

Determinants of Fraud Tendency among Accounting Students: The Moderating Role of Ethical Value

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ABSTRACT

This study analyzes factors influencing fraud tendency among accounting students based on the fraud hexagon theory, including pressure, opportunity, rationalization, competence, arrogance, and collusion, and examines ethical value as a moderating variable. Fraud tendency is considered an early indicator of unethical behavior, making its identification during education essential. This study applies a quantitative survey approach using questionnaires distributed to final-year accounting students at STIE Cendekia Bojonegoro and the Islamic University of Darul Ulum Lamongan. Data were analyzed using Moderated Regression Analysis (MRA). The results show that pressure, rationalization, and arrogance positively affect fraud tendency, while competence has a negative effect. Opportunity and collusion are insignificant. Ethical value negatively moderates the relationship between arrogance and fraud tendency but does not moderate the other factors. These findings highlight the importance of strengthening ethical values in accounting education to prevent fraud tendency early.

Keywords: Fraud Hexagon; Fraud Tendency; Ethical Values; Accounting Students.

ABSTRAK

Penelitian ini bertujuan menganalisis faktor-faktor yang memengaruhi kecenderungan fraud pada mahasiswa akuntansi menggunakan pendekatan fraud hexagon theory, yang meliputi tekanan, peluang, rasionalisasi, kompetensi, arogansi, dan kolusi, serta menguji peran nilai etika sebagai variabel moderasi. Kecenderungan fraud dipandang sebagai indikator awal potensi perilaku tidak etis di dunia kerja, sehingga penting untuk diidentifikasi sejak masa pendidikan. Penelitian ini menggunakan pendekatan kuantitatif dengan metode survei melalui kuesioner terhadap mahasiswa S1 Akuntansi semester akhir di Sekolah Tinggi Ilmu Ekonomi Cendekia Bojonegoro dan Universitas Islam Darul Ulum Lamongan. Analisis data dilakukan menggunakan Moderated Regression Analysis (MRA). Hasil penelitian menunjukkan bahwa tekanan, rasionalisasi, dan arogansi berpengaruh positif terhadap kecenderungan fraud, sedangkan kompetensi berpengaruh negatif. Sementara itu, peluang dan kolusi tidak berpengaruh signifikan. Nilai etika hanya terbukti memoderasi negatif hubungan antara arogansi dan kecenderungan fraud. Temuan ini menegaskan pentingnya penguatan nilai etika dalam pendidikan akuntansi untuk membentuk karakter profesional yang berintegritas dan mencegah kecenderungan fraud sejak dini.

Kata Kunci: Fraud Hexagon; Kecenderungan Fraud; Nilai Etika; Mahasiswa Akuntansi.

Artikel dapat diakses : <https://ejournal1.unud.ac.id/index.php/Akuntansi/index>



e-ISSN 2302-8556

Vol. 36 No. 2
Denpasar, 28 Februari 2026
Hal. 529-552

DOI:
10.24843/EJA.2026.v36.i02.p19

PENGUTIPAN:
Shofiyah, A., & Ardini, L.
(2026). Determinants of Fraud
Tendency among Accounting
Students: The Moderating
Role of Ethical Value.
E-Jurnal Akuntansi,
36(2), 529-552

RIWAYAT ARTIKEL:
Artikel Masuk:
27 Februari 2024
Artikel Diterima:
13 Mei 2024

INTRODUCTION

Fraud is a global issue that causes significant losses to organizations across sectors and regions. The Association of Certified Fraud Examiners (ACFE) reports that organizations lose an average of 5% of their annual revenue to fraud, with total global losses reaching USD 3.1 billion from 1,921 cases across 138 countries, with Indonesia ranking second in the Asia-Pacific region (ACFE, 2024). The involvement of accounting professionals in major corporate scandals, such as Enron, confirms that fraud poses a serious threat to the integrity of the accounting profession, which upholds principles of honesty and accountability (Sahla & Ardianto, 2023).

Fraud is not considered to emerge suddenly in the workplace but may originate during the educational stage through academic dishonesty. Several studies have examined this relationship. Ballantine et al. (2018) found that academic dishonesty reflects behavioral tendencies similar to professional fraud. Guerrero-Dib et al. (2020) reported that students who engage in academic misconduct are more likely to rationalize unethical actions, indicating patterns comparable to occupational fraud. Sholikhah et al. (2024) further demonstrated that academic fraud is positively associated with increased tolerance toward unethical behavior in the workplace. These findings indicate a continuity of behavior between academic and professional environments.

In the Indonesian context, Ampuni et al. (2020) documented a high prevalence of academic dishonesty among university students. Hidayat & Sangka (2025) also emphasized that this phenomenon is not merely an incidental violation but represents a systemic issue. This suggests that academic dishonesty has the potential to shape unethical behavioral orientations in the future.

Within this framework, academic dishonesty among accounting students may be positioned as early fraud behavior, representing the initial stage in the formation of rationalization patterns and the normalization of deviant actions before individuals enter professional life. Mulisa (2021), in a systematic review, found that academic dishonesty is associated with a tendency toward unethical behavior beyond the educational environment. This finding suggests that academic misconduct cannot be understood merely as a situational response but rather as an early indicator of the internalization of values and justifications for deviant behavior.

This argument is reinforced by Christiana et al. (2021) and Smith et al. (2021), who demonstrated that academic pressure, moral rationalization, and social norms play significant roles in shaping students' cheating tendencies. Accordingly, academic dishonesty reflects not only a failure of educational supervision but also the foundation for the development of a fraud-oriented mindset that may persist into the professional domain.

In explaining this phenomenon, the use of fraud hexagon theory proposed by Vousinas (2019) is considered more comprehensive than the fraud triangle or fraud diamond models. The fraud triangle emphasizes pressure, opportunity, and rationalization as the primary determinants of fraud, focusing largely on individual behavior within the context of organizational financial crime. The fraud diamond extends this framework by incorporating capability to explain the

technical capacity of perpetrators to execute fraud. Although relevant, both models remain predominantly individual oriented and do not fully accommodate the strong social dynamics inherent in academic cheating practices.

The fraud hexagon addresses these limitations by incorporating the additional dimensions of arrogance and collusion. In the context of accounting students, collusion is particularly relevant, as academic dishonesty is frequently conducted collectively through unauthorized cooperation, such as sharing answers, engaging in group plagiarism, or coordinating during examinations. This suggests that academic fraud is not solely driven by personal pressure or structural opportunity but is also influenced by social interaction and group norms. Furthermore, the dimension of arrogance explains the presence of perceived superiority, confidence in avoiding detection, and a tendency to underestimate academic control systems. Such characteristics may emerge among accounting students who possess sufficient competence and understanding of weaknesses within evaluation systems. Accordingly, the fraud hexagon provides a more integrative conceptual framework for explaining the interaction of individual, structural, and social factors in shaping academic fraud tendencies during the educational stage.

Although research on the fraud hexagon in the context of academic dishonesty continues to develop, opportunities for conceptual and empirical refinement remain. Previous studies, such as Azzahra & Baridwan (2024) and Moorcy et al. (2024), have primarily examined the individual effects of pressure, opportunity, rationalization, capability, arrogance, and collusion on students' academic cheating behavior. Their findings reveal variations in the significance of each dimension, indicating that the relative contribution of these factors requires further investigation through a more integrated modeling approach. To date, the simultaneous examination of all six components of the fraud hexagon within a comprehensive framework remains limited. Consequently, understanding their combined influence and interaction effects on academic fraud tendency warrants further exploration.

On the other hand, studies such as Prastiwi et al. (2025) have focused mainly on specific individual characteristics and have not explicitly tested ethical values as a moderating variable in the academic context. Given that students are in a formative phase of value development and professional identity construction, integrating ethical values into the analytical model is conceptually relevant. Simultaneously testing the fraud hexagon components while incorporating ethical values as a moderating variable not only expands the empirical scope but also contributes theoretically to the development of the fraud hexagon within the educational domain. Moreover, this approach enriches the literature on ethical moderation in behavioral accounting by explaining how ethical values may strengthen or weaken the influence of fraud determinants on academic cheating tendencies. Accordingly, this study reinforces its position within behavioral accounting research, which emphasizes the interaction between structural factors and individual moral dimensions in shaping behavior.

Within the fraud hexagon framework, pressure is frequently associated with the emergence of unethical behavior when individuals face demands that are difficult to avoid. In the academic environment, pressure may arise from heavy

coursework, achievement expectations, time constraints, and academic performance standards. Several studies have reported a positive association between academic pressure and increased tendencies toward academic dishonesty (Dewi & Pertama, 2020; Said et al., 2017). Other findings indicate that individuals experiencing high levels of pressure are more likely to seek alternative means of achieving desired academic outcomes, including engaging in fraudulent practices (Aghghale et al., 2014; Vousinas, 2019). Based on this reasoning, the following hypothesis is proposed:

H₁: Pressure has a positive effect on fraud tendency among accounting students.

The greater the opportunity available to commit fraud, the higher the likelihood that such behavior will occur (Utami & Purnamasari, 2021). Individuals may be encouraged to engage in fraudulent actions when they perceive weaknesses in control mechanisms or governance structures that allow misconduct to go undetected. Opportunity reflects the absence or ineffectiveness of monitoring and enforcement systems that are intended to prevent the misuse of resources (Fadersair & Subagyo, 2019). In the academic context, weak supervision during examinations and inconsistent enforcement of academic regulations may create conditions that facilitate academic dishonesty.

Empirical findings provide mixed but generally supportive evidence regarding the role of opportunity in fraudulent behavior. Said et al. (2017) reported that opportunity has a positive effect on fraud. Ong'are and Njeru (2022) similarly found that perceived opportunity increases the likelihood of academic cheating. Research focusing on accounting students by Dewi (2016) and Bierstaker et al. (2024) also demonstrated that greater opportunity is associated with a higher tendency toward academic fraud. These findings suggest that when monitoring mechanisms are weak, the risk of fraudulent behavior increases. Based on these arguments, the proposed hypothesis is:

H₂: Opportunity has a positive effect on fraud tendency among accounting students.

The stronger the rationalization employed by an individual, the greater the likelihood that fraudulent behavior will be accepted as justifiable. Rationalization refers to a moral justification process that enables individuals to engage in unethical actions without perceiving a conflict with their personal values (Slezak, 2013). Within the academic environment, rationalization may arise when students perceive cheating as common practice, harmless, or necessary to achieve academic success. Such cognitive justification reduces feelings of guilt and lowers internal resistance to misconduct. Vousinas (2019) identifies rationalization as a central element in explaining why otherwise ethical individuals may commit fraud.

Empirical evidence supports this argument. Dewi & Pertama (2020) found that rationalization has a positive effect on academic fraud tendencies among accounting students. Similarly, Fernandhytia & Muslichah (2020) reported that students who justify dishonest behavior are more likely to engage in academic cheating. Sahla & Ardianto (2023) also demonstrated a significant positive relationship between rationalization and fraud tendency. These findings indicate that moral justification plays a crucial role in shaping students' inclination toward academic dishonesty. Based on these findings, the proposed hypothesis is:

H₃: Rationalization has a positive effect on fraud tendency among accounting students.

Competence refers to the ability and knowledge that enable an individual to execute fraudulent actions in a more structured manner and with a lower risk of detection. Competence represents the technical capacity to identify and exploit weaknesses within existing systems. In the fraud hexagon framework, competence is considered essential because fraud is more likely to be committed by individuals who possess sufficient skills, confidence, and understanding of procedural gaps (Vousinas, 2019). Individuals with higher levels of expertise may be better equipped to manipulate information or bypass control mechanisms.

Empirical evidence supports the role of competence in fraudulent behavior. Smith et al. (2021) found that competence has a positive relationship with fraud tendency. Similarly, Reskino et al. (2021) reported that higher levels of competence among accounting students are associated with an increased potential for academic dishonesty. These findings suggest that enhanced capability may facilitate the execution of fraudulent acts. Based on these findings, the proposed hypothesis is:

H₄: Competence has a positive effect on fraud tendency among accounting students.

Arrogance reflects an attitude of superiority and a belief that rules do not fully apply to oneself. Arrogance represents excessive self-confidence that reduces concern about potential risks or sanctions. Individuals with high levels of arrogance tend to underestimate control mechanisms and assume that their actions are unlikely to be detected. Within the fraud hexagon framework, arrogance is considered a factor that strengthens the intention to commit fraud because perpetrators perceive themselves as more capable or untouchable (Vousinas, 2019).

Empirical findings support this argument. Said et al. (2017) found that arrogance contributes to fraudulent behavior, as individuals believe that the likelihood of detection is minimal. Sahla & Ardianto (2023) also reported that arrogance significantly influences fraud tendency. Research involving accounting students by Reskino et al. (2021) and Pratiwi & Munari (2024) further demonstrated a positive relationship between arrogance and academic cheating tendencies. These findings indicate that a heightened sense of superiority may increase students' inclination toward fraudulent conduct. Based on these findings, the proposed hypothesis is:

H₅: Arrogance has a positive effect on fraud tendency among accounting students.

Collusion occurs when two or more parties cooperate to commit fraud in order to achieve certain benefits. Collusion represents coordinated action that increases the likelihood of successfully executing fraudulent activities. Within the fraud hexagon framework, collusion is considered to expand the opportunity and effectiveness of fraud because it involves multiple perpetrators who can support and protect one another (Vousinas, 2019). The presence of collaboration reduces the risk of detection and strengthens the collective intention to engage in misconduct.

Empirical evidence supports the role of collusion in fraudulent behavior. Achmad et al. (2022) found that collusion is associated with increased fraud risk

and intensity. Said et al. (2017) also reported that collaborative behavior contributes positively to fraudulent practices. Research involving accounting students by Nailah (2023) further demonstrated a positive relationship between collusion and academic fraud tendency. These findings indicate that collective involvement may reinforce individuals' inclination toward dishonest conduct. Based on these findings, the proposed hypothesis is:

H₆: Collusion has a positive effect on fraud tendency among accounting students.

Ethical values are regarded as an internal control mechanism that influences how individuals evaluate and respond to unethical behavior. Ethical values represent moral principles that guide decision making and shape judgments regarding right and wrong actions. In the academic context, the internalization of ethical values contributes to reducing dishonest practices such as plagiarism and academic manipulation. Individuals with stronger ethical foundations are less likely to justify or engage in fraudulent conduct.

Empirical evidence supports the role of ethical values in mitigating fraud tendencies. Said et al. (2017) found that ethical values have a negative relationship with fraud. Fernandhytia & Muslichah (2020) similarly reported that stronger ethical orientation reduces the tendency toward accounting fraud. Utami & Purnamasari (2021) also demonstrated that ethical values negatively affect fraudulent behavior. Research involving accounting students by Nwanyanwu (2018) and Reskino et al. (2021) further confirmed that strengthening ethical values is associated with lower levels of academic cheating tendency. These findings indicate that ethical values function as a preventive factor against fraudulent behavior. Based on these findings, the proposed hypothesis is:

H₇: Ethical values have a negative effect on fraud tendency among accounting students.

Ethical values are also considered to function as a moderating variable in the relationship between the components of the fraud hexagon and fraud tendency. Ethical values represent internalized moral standards that shape how individuals interpret and respond to unethical situations. Individuals with strong ethical values evaluate pressure differently, assess opportunities more cautiously, construct fewer justifications, use their competence more responsibly, restrain feelings of superiority, and resist invitations to collude (Nwanyanwu, 2018; Utami & Purnamasari, 2021). Thus, the moderating role of ethical values is not uniform but operates through distinct psychological mechanisms across each fraud hexagon dimension.

Pressure refers to external or internal demands that create a perceived need to achieve certain targets. Under conditions of high pressure, individuals may adopt pragmatic coping strategies that justify unethical actions. Ethical values function as a moral buffer by providing an evaluative framework that restrains impulsive responses to pressure and encourages consideration of normative consequences and personal integrity. Accordingly, the following moderating hypothesis is proposed:

H₈: Ethical values moderate the effect of pressure on fraud tendency among accounting students.

Opportunity is associated with the perception of weak supervision or loopholes within the system, so the decision to commit fraud is more strongly

based on rational considerations of risks and benefits. Several studies indicate that opportunities arising from weak internal controls or inadequate supervision contribute to an increased tendency toward fraud (Reskino et al., 2021). However, other research emphasizes that the internalization of ethical values can function as a form of self-control that limits an individual's inclination to exploit such opportunities (Fernandhytia & Muslichah, 2020; Utami & Purnamasari, 2021). Individuals with strong ethical commitment tend to consider the moral implications of their actions even when opportunities are available and the risk of detection is relatively low. Therefore, ethical values are expected to weaken the relationship between opportunity and fraud tendency. Accordingly, the proposed hypothesis is as follows:

H₉: Ethical values moderate the effect of opportunity on fraud tendency among accounting students.

Ethics functions not only as a behavioral control mechanism but also as a moral evaluative framework within individuals' cognitive processes (Fernandhytia & Muslichah, 2020). In the context of rationalization, fraud often begins with self justification to ensure that deviant actions remain consistent with one's self image as a good person. Rationalization operates through a self justification mechanism, in which moral perceptions of an act are reconstructed so that the behavior appears acceptable.

Ethics education and the internalization of ethical values, as emphasized by Okougbo (2021) and Poje et al. (2025), play a crucial role in strengthening moral sensitivity and awareness of the long-term consequences of unethical behavior. Individuals with a high level of ethical awareness tend to experience stronger psychological inconsistency (moral dissonance) when attempting to justify fraudulent acts. This condition reduces the effectiveness of rationalization, as internal moral standards remain actively engaged in evaluating the behavior. Therefore, ethical values do not merely suppress the intention to commit fraud but more specifically weaken the effectiveness of the cognitive justification processes underlying rationalization. Accordingly, the proposed hypothesis is as follows:

H₁₀: Ethical values moderate the effect of rationalization on fraud tendency among accounting students.

Within the fraud hexagon theory, competence refers to an individual's ability, intelligence, position, or level of confidence that enables fraud to be carried out effectively. Vousinas (2019) emphasizes that capability is a crucial element because, without sufficient ability, pressure and opportunity cannot always be translated into fraudulent actions. Empirically, Reskino et al. (2021) found that competence accompanied by a tendency toward unethical behavior is positively associated with fraud tendency.

However, competence is morally neutral in nature and represents capacity rather than motivation. Research by Fernandhytia & Muslichah (2020) demonstrates that ethical values are negatively correlated with fraud tendency, while Utami & Purnamasari (2021) affirm that the internalization of ethical values strengthens individuals' self control in ethical decision making. Within this framework, ethical values function as a moral direction mechanism that determines how competence is utilized. Individuals with high capability but strong ethical commitment are more likely to direct their competence toward norm

compliant actions rather than exploiting system weaknesses. Accordingly, the proposed hypothesis is as follows:

H₁₁: Ethical values moderate the effect of competence on fraud tendency among accounting students.

A stronger sense of superiority increases the likelihood of higher fraud tendency. Arrogance reflects a tendency to perceive oneself as exempt from rules and consequences (Reskino, 2021). In academic settings, students who feel superior may view their competence, status, or intelligence as justification for dishonest behavior, thereby increasing their propensity to engage in fraud.

Ethical values act as a moderating variable by regulating how arrogance translates into fraudulent behavior. Specifically, internalized ethical standards provide a moral framework that encourages self-reflection and restraint, even when students perceive themselves as above rules. Through this mechanism, ethical values reduce the behavioral impact of perceived superiority by promoting responsibility, integrity, and adherence to norms. In other words, students with high ethical internalization are less likely to allow feelings of arrogance to drive misconduct, because their moral commitment overrides the temptation to exploit personal advantages. This moderating effect highlights the conditional role of ethical values: while arrogance increases fraud tendency, its influence is weakened when ethical standards are strongly internalized.

H₁₂: Ethical values weaken the relationship between arrogance and fraud tendency among accounting students.

The stronger the collaboration among individuals to engage in misconduct, the greater the likelihood that fraud tendency will increase. Collusion refers to deliberate cooperation aimed at enhancing the success of fraud while reducing the risk of detection (Utami & Purnamasari, 2021; Reskino et al., 2021). Unlike other fraud dimensions that are more individualistic, collusion involves social interaction, role distribution, mutual protection, and the development of collective justifications for deviant behavior. In the academic context, collusion is often manifested in unethical cooperation during assignments or examinations, which may be perceived as solidarity or reciprocal assistance among students. Such group-based legitimacy can normalize dishonest behavior and increase the tendency to commit fraud.

Fernandhytia & Muslichah (2020) demonstrate that ethical values are negatively associated with fraud tendency, emphasizing the role of moral commitment in limiting deviant actions. Ethical values function as a moral resistance to peer influence, enabling individuals to uphold internalized moral standards despite social pressure or group encouragement. Students with strong ethical values are more likely to reject invitations to collude and resist collective rationalizations that justify dishonest conduct. Ethical values therefore serve as a moderating mechanism that weakens the positive influence of collusion on fraud tendency. Based on these arguments, the proposed hypothesis is:

H₁₃: Ethical values weaken the relationship between collusion and fraud tendency among accounting students.

Accordingly, to clarify the direction of the relationships among the components of the fraud hexagon, ethical values, and fraud tendency, as well as to

provide a systematic overview of the research structure, the conceptual framework of this study is presented as follows.

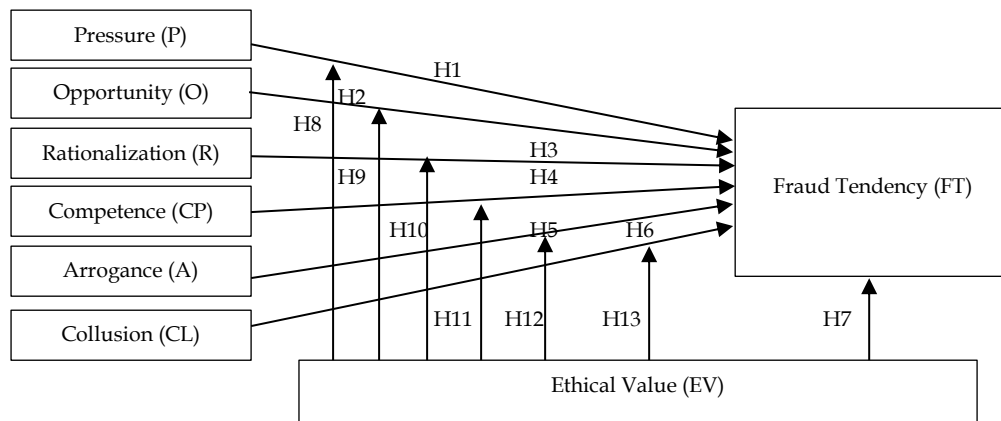


Figure 1. Conceptual Framework

Source: Research Data, 2025

RESEARCH METHODS

This study employs a quantitative research design to examine the causal relationships among the six dimensions of the fraud hexagon, namely pressure, opportunity, rationalization, competence, arrogance, and collusion, and fraud tendency among accounting students, with ethical values incorporated as a moderating variable. A quantitative approach is appropriate for testing theoretically derived hypotheses and assessing the direction and strength of relationships among variables in a structured and objective manner. Primary data were collected through structured questionnaires administered both directly and via an online platform using google forms to enhance response accessibility and efficiency.

The population of this study consists of all active undergraduate accounting students at Sekolah Tinggi Ilmu Ekonomi Cendekia (STIEKIA) Bojonegoro and Universitas Islam Darul Ulum (UNISDA) Lamongan, totaling 399 students. The sampling technique applied was purposive sampling, with inclusion criteria restricted to students in the sixth semester and above who had completed Advanced Accounting, Auditing I and II, and Business and Professional Ethics courses. These criteria were established to ensure that respondents possessed sufficient academic exposure and conceptual understanding related to fraud and ethical decision making. The minimum required sample size of 80 respondents was determined using the Slovin formula with a 10 percent margin of error to ensure adequate statistical power for hypothesis testing.

Table 1. Operational Definition of Variables

Variables	Operational Definitions	Indicators	Measurement Scale
Fraud Tendency (FT)	Fraud tendency refers to justification, students' inclination to engage in dishonest actions that harm other parties within the academic context (Reskino et al., 2021).	(1) Fraud (2) Influence of opportunity, (3) Ethical awareness, (4) Manipulative behavior, (5) External pressure.	Likert 1-4
Pressure (P)	Pressure is defined as internal or external demands arising from academic workload, financial needs, or environmental expectations that may motivate students to commit fraud (Fadersair & Subagyo, 2019).	(1) Academic pressure, (2) Environmental pressure, (3) Financial pressure.	Likert 1-4
Opportunity (O)	Opportunity refers to conditions characterized by weak supervision, ineffective control, systemic loopholes within the academic environment that enable fraudulent acts to occur (Fadersair & Subagyo, 2019).	(1) Weak supervision, (2) or supervision, System loopholes, (3) Minimal sanctions.	Likert 1-4
Rationalization (R)	Rationalization is the moral justification process used by students to legitimize fraudulent behavior (Slezak, 2013).	(1) Justifying reasons, (2) Belief that cheating does not cause harm, (3) Normalization of dishonest behavior.	Likert 1-4
Competence (CP)	Competence refers to students' technical ability and skills to commit fraud and conceal their actions (Sahla & Ardianto, 2023).	(1) Technical knowledge, (2) Manipulative ability, (3) Ability to conceal fraud.	Likert 1-4
Arrogance (A)	Arrogance reflects an attitude of superiority and	(1) Disregard for rules, (2) Excessive	Likert 1-4

Variables	Operational Definitions	Indicators	Measurement Scale
	the belief that rules and self-confidence, regulations do not apply to oneself (Aprilia, 2017).	(3) Belief of not being detected.	
Collusion (CL)	Collusion refers to cooperation among students or with external parties to commit fraudulent acts (Achmad et al., 2022).	(1) Cooperation in cheating, (2) Assistance from others, (3) Academic conspiracy.	Likert 1–4
Ethical Values (EV)	Ethical values are moral standards that guide students to act honestly, responsibly, and with integrity, and to avoid fraudulent behavior (Roy et al., 2024).	(1) Honesty, (2) Responsibility, (3) Integrity, (4) Moral awareness.	Likert 1–4

Source: Research Data, 2025

All items were measured using a four points Likert scale consisting of: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. Data were analyzed using multiple linear regression to examine the direct effects among variables and Moderated Regression Analysis to test the moderating role of ethical values. Multiple linear regression was applied to assess the influence of pressure, opportunity, rationalization, competence, arrogance, and collusion on fraud tendency. Moderated Regression Analysis was subsequently employed to determine whether ethical values strengthen or weaken the relationships between each fraud hexagon dimension and fraud tendency.

The regression model is formulated as follows:

$$FT = \alpha + \beta_1P + \beta_2O + \beta_3R + \beta_4CP + \beta_5A + \beta_6CL + \beta_7EV + \varepsilon \dots \dots \dots (1)$$

$$FT = \alpha + \beta_1P + \beta_2O + \beta_3R + \beta_4CP + \beta_5A + \beta_6CL + \beta_7EV + \beta_8(P*EV) + \beta_9(O*EV) + \beta_{10}(R*EV) + \beta_{11}(CP*EV) + \beta_{12}(A*EV) + \beta_{13}(CL*EV) + \varepsilon \dots \dots \dots (2)$$

Notes:

- FT = Fraud Tendency
- P = Pressure
- O = Opportunity
- R = Rationalization
- CP = Competence
- A = Arrogance
- CL = Collusion
- EV = Ethical Values
- α = Constant term
- β = Regression coefficients
- ε = Error

RESULTS AND DISCUSSION

A description of respondents' characteristics is necessary to provide a general overview of the research sample, which serves as the basis for subsequent analysis. A summary of the distribution of respondents based on gender, age, semester level, and cumulative grade point average is presented in Table 2 as follows:

Table 2. Respondents' Characteristics

Characteristics			Number of Respondents	Percentage
Gender				
Male			45	27%
Female			119	73%
Age (Years)				
20-21			98	60%
22-23			57	35%
24-25			9	5%
Semester Level				
Sixth			100	61%
Eighth			64	39%
Cumulative	Grade	Point		
Average				
3,00-3,50			74	45%
3,50-4,00			90	55%
Total			164	100%

Source: Research Data, 2025

The majority of respondents were female students (73%), with the dominant age range being 20-21 years (60%). In terms of semester level, most respondents were in the sixth semester (61%), indicating that they were in the core phase of their academic studies. Regarding academic achievement, more than half of the respondents had a cumulative grade point average ranging from 3.50 to 4.00 (55%), suggesting that the sample was predominantly composed of students with relatively strong academic performance.

This distribution of characteristics indicates that the respondents possess adequate academic experience to evaluate academic misconduct behavior, thereby providing a relevant basis for examining the determinants of fraud tendency within the context of accounting students.

Table 3. Descriptive Statistics

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Pressure	164	1	4	2,36	0,70
Opportunity	164	1	4	2,16	0,68
Rationalization	164	1	4	2,16	0,73
Competence	164	1	4	2,04	0,67
Arrogance	164	1	4	2,52	0,76
Collusion	164	1	4	1,93	0,66
Ethical Value	164	1	4	1,61	0,63
Fraud Tendency	164	1	4	2,05	0,59

Valid N (listwise) 164

Source: Research Data, 2025

The mean scores of most fraud hexagon variables are relatively low, with pressure ($M = 2.36$), opportunity ($M = 2.16$), rationalization ($M = 2.16$), competence ($M = 2.04$), and collusion ($M = 1.93$), indicating that structural and external drivers of academic misconduct are limited. Fraud tendency is also low ($M = 2.05$), which aligns with the high academic achievement of respondents who rely on personal effort rather than dishonest practices. In contrast, arrogance shows the highest mean ($M = 2.52$), highlighting the influence of internal psychological factors on fraud behavior. Ethical values have the lowest mean ($M = 1.61$); given the negatively worded items, this reflects strong internalization of ethics. The gap between ethical values and fraud tendency suggests a discrepancy between ethical understanding and its practical application in academic behavior.

Validity testing using the Corrected Item Total Correlation method with a threshold of 0.30 showed that most questionnaire items met the criterion, while those that did not were removed to enhance measurement accuracy. Reliability testing using Cronbach's Alpha indicated that all variables exceeded 0.60, demonstrating satisfactory internal consistency. Classical assumption tests confirmed that the regression model met essential conditions: normality was supported by significance values above 0.05 and a P-P Plot closely following the diagonal, multicollinearity was absent as all VIF values were below 10 and tolerance values above 0.10, and heteroscedasticity was not present, as residuals were randomly distributed in the scatter plot, indicating the model is suitable for further analysis.

Table 4. F Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	181.552	7	25.936	67.920	<.001 ^b
	Residual	59.570	156	.382		
	Total	241.122	163			

a. Dependent Variable: Kecenderungan Fraud

b. Predictors: (Constant), Ethical Values, Opportunity, Rationalization, Competence, Pressure, Arrogance, and Collusion

Source: Research Data, 2025

The regression model employed in this study is considered statistically appropriate based on the F test results, which show an F value of 67.920 with a significance level of less than 0.001. This indicates that pressure, opportunity, rationalization, competence, arrogance, collusion, and ethical values simultaneously have a significant effect on fraud tendency.

Table 5. Coefficient of Determination (R^2) Test Results

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.868 ^a	.753	.742	.618		

a. Predictors: (Constant), Ethical Values, Opportunity, Rationalization, Competence, Pressure, Arrogance, and Collusion

Source: Research Data, 2025

The coefficient of determination test shows an R Square of 0.753 and an Adjusted R Square of 0.742, indicating that 75.3 percent of the variance in fraud tendency among accounting students is explained by the model, while the remaining variance is attributable to factors not included in the study. These results demonstrate that the model has strong explanatory power in accounting for fraud tendency.

Table 6. Multiple Linear Regression Results

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.702	.284		2.468	.015
Pressure	.231	.036	.350	6.466	<.001
Opportunity	.029	.031	.048	.949	.344
Rationalization	.109	.025	.230	4.380	<.001
Competence	-.059	.019	-.161	-3.043	.003
Arrogance	.133	.033	.326	3.992	<.001
Collusion	-.029	.038	-.063	-.764	.446
Ethical Value	.173	.024	.353	7.089	<.001

Source: Research Data, 2025

The results of the multiple linear regression analysis indicate that pressure has a positive coefficient of 0.231 with a significance level of less than 0.001, suggesting that an increase in academic pressure leads to a higher fraud tendency among accounting students. The magnitude of the standardized coefficient ($\beta = 0.350$) confirms that pressure is one of the most influential factors affecting fraudulent behavior. Rationalization also demonstrates a positive effect, with a coefficient of 0.109 and a significance level of less than 0.001, indicating that stronger moral justification for dishonest actions increases the likelihood of engaging in fraud. Arrogance similarly contributes positively, with a coefficient of 0.133 and a significance level of less than 0.001, reflecting that feelings of superiority and perceived immunity to rules encourage fraudulent behavior in the academic context.

In contrast, competence shows a negative relationship with fraud tendency, as indicated by a coefficient of -0.059 and a significance level of 0.003. This finding suggests that students with higher academic competence are less likely to rely on dishonest practices to meet academic demands. Ethical values have a positive coefficient of 0.173 with a significance level of less than 0.001. However, since the measurement items were formulated as negative statements, this coefficient implies that lower ethical values increase fraud tendency, whereas stronger internalization of ethical values reduces dishonest behavior. Meanwhile, opportunity, with a coefficient of 0.029 and a significance level of 0.344, and collusion, with a coefficient of -0.029 and a significance level of 0.446, do not exhibit significant effects. This suggests that the presence of opportunity or potential cooperation alone is insufficient to drive fraud without accompanying

psychological pressure and internal factors. Overall, the magnitude and direction of these coefficients indicate that academic fraud tendency is more strongly influenced by internal psychological factors, as conceptualized within the fraud hexagon framework.

Table 7. Results of Moderated Regression Analysis (MRA)

Model	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.228	.944		-.241	.810
Pressure*Ethical_Values	.003	.017	.071	.176	.860
Opportunity*Ethical_Values	.013	.011	.294	1.104	.271
Rationalization*Ethical_Values	.006	.011	.181	.504	.615
Competence*Ethical_Values	.011	.008	.466	1.317	.190
Arrogance*Ethical_Values	-.063	.015	-2.372	-4.231	<.001
Collusion*Ethical_Values	.027	.017	.857	1.519	.131

a. Dependent Variable: Fraud Tendency

Source: Research Data, 2025

Based on the regression output, the interaction between pressure and ethical values is not statistically significant (Sig. = 0.860), indicating that ethical values do not moderate the relationship between pressure and fraud tendency. Similarly, the interaction between opportunity and ethical values is not significant (Sig. = 0.271). The same pattern is observed for rationalization (Sig. = 0.615), competence (Sig. = 0.190), and collusion (Sig. = 0.131), all of which exceed the conventional threshold of 0.05. These findings suggest that ethical values do not significantly strengthen or weaken the effects of these fraud hexagon dimensions on accounting students' fraud tendencies.

In contrast, the interaction between arrogance and ethical values is statistically significant (Sig. < 0.001). This result indicates that ethical values significantly moderate the relationship between arrogance and fraud tendency. Therefore, unlike the other fraud hexagon dimensions, the effect of arrogance on fraud tendency varies depending on the level of ethical values. Overall, the significance values demonstrate that ethical values function as a moderating variable only in the relationship between arrogance and fraud tendency, while no moderating effect is detected for pressure, opportunity, rationalization, competence, or collusion.

The predominance of non-significant interaction effects is explained by several substantive factors. First, ethical values function primarily as general moral principles rather than as context specific behavioral constraints. In academic environments characterized by performance pressure and competitive demands, situational factors such as perceived opportunities, justification mechanisms, and peer dynamics exert a stronger and more immediate influence on behavior than abstract ethical commitments. Consequently, although ethical values influence

fraud tendency directly, they do not interact with these situational drivers in a statistically significant manner within the regression model.

Second, the discrepancy between moral cognition and moral action contributes to the absence of moderating effects. Although students cognitively endorse ethical standards, these values are not fully internalized into their behavioral decision-making processes. When confronted with academic pressure, opportunities for misconduct, rationalization strategies, competence to exploit loopholes, or collusion with peers, students engage in moral disengagement mechanisms that neutralize the restraining function of ethical values. As a result, ethical commitment does not operate as an effective buffering mechanism in the relationship between fraud risk factors and fraud tendency.

Third, the relative homogeneity of ethical values among accounting student respondents reduces the variability necessary to detect significant interaction terms. Limited dispersion in the moderating variable statistically constrains the magnitude of interaction effects in regression analysis. Consequently, the interaction coefficients remain insignificant within the estimated model, indicating that ethical values do not empirically function as a moderating variable under the observed conditions.

These findings are consistent with those reported by Waworuntu et al. (2025), who demonstrate that ethics education is not always effective in moderating the relationship between fraud dimensions and students' academic fraud tendencies. Substantively, this evidence suggests that students' ethical values tend to remain at a cognitive or declarative level and have not been fully translated into consistent behavioral control. Therefore, strengthening the internalization of ethical values through deeper experiential learning and institutional integrity reinforcement may be necessary for ethical values to function more effectively as a situational moderator within the fraud hexagon framework in the academic context.

The first hypothesis posits that pressure has a positive effect on fraud tendency among accounting students. The empirical results provide strong support for this hypothesis, as indicated by a regression coefficient of 0.231 and a t-statistic of 6.466 with a probability value below 0.05 (Sig. < 0.001). The standardized coefficient ($\beta = 0.350$) demonstrates that pressure is one of the relatively strong predictors in explaining the variance in fraud tendency. This magnitude confirms that pressure makes a substantial contribution to students' propensity to engage in fraudulent behavior.

Substantively, the findings indicate that increasing academic pressure, such as grade demands, heavy workloads, and time constraints is directly associated with a higher tendency toward fraud. When students perceive that their ability to adapt is limited, fraudulent behavior becomes an alternative means of maintaining academic performance. This pattern is consistent with the fraud hexagon framework, which positions pressure as a primary trigger of fraudulent behavior, and aligns with the empirical findings of Dewi & Pertama (2020) and Sihombing & Budiarta (2022), who similarly report that pressure significantly increases students' likelihood of engaging in fraudulent behavior.

The second hypothesis posits that opportunity has a positive effect on fraud tendency among accounting students. The empirical findings do not support

this hypothesis, as the regression coefficient of 0.029, with a t-statistic of 0.949 and a probability value above 0.05 (Sig. = 0.344), indicates that opportunity does not exert a statistically significant influence on fraud tendency. The relatively small coefficient further confirms that variations in perceived opportunity contribute minimally to explaining fraudulent behavior within the model.

Theoretically, opportunity represents a structural condition that facilitates fraud when supervision is weak and control systems are ineffective. In the academic environment examined, institutional mechanisms such as structured assessment procedures, examination monitoring, plagiarism detection systems, and clearly defined sanctions function systematically. Consequently, perceived opportunities do not substantially differ among students and do not act as decisive determinants of fraud. Opportunity often serves as a facilitating condition rather than a primary motivator, and without strong internal pressures or rationalizations, its mere presence is insufficient to trigger misconduct. These findings are consistent with Fadersair & Subagyo (2019), who also reported that opportunity does not significantly influence academic fraud behavior.

The third hypothesis posits that rationalization has a positive effect on fraud tendency among accounting students. The empirical results support this hypothesis, as indicated by a regression coefficient of 0.109 and a t-statistic of 4.380 with a probability value below 0.05 (Sig. < 0.001). The standardized coefficient (β = 0.230) demonstrates that rationalization plays a substantial role in shaping fraudulent behavior.

These findings indicate that the stronger the moral justification for misconduct such as perceiving cheating as a common practice, harmless behavior, or a necessary response to academic demands the greater the likelihood that students will violate academic rules. Rationalization functions as an internal legitimization mechanism that reduces psychological discomfort associated with unethical actions. Within the Fraud Hexagon framework, rationalization serves as a critical cognitive driver that transforms pressure and opportunity into actual fraudulent behavior. This result reinforces the theoretical position of rationalization as a central internal enabler of fraud and is consistent with the findings of Pratiwi & Munari (2024), who similarly report a significant positive relationship between rationalization and academic fraud tendency.

The fourth hypothesis posits that competence has a positive effect on fraud tendency among accounting students. However, the empirical results reveal an opposite direction of relationship, with a regression coefficient of -0.059 and a t-statistic of -3.043 at a probability level below 0.05 (Sig. = 0.003). This indicates that competence has a statistically significant negative effect on fraud tendency. In other words, higher academic competence is associated with a lower propensity to engage in fraudulent behavior.

Substantively, this finding suggests that students with stronger academic abilities possess greater confidence in their capacity to meet academic demands through legitimate means. Adequate competence enhances self-efficacy and strengthens behavioral control, thereby reducing the perceived need to resort to dishonest practices. This pattern is consistent with the theory of planned behavior, particularly the dimension of perceived behavioral control, which posits that individuals who believe they have sufficient ability to perform a task are less likely

to engage in unethical shortcuts. This interpretation is supported by the findings of Hendy & Montargot (2019), who similarly report that higher competence is associated with a lower likelihood of fraudulent behavior.

The fifth hypothesis posits that arrogance has a positive effect on fraud tendency among accounting students. The empirical results support this hypothesis, as indicated by a regression coefficient of 0.133 and a t-statistic of 3.992 with a probability value below 0.05 (Sig. < 0.001). The standardized coefficient (β = 0.326) demonstrates that arrogance constitutes one of the strongest psychological determinants of academic fraud within the model.

These findings indicate that students who perceive themselves as superior, underestimate institutional rules, and regard the risk of sanctions as minimal are more likely to disregard academic norms. Arrogance fosters a sense of entitlement and overconfidence, which weakens compliance with established regulations and reduces sensitivity to potential consequences. Within the Fraud Hexagon framework, arrogance functions as a reinforcing psychological factor that legitimizes deviant behavior and strengthens the transition from intention to action. This result is consistent with the theoretical assumptions of the fraud hexagon and aligns with the findings of Nurhalisa & Fauzan (2024), who likewise report a significant positive relationship between arrogance and academic fraud tendency.

The sixth hypothesis posits that collusion has a positive effect on fraud tendency among accounting students. However, the empirical results do not support this hypothesis. The regression coefficient is -0.029 with a t-statistic of -0.764 and a probability value above 0.05 (Sig. = 0.446), indicating that collusion does not have a statistically significant effect on fraud tendency. The small magnitude of the coefficient further suggests that collaborative misconduct is not a dominant pattern in shaping students' fraudulent behavior.

This condition indicates that individual based evaluation systems, technology assisted supervision, and structured academic control mechanisms limit the opportunity for coordinated cheating practices. As a result, fraud behavior tends to occur on an individual rather than collective basis. These findings are consistent with the results reported by Utami & Purnamasari (2021), who likewise found that collusion does not significantly influence academic fraud tendency.

The seventh hypothesis posits that ethical values have a negative effect on fraud tendency among accounting students. The empirical results, however, show a regression coefficient of 0.173 with a t-statistic of 7.089 at a probability level below 0.05 (Sig. < 0.001). Given that the measurement instrument was framed using negatively worded statements, the positive coefficient indicates that lower internalization of ethical values is associated with a higher tendency to commit fraud.

These findings reveal a gap between students' ethical awareness and their actual behavior, reflecting an attitude behavior discrepancy. In other words, although students may cognitively recognize ethical norms, insufficient internalization prevents these values from consistently guiding behavior. This pattern aligns with the theory of planned behavior, which emphasizes the role of

internalized attitudes in shaping intentions and actions, and is consistent with the empirical findings of Neto & Marques (2022) and Cheng et al. (2021).

The eighth hypothesis posits that ethical values moderate the effect of pressure on fraud tendency among accounting students. The empirical results do not support this hypothesis, as indicated by a t-statistic of 0.176 and a p-value of 0.860 (Sig. > 0.05). This finding demonstrates that ethical values do not alter the strength of the relationship between academic pressure and fraud tendency.

In other words, increases in pressure continue to drive students' propensity to engage in fraudulent behavior, regardless of their level of ethical values. This pattern suggests that under conditions of high academic pressure, ethical commitment remains primarily normative and is insufficiently internalized to influence actual behavior. These results are consistent with the findings of Zamzam et al. (2017), who report that academic pressure often outweighs ethical considerations in students' decision-making processes.

The ninth hypothesis posits that ethical values moderate the effect of opportunity on fraud tendency among accounting students. The empirical results do not support this hypothesis, as indicated by a t-statistic of 1.104 and a p-value of 0.271 (Sig. > 0.05). This indicates that ethical values do not significantly strengthen or weaken the relationship between opportunity and fraud tendency.

The perception of opportunity among students is relatively uniform and limited in scope due to standardized academic procedures, such as structured assignments, uniform grading rubrics, and regulated exam protocols. Because students generally perceive similar levels of opportunity, there is insufficient variation for ethical values to interact meaningfully with this factor. In this context, opportunity is neither salient nor differentiated enough to activate the moderating effect of ethical values. These results are consistent with Fadersair & Subagyo (2019), who found that strict procedural controls reduce the influence of opportunity on academic fraud.

The tenth hypothesis posits that ethical values moderate the effect of rationalization on fraud tendency among accounting students. The empirical results do not support this hypothesis, as indicated by a t-statistic of 0.504 and a p-value of 0.615 (Sig. > 0.05). This finding demonstrates that ethical values do not buffer the influence of rationalization on fraud tendency.

In other words, students remain likely to engage in fraudulent behavior when they can justify their actions, even if they report holding strong ethical values. This pattern reflects an attitude-behavior gap, where ethical awareness does not necessarily translate into actual conduct. These results are consistent with the Fraud Hexagon theory (Vousinas, 2019) and are supported by Pratiwi & Munari (2024), who emphasize the strong role of rationalization in legitimizing fraudulent behavior.

The eleventh hypothesis posits that ethical values moderate the effect of competence on fraud tendency among accounting students. The empirical results do not support this hypothesis, as indicated by a t-statistic of 1.317 and a p-value of 0.190 (Sig. > 0.05). This finding shows that ethical values do not enhance the effect of competence in reducing fraud tendency.

Students with high competence rely primarily on their cognitive and technical abilities to navigate academic demands, reducing the perceived need for

fraudulent behavior. In this context, competence operates as a rational control mechanism: students with sufficient skills and knowledge can achieve academic success through legitimate means, independent of ethical considerations. Consequently, while ethical values may have a direct effect on behavior, they do not interact meaningfully with competence in moderating fraud tendency. This interpretation aligns with the findings of Hendy & Montargot (2019), who report that academic ability plays a stronger role in preventing fraud than normative ethical commitment.

The twelfth hypothesis posits that ethical values moderate the effect of arrogance on fraud tendency among accounting students. The empirical results support this hypothesis, as indicated by a t-statistic of -4.231 and a p-value below 0.001 (Sig. < 0.001). The negative interaction coefficient demonstrates that ethical values weaken the effect of arrogance on fraud tendency.

Students who exhibit feelings of superiority or entitlement are less likely to translate these traits into fraudulent behavior when they have internalized strong ethical values. In this context, ethical values function as a moral buffer that constrains the behavioral expression of personality traits that would otherwise promote fraud. This mechanism operates through heightened self-regulation and internalized standards of right and wrong, which reduce the likelihood that arrogant tendencies lead to rule-breaking. These results are consistent with the findings of Misran (2024), Pura et al. (2025), and Suryandari & Moaffafah (2024), who similarly emphasize that ethical internalization mitigates the influence of arrogance on fraudulent behavior.

The thirteenth hypothesis posits that ethical values moderate the effect of collusion on fraud tendency among accounting students. The empirical results do not support this hypothesis, as indicated by a t-statistic of 1.519 and a p-value of 0.131 (Sig. > 0.05). This finding demonstrates that ethical values do not alter the relationship between collusion and fraud tendency.

Collusion itself exerts a weak influence as a primary driver of fraudulent behavior in the studied context. The limited impact of collaborative misconduct means there is little for ethical values to strengthen or weaken. In addition, strict and technology assisted academic evaluation systems reduce the feasibility of coordinated cheating, minimizing the role of collusion in shaping behavior. These findings are consistent with Pratiwi & Munari (2024) as well as Theotama et al. (2023), who similarly report that rigorous, technology-based academic controls limit the occurrence and impact of collusion in higher education settings.

CONCLUSION

This study concludes that academic fraud tendencies among accounting students are influenced by individual factors as outlined in the Fraud Hexagon framework, particularly pressure, rationalization, arrogance, and competence, as well as by students' ethical values as an internal factor. Conceptually, the findings indicate that academic fraud is primarily driven by students' psychological dynamics and personal characteristics rather than structural factors such as opportunity and collusion. Furthermore, ethical values are not yet fully internalized as a behavioral control mechanism, resulting in a gap between ethical awareness and actual conduct. Nevertheless, ethical values have been shown to

function as a moral regulator under specific conditions, particularly in mitigating fraud tendencies stemming from arrogance, highlighting the critical role of character dimensions in preventing academic fraud.

This study has limitations due to the relatively small sample size, caused by low participation rates among final-year students in completing the online questionnaire. Therefore, the generalization of findings should be approached with caution. These limitations create opportunities for future research to employ more effective data collection methods, such as in person questionnaire administration through academic forums, and to expand both the sample size and institutional context. In addition, educational institutions are encouraged to strengthen ethics education that is practical and contextually relevant, alongside managing academic pressure and enhancing students' competencies, so that fraud prevention not only emphasizes compliance with rules but also fosters integrity and moral resilience from the early stages of higher education.

REFERENCES

- Achmad, T., Ghozali, I., & Pamungkas, I. D. (2022). Hexagon Fraud: Detection of Fraudulent Financial Reporting in State-Owned Enterprises Indonesia. *Economies*, 10(1). <https://doi.org/10.3390/economies10010013>
- Aghghaleh, S.F., Iskandar, T.M. and Mohamed, Z.M. (2014), "Fraud risk factors of fraud triangle and the likelihood of fraud occurrence: evidence from Malaysia". *Information Management and Business Review*, 6(1), 1-7. doi: 10.22610/imbr.v6i1.1095
- Ampuni, S., Kautsari, N., Maharani, M., Kuswardani, S., & Buwono, S. B. S. (2020). Academic dishonesty in Indonesian college students: An investigation from a moral psychology perspective. *Journal of Academic Ethics*, 18(4), 395-417. <https://doi.org/10.1007/s10805-019-09352-2>
- 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), 101-132. <https://doi.org/10.17509/jaset.v9i1.5259>.
- Association of Certified Fraud Examiners Indonesia. (2019). Survei Fraud Indonesia. ACFE Indonesia. <https://acfe-indonesia.or.id/>
- Azzahra, R., & Baridwan, Z. (2024). Faktor-faktor pendorong perilaku kecurangan akademik pada mahasiswa berdasarkan perspektif fraud hexagon. *Telaah Ilmiah Akuntansi dan Perpajakan*, 2(4), 698-713. <https://doi.org/10.21776/tiara.2024.2.4.148>
- Ballantine, J.A. & McCourt Larres, P. & Mulgrew, M. (2014). Determinants of academic cheating behavior: The future for accountancy in Ireland, *Accounting forum*, Elsevier, 38(1), 55-66. <https://doi.org/10.1016/j.accfor.2013.08.002>
- Bierstaker, J., Brink, W. D., Khatoon, S., & Thorne, L. (2024). Academic fraud and remote evaluation of accounting students: An application of the fraud triangle. *Journal of Business Ethics*, 195(2), 425-447. <https://doi.org/10.1007/s10551-024-05628-9>

- Cheng, Y.-C., Hung, F.-C., & Hsu, H.-M. (2021). The relationship between academic dishonesty, ethical attitude and ethical climate: Evidence from Taiwan. *Sustainability*, 13(21), 11615. <https://doi.org/10.3390/su132111615>
- Christiana, A., Kristiani, A., & Pangestu, S. (2021). Kecurangan pembelajaran daring pada awal pandemi: Dimensi fraud pentagon. *Jurnal Pendidikan Akuntansi Indonesia*, 19(1), 66–83. <https://doi.org/10.21831/jpai.v19i1.40734>
- Dewi, I. G. A. R. P., & Pertama, I. G. A. W. (2020). Perilaku kecurangan akademik mahasiswa akuntansi: Dimensi fraud diamond. *JIA (Jurnal Ilmiah Akuntansi)*, 5(2), 221–234. <https://ejournal.undiksha.ac.id/index.php/JIA/article/view/25949>
- Dewi, P. (2016). Perilaku kecurangan akademik pada mahasiswa S1, S2, dan S3 jurusan akuntansi FEB UB berdasarkan konsep Diamond Fraud. *Jurnal Ilmiah Mahasiswa Fakultas Ekonomi dan Bisnis Universitas Brawijaya*, 4(2), 1–14. <https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/2873>
- Fadersair, K., Kristen, U., & Wacana, K. (n.d.). Perilaku Kecurangan Akademik Mahasiswa Akuntansi: Dimensi Fraud Pentagon (Studi Kasus Pada Mahasiswa Prodi Akuntansi Ukrida). *Jurnal Akuntansi Bisnis*, 12(2). doi: <http://dx.doi.org/10.30813/jab.v12i2.1786>
- Fernandhytia, F., & Muslichah, M. (2020). The Effect of Internal Control, Individual Morality and Ethical Value on Accounting Fraud Tendency. *Media Ekonomi Dan Manajemen*, 35(1), 112. <https://doi.org/10.24856/mem.v35i1.1343>
- Guerrero-Dib, J. G., Portales, L., & Heredia-Escorza, Y. (2020). Impact of academic integrity on workplace ethical behaviour. *International Journal for Educational Integrity*, 16(1). <https://doi.org/10.1007/s40979-020-0051-3>
- Hendy, N. T., & Montargot, N. (2019). Understanding academic dishonesty among business school students in France using the theory of planned behavior. *The International Journal of Management Education*, 17(1), 85–93. <https://doi.org/10.1016/j.ijme.2018.12.003>
- Hidayat, R. W., & Sangka, K. B. (2025). Penggunaan ChatGPT sebagai variabel moderasi pada kecurangan akademik mahasiswa: Sebuah tinjauan Fraud Pentagon. *Jambura Economic Education Journal*, 7(3), 820–838. <https://doi.org/10.37479/jeej.v7i3.27613>
- Misran, A. (2024). Unraveling the Impact of Individual Morality, Arrogance, and Greed on the Risk of Fraud in Government Procurement: Perspectives from Local Governments in South Kalimantan. *Proceedings of the 2nd International Conference on Contemporary Risk Studies (ICONIC-RS 2023)*. doi: 10.4108/eai.21-9-2023.2345660
- Moorcy, P. A., Sarwani, S., Suhaili, A., & Rasidah, R. (2024). Perspektif fraud hexagon theory dalam perilaku akademik fraud: Studi explanatory pada mahasiswa akuntansi. *Owner: Riset dan Jurnal Akuntansi*, 8(1), 130–142. <https://doi.org/10.33395/owner.v8i1.2068>
- Mulisa, F., & Ebessa, D. (2021). The carry-over effects of college dishonesty on professional workplace dishonest behaviors: A systematic review. *Cogent Education*, 8, 1935408. <https://doi.org/10.1080/2331186X.2021.1935408>
- Neto, V. S., & Marques, O. R. B. (2022). Attitude–Behaviour Gap. In *Encyclopedia of Tourism Management and Marketing* (pp. 200–202). Edward Elgar

Publishing.

DOI:

<https://doi.org/10.4337/9781800377486.attitude.behaviour.gap>

- Nurhalisa, S., & Fauzan, S. (2024). Penggunaan fraud pentagon theory untuk mengidentifikasi kecurangan akademik dengan niat sebagai variabel intervening. *Business and Accounting Education Journal*, 5(2), 187–216. <https://journal.unnes.ac.id/journals/baej/article/view/10671>
- Nwanyanwu, L. A. (2018). Accountants' Ethics and Fraud Control in Nigeria: The Emergence of a Fraud Control Model. *Journal of Accounting, Finance and Auditing Studies*, 4(1), 130–150. doi: 10.56578/jafas040108
- Okougbo, P. O. (2021). Accounting ethics education and the ethical awareness of undergraduate accounting students. *Journal of Accounting & Organizational Change*. <https://doi.org/10.1080/09639284.2021.1888135>
- Ong'are, O. D., & Njeru, A. (2022). Effectiveness of Internal Control Systems on Fraud Prevention Among State Corporations in Kenya: A Case of Kenya Pipeline Company. *The Strategic Journal of Business & Change Management*, 9 (4), 948 – 961. DOI: <http://dx.doi.org/10.61426/sjbcm.v9i4.2465>
- Poje, T., Ličen, M., & Zaman Groff, M. (2025). Who enrolls in accounting? Ethical predispositions of undergraduate accounting students. *Journal of Accounting Education*, 71, 100966. <https://doi.org/10.1016/j.jaccedu.2025.100966>
- Pratiwi, N.A.S & Munari. (2024). Dimensi Fraud Hexagon Dalam Mempengaruhi Kecurangan Akademik Pada Mahasiswa Akuntansi. *Jambura Economic Education Journal*, 6(2). doi: <https://doi.org/10.37479/jeej.v6i2.24673>
- Prastiwi, A., Atmini, S., & Kawulur, H. R. (2025). Fraud hexagon and dark personality traits in academic dishonesty: Evidence from Indonesian accounting students. *JIA (Jurnal Ilmiah Akuntansi)*, 10(1), 55–69. <https://doi.org/10.23887/jia.v10i1.84227>
- Pura, R., Kartini, K., Amiruddin, A., & Indrijawati, A. (2025). Moderating Role of Individual Morality in Relationship Between Aspects of Fraud Hexagon and Fraudulent Behavior: A Study of Budget User Officials in Indonesian Local Government. *Journal of System and Management Sciences*, 15(2), 175-192. doi: 10.33168/JSMS.2025.0211
- Reskino, R., Harnovinsah, H., dan Hamidah, S. (2021). Analisis Fraud Tendency Melalui Pendekatan Pentagon Fraud: Unethical Behavior Sebagai Mediator. *Ekuitas (Jurnal Ekonomi Dan Keuangan)*, 5(1): 98–117. doi: <https://doi.org/10.24034/j25485024.y2021.v5.i1.4675>
- Roy, A., Newman, A., Round, H., & Bhattacharya, S. (2024). Ethical culture in organizations: A review and agenda for future research. *Business Ethics Quarterly*, 34(1), 97–138. <https://doi.org/10.1017/beq.2022.44>
- Sahla, W. A., & Ardianto, A. (2023). Ethical values and auditors fraud tendency perception: testing of fraud pentagon theory. *Journal of Financial Crime*, 30(4), 966–982. <https://doi.org/10.1108/JFC-04-2022-0086>
- Said, J., Alam, M. M., Ramli, M., & Rafidi, M. (2017). Integrating Ethical Values into Fraud Triangle Theory in Assessing Employee Fraud: Evidence from the Malaysian Banking Industry. In *Journal of International Studies*, 10(2), 170-184. doi: 10.14254/2071-8330.2017/10-2/13
- Sholikhah, Z., Adawiyah, W. R., Pramuka, B. A., & Pariyanti, E. (2024). Can spiritual power reduce online cheating behavior among university students?

- The fraud triangle theory perspective. *Journal of International Education in Business*, 17(1), 82-106. <https://doi.org/10.1108/JIEB-11-2022-0082>
- Sihombing, M., & Budiarta, I. K. (2020). *Analisis pengaruh fraud triangle terhadap kecurangan akademik (academic fraud) mahasiswa akuntansi Universitas Udayana. E-Jurnal Akuntansi*, 30(2). <https://doi.org/10.24843/EJA.2020.v30.i02.p07>
- Slezak, K. (2013). *Fraud Prevention and Employee Rationalization in New York State Public Schools*. Department of Educational Administration and Policy Studies University at Albany, New York. Phd Thesis. Legacy Theses & Dissertations (2009 - 2024). 1013. <https://doi.org/10.54014/T689-W86G>
- Smith, K. J., Emerson, D. J., & Mauldin, S. (2021). Online cheating at the intersection of the dark triad and fraud diamond. *Journal of Accounting Education*, 57, 100753. <https://doi.org/10.1016/j.jaccedu.2021.100753>
- Suryandari, E., & Moaffafah (2024). The Influence of Pressure, Opportunity, Rationalization, Capability, Arrogance, and Collusion on Village Fund Fraud with Morality as a Moderating Variable. *SHS Web Conf.* 201, 01004. doi: 10.1051/shsconf/202420101004
- Theotama, G., Denny, Y., dan Nugrahesthy, A. 2023. Hexagon in the Motives to Commit Academic Fraud. *Jurnal Ekonomi Dan Bisnis*, 26(1), 195-220. DOI: <https://doi.org/10.24914/jeb.v26i1.7395>
- Utami, D. P.W & Purnamasari, D. I. 2021. The impact of ethics and fraud pentagon theory on academic fraud behavior. *Journal of Business and Information Systems* (e-ISSN: 2685-2543), 3(1): 49-59. DOI: <https://doi.org/10.36067/jbis.v3i1.88>
- Vousinas, G. L. (2019). Advancing theory of fraud: the S.C.O.R.E. model. *Journal of Financial Crime*, 26(1), 372-381. <https://doi.org/10.1108/JFC-12-2017-0128>
- Waworuntu, R. K., Yudhi Fahrianta, R., Ramaraya Koroy, T., & Yafiz Syam, A. (2025). The moderating role of religiosity and ethics education on the relationship between fraud diamond dimensions and Machiavellian traits in academic fraud. *International Journal of Trends in Accounting Research*, 6(2), 209-226. <https://doi.org/10.54951/ijtar.v6i2.1166>
- Zamzam, I., Mahdi, S. A., & Ansar, R. (2017). Pengaruh diamond fraud dan tingkat religiusitas terhadap kecurangan akademik. *Jurnal Ilmiah Akuntansi Peradaban*, 3(2), 1-24. <https://journal.uin-alauddin.ac.id/index.php/jiap/article/view/4546>