THE IMPACT OF ETHICS AND FRAUD PENTAGON THEORY ON ACADEMIC FRAUD BEHAVIOR

by Dhita Dian Indri Purnamasari

THE IMPACT OF ETHICS AND FRAUD PENTAGON THEORY ON ACADEMIC FRAUD BEHAVIOR

[1]**Dhita Permata Wira Utami**
dp.wirautami@gmail.com

[2]**Dian Indri Purnamasari**
dian_indri@upnyk.ac.id
Universitas Pembangunan Nasional "Veteran" Yogyakarta

ABSTRACT

This study aims to determine the impact of ethics, pressure, opportunity, rationalization, competence, arrogance on academic fraud behavior of accounting students. The population of this research consists of UPN "Veteran" Yogyakarta accounting students. The number of samples used in this study were 170 respondents that represent several criteria and have taken the Auditing I and Business Ethics courses. The dependent variable (Y) in this study is academic fraud behavior. The independent variables include ethics (X_1), pressure (X_2), opportunity (X_3), rationalization (X_4), competence (X_5) and arrogance (X_6). The method used in this research is quantitative method. The data used were primary data. Multiple regression analysis was performed to process the data using IBM SPSS (Statistical Package for Social Science) version 20. The results of this study indicate that ethics, pressure, and competence have an impact on academic fraud behavior. In contrast, opportunities, rationalization and arrogance have no impact on academic fraud behavior.

Keywords: ethics, pentagon, fraud, cheating, behavior, students

1. Introduction

Accounting can be considered as a science that can never be separated from life, because it represents a body of very important and much-needed knowledge. Today, a number of branches of accounting have been successfully developed by accounting experts; one of them is educational accounting (Agustina, 2018).

Accounting education aims to prepare students to become professional accountants and to meet the anticipated future need for professional accounting services. For that reason, accountants lacking in professionalism will not sell quite well in the job market. Basically, accounting focuses on reporting financial information. However, in recent times, professional managers and accountants have acknowledged the importance of additional economic information that neither accounting nor financial reporting systems can produce. It is believed that the information is not always concerns financial matters, but it gives deeper meaning to the reported data so that it can provide more in-depth information for the decision-making processes. Some of this non-financial information belongs to the area of behavioral accounting. Behavioral accounting is a branch of accounting that integrates behavioral dimension into traditional accounting (Handayani, 2018).

Education is a very important aspect of life because it paves the ways for improving the quality of human resources. Education involves learning processes which are expected to bring about behavioral changes in those who learn. In the real world, we find that there are still many students who consider the Grade Point Average (GPA) as a benchmark for their success. Many of them are competing to get high GPA in any possible way that leads to academic dishonesty (Oktaviani, Amin, & Mawardi, 2019).

Dishonesty seems to be quite prevalent today. Almost every day, various mass media provide news about fraudulent practices that are deeply entrenched and increasingly difficult to overcome in our country. Numerous corruption scandals reported in the media

1

are perpetrated by various professional groups, one of which is accountant. Fraud perpetrated by accountants must be taken seriously by policy makers in the field of education, especially accounting education. According to Irianto (2003), involvement of accountants in various recent financial scandals or those occurred over the past decade, has exposed accountant integrity to public scrutiny. Latest data from the Association of Certified Fraud Examiners (2014) stated that accounting department constitutes the largest part of the fraud perpetrator in the professional world. Therefore it is necessary for accounting education to provide a constructive response to this and to improve the moral competence of prospective accountants (Irianto, 2003), as cited in Artani & Wetra (2017).

As the agents of change, the next generation, as well as future accountants, students shall avoid those fraudulent practices for the betterment of their future profession. Inculcating ethical behavior and moral values as well as developing social relationship will certainly not be enough when it is limited to education in the classroom. Creating a favorable environment for ethical behaviors will provide a stronger impetus for students to get used to being honest and to asserting an opinion of dishonesty that may occur anywhere. That way, the role of universities in preparing for high-quality graduates can be performed well (Astuti, 2018).

The reason for choosing University of National Development "Veteran" Yogyakarta (subsequently abbreviated to UPNVY) as the object of study, especially students of accounting department of Economics and Business Faculty, is that the university has been nicknamed 'the Campus of National Defense'. The UPNVY got the nickname because the university is run under the auspices of the Department of Defense. The concept of national defense is also manifested in the education curriculum of UPNVY. It has a vision for becoming a pioneer in the national development in the spirit of national defense in this era of globalization.

2. Theoretical Framework and Hypothesis Development
2.1 Theoretical Framework
Ethics

The word ethics, derived from the late Latin *ethica*, also means moral philosophy. It is a guideline for how to behave properly from a cultural, moral and religious perspective. Alternatively, Keraf (1997) argued that ethic is literally derived from Greek *Ethos* (plural: *ta etha*), which means exactly similar to morality, that is to have good habits. In general, ethics is defined as behavioral values or rules accepted and practiced by a certain group or individuals (Sukamto, 1991). Ethics talks about the moral values and norms that determine human behavior in his life (Suraida, 2005).

Fraud

Albrecht, in his *Fraud-Examination*, stated that fraud is a generic term, and embraces all the multifarious means which human ingenuity can devise, which are resorted to by one individual, to get an advantage over another by false representations. No definite and invariable rule can be laid down as a general proposition in defining fraud, as it includes surprise, trickery, cunning and unfair ways by which another is cheated. The only boundaries defining it are those which limit human knavery.

Fraud Triangle

The fraud triangle theory is developed by Donald R. Cressey in 1953. This is the first theory that explains the elements that cause fraud and there have been many studies that confirmed the fraud triangle. Cressey conducted an extensive research with convicted criminals to determine what motivates seemingly honest people to commit fraud. The three components of the fraud triangle are pressure, opportunity and rationalization.

Fraud Diamond

In 2004, the fraud triangle theory was refined by Wolfe & Hermanson (2004) to fraud diamond theory, which consists of pressure, opportunity, rationalization and competence. There is an additional element in the latter fraud theory, i.e. competency. Competency is defined as individual capability, and it plays a key role in fraud. Successful fraudulent practices depend on one's capability which consists of position, intelligence, egocentrism, persuasiveness, deceit, and stress control (Wolfe & Hermanson, 2004).

Fraud Pentagon

Fraud pentagon theory is developed by Jonathan Marks (2912) from previous Crowe's *Fraud Pentagon Theory*. According to Crowe, arrogance is identified with a sense of superiority and a feeling of entitlement or greed as parts of a person who believe that internal control does not apply to him or her. Fraud perpetrators believe that the implemented internal controls cannot befall him, so they usually think freely without fear of sanctions that will ensnare them.

2.2 Hypothesis Formulation

Forsyth (1980), as cited in Astuti (2018), described ethics as the main goal of professional behavior which is closely related to the prevailing morals and values based on idealism and relativism. In a survey conducted by Litbang Media Group, predominant academic fraud at high school and university level is cheating (Pudjiastuti, 2012). By academic fraud we mean behaviors deliberately perpetrated by high school students, such as violating the rules for assignments or exams, or helping their classmates in dishonest completion of assignments or exams (Cizek, 2003). Astuti (2018) argued that ethics, both idealism and relativism, have no impact on students' whistle-lowing behavior.

Pressure is a situation where someone feels the need to commit academic fraud (Albrecht, 2003). Pressure is defined as a strong urge that exists within students' feeling, both from within him self and from the environment, to achieve certain goals that arise owing to too many demands or tasks that must be done (Nurkhin & Fachrurrozie, 2018). A study by McCabe, Trevino, & Butterfield (2001) indicates that one of the factors related to the pressure felt by students is when they have many activities outside the campus. Students involved in many off campus activities are more prone and closer to academic cheating behavior (Murdiansyah et al., 2017). Apriani (2017) argues that pressure affects fraud behaviors among accounting students. Oktaviani et al. (2019) show that pressure has a significant impact on academic fraud behavior among accounting students across the universities in Malang.

The greater the opportunity, the higher the possibility for the occurrence of fraud behavior will be (Albrecht et al, 2012). According to Becker et al. (2006), opportunity is a factor that encourages academic fraud to occur. The greater opportunity a person has to commit fraud, the higher possibility that he or she will do so. A person can be motivated to commit fraud by a perceived opportunity, such as a chance for gaining benefits from other sources. Opportunity means either available or sought out opportunities in a classroom situation that entices a university student to commit fraud behaviors under loose exam supervision or to jointly commit academic dishonesty together with his or her classmate (Nurkhin & Fachrurrozie, 2018). All these confirm the findings of Apriani, Sujana, & Sulindawati (2017) stating that opportunity has an impact on students' academic fraud behavior. Oktaviani et al., (2019) show that opportunity has a significant impact on academic fraud behavior among students of accounting department across the universities in Malang. Fitri (2019), in contrast, shows that opportunity has no impact on fraudulent procurement of goods or services in Local Government of Aceh.

Rationalization is a self-justification or a wrong excuse for wrong behavior (Albrecht, 2003). McCabe and Trevino (1997) state that rationalization is a behavior that shows

students' habits to regard cheating as an act consistent with their personal code of ethics in their environment (Murdiansyah et al., 2017). Rationalization is a strong reason that students have to justify their acts of academic fraud (Nurkhin & Fachrurrozie, 2018). This conforms to the findings of Apriani, Sujana, & Sulindawati (2017) stating that rationalization has an impact on students' academic fraud behaviors. Oktaviani et al., (2019) show that rationalization has a significant impact on academic fraud behavior among accounting students across universities in Malang. In contrast, Fitri (2019) demonstrates that rationalization has no impact on fraudulent procurement of goods or service in Aceh government.

Competency here is the ability of a person to commit fraud acts. Thus, competence is a person's ability to override internal control, to develop sophisticated concealment strategies, and to control social situations for his benefit by selling them to others (Marks, 2012). More specifically, the competency here is students' ability to override internal control, to develop concealment strategies, and to control social situation for their personal benefits (Nurkhin & Fachrurrozie, 2018). The results of a study by Fitrianti (2019) demonstrate that competency has an impact on academic fraud. Murdiansyah et al., (2017) shows that competency has a significant impact on reducing academic fraud behaviors. Oktaviani et al., (2019), conversely, demonstrates that competency is rejected or has no impact.

Arrogance is a person attitude revealing that internal controls, company policies and regulations do not apply to him and he feels that he is exempt from policies, regulations and internal controls, and therefore he 'innocently' commits fraud (Oktafiana & Sari, 2019). Achsin & Cahyaningtyas (2019) also suggest that arrogance can arise when a person has a sense of superiority or is able to commit fraud without being foiled by any control and, therefore, he did so without fear of sanctions that will ensnare him. Faradiza (2019) reveals that arrogance has no impact on fraudulent financial reporting. The results of study by Febriana (2019) indicate that students' arrogance does not encourage them to commit academic fraud in competency assessment.
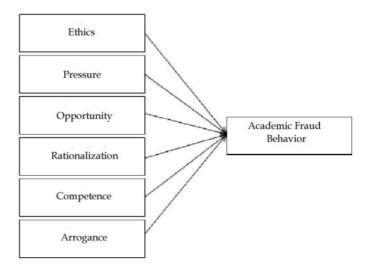

Figure 1 Conceptual Framework

Based in the above conceptual framework, we propose the following hypotheses:

4

H1: Ethics have an impact on academic fraud behavior.
H2: Pressure has an impact on academic fraud behavior.
H3: Opportunity has an impact on academic fraud behavior,
H4: Rationalization has an impact on academic fraud behavior.
H5: Competency has an impact on academic fraud behavior.
H6: Arrogance has an impact on academic fraud behavior.

3. Methods

The population consists of all accounting students of Veteran National Development University of Yogyakarta. We use primary data collected directly from main sources through interviews upon which the answers to the research questions are based on (Sugiyono, 2014). The samples were selected using a purposive sampling technique on the basis of predetermined criteria, i.e., students who currently taking or have taken Business Ethics and Auditing 1 courses. All questionnaires use 4 point Likert-scale questions that start with 1 (strongly disagree) to 4 (strongly agree).

Table 1. Research Instrument

Variables		Instrument
Ethics	Idealism	1. A person has to make sure that the actions he takes do not hurt others. 2. Harming others will always be wrong, even if it can benefit us. 3. When an action is to the detriment of another innocent person, then it should not be taken. 4. Moral action is an action that is closer to perfect properness. 5. Sacrificing the welfare of others is something that shouldn't be done.
	Relativism	1. Lying can be judged as a moral or immoral act, depending on the situation. 2. Very complex ethical considerations leave individuals free to form their own code of ethics. 3. Ethical values differ from one community to another, and their implementation also differs from one situation to another. 4. The meaning of being ethical can be difficult to determine because individuals differ on what morality and immorality are. 5. Moral standards should be set by each individual, because an act can be morally good for one and morally bad for another.
Competency		1. I can control myself when I committed academic fraud. 2. I feel neither afraid nor worried when I committed fraud. 3. I prepared a strategy, so that I could cheat on a test. 4. I could argue if I am considered to be committing academic fraud. 5. I asked a friend to help me cheat. 6. I can handle my surroundings to assist me in cheating.
Opportunity		1. Lecturers were not careful in checking student assignments, therefore I did plagiarism. 2. Cheating is okay, had it gone undetected. 3. The exam invigilators let students cheat. 4. I'm not scared to cheat on exams. 5. Lecturers do not check student paper assignments with a plagiarism detection software. 6. The exam invigilator is engrossed in activities other than supervising.
Pressure		1. I have to pass the exam even if I do plagiarism in my paper assignment. 2. I have to pass the exam even if I cheated. 3. I cheated on the exam to get top marks. 4. I did collaborative cheating to pass the exams with high grades. 5. I did plagiarism in my paper assignment due to lack of time. 6. I didn't participate in group assignments because I couldn't manage the time to study.
Rationalization		1. I didn't hurt anyone when I cheated on the exam. 2. If I get caught cheating, no one but me deserved to be punished. 3. It is normal for me and my friends to commit academic fraud.

	4. I was mockingly called a saint for refusing to share my answer during the exam.
	5. I committed academic fraud to get high grades and considered to be smart.
	6. I committed academic fraud to get high grades and to make my parents happy.
Arrogance	1. I committed academic fraud on my own.
	2. I became more confident after cheating.
	3. Cheating on exams is cool!
	4. Cheating on exams is something I am proud of .
Academic Fraud Behavior	1. I did not cite the sources in my paper assignment.
	2. I simply copying my friend's paper assignment.
	3. I prepared a cheat sheet for the exam.
	4. I used a cheat sheet during the exam.
	5. I copied my friend's answer during the exam.
	6. I did collaborative cheating during the exam.

Source: Forsyth (1992) & Muhsin *et al.* (2018)

4. Results

Respondents in this study consist of accounting students of the economics and business faculty of Veteran National Development University of Yogyakarta. The data collected are 170 questionnaires returned and eligible for analysis.

Validity Test

Validity test is conducted to measure the validity of questionnaire. Questions on a questionnaire a valid when they measure what they are supposed to measure (Ghozali, 2016). Validity test is conducted by counting the correlation between scores of each question item using Pearson's Product Moment. When a correlation indicates the p value of less than 0.05, this means significant, therefore the test is valid.

Reliability Test

Reliability refers to the overall consistency of measure in assessing a questionnaire which is an indicator of the variable. A questionnaire is reliable when the one's answers to the questions are consistent and stable over time (Ghozali, 2016). Reliability test is conducted using Cronbach's Alpha Coefficient. A Cronbach's alpha of 0.6 indicates an acceptable level of reliability.

Normality Test

Normality test is intended to determine if a variable has a normal distribution or not. In this study, we used Kolmogorov-Smirnov normality test. When the residuals are not normally distributed, that makes the statistical t-test and f-test results invalid. The data is said to be normally distributed at a significance level of 0.05.

Table 2. Normality Test Results

	Unstandardized Residual	Description
Asymp. Sig. (2-tailed)	0,492	The data is normally distributed

Source: Primary Data processed using *SPSS* Version 20, 2020

Table 2 indicates that the *Asymp.Sig* (2-tailed) value of 0.492 is greater than 0.05. Therefore, it can be concluded that the data is normally distributed. Consequently, the assumptions underlying the normality requirements in the regression model are satisfied.

Multicollinearity Test

Table 3. Multicollinearity Test Results

Model	Collinearity Statistics	
	Tolerance	VIF
Ethics (X_1)	0,895	1,117
Pressure (X_2)	0,273	3,667
Opportunity (X_3)	0,576	1,737
Rationalization (X_4)	0,313	3,193
Competence (X_5)	0,664	1,507
Arrogance (X_6)	0,423	2,366

The bases for multicollinearity test decision are the Tolerance and VIF values. From the coefficient table in 'collinearity statistics' column we see that the tolerance value of the independent variable is <10.00. Thus, we come to a conclusion that no sign of multicollinearty was found in the regression model.

Heteroscedasticity Test

Heteroscedasticity test is used to determine whether variance differences exist in the regression model between residual of one observation and the other. One of statistical tests used to determine the heteroscedasticity is Park test. The basis for decision is that if the significance value is >0.05, no signs of heteroscedasticity were found in the regression model. The results indicate that no hetereoscedasticity occurs, as represented in the table below:

Table 4. Heteroscedasticity Test Results

Model	Significance
Ethics (X_1)	0,141
Pressure (X_2)	0,097
Opportunity (X_3)	0,746
Rationalization (X_4)	0,756
Competence (X_5)	0,517
Arrogance (X_6)	0,751

Source: Primary data processed using *SPSS* Version 20, 2020

Multiple Linear Regression Analysis

Multiple linear regression analysis is used to explain the relationship between one dependent variable and the factors affecting more than one independent variable.

Table 5. Results of Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	7,218	1,665		4,334	0,000
Ethics	-0,146	0,050	-0,173	-2,895	0,004
Pressure	0,345	0,085	0,440	4,067	0,000
Opportunity	0,087	0,066	0,098	1,315	0,190
Rationalization	-0,037	0,090	-0,041	0,410	0,682
Competence	0,181	0,063	0,197	2,848	0,005
Arrogance	0,148	0,115	0,112	1,292	0,198

Source: Primary data processed using *SPSS* Version 20, 2020

Based on Table 5, the regression equation can be written as follows:

$$Y = 7,218 - (-0,146)X_1 + 0,345X_2 + 0,087X_3 + (-0,037)X_4 + 0,181X_5 + 0,148X_6$$

A constant value of 7.218 indicates that the constant value in equation is 7.218, which means that if the independent variables—ethics, pressure, opportunity, rationalization, competence, and arrogance—did not change or constant, then the academic fraud behavior would be 7.218. The regression coefficient of ethics (b_1) is -0.146, which means that if the ethics had 1 unit increase, the academic fraud behaviour would decrease by 0.146, assuming that all other variables remain constant. The regression coefficient of pressure (b_2) is 0.345, which means that if the pressure had 1 unit increase, the academic fraud behavior would increase by 0.345, assuming that all other variables remain constant. The regression coefficient of competence (b_5) is 0.181, which means that if the competence had 1 unit increase, academic fraud behavior would increase by 1.81, assuming that all other variables remain constant.

Coefficient of Determination (R^2) Analysis

Coefficient of determination (R^2) is used to assess the extent to which a model capable of explaining the variation in the dependent variable. The coefficient of determination

7

normally ranges from 0 to 1. The higher the coefficient, the stronger effect the independent variable has on the dependent variable.

Table 6. Compiled Results of the Hypothesis testing for R²

Model Summary				
Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*
1	.693ª	.480	.461	2.273
a. Predictors: (Constant), total_a, total_e, total_k, total_p, total_r, total_t				

The R² value indicates that the coefficient of determination (Adjusted R Square) is 0.461, which means that the independent variables (ethics, pressure, opportunity, rationalization, competence and arrogance) simultaneously affect the dependent variable (academic fraud behavior) by 46.1%, and the rest 53.9% was the effect of other variables excluded from the research model.

F test

Table 7. Compiled Results of the Hypothesis testing for F test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	*Regression*	776.218	6	129.370	25.047	.000ᵇ
	Residual	841.906	163	5.165		
	Total	1618.124	169			
a. Dependent Variable: total_pca						
b. Predictors: (Constant), total_a, total_e, total_k, total_p, total_r, total_t						

From the results of F test, the F count is reported to be 25.047, at a significance level of 0.000. The value of Sig F_{count} is <5% (0,000 < 0,05), thus it can be stated that the regression equation in this study is in goodness of fit or that it fits the interpretation (Ghozali, 2016).

T test

Hypothesis testing is conducted using t test to determine the significance of regression coefficient of each independent variable and dependent variable. The basis for the decision is that the significance (Sig.) < probability of 0.05, thus the hypothesis is supported. From this, we come to the conclusion that:

a. The significance level of ethics is 0.004 < 0.05, thus H1 is accepted.
b. The significance level of pressure is 0.000 < 0.05, therefore H4 is accepted.
c. The significance level of opportunity is 0.190 > 0.05, thus H3 is rejected.
d. The significance level o rationalization is 0.682 > 0.05, thus H5 is rejected.
e. The significance level of competence is 0.005 < 0.05, therefore H2 is accepted.
f. The significance level of arrogance is 0.198 > 0.05, thus H6 is rejected.

5. Discussion

The results stated that ethics has an impact on academic fraud behavior. This indicates that the committed act is not harmful others; that it will always be wrong to harm others; that moral action is an action that is closer to perfect properness; that sacrificing the welfare of others is something that shouldn't be done; that lying can be judged as a moral or immoral act, depending on the situation; that ethical values differ from one community to another, and their implementation also differs from one situation to another; and that moral standards should be set by each individual, because an act can be morally good for one and morally bad for another, and affects academic fraud behavior. Forsyth (1980) describes ethics as the main objectives of professionalism that closely related to applicable moral rules and values based on idealism and relativism. Idealism is an ethical value that refers to individual belief that positive consequence happen as a result of a morally right act. The point is that the desired consequences (positive consequences) occur when no one

was harmed. Relativism, on the other hand, rejects moral judgment in any absolute sense. Individuals will take their local values, culture, or beliefs into consideration. One of the relativism aspects stated that ethical values originate not from one absolute perspective, because individuals have their respective perceptions of what ethical behaviors are. The results of H1 indicated that ethics have an impact on students' academic fraud behavior. The results of the current study do not support those of Astuti (2018). She argued that ethics (idealism and relativism) have no impact on whistleblowing behavior.

The results of study revealed that pressure has an impact on academic fraud behavior. Pressure is the factor with most significant impact on academic fraud behavior. This can be seen from its lowest significance level among other variables. Furthermore, based on the Standardized Coefficient, pressure has the value of Beta = 0.440, which is the largest value of B. This indicates that the pressures of having to do well in exams, getting higher grades, having no sufficient time to complete assignment, and failing to work on group assignment because of inability to manage the time have an impact on academic fraud behavior. According to Tuanakotta (2010), pressure motivates an individual to commit fraud for either financial or non-financial factors. Pressure is a situation where a person feels the need for committing academic fraud (Albrecht, 2003). The test of hypothesis 2 indicates that pressure has an impact on students' academic fraud. McCabe, Trevino, & Butterfield (2001) suggest that one factor related to pressure that the students felt is their involvement in many off campus activities. Students with many off campus activities are more prone or closer to academic fraud behavior (Murdiansyah et al., 2017). Apriani (2017) indicates that pressure affects fraud behavior among accounting students.

The present study revealed that opportunity has no impact on academic fraud behavior. The reason for this is that an effective control system has been implemented in a campus, therefore students find it difficult to commit fraud. Lecturers have been carefully checking students' assignments to keep them from plagiarism. Exam invigilators won't let students cheat. According to Tuanakotta (2010), opportunity is a condition where individuals cheat because there are loopholes that let them cheats without being detected and no sanction ever imposed on them. Individuals usually commit fraud by utilizing their expertise and skills. The greater opportunities an individual gets, the higher likelihood that he will cheat. The testing of third hypothesis indicated that opportunity has no impact on students' academic fraud. Fitri (2019) suggests that better internal control system will result in higher likelihood of detecting fraud in a simpler and faster way. Furthermore, this will help reduce the opportunity for committing fraud.

The results revealed that rationalization has no impact on academic fraud behavior. This indicates the feeling that no one was harmed when committing fraud; that "if I get caught cheating, no one but me deserved to be punished"; that "it is normal for me and my friends to commit academic fraud"; that "I was mockingly called a saint for refusing to share my answer during the exam"; and that committing academic fraud to get high grades and considered to be smart and to make parents happy will have no effect on students to commit academic fraud. According to Tuanakotta (2010), rationalization is individual consideration to justify his or her fraud acts before actually commit fraud behavior. The testing of fourth hypothesis indicates that rationalization has no impact on students' academic fraud behavior. This is because many respondents expressed their disagreement with statements concerning rationalization. They argued that one's rationalization in committing fraud can not be measured because it is a conscious thought to justify his or her fraud act. The results of this study are consistent with those of Kusuma (201) and Fitri (2019).

The results indicated that competence has an impact on academic fraud behavior. This indicates that self-control, the feeling of not being afraid or worried, the ability to argue when caught cheating, getting a friend to help cheat on exams, and the ability to handle the surroundings have an impact on academic fraud behavior. According to Marks (2012), competence is a person's ability to override internal control, to develop sophisticated concealment strategies, and to control social situations for his benefit by selling them to others. The testing of fifth hypothesis indicated that competence has an impact on students' academic fraud. This means that the higher ability a student has in academic fraud, the higher competence he gets for doing so. The results of this study are consistent with those of Faradiza (2019) and Kusuma (2019).

The results of study revealed that arrogance has no impact on academic fraud behavior. This means that student's ability to commit fraud, increased confidence after committing fraud, feeling that cheating in exam is cool, and being proud of committing academic fraud have no impact on academic fraud. Oktafiana and Sari (2019) stated that arrogance arises when a person considered himself as not subject to internal control, policies or rules of his or her company, and thus feels he is not guilty when committing fraud. The results of this study are consistent with those of Muhsin (2018). Faradiza (2019) found that arrogance has no impact on fraudulent acts in financial reporting. Febriana (2019) revealed arrogance among students did not lead them to commit academic fraud on their competency test. However, the finding is not consistent with that of Tessa and Harto (2016).

6. Conclusions, Limitations, and Recommendations

The findings elaborated in the results and discussion section have led us to the following conclusions:

1. Ethics have an impact on academic fraud behavior among accounting students of Veteran National Development University of Yogyakarta.
2. Pressure has an impact on academic fraud behavior among accounting students of Veteran National Development University of Yogyakarta.
3. Opportunity has no impact on academic fraud behavior among accounting students of Veteran National Development University of Yogyakarta.
4. Rationalization has no impact on academic fraud behavior among accounting students of Veteran National Development University of Yogyakarta.
5. Competence has an impact on academic fraud behavior among accounting students of Veteran National Development University of Yogyakarta.
6. Arrogance has no impact on academic fraud behavior among accounting students of Veteran National Development University of Yogyakarta.

Our work clearly has some limitations, such as the difficulty in getting more respondents because the questionnaires were distributed during the semester break. It was also not possible for us to contact the respondents in a face-to-face survey. Therefore, we use a social media platform as an alternative way for distributing the questionnaires. We propose the following recommendations to the parties concerned: for education practitioners, this study provides valuable information in considering the impact of ethics, pressure, opportunity, rationalization, competence and arrogance on academic fraud behavior in devising better learning method or rules to minimize academic fraud among students. We also suggest that future research should use other independent variables than those included in this study, such as religiosity, intelligence, personality, and self efficacy. Furthermore, we recommend that further research should be taken in the area of fraud pentagon concept because some studies cited this research paper provide the results that run contrary to the existing theory.

References

Achsin, R. I. C. M. (2019). Studi Fenomenologi Kecurangan Mahasiswa Dalam Pelaporan Pertanggungjawaban Dana Kegiatan Mahasiswa: Sebuah Realita Dan Pengakuan. *Journal of Chemical Information and Modeling*, *53*(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004

Agustina, B. (2018). E-JRA Vol. 07 No. 01 Agustus 2018 Fakultas Ekonomi dan Bisnis Universitas Islam Malang. *E-JRA Vol. 07 No. 01 Agustus 2018*, *07*(01), 32–45. https://doi.org/10.1186/1476-4598-10-45

Apriani, N., Sujana, E., & Sulindawati, I. G. E. (2017). Pengaruh Pressure, Opportunity, dan Rationalization Terhadap Perilaku Kecurnagan Akademik (Studi Empiris : Mahasiswa Akuntansi Program S1 Universitas Pendidikan Ganesha). *E-Journal S1 Ak*, *7*(1), 121–133.

Aprilia, A. (2017). Analisis Pengaruh Fraud Pentagon Terhadap Kecurangan Laporan Keuangan Menggunakan Beneish Model Pada Perusahaan Yang Menerapkan Asean Corporate Governance Scorecard. *Jurnal ASET (Akuntansi Riset)*, *9*(1), 101. https://doi.org/10.17509/jaset.v9i1.5259

Artani, K. T. B., & Wetra, I. W. (2017). Academic self efficacy dan fraud diamond. *Riset Akuntansi*, *7*(2), 123–132.

Astuti, E. K. (2018). Pengaruh Etika , Komitmen Profesional , Mahasiswa Akuntansi Terhadap Perilaku Skripsi Diajukan Oleh : Nama : Erlita Kusuma Astuti Fakultas Ekonomi Universitas Islam Indonesia Yogyakarta. *Universitas Islam Indonesia Yogyakarta*.

Dzakirin, M. K. (2013). Kata kunci: idealisme, relativisme, pengetahuan, skandal akuntansi, profesi akuntansi, persepsi. 1. *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya*, 1–25.

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.v12i2.1774

Faradiza, S. A. (2019). Fraud Pentagon Dan Kecurangan Laporan Keuangan. *EkBis: Jurnal Ekonomi Dan Bisnis*, *2*(1), 1–22. Retrieved from http://ejournal.uin-suka.ac.id/febi/ekbis/article/view/1060/621

Febriana, N. R. (2016). *Analisis Pengaruh Dimensi Fraud Pentagon Terhadap Perilaku Kecurangan Akademik Mahasiswa Pada Uji Kompetensi*.

Fitri, F. (2019). *Pengaruh Tekanan (Pressure) , Kesempatan (Opportunity) , Rasionalisasi (Rationalization) , Dan Kapabilitas (Capability) Terhadap Kecurangan Pengadaan Barang / Jasa Di Pemerintahan*. *4*(3), 412–427.

Fitriani. (2019). *Analisis Pengaruh Dimensi Fraud Diamond Terhadap Academic Fraud (Studi Empiris Pada Mahasiswa Akuntansi Universitas Swasta di Surakarta)*.

Handayani, M. H. & A. E. (2018). *Kecerdasan, Pengaruh Terhadap, Emosional Pemahaman, Tingkat Pada, Akuntansi Akuntansi, Mahasiswa Universitas, D I*. *2*(September), 86–98.

Hendricks, B. (2004). Academic Dishonesty : A Study in the Magnitude of and Justifications for Academic Dishonesty Among College Undergraduate and Graduate Students. *Jurnal of College Student Development*, 212–260. https://doi.org/10.1007/s12033-010-9324-z

Marks, J. (2012). The Mind Behind The Fraudsters Crime : Key Behavioral and Environmental Elements. *Crowe Horwath LLP*, 62. Retrieved from http://www.fraudconference.com/uploadedFiles/Fraud_Conference/ Content/Course-

Materials/presentations/23rd/ppt/10C-Jonathan-Marks.pdf

McCabe, D. L., Trevino, L. K., & Butterfield, K. D. (2001). Dishonesty in academic environments: The influence of peer reporting requirements. *Journal of Higher Education*, *72*(1), 29–45. https://doi.org/10.2307/2649132

Meliana, M., & Hartono, T. R. (2019). Fraud Perbankan Indonesia: Studi Eksplorasi. *Prosiding Seminar Nasional Pakar*, 2–52.

Mia Tri Puspitaningrum, Eindye Taufiq, & Satria Yudhia Wijaya. (2019). Pengaruh Fraud Triangle Sebagai Prediktor Kecurangan Pelaporan Keuangan. *Jurnal Bisnis Dan Akuntansi*, *21*(1), 77–88. https://doi.org/10.34208/jba.v21i1.502

Muhsin, Kardoyo, & Nurkhin. (2018). What 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

Murdiansyah, I., Sudarma, M., & Nurkholis. (2017). Pengaruh Dimensi Fraud Diamond Terhadap Perilaku Kecurangan Akademik. *Jurnal Akuntansi Aktual*, *4*(2), 121–133.

Nurkhin, A., & Fachrurrozie. (2018). Analisis Pengaruh Dimensi Fraud Diamond Terhadap. *Pendidikan Akuntansi*, *1*(1), 1–12.

Oktafiana, N. F., & Sari, S. P. (2019). *Fraudulent Financial Statement Ditinjau Dari Model Fraud Pentagon Horwath*.

Oktaviani, D., Amin, M., & Mawardi, M. C. (2019). E-JRA Vol. 08 No. 01 Februari 2019 Fakultas Ekonomi dan Bisnis Universitas Islam Malang. *E-Jra*, *08*(01), 1–13.

Padmavathy, R., Amudhavalli, A., Manikandan, M., Rajeswarapalanichamy, R., Iyakutti, K., & Kushwaha, A. K. (2019). Electronic and Optical Properties of CsSnI3−yCly (y = 0, 1, 2, 3) Perovskites: a DFT Study. *Journal of Electronic Materials*, *48*(2), 1243–1251. https://doi.org/10.1007/s11664-018-06850-8

Padmayanti, K. D., Sujana, E., & Kurniawan, P. S. (2017). *Analisis Pengaruh Dimensi Fraud Diamond Terhadap Perilaku Kecurangan Akademik Mahasiswa (Studi Kasus Mahasiswa Penerima Bidikmisi Jurusan Akuntansi S1 Fakultas Ekonomi Universitas Pendidikan Ganesha)*. *1*.

Pamungkas, I. D. (2016). Pengaruh Orientasi Etika dan Komitmen Profesional terhadap Kecurangan Akuntansi melalui Rasionalisasi sebagai Variabel Moderating. *Ekonomi Dan Bisnis*, *18*, 41–54.

Pudjiastuti, E. (2012). Hubungan "Self Efficacy" dengan Perilaku Mencontek Mahasiswa Psikologi. *MIMBAR, Jurnal Sosial Dan Pembangunan*, *28*(1), 103. https://doi.org/10.29313/mimbar.v28i1.344

Putri, D. L. P., & Amar, S. S. (2017). Ф.В. Тузиков2, Ю.И. Рагино1, Нл. Тузикова2, М.В. Иванова1, Р.В. Талимов2, Ю.П. Никитин1. *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2017*, *41*(2), 84–93.

Ristianingsih, I. (2017). Telaah Konsep Fraud Diamond Theory Dalam. *Strategi Pengelolaan Sumber Daya Daerah Dalam Menciptakan Good Governance*, *2017*, 128–139.

Sari, R. L. (2017). *Pengaruh profitabilitas dan tingkat likuiditas terhadap nilai perusahaan dengan kebijakan deviden sebagai variabel intervening*. 1–15.

Suraida, I. (2005). Pengaruh Etika, Kompetensi, Pengalaman Audit dan Risiko Audit terhadap Skeptisisme Profesional Auditor dan Ketepatan Pemberian Opini Akuntan Publik. *Sosiohumaniora*, *7*(3), 186–202.

Wardana, I. G. J., Sulindawati, I. N. L. G. E., & Sujana, I. E. (2017). Pengaruh motivasi belajar, integritas mahasiswa dan penyalahgunaan teknologi informasi terhadap perilaku kecurangan akademik (Studi kasus pada mahasiswa Jurusan Akuntansi Program S1 Universitas Pendidikan Ganesha). *E-Jurnal S1 Ak*, *8*(2).

Wati, M., & Sudibyo, B. (2016). Pengaruh Pendidikan Etika Bisnis Dan Religiusitas Terhadap Persepsi Etis Mahasiswa Akuntansi. *Jurnal Economia*, *12*(2), 183. https://doi.org/10.21831/economia.v12i2.11775

Wolfe, D. T., & Hermanson, D. R. (2004). The Fraud Diamond : Considering the Four Elements of Fraud: Certified Public Accountant. *The CPA Journal*, *74*(12), 38–42. https://doi.org/DOI:

Yudiana, A. P., & Lastanti, H. S. (2016). Analisis Pengaruh Dimensi Fraud Diamond Terhadap Perilaku Kecurangan Akademik Mahasiswa Fakultas Ekonomi. *Seminar Nasional Dan Call Paper Fakultas Ekonomi UNIBA Surakarta*, (September), 412–422.

Ghozali, I. 2016. *Aplikasi Analisis Multivariate dengan Program IBM SPSS*. Edisi Kedelapan. Semarang: Badan Penerbit Universitas Diponegoro.

Sugiyono. 2012. Statistika Untuk Penelitian Kuantitatif. Bandung : Alfabeta.

Suseno, Frans Magnis, 1989, Etika Dasar Masalah-masalah Pokok Filsafat Moral . Penerbit Karnisius, Jogjakarta, hal 14.

Tuanakotta, Theodorus. M. 2010. Akuntansi Forensik dan Auditor Investigatif. Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia (LPFE UI). Edisi ke 2: Jakarta

THE IMPACT OF ETHICS AND FRAUD PENTAGON THEORY ON ACADEMIC FRAUD BEHAVIOR