Coefficients			
		B	Std. Error	T	Sig.
1	(Constant)	3.566	1.094	3.258	.002
	Pressure	.193	.124	1.554	.124
	Rationalization	.430	.121	3.554	.001
	Opportunity	.103	.116	.886	.378
	Competence	.477	.136	3.522	.001
	Arrogance	-.145	.128	-1.134	.260

Source:SPSS

Based on table 5, it can be concluded that the results of the multiple linear regression equation, which are read are the values in column B, the first row mentions the constant (α) and the next row states the coefficients of the independent variables. The regression model used according to table 5 is as follows:

Y   = α + β1X1 + β2X2 + β3X3 + β4X4 + β5X5 + ε
= 3.566 + 0.193X1+ 0.430X2 + 0.103X3 + 0.477X4 − 0.145X5 + 1.094

Description:
Y   = Fraud Academic
α   = regression constant
β   = regression coefficient
X1   = pressure
X2   = rationalization
X3   = opportunity

X4   = competence
X5   = arrogance
ε   = error

F. Test

The F test shows whether all independent variables have an effect on the independent variables. To determine whether or not a research hypothesis is in the brain, a comparison value with a significant value of 0.05 is carried out or a comparison of the calculated F value with the F table. Here are the test results in the table below:

Table 6. F Test Results

Model		Mean Square	F	Sig.
1	Regression	209.618	27.891	.000[b]
	Residual	7.516		

Source: SPSS

Table 6 states that the results of the F test have a significant value of 0.000 which is smaller than the significant value level of 0.05. The calculated F value is 27,891 which is greater than the F table, which is 2.33. So it can be concluded simultaneously that the five dependent have an effect on fraud academics.

t Test

The t-test is used to determine the independent variables affect the independent variables on an item-by-item basis. Whether or not a research hypothesis is accepted, it is done by comparing the significant value with a significant level of 0.05 or comparing t count with t table. In this study, the results of the t-test can be seen in the table 5 as follows: The t-test coefficient of the pressure variable is 0.193 and the significant value is 0.124 with an at-count of 1.554. The significant value is greater than the significant level of 0.05 and the t-count value is smaller than the t-table value of 1.99167. It can be concluded that the pressure variable does not have a significant effect on academic fraud behavior. The first hypothesis is declared rejected. The t-test coefficient of the rationalization variable is 0.430 and the significant value is 0.001 with an at-count of 3.554. The significant value is smaller than the significant level of 0.05 and the t-count value is greater than the t-table value of 1.99167. It can be concluded that the rationalization variable has a significant influence on academic fraud behavior. The second hypothesis is accepted. The t-test coefficient for the opportunity variable is 0.103 and the significant value is 0.378 with a t-test of 0.886. The significant value is smaller than the significant level of 0.05 and the t value is smaller than the t table value of 1.99167. It can be concluded that the opportunity variable does not have a significant effect on academic fraud behavior. The third hypothesis is declared rejected. The t-test

coefficient for the competence variable is 0.477 and the significant value is 0.001 with an at-count of 3.522. The significant value is smaller than the significant level of 0.05 and the t value is greater than the t table value of 1.99167. It can be concluded that the competence variable has a significant influence on academic fraud behavior. The fourth hypothesis is accepted. The coefficient of t-test of the arrogance variable is -0.145 and the significant value is 0.260 with an at-count of -1.134. The significant value is greater than the significant level of 0.05 and the t value is smaller than the t table value of 1.99167. It can be concluded that the arrogance variable does not have a significant effect on academic fraud behavior. The fifth hypothesis is declared rejected.

Coefficient of Determination Test (R2)
Coefficient of Determination Test to determine how strong the relationship of the independent variable to the dependent variable is. How strong is the influence of pressure, rationalization, opportunity, competence, and arrogance to the influence of academic fraud. The value of the coefficient of determination ranges from 0 to 1. The higher the value, the stronger the relationship between the independent variable and the dependent variable. The following table shows the results of the coefficient of determination below:

Tabel 7. Coefficient of Determination Test (R2) Result

Model Summary[b]

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | |
					R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.805[a]	.647	.624	2.74147	.647	27.891	5	76	.000	2.278

a. Predictors: (Constant), AROGANCE, RATIONALIZATION, PRESSURE, OPPORTUNITY, ABILITY

b. Dependent Variable: FRAUD.ACADEMIC

Source: SPSS

According to table 7, it is stated that the size of R square is 0.647 or 64.7%. It can be concluded that the independent variables pressure, rationalization, opportunity, competence, and arrogance affect the dependent variable, namely academic cheating by 64.7% while for the remaining 100%-64.7% it is 35.3% influenced by other variables outside the regression model in this study.

Discussion
Effect of Pressure on Academic Fraud
The results were obtained through the significance test of the pressure variable regression coefficient of 0.193 from a significant value of 0.124 with a count of 1.554. The t-count result is smaller than the t-table of 1.99167 (1.554 <1.99167) and the

significant level is greater than 0.05. From these results, it can be concluded that the pressure variable does not have a significant effect on fraud academic of UPN "Veteran" East Java and UNAIR Accounting Students. It is concluded that H0 is accepted and H1 is rejected.

Effect of Rationalization on Academic Fraud

The results were obtained through the significance test of the rationalization variable regression coefficient of 0.430 from a significant value of 0.001 with a count of 3.554. The result of t-count is greater than the t-table of 1.99167 (3.554>1.99167) and the significant level is less than 0.05. From these results, it can be concluded that the rationalization variable has a significant influence on fraud academic of UPN "Veteran" East Java and UNAIR students. It is concluded that H0 is rejected and H2 is accepted.

Effect of Opportunity on Academic Fraud

The results were obtained through the significance test of the opportunity variable regression coefficient of 0.103 from a significant value of 0.378 with a count of 0.866. The t-count result is smaller than the t-table of 1.99167 (0.866 <1.99167) and the significant level is greater than 0.05. From these results, it can be concluded that the opportunity variable does not have a significant effect on fraud academic of UPN "Veteran" East Java and UNAIR students. It is concluded that H0 is accepted and H3 is rejected.

Effect of Competence on Academic Fraud

The results were obtained through the significance test of the competence variable regression coefficient of 0.477 from a significant value of 0.001 with a count of 3.552. The result of the t count is greater than the t table of 1.99167 (3.552>1.99167) and the significant level is less than 0.05. From these results, it can be concluded that the competence variable has a significant

influence on fraud academic of UPN "Veteran" East Java and UNAIR Accounting Students. It is concluded that H0 is rejected and H4 is accepted.

Effect of Arrogance on Fraud Academic

The results were obtained through the significance test of the arrogance variable regression coefficient of -0.145 from a significant value of 0.260 with a count of -1.134. The result of the t-count obtained is smaller than the t-table of 1.99167 (-1.134>1.99167) and the significant level is greater than 0.05. From these results, it can be concluded that the arrogance variable does not have a significant effect on fraud academic of UPN "Veteran" East Java and UNAIR Accounting Students. It is concluded that H0 is accepted and H5 is rejected.

CONCLUSION

Based on the research that has been done, the results of the research simultaneously show that the Pentagon Fraud has an effect on academic students. Partially shows rationalization and competence to have a significant effect on positive events. pressure, opportunity, and arrogance have no significant effect on academic experience.

REFERENCES

Cahyaningtyas, R. I., & Achsin, M. (2018). Studi Fenomenologi Kecurangan Mahasiswa dalam Pelaporan Pertanggungjawaban Dana Kegiatan Mahasiswa: Sebuah Realita dan Pengakuan. *Journal of Chemical Information and Modeling*, *53*(9), 1689–1699.

Dewi, Y. P. (2017). *Perilaku Kecurangan Akademik Pada Mahasiswa S1, S2, Dan S3 Jurusan Akuntansi Feb Ub Berdasarkan Konsep Fraud Diamond*.

Fadersair, K., & Subagyo, S. (2019). Perilaku Kecurangan Akademik Mahasiswa Akuntansi : Dimensi Fraud Pentagon (Studi Kasus Pada Mahasiswa Prodi Akuntansi Ukrida). *Jurnal Akuntansi Bisnis*, *12*(2), 122–147. https://doi.org/10.30813/jab.v12i2.1766

Fitriana, A., & Baridwan, Z. (2012). Perilaku Kecurangan Akademik Mahasiswa Akuntansi: Dimensi Fraud Triangle. *Jurnal Akuntansi Multiparadigma*, *3*(2), 244–256.

Hariri, Pradana, A. W. S., & Rahman, F. (2018). Mendeteksi Perilaku Kecurangan Akademik Dengan Perspektif Fraud Diamond Theory. *Jurnal Ketahanan Pangan*, *2*(1), 1–11. http://riset.unisma.ac.id/index.php/JU-ke/article/view/1045

Horwath. C. (2010). IIA Practice Guide: Fraud and Internal Audit.

Lailiyah, A. (2016). Variabel-Variabel yang Berpengaruh terhadap Kecurangan (Fraud) di Sektor Pemerintahan: Persepsi Pegawai Bidang Keuangan di Lingkungan Pemerintah Kabupaten Situbondo. *Sklripsi*.

Marks, J. (2012). *The Mind Behind The Fraudsters Crime: Key Behavioral and Environmental Elements*.

Motifasari, E., Maslichah, & Mawardi, C. M. (2019). Pengaruh Dimensi Fraud Triangle Terhadap Perilaku Kecurangan Akademik Pada Mahasiswa Akuntansi (Studi Pada Mahasiswa Prodi Akuntansi di Perguruan Tinggi Kota Malang). *E-Jra*, *08*(08), 66–85. http://www.riset.unisma.ac.id/index.php/jra/article/view/4251

Murdiansyah, I., Sudarma, M., & Nurkholis. (2017). Pengaruh Dimensi Fraud Diamond Terhadap Perilaku Kecurangan Akademik (Studi Empiris Pada Mahasiswa Magister Akuntansi Universitas Brawijaya). *Jurnal Akuntansi Aktual*, *4*(2), 121–133. http://journal2.um.ac.id/index.php/jaa/article/view/7094

Prawira, I. D. M. S., & Irianto, G. (2016). Analisis Pengaruh Dimensi Fraud Diamond Terhadap Perilaku Kecurangan Akademik Mahasiswa (Studi Kasus pada Mahasiswa S1 Jurusan Akuntansi Perguruan Tinggi Negeri Kota Malang). *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya*, *3*(2), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004

Saidina, D. A., Nurhidayati, H., & Mawardi, M. C. (2017). Faktor-Faktor Yang Mempengaruhi Perilaku Kecurangan Akademik Dalam Perspektif Fraud Triangle Pada Mahasiswa Akuntansi Universitas Islam Malang Desi. *Jurnal Ilmiah Riset Akuntansi*, *6*(01), 25–38. http://riset.unisma.ac.id/index.php/jra/article/view/314

Sihombing, M., & Budiartha, I. K. (2020). Analisis Pengaruh Fraud Triangle Terhadap Kecurangan Akademik (Academic Fraud) Mahasiswa Akuntansi Universitas Udayana. *E-Jurnal Akuntansi*, *30*(2), 361. https://doi.org/10.24843/eja.2020.v30.i02.p07

Wijayanti, A. W., & Putri, G. A. (2016). Model Theory of Planned Behavior (TPB) Untuk Memprediksi Niat Mahasiswa Melakukan Kecurangan Akademik. *Jurnal Manajemen Dan Kewirausahaan*, *14*(2), 189–197.

Wolfe, D. T., & Hermanson, D. R. (2004). The Fraud Diamond : Considering the Four Elements of Fraud. *CPA Journal*, *12*, 38–42.

Zaini, M., Carolina, A., & Setiawan, A. R. (2015). *Analisis Pengaruh Fraud Diamond dan Gone Theory Terhadap Academic Fraud (Studi Kasus Mahasiswa Akuntansi Se-Madura)*. 1–20.

Zamzam, I., Mahdi, S. A., & Ansar, R. (2017). Pengaruh Diamond Fraud Dan Tingkat Religiuitas Terhadap Kecurangan Akademik (Studi Pada Mahasiswa S-1 Di Lingkungan Perguruan Tinggi Se Kota Ternate). *Jurnal Ilmiah Akuntansi Peradaban*, *3*(2), 1–24. http://journal.uin-alauddin.ac.id/index.php/jiap/article