

THE EFFECT OF FRAUD DIAMOND DIMENSIONS AND ACADEMIC PROCRASTINATION ON STUDENT ACADEMIC CHEATING BEHAVIOR

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Abstract

This research aims to determine the influence of diamond fraud dimensions and academic procrastination on academic cheating behavior among students in the Economic Education FKIP UNS undergraduate study program. This research is descriptive quantitative research. The data source for this research comes from primary data from respondents, namely students of the 2020-2023 FKIP UNS Bachelor of Economics Education Study Program. The sampling technique was carried out using simple random sampling. Data collection was carried out by distributing questionnaires containing questions. The validity test was carried out using the Pearson correlation product moment technique. Reliability testing was carried out using the Cronbach's Alpha formula. Data analysis was carried out using descriptive statistical analysis and statistical analysis including prerequisite tests, partial t tests, and coefficient of determination. The results of this research are that the variables of opportunity and ability have a significant effect on academic cheating behavior. While the variables of pressure, rationalization, and academic procrastination do not have a significant effect on academic cheating behavior.

Key words: Pressure, opportunity, rationalization, ability, academic procrastination, and academic cheating.

Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh dimensi *fraud diamond* dan prokrastinasi akademik terhadap perilaku kecurangan akademik pada mahasiswa program studi S1 Pendidikan Ekonomi FKIP UNS. Penelitian ini merupakan penelitian kuantitatif deskriptif. Sumber data penelitian ini berasal dari data primer yang berasal dari responden yaitu mahasiswa program studi S1 Pendidikan

Ekonomi FKIP UNS angkatan 2020-2023. Teknik pengambilan sampel dilakukan dengan *simple random sampling*. Pengumpulan data dilakukan dengan menyebarkan kuesioner yang berisi butir-butir pertanyaan. Uji validitas dilakukan menggunakan teknik *pearson correlation product moment*. Uji reliabilitas dilakukan dengan menggunakan rumus *Cronbach's Alpha*. Analisis data dilakukan dengan menggunakan analisis statistik deskriptif dan analisis statistik meliputi uji prasyarat, uji t parsial, dan koefisien determinasi. Hasil penelitian ini adalah variabel kesempatan dan kemampuan berpengaruh signifikan terhadap perilaku kecurangan akademik. Sedangkan, variabel tekanan, rasionalisasi, dan prokrastinasi akademik tidak berpengaruh signifikan terhadap perilaku kecurangan akademik.

Kata kunci: Tekanan, kesempatan, rasionalisasi, kemampuan, prokrastinasi akademik, dan kecurangan akademik.

INTRODUCTION

Higher education not only aims to develop academic abilities, but also to build honesty character as the basis for every action taken (Murdiana, 2023). During their education, students must comply with the procedures and rules of each university. If students realize that they are bound by academic rules, they will maintain their integrity value while in higher education (Qudsyi et al., 2018). However, in reality, many academic fraud phenomena indicate that honesty and integrity among students are still in doubt. The results of research conducted by Pratama et al. (2023) on students of one university in Indonesia showed that 74.8% of students had committed academic fraud in the past. Academic cheating is defined as illegal assistance in completing a task (Krou et al., 2020). Academic cheating can include giving or receiving information during exams, using notes of material during exams, and plagiarism (Jones, 2011). Based on data from the *Association of Certified Fraud Examiners* (2020), it is stated that undergraduate graduates are the most perpetrators of fraud in Indonesia with a figure of 73.2% with a total of 175 cases. This is certainly very concerning because fraud committed in the workplace is related to the habit of committing academic fraud while in college (Rujoiu & Rujoiu, 2014).

Wolfe & Hermanson (2004) mention four factors that support a person committing fraud, namely *pressure*, *opportunity*, *rationalization*, and *capability*. These four factors are known as the *Fraud diamond Theory* which is a development of the *Fraud Triangle Theory* with the addition of the ability element. Pressure is defined as a drive, motivation or goal that wants to be achieved but has limited ability to achieve it, resulting in fraud (Albrecht et al., 2012). When the perceived pressure increases, the possibility of students committing fraud increases as well (Pratama et al., 2023). The pressure felt by students comes from themselves, academic standards, and parents. The pressure felt by students triggers them to cheat in achieving the desired goal, namely academic success (Purnamasari, 2013).

Opportunity is a supporting factor for students to commit academic fraud. Opportunity is a condition that allows individuals to commit fraud because they think that this behavior will not be detected so it is safe to commit fraud (Albrecht et al., 2012). Opportunities can encourage academic fraud behavior due to weak systems that can be exploited to commit fraud (Wolfe & Hermanson, 2004). In the campus environment, lax academic institution policies can create opportunities for students to commit academic fraud. For example, when exams take place with low supervision from lecturers or even if cheating behavior is detected but lecturers

do not provide strict consequences to the perpetrators, it will encourage students to commit academic fraud.

Rationalization can influence academic cheating behavior. Pratama et al (2023) define rationalization as an attempt to provide social reasons or justifications that can justify their actions, even though these reasons may be based on personal motives. Students tend to influence each other to commit acts of academic fraud such as cheating because their peers consider this behavior to be normal and acceptable. Students also rationalize to commit academic fraud when they feel there is unfair competition if they are not involved in cheating, so they do the same (McCabe et al., 1996).

Ability is also a factor that influences individuals to commit academic fraud. Wolfe & Hermanson (2004) explain that abilities are skills or traits that individuals have to be able to recognize opportunities and commit fraud. Students who have the ability to commit academic fraud usually have several characteristics such as being able to eliminate guilt after cheating, being able to find opportunities to commit fraud, and being able to plan ways to commit fraud (Nursani & Irianto, 2013).

In addition, based on research conducted by Murdiana (2023), academic procrastination can influence individuals to commit academic fraud. Oktaria et al (2021) define procrastination as the behavior of individuals who have not started working on a task or have delayed completing a task which causes the task not to be completed according to the deadline and late. Procrastination by students is a serious problem and needs attention because it has a negative impact on the students themselves, such as causing stress and reducing student performance. Academic procrastination carried out by students occurs because they are not wise in utilizing time. Ferrari (1995) states that one of the main characteristics of academic procrastination is the delay in completing academic tasks. If students delay completing the task, the time to do the task will be reduced, making it difficult for students to get maximum final results. Such a situation will cause the deadline effect. The closer the deadline, the higher the pressure to complete the task (Weinstein & Dobkin in Patrzek et al., 2014). Therefore, academic fraud is expected to be committed more often in situations with little time left and will commit academic fraud to account for lost time and to avoid academic failure (Patrzek et al., 2014). The above statement is in line with research conducted by Murdiana et al (2023) and Yulianto et al (2020), namely academic procrastination has a positive and significant effect on academic fraud. The higher the level of student procrastination, the higher the likelihood of students committing academic fraud. The results of this study are consistent with the cognitive-behavioral theory presented by Ellis & Knaus in Yulianto et al. (2020). This theory explains that if students feel unable to complete tasks optimally and are afraid of failure, they tend to delay completing their assignments. Students who delay completing their assignments will find it difficult to complete the task on time, so that in the remaining time students prefer to copy their friends' answers.

Research on academic fraud has been conducted by Pratama et al. (2023) & Alserhan et al. (2022) state that pressure, opportunity, rationalization, and ability have a significant effect on academic fraud behavior. Meanwhile, research conducted by Wulansuci & Laily (2022) states that pressure and rationalization have no significant effect on student academic fraud. In addition, research conducted by Warni & Margunani (2022) states that ability has no significant effect on student academic cheating behavior. Research on academic procrastination conducted by Yulianto et al. (2019) states that the higher the academic procrastination, the higher the level

of academic fraud committed. In addition, research conducted by Murdiana et al. (2023) stated that academic procrastination has a significant effect on academic cheating behavior. Meanwhile, research conducted by Warsiyah (2015) states that academic procrastination has no significant effect on academic cheating behavior.

The Department of Economic Education as part of the Faculty of Teacher Training and Education UNS which has the aim of producing graduates who are faithful and devoted to God Almighty, have noble, intelligent, and skilled personalities who are ready to become educators or professional education personnel with global insight. Based on these objectives, this study was conducted to examine the factors of the dimensions of the *fraud diamond* and academic procrastination that can affect the academic fraud of FKIP UNS Economics Education students.

METHODS

This research uses descriptive quantitative methods. Quantitative method is a research method based on positivism, which is used to examine a certain population or sample and use research instruments as data collection techniques, as well as quantitative data analysis to test hypotheses that have been formulated (Sugiyono, 2013). The descriptive quantitative method is a method used to summarize and describe the data that has been collected (Sudirman et al., 2020).

The population of this study were active students majoring in Economic Education, Faculty of Teacher Training and Education, Sebelas Maret University, class of 2020-2023, totaling 467 students. The sample of this study was taken using the simple random sampling method. The research data collection technique was carried out using a questionnaire. The data analysis technique of this research is descriptive analysis and multiple linear regression analysis.

RESULTS AND DISCUSSION

The data that has been collected through the distribution of questionnaires is then processed and described through descriptive statistical analysis. The results of the descriptive analysis of respondents are presented in table 1.

Table 1. Descriptive Analysis of Respondents

<i>Descriptive Statistic</i>			
Demographics		<i>Frequency</i>	<i>Percent</i>
Gender			
	Male	35	16%
	Female	181	84%
Frequency of committing academic fraud in one semester			
	Never	48	22%
	1-3 times	134	62%
	4-6 times	23	11%
	0Kali	5	2%
	>10 times	6	3%
Frequency of doing leisure activities			
	Never	2	1%
	Every day	39	18%

Once every 2-3 days	49	23%
Once a week	70	32%
Once every two weeks	34	16%
Once a month	22	10%

During one semester, there were 134 respondents who had committed academic fraud 1-3 times. A total of 23 respondents had committed academic fraud 4-6 times. A total of 5 respondents had committed academic fraud 7-10 times. A total of 6 respondents have committed academic fraud more than 10 times and 48 respondents have never committed academic fraud in one semester. In addition, a total of 70 students do fun activities once a week. A total of 49 students do fun activities once every 2-3 days. A total of 34 students do fun activities once every two weeks. A total of 39 students have fun activities every day. A total of 22 students did fun activities once a month and 2 students claimed to have never done fun activities.

The results of descriptive analysis of academic cheating variables, pressure, opportunity, rationalization, ability, and academic procrastination are presented in table 2.

Table 2. Descriptive Analysis of Variables

<i>Descriptive Statistics</i>						
	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>Sum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Academic Cheating	216	6	24	2.790	12,92	3,545
Pressure	216	4	15	1.861	8,62	2,234
Opportunity	216	5	20	2.799	12,96	2,730
Rationalization	216	4	16	2.066	9,56	2,424
Ability	216	5	20	2.150	9,95	3,163
Academic Procrastination	216	5	20	2.585	11,97	3,736
Valid N (listwise)	216					

Based on table 2, the questionnaire items to measure this research variable use a Likert scale of 1-4. The academic fraud variable questionnaire totaling 6 questions obtained a minimum value of 6 and a maximum value of 24. The average value is 12.92 with a total value of 2790 and a standard deviation value of 3.545. The pressure variable questionnaire totaling 4 questions obtained a minimum value of 4 and a maximum value of 15. The average value is 8.62 with a total value of 1861 and a standard deviation value of 2.234. The opportunity variable questionnaire of 5 questions obtained a minimum value of 5 and a maximum value of 20. The average value is 12.96 with a total value of 2799 and a standard deviation value of 2.730. The rationalization variable questionnaire of 4 questions obtained a minimum value of 4 while the maximum value was 16. The average value is 9.56 with a total value of 2066 and a standard deviation value of 2.424. The ability variable questionnaire of 5 questions obtained a minimum value of 5 while the maximum value was 20. The average value was 9.95 with a total

value of 2150 and a standard deviation value of 3.163. The academic procrastination variable questionnaire of 5 questions obtained a minimum value of 5 while the maximum value was 20. The average value was 11.97 with a total value of 2585 and a standard deviation value of 3.736.

Before conducting multiple linear regression analysis, a classical assumption test is carried out including normality test, linearity test, multicollinearity test and heteroscedasticity test. The normality test was carried out with the Kolmogorov Smirnov test and obtained a significance value of 0.200. The significance value of $0.200 > 0.05$, it can be concluded that the data is normally distributed. In the linearity test, the variables of pressure, opportunity, rationalization, ability, academic procrastination, and academic fraud show a significance value < 0.05 so it can be concluded that the data obtained are linear. In the multicollinearity test, overall, the VIF value < 10 and the tolerance value > 0.1 . This indicates that the research data does not occur multicollinearity. Based on the heteroscedasticity test with the Glejser method, the significance value of the independent variable > 0.05 means that the data does not occur symptoms of heteroscedasticity.

Based on the results of multiple regression analysis through the IBM SPSS 25 application, the multiple linear regression equation is obtained as follows.

$$2.263 + 0.033X_1 + 0.347X_2 + 0.090X_3 + 0.512X_4 - 0.007X_5$$

Table 3. Partial t test results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,263	1,100		2,056	,041
	X1	,033	,091	,021	,358	,721
	X2	,347	,084	,267	4,146	,000
	X3	,090	,099	,062	,906	,366
	X4	,512	,070	,457	7,296	,000
	X5	-,007	,053	-,007	-,124	,902

Partial t test is conducted to see the effect of independent variables partially on the dependent variable. The first hypothesis of this study is that pressure has a significant effect on student academic cheating behavior. Based on the partial t test, the significance value is $0.721 > 0.05$, so the hypothesis is rejected, that there is no significant influence between pressure on student academic fraud. The results of this study are not in accordance with the fraud diamond theory by Wolfe & Hermanson which states that pressure can influence individuals to commit fraud. This means that students in committing academic fraud are not influenced by the perceived pressure. However, this study is in line with the results of research conducted by Wulansuci & Laily (2022) and Nursani & Irianto (2013) which state that pressure does not affect student academic fraud behavior. Pressure due to difficulties in attending lectures and completing assignments does not make him commit academic fraud (Wulansuci & Laily, 2022). In addition, based on data analysis, 61.1% of respondents did not feel pressure from their parents to get high grades. The grades obtained may not be overly concerned by parents, especially for students who migrate out of town and the important thing is that the student can

complete their studies on time with good enough grades (Nursani & Irianto, 2013). If parents demand that their children get high grades, students may do everything possible including cheating to get these grades. In addition, the low level of competition for grades makes students less motivated to get high grades (Nursani & Irianto, 2013). Based on Table 1 regarding the intensity of having fun, students generally use their time to have fun with their friends, such as traveling, watching, doing hobbies, and so on. This means that students prefer to establish social interactions by having fun rather than engaging in value competition which can cause unhealthy competition and lead to academic cheating behavior.

The second hypothesis of this study is that opportunity has a significant effect on student academic cheating behavior. Based on the partial t test, the significance value is $0.000 < 0.05$, so the hypothesis is accepted, that there is a significant influence between opportunity and student academic fraud. Weak control or supervision provides an opportunity for students to commit academic fraud (Wolfe & Hermanson, 2004). The greater the opportunity available, the greater the likelihood of students committing academic fraud. Students have the opportunity to commit academic fraud when educators do not strictly enforce academic policies and do not explain the consequences of punishment for cheating (Perkins et al., 2020). The effect of opportunity on academic fraud in this study can also be explained through the indicators used. Among other things, students have the opportunity to cheat when educators do not change assignments or exams between semesters, so that they have the potential to copy answers from assignments that have been given to other students. In addition, students also have the opportunity to commit academic fraud when educators do not check the plagiarism of the results of the assignments that have been given. The results of this study are consistent with the research of Becker et al (2006); Nursani & Irianto (2013); and Wulansuci & Laily (2022) which explain that opportunity affects academic fraud behavior. The existence of broad opportunities tends to make someone more active in doing something. The existence of an opportunity makes a person feel that the behavior and situation being faced can be controlled by him. This will encourage him to do something according to his own wishes, including committing academic fraud (Becker et al., 2006).

The third hypothesis of this study is that rationalization has a significant effect on student academic cheating behavior. Based on the partial t test, the significance value is $0.366 > 0.05$, so the hypothesis is rejected, that rationalization has no significant effect on student academic fraud. The results of this study are not in accordance with the fraud diamond theory which states that rationalization can influence a person to commit fraud. However, this research is in line with research conducted by Wulansuci & Laily (2022) which suggests that rationalization has no effect on academic fraud. Students do not easily choose to commit academic fraud even though they have various reasons or defenses for these fraudulent actions. The presence or absence of an explanation of the forms of cheating from educators does not make students commit academic fraud. The absence of strict sanctions for cheating perpetrators and the rarity of detected cheating behavior also does not make students rationalize cheating. Students realize that academic fraud is an action that is not justified (Wulansuci & Laily, 2022).

The fourth hypothesis is that ability has a significant effect on student academic fraud. Based on the partial t test, the significance value is $0.00 < 0.05$, so the hypothesis is accepted, that ability has a significant effect on student academic fraud. This supports the opinion of Wolfe & Hermanson (2004) which reveals that cheating will not occur if the perpetrator does not have sufficient ability. The higher the ability possessed by students, the higher the

possibility of committing academic fraud. The abilities possessed by students to be able to commit academic fraud are explained in the indicators used in this study, including having the intelligence to take advantage of opportunities, being able to understand the situation and take advantage of weaknesses in supervision so that their actions are not detected. In addition, students must also have characteristics and abilities that are important in order to successfully commit fraud, such as high ego/self-confidence, having the ability to force others to participate in cheating, and being able to suppress guilt after committing fraudulent acts (Wulansuci & Laily, 2022). The results of this study are in line with research conducted by Christiana & Kristiani (2021); Pratama et al. (2023); and Wulansuci & Laily (2022). However, this is not in line with research conducted by Warni & Margunani (2021) which shows that ability has no effect on academic fraud behavior.

The fifth hypothesis is that academic procrastination has a significant effect on student academic fraud. based on the partial t test, the significance value is $0.902 > 0.05$, so the hypothesis is rejected. This means that there is no significant influence between academic procrastination variables on student academic cheating. This finding is not in line with the cognitive-behavioral theory put forward by Ellis & Knaus which explains that if students feel afraid of failure and feel they do not have the ability to complete their assignments optimally, then these students tend to procrastinate in completing their assignments. If students continue to delay, it will be difficult to complete the task on time and in the remaining time they will copy their friends' answers. This is what causes academic fraud. However, the results of this study contradict research conducted by Yulianto et al. (2020); Wisnumurti (2017) and Murdiana et al. (2023) which state that the more students who do academic procrastination, the higher the academic cheating behavior will occur.

However, the results of this study are in line with research conducted by Warsiyah (2013) which states that there is no effect of academic procrastination on academic cheating behavior. Research conducted by Oktaria et al. (2021) on students of the University of Lampung Medical Study Program also stated that there was no relationship between academic procrastination and academic fraud. This may be due to the existence of strict sanctions as a consequence of academic fraud. Besides being triggered by personality factors including academic procrastination habits and the dimensions of the fraud diamond, academic fraud can also be influenced by various factors such as: 1) individual factors such as age, gender, race, academic achievement, parents' education level, and extracurricular activities, 2) contextual factors including student organization membership and peer behavior, and 3) situational factors including over-study, competition in lessons, and the environment during exams (Hendricks in Oktaria et al., 2021).

Students' academic cheating behavior is not influenced by their academic procrastination. Students can manage their time well and prioritize lectures. In addition, students also do not underestimate the assignments given by lecturers so that academic procrastination has no effect on academic cheating behavior. Based on research conducted by Jones (2011), it is stated that compared to the habit of academic procrastination, 92% of students more often commit academic fraud because of the motivation to get high scores. Purnamawati in Oktaria et al (2021) said that students' desire to get higher grades and not accompanied by persistent efforts usually leads to the desire to cheat. This can happen because students lack control over themselves. Based on the theory of crime by Gottfredson & Hirschi (Oktaria et al., 2021), it is stated that the main causes of cheating behavior, including academic fraud, include lack of self-

control, opportunity, and the interaction between the two. Individuals who have weak self-control have a tendency to commit fraud, especially with the opportunity, individuals with weak self-control are unable to avoid this tendency.

Based on the results of the coefficient of determination test, the R Square value is 0.426. That is, this shows that 42.6% of academic cheating behavior can be explained by the variables of pressure, opportunity, rationalization, ability, and academic procrastination, while the remaining 57.4% is influenced by other variables outside these variables.

CONCLUSION

Based on the results of research, data analysis, and hypothesis testing that has been carried out by researchers regarding the influence of the dimensions of the *fraud diamond* and academic procrastination on academic fraud behavior, it can be concluded that opportunity and ability have a significant effect on academic *fraud* behavior. Meanwhile, pressure, rationalization, and academic procrastination have no significant effect on student academic fraud behavior. The results of this study partly support and reject previous research. This is thought to be due to differences in research subjects.

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