



Deconstructing Academic Misconduct: The Moderating Role of IT in a Diamond of Fraud Analysis

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ABSTRACT

Purpose - This study aims to determine how the use of information technology deconstructs and moderates the influence of the diamond fraud perspective on the academic cheating behavior of economics education students.

Methodology - This study employs a quantitative research approach, using both descriptive and inferential statistics to analyze relationships among variables thoroughly. Descriptive statistics are used to summarize the data from 183 respondents, highlighting key patterns such as central tendency and data dispersion. At the same time, Moderated Regression Analysis (MRA) and the prerequisite tests were used to provide a clearer understanding of the sample characteristics and lay the groundwork for hypothesis testing.

Findings - The results show that the use of information technology does not strengthen or weaken the influence of pressure on academic cheating behavior, the use of information technology does not strengthen or weaken the opportunity for academic cheating behavior, the use of information technology does not strengthen or weaken the influence of rationalization on academic cheating behavior, and the use of information technology does not strengthen or weaken the influence of ability on academic cheating behavior.

Contribution - The contribution of this research is for study programs and faculties, as well as lecturers, as evaluation material related to academic cheating actions when completing assignments or exams by establishing strict rules and norms that must be implemented to reduce academic cheating committed by students.

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INTRODUCTION

The most important need of every human being is education. Education will provide quality human resources to meet every human need in the future. High-level education prepares human resources with

sufficient academic, moral, and professional ethical abilities (Apriani et al., 2017). Based on this, education at universities, apart from providing knowledge, also forms character that is applied in life. However, the phenomena that occur do not align with the standards and expectations at universities. This situation is quite concerning for the education sector, especially in Indonesia. It is still a problem among students who behave when they get high grades but do everything they can to avoid honesty, so this is called cheating (Amin et al., 2021).

Academic misconduct remains an important problem in Indonesia's education system. Academic misconduct is behavior that benefits students illegally, such as plagiarism, theft, cheating, and falsification in educational matters (Pramono & Rahmawati, 2020). Based on the definition above, academic fraud is a dishonest act intentionally carried out using a tool not permitted to gain an advantage in academic achievement. In short, it could be called academic fraud. It has been an unresolved problem because anyone can commit academic dishonesty at any time for various reasons.

A person commits academic fraud based on several factors; these are outlined in the Fraud Triangle Theory, introduced by Donald Cressey in 1953. According to this theory, a fraud can be caused by pressure, opportunity, and rationalization. Then, in 2004, Wolfe and Hermansson refined it by adding one element: capability. In the Fraud Diamond Theory, there is an element of the ability to commit academic fraud. This is often found in students' motives for cheating because they feel capable of justifying any means of cheating. The capability element is not included in the Fraud Triangle Theory, whereas it is an important factor in identifying fraud motives.

In the Fraud Diamond Theory, capability plays a crucial role because technology-based academic cheating relies not only on opportunity but also on an individual's technical ability to operate and exploit available technology (Burrohman & Aulia, 2025; Yessyani et al., 2023). Several recent empirical studies have shown that capability significantly influences academic cheating behavior, even when technology use does not statistically moderate its effect. This is because technology itself is neutral; what differentiates its use as a cheating tool is the individual's digital competence and understanding of the academic evaluation system (Salwawati, 2024; Yessyani et al., 2023). Therefore, although information technology moderation is insignificant in the empirical model, capability remains a fundamental factor bridging the gap between students' academic cheating intentions and their actual behavior, a factor not explained by the Fraud Triangle Theory.

Apart from that, there is another Fraud Theory, such as Jonathan Marks's Fraud Pentagon Theory, which adds one element of fraud: arrogance. The Fraud Pentagon Theory contains an element of arrogance, assuming that academic regulations do not apply to them and leading them to defy all existing regulations. The arrogance element in the Fraud Pentagon Theory was developed in the context of organizational and corporate fraud, where the perpetrator has structural power and formal authority that allows them to ignore the existing control systems and regulations (Vousinas, 2019). This condition is very different when applied to students who do not have the authority or control over the policies given, making it difficult for them to assume that academic regulations do not fully apply to them. Therefore, the Fraud Diamond Theory is considered more relevant for this study because it emphasizes pressure, opportunity, rationalization, and capability, which align more closely with the characteristics of student academic fraud, primarily when associated with the ability to use information technology.

When someone feels under pressure, self-confidence decreases, and depression results in actions that go against the applicable regulations (Pranagita et al., 2020). In line with this statement, pressure is understood as a psychological condition that arises when individuals face demands or expectations that exceed their capabilities, thus increasing the risk of unethical behavior, including academic cheating. For example, research by Albrecht, Holland, and Malagueno (2023) shows that academic pressure, such as the pressure to achieve high performance, fear of failure, or intense academic demands, can be a powerful motivator that drives students to cheat to meet these expectations. Another theory by Rashid & Hamid (2021) supports the idea that this pressure often stems from internal (anxiety about results) and external (environmental expectations) factors, which then lead to stress that drives students to seek shortcuts through cheating. Based on this thinking, pressure can be understood as internal and external forces that increase an individual's motivation

to achieve academic goals but also create a mismatch between their abilities and perceived demands, potentially leading to cheating.

Opportunity is a condition in which someone has a substantial likelihood of committing fraud (Zaeni et al., 2015). According to Wolfe & Hermanson (2004), an opportunity is a situation in which a system weakness is exploited to commit fraudulent behavior. Pramono & Rahmawati (2020) argued that opportunities emerge from inadequate supervision or the absence of strict enforcement of regulations. From the definitions above, an opportunity is a situation in which an individual can commit fraud due to lax oversight or ineffective regulatory controls. Opportunity is the most significant factor in committing fraud; the more opportunities that are available, the more likely it is that someone will succeed in carrying out their fraudulent actions. Like when taking an exam, a person does not intend to cheat, but an opportunity arises due to the lecturer's lack of strict supervision, leading to the intention and the act of cheating.

Rationalization is a cognitive mechanism that individuals use to justify unethical behavior and maintain social and personal acceptance. Research by Rashid and Hamid (2021) explains that students rationalize by constructing logical reasons to justify cheating, so that the act is not perceived as a serious violation. Similarly, Murphy and Dacin (2020) state that rationalization reflects an individual's ability to interpret circumstances as consistent with or not in conflict with their personal ethical standards. Furthermore, Albrecht et al. (2023) emphasize that rationalization is a form of self-justification for deviant behavior that allows individuals to reduce guilt and moral conflict. Based on these various views, rationalization can be defined as the process of justifying wrong behavior with reasons considered reasonable and acceptable. In the academic context, when students intend to cheat, they tend to consciously construct reasons to justify their actions, both to themselves and to their social environment.

Lastly, ability can be defined as a quality and attribute that is very important in academic cheating (Nurjanah et al., 2021). In line with this opinion, Wolfe & Hermanson (2004) argue that ability is a characteristic of identifying opportunities for fraud. Without the proper people with the right talents, academic cheating will not occur. A person is likely to commit fraud if they can recognize, exploit, and repeat opportunities to gain profit, because this ability allows them to execute fraudulent actions effectively and sustainably (Salwawati, 2024; Yessyani et al., 2023). According to the definitions given above, ability is the genuine quality of a person who can identify different chances to commit an action, including dishonest behavior. To complete their tasks, students can take advantage of opportunities.

According to Hanh & Duyen (2025), digital tools and online learning platforms provide opportunities for students to engage in academic dishonesty due to widespread, easy access to digital resources in online learning environments, thereby increasing the likelihood of misuse of technological resources in exams and assignments. Information Technology (IT) is understood as the primary foundation that enables the collection, processing, storage, and presentation of data into meaningful information (Chen & Lowell, 2024). Furthermore, according to Ain et al (2025), IT is understood as a series of technologies used to collect, process, store, retrieve, and organize data so that it can be converted into quality information that is relevant, accurate, and available promptly to support decision-making and operational activities in various organizational contexts.

Results in Munirah & Nurkhin (2018). According to a research journal article, perspectives in diamond fraud theory have a positive and noteworthy impact, as shown in a study by Achmada et al. (2020) with a sample of 222 students at the University of Indonesia, which found that those perspectives have a significant positive contribution to academic misconduct. Apart from that, research by Al Serhan et al. (2022) conducted at two United Arab Emirates Universities with a sample of 305 undergraduate students showed that pressure ranked highest among the causes of student cheating. Rationalization has a substantial and favorable impact on fraud. There are many opportunities for students to cheat; therefore, it is necessary to increase internal academic community oversight. Prevention of cheating is still considered weak, so students' abilities are higher and show a positive, significant influence. Additionally, the research offers suggestions for how higher education institutions should use online platforms for both learning delivery and exam preparation.

Some of the research results contradict the findings in the Warni & Margunani (2022) article, which found that only three of four perspectives have a positive and substantial effect on academic cheating, while ability

has no effect. Apart from that, research by Amin et al. (2021) indicates that weight and opportunity do not have a noteworthy impact on scholastic cheating behavior, whereas rationalization and capacity do. In addition, there are contrasts in research findings regarding the use of data technology in academic cheating. Judging from the research by Nurjanah, Anggraeni, and Melle (2021), the misuse of information technology has a significant effect on accounting students' academic cheating. The results differ from those of Victoranius, Wahjuningsih, and Sulistyorini (2022), who showed that information technology does not affect academic cheating.

Based on previous research, there are inconsistencies in empirical findings regarding both the dimensions of the Fraud Diamond and the role of information technology in academic cheating. Differences in the significance of pressure, opportunity, rationalization, and, especially, ability indicate that the influence of the Fraud Diamond is contextual and shaped by the learning system implemented (Achmada et al., 2020; Amin et al., 2021; Munirah & Nurkhin, 2018; Warni & Margunani, 2022). Furthermore, the mixed findings regarding the influence of information technology, both significant and insignificant, indicate that it is not appropriate to position information technology solely as an independent variable (Nurjanah et al., 2021; Victoranius et al., 2022). A major limitation of previous research is the lack of examination of information technology as a moderating variable that can strengthen or weaken the relationship between the Fraud Diamond and academic cheating. With the increasing digitalization of learning and academic evaluation, the use of information technology can expand students' opportunities and capabilities to cheat while also serving as an instrument of academic control. Therefore, this study fills this gap by examining the moderating role of information technology use to explain the variations observed in previous research more comprehensively.

Based on the depiction above, this investigation aims to deconstruct the impact of weight, opportunity, rationalization, and capacity on scholastic offense behavior, and to examine the impact of the use of data technology in directing the impact of weight, opportunity, rationalization, and capacity on scholarly cheating behavior. Based on research objective above, several hypotheses were obtained as follows; (H₁) Use of Information Technology can moderate the influence of pressure on economic education students' academic cheating behavior; (H₂) Use of Information Technology can moderate the influence of opportunity on economic education students' academic cheating behavior; (H₃) Use of Information Technology can moderate the influence of rationalization on economic education students' academic cheating behavior; (H₄) The use of Information Technology can moderate the influence of ability on economic education students' academic cheating behavior.

METHODOLOGY

Research Design

This study uses the Fraud Diamond Theory by Wolfe & Hermanson (2004), which explains that fraud will not occur if the three reasons do not cross the perpetrator's mind. The magnitude of fraudulent behavior depends on the strength of each element. The underlying reasons are various factors that influence both the person and others or the surrounding environment. There are three reasons why someone commits fraud: pressure, opportunity, and rationalization, which together form the fraud triangle.

The present study employs a quantitative research approach, using both descriptive and inferential statistical methods to examine the relationships among variables rigorously. Descriptive statistics summarize and characterize the data, providing an overview of the sample's central tendencies and variability. Inferential statistics, on the other hand, are used to test hypotheses and determine the significance of relationships between independent variables—specifically, the diamond fraud factors—and the dependent variable, academic cheating behavior. This dual application of statistical techniques ensures a comprehensive analysis that not only describes the data but also allows for generalization of findings to the broader population of Economics Education students.

The research process follows a systematic sequence of stages to maintain methodological rigor and coherence. It begins with problem identification, which involves recognizing a gap in the existing literature regarding the moderating role of information technology in academic dishonesty. This is followed by an

extensive literature review to establish theoretical foundations and inform the development of research instruments. Subsequently, data collection is conducted using validated questionnaires administered to a randomly selected sample. The collected data undergo preparation procedures, including cleaning and validation, to ensure accuracy and reliability. Analytical procedures are then performed to test the proposed hypotheses, culminating in the reporting phase where findings are synthesized and contextualized within the academic discourse. This structured approach facilitates transparency, replicability, and validity throughout the research process. Therefore, the research framework is presented in Figure 1.

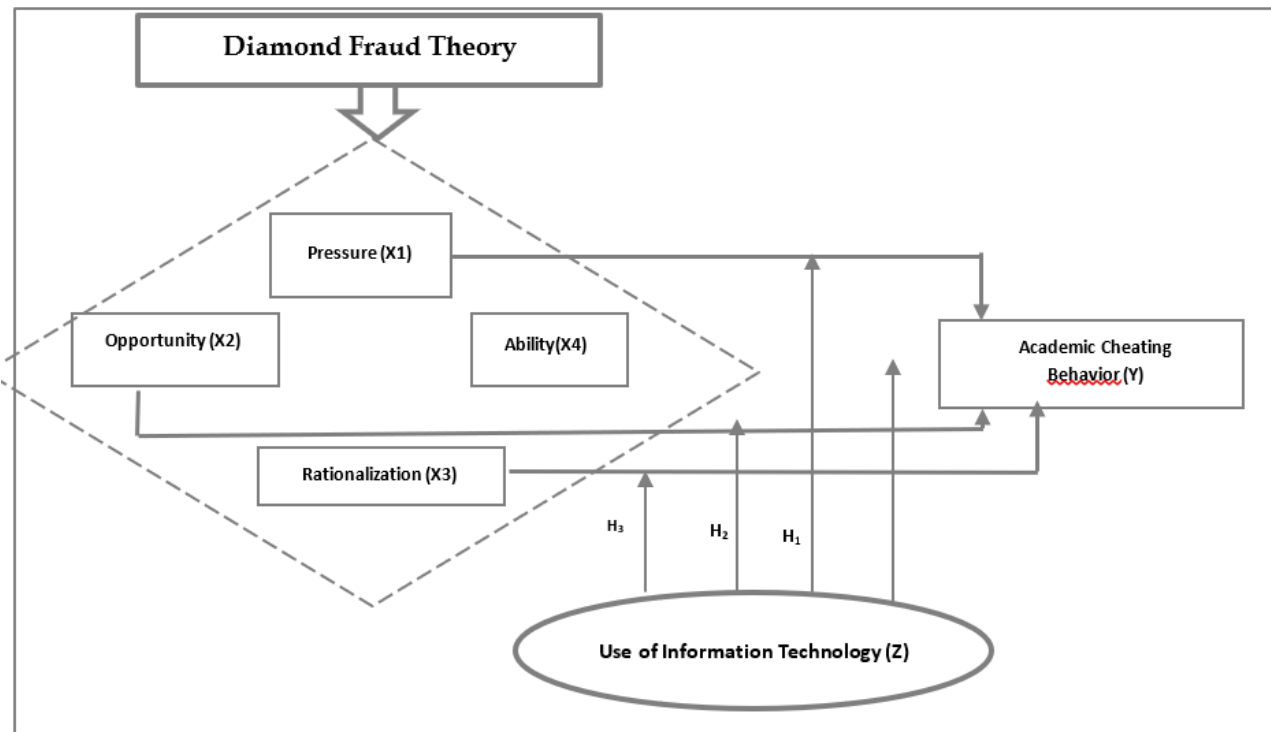


Figure 1. Research Framework

Participant

The research population comprised 336 Economic Education students from the Faculty of Teacher Training and Education, Classes of 2020, 2021, and 2022. This population was selected to represent the target group whose academic behaviors, particularly regarding cheating, are under investigation. By focusing on this specific cohort range, the study ensures relevance and contemporaneity in understanding the factors influencing academic dishonesty within the context of current educational practices and technological integration. To obtain a representative sample from this population, the study employs simple random sampling. This probabilistic sampling strategy ensures that each student in the defined population has an equal chance of being selected, thereby minimizing selection bias and improving the generalizability of the findings. The examination method used straightforward random testing, carried out in an agent manner using the Slovin equation, with an error rate of 5%, resulting in a test of 183.

Data Collection

The data collection technique used was an online questionnaire. Validity test and reliability test using SPSS 25. Analysis requirements, test, and hypothesis test are also using SPSS 25. Hypothesis test using Moderated Regression Analysis (MRA). The indicators for the variables pressure, opportunity, rationalization, ability, and use of information technology are explained in Table 1.

Table 1. Variable Indicators

Variable	Indicator
Pressure	<ol style="list-style-type: none"> 1. Requirement to graduate 2. Student competition for high scores 3. Large workload 4. Not enough study time
Opportunity	<ol style="list-style-type: none"> 1. Educators do not check for plagiarism. 2. Educators do not change assignments or exams that have been given to other students. 3. Educators do not prevent cheating
Rationalization	<ol style="list-style-type: none"> 1. Cheating is done because friends usually do it 2. Cheating is done as a form of solidarity with friends 3. Fraud is committed to maintain the reputation 4. The perpetrator feels that no party has been harmed
Ability	<ol style="list-style-type: none"> 1. A person's intelligence 2. Self-confidence 3. Forcing 4. Lies 5. Managing Stress
Academic Cheating Behavior	<ol style="list-style-type: none"> 1. Cheating is committed when completing individual tasks 2. Cheating is committed in carrying out group assignments 3. Cheating in exams
Use of Information Technology	<ol style="list-style-type: none"> 1. Knowledge and Skills 2. Level of technological sophistication 3. Long use of technology

Data Analysis

The data analysis process in this study involved a comprehensive application of both descriptive and inferential statistical techniques to rigorously test the hypothesized relationships between the diamond fraud factors (pressure, opportunity, rationalization, and ability), the moderating role of information technology (IT) usage, and academic cheating behavior among Economics Education students. At first, descriptive measurements were utilized to summarize the statistical characteristics of the test and to supply an outline of the central tendencies and dispersion of the most factors. Measures such as the mean, standard deviation, and dispersion of recurrence were calculated to portray the distribution of weight, opportunity, rationalization, capacity, IT utilization, and cheating behavior within the test. This preliminary analysis facilitated an understanding of the data distribution and ensured that the assumptions for subsequent inferential analyses were met.

For inferential analysis, the study utilized Pearson Product-Moment Correlation to assess the validity of the research instruments, ensuring that the questionnaire items reliably measured the intended constructs. The internal consistency of each scale was confirmed using Cronbach's Alpha, with values exceeding the conventional threshold of 0.7, indicating good reliability. Hypothesis testing used t-tests to examine the direct effects of the diamond fraud factors on academic cheating behavior. The results indicated that the diamond fraud theory's perspectives on cheating were statistically significant, corroborating the theoretical framework. To explore the moderating effect of IT usage, moderated regression analysis (MRA) was performed by incorporating interaction terms between IT and each fraud factor. The analysis revealed that IT usage did not significantly moderate the relationships among the diamond fraud factors and cheating behavior, as evidenced by non-significant t-values for all interaction terms. These findings suggest that while the core fraud factors strongly predict cheating behavior, IT serves as a neutral variable that neither exacerbates nor mitigates this relationship. The thorough explanatory approach in this consideration enhances the vigor of the

discoveries and provides valuable insights into the flow of scholarly dishonesty in the digital age.

FINDINGS

Normality Test

For the ordinary test using the Kolmogorov-Smirnov test, as shown in Table 2, the asymptotic estimate is evident. signature. (2-tailed) which is 0.200. This shows $0.200 > 0.05$, so the ordinariness test is satisfied; specifically, the information is regularly distributed.

Table 2. Normality Test

One-Sample Kolmogorov-Smirnov Test	Unstd. Residual
N	183
Mean	0.0000000
Std. Deviation	1.68585281
Test Statistic	0.057
Asymp. Sig. (2-tailed)	0.200

Source: Processed data (2024)

Linearity Test

The Linearity Test points to analyzing the direct relationship between the subordinate and free factors. Linearity testing can be seen through the Sig esteem. Linearity < 0.05 , which shows that the information obtained is straight. The results of this research's linearity test are displayed in Table 3 below:

Table 3. Linearity Test

Variable	Sig. Linearity
Pressure * Academic Cheating Behavior	0.000
Opportunity * Academic Cheating Behavior	0.000
Rationalization * Academic Cheating Behavior	0.000
Ability * Academic Cheating Behavior	0.000
Use of Information Technology * Academic Cheating Behavior	0.000

Source: Processed data (2024)

The outcomes of the linearity test between the independent and dependent variables are presented in Table 3. It is known that the pressure variable (X1), opportunity variable (X2), rationalization variable (X3), ability variable (X4), and use of information technology variable (Z) all have Sig – linearity values of 0.000. A linear relationship between the dependent and independent variables is indicated by this value being less than 0.05.

Multicollinearity Test

The multicollinearity test was performed to assess the correlation between the dependent and independent variables. Multicollinearity is assessed using tolerance values and VIF (Variance Inflation Factors). The decision is made based on whether the tolerance value is > 0.10 or the VIF is < 10.00 . The results of this research's multicollinearity test are shown in Table 4 as follows:

Table 4. Multicollinearity Test

Variable	Tolerance	VIF
Pressure	0.458	2.181
Opportunity	0.363	2.756
Rationalization	0.224	4.474
Ability	0.301	3.320
Use of Information Technology	0.467	2.139

Source: Processed data (2024)

According to Table 4, the tolerance value for the pressure variable is 0.458, the opportunity value is 0.363, the rationalization value is 0.224, the ability value is 0.301, and the use of information technology value is 0.467. All of these variables have tolerance values greater than 0.10. Therefore, the VIFs are: pressure 2.181, opportunity 2.756, rationalization 4.474, ability 3.320, and technology use 2.139. All of these variables together have a VIF value less than 10.00, so these five variables do not exhibit multicollinearity.

Heteroscedasticity Test

This study's heteroscedasticity test uses the Glejser test to assess the significance of the test statistic. absolute residual, as long as the variable's significance value is greater than 0.05 and there is no heteroscedasticity. The findings of this study's heteroscedasticity are displayed in Table 5 below:

Table 5. Heteroscedasticity Test

Model	B	Std. Error	Beta	t	Sig.
(Constant)	0.423	0.449	-	0.944	0.346
X1 (Pressure)	0.014	0.029	0.054	0.505	0.614
X2 (Opportunity)	-0.016	0.032	-0.061	-0.502	0.616
X3 (Rationalization)	-0.006	0.028	-0.036	-0.231	0.818
X4 (Ability)	0.034	0.019	0.234	1.764	0.080
Z (Use of IT)	0.013	0.024	0.057	0.536	0.593

Source: Processed data (2024)

Table 5 indicates that the pressure, opportunity, rationalization, ability, and use of information technology variables have significance values of 0.614, 0.616, 0.818, and 0.593, respectively. Based on the significance values of these five variables, heteroscedasticity is not present.

Moderated Regression Test

This research employs multiple linear regression analyses, specifically Moderated Regression Analysis (MRA). The findings from the moderation regression analysis are represented in the following table:

Table 6. Moderated Regression Test Results

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	6.148	2.882	-	2.133	0.034
X1 (Pressure)	-0.004	0.174	-0.003	-0.023	0.982
X2 (Opportunity)	0.096	0.218	0.067	0.439	0.661
X3 (Rationalization)	0.125	0.172	0.129	0.726	0.469
X4 (Ability)	0.366	0.116	0.468	3.159	0.002
X5 (Use of IT)	-0.282	0.155	-0.237	-1.817	0.071
X1Z	0.005	0.009	0.127	0.516	0.607
X2Z	0.015	0.011	0.359	1.382	0.169
X3Z	-0.002	0.008	-0.054	-0.185	0.854
X4Z	0.003	0.005	0.138	0.620	0.536

Source: Processed data (2024)

The values X1Z, X2Z, X3Z, and X4Z result from the interaction between the independent and moderator variables. The test criteria use significance values. If the sign value is > 0.05 , then the hypothesis is rejected. Conversely, if the sig value < 0.05 , then the hypothesis is accepted.

Hypothesis Testing Result

With a significance value of $0.607 > 0.05$ (H1 is rejected), the results in Table 6 indicate that Information technology use cannot mitigate the impact of pressure on academic cheating. With a significance value of $0.169 > 0.05$ (H2 is rejected), the impact of opportunity on academic cheating cannot be mitigated by the use of information technology. With a significance value of $0.854 > 0.05$ (H3 is rejected), the impact of rationalization

on academic cheating cannot be mitigated by the use of information technology. With a significance value of $0.536 > 0.05$ (H4 is rejected), the impact of ability on academic cheating is not moderated by the use of information technology.

The results of the hypothesis test in this research showed that the research hypothesis had a calculated probability value of Sig. Table a value of $0.607 > 0.05$. Therefore, the fifth hypothesis (H5) is rejected, indicating that information technology use does not affect the degree of pressure placed on academic dishonesty. This demonstrates that students' pressure to engage in academic fraud is unaffected by the use of technology during tests or assignments.

Although they do not rely on technology, students under a lot of pressure in lectures will make every effort to achieve the best possible results. According to the research's findings, information technology use does not influence the two independent variables on the dependent variable, so it cannot increase or decrease the prevalence of academic dishonesty among students. According to the findings of the research hypothesis test, the study's hypothesis test yielded a calculated probability value in the significance table. yields a $0.169 > 0.05$ value. The conclusion of the sixth hypothesis, H6, is rejected, indicating that the use of information technology does not influence the strength or weakness of the opportunity for academic cheating behavior. This shows that the use of information technology during exams or assignments does not affect students' opportunities to commit academic fraud.

Academic fraud is more likely to occur when students have the opportunity, due to inadequate teacher oversight. Despite the abundance of options available to them, students do not opt to use technology as a tool for assignments or tests. The findings of this study indicate that information technology use does not affect the dependent variable, meaning it cannot increase or decrease the prevalence of academic dishonesty among students.

The findings of this study's hypothesis test showed that the sig column contained a calculated p-value. produces a value of $0.854 > 0.05$. The conclusion of the seventh hypothesis (H7) is rejected, indicating that the use of information technology does not influence the strength or weakness of the rationalization of academic cheating behavior. This shows that the use of information technology during exams or assignments has no effect on the rationalizations students have for committing academic fraud.

When it comes to using technology to commit academic fraud, students who are aware of its use are less likely to defend or explain it. According to the research's findings, information technology use does not influence the two independent variables on the dependent variable, so it cannot increase or decrease the prevalence of academic dishonesty among students. Although students have varying degrees of proficiency with technology, they do not use it to commit academic dishonesty. According to the research's findings, information technology use does not influence the two independent variables on the dependent variable, so it cannot increase or decrease the prevalence of academic dishonesty among students.

The results of the hypothesis test in this study indicate that the research hypothesis is not rejected, as the calculated probability value in the significance table is $0.536 > 0.05$. So the conclusion of the eighth hypothesis, namely Ha8, is rejected, indicating that the use of information technology does not affect the strength or weakness of the ability to engage in academic cheating. This shows that the use of information technology during exams or assignments does not affect students' ability to commit academic fraud.

DISCUSSION

This report presents a comprehensive, expert-level analysis of academic dishonesty, focusing specifically on a critical demographic: Economics Education students in Indonesia. Within this new digital paradigm, maintaining academic integrity has emerged as a paramount challenge. The traditional mechanisms of supervision and moral enculturation have been eroded by the physical distance between educators and learners, creating fertile ground for academic dishonesty to metastasize (Novita & Jannah, 2022). This group is of particular significance for two primary reasons. First, as students of economics, they are immersed in a curriculum that emphasizes rational choice theory, utility maximization, and efficiency, as well as intellectual frameworks that, paradoxically, can provide a cognitive scaffold for rationalizing dishonest behavior as a

"strategic" choice. Second, as pre-service teachers, their ethical formation during their university years serves as a predictor for the moral integrity of the future Indonesian educational system. If future generations allow dishonesty to become commonplace, the impact on the formation of national character will be profound. To dissect this complex phenomenon, this report employs the Fraud Diamond Theory as its primary analytical lens. While the traditional Fraud Triangle (Pressure, Opportunity, Rationalization, and Ability) has served criminologists and educators for decades, the digital age necessitates the inclusion of a fourth, decisive element: "capability" (Wolfe & Hermanson, 2004). In an era where cheating requires navigating complex Learning Management Systems (LMS), bypassing AI-driven proctoring tools, and effectively prompting Generative AI models, "Capability" has transitioned from a minor variable to a central determinant of fraud.

This report argues that the Fraud Diamond is the superior framework for analyzing current trends because it acknowledges that, in a high-tech learning environment, the barrier to cheating is often technical. A student may want to cheat (Pressure) and be unsupervised (Opportunity). However, if they lack the digital literacy to find the answer online without triggering a proctoring alert, the fraud will not occur. Conversely, competent students may identify loopholes that even the instructors are unaware of, effectively creating their own opportunities (Berkhout et al., 2024). While the diamond is our primary focus, it is crucial to acknowledge recent extensions, such as the "Fraud Pentagon" (adding arrogance). The Fraud Hexagon" (adding arrogance and collusion). The element of "collusion" is particularly relevant in the Indonesian context, where the cultural value of *gotong royong* (cooperation) is often warped into "wrongful cooperation" on individual exams. However, the core drivers remain anchored in the diamond's four interactional nodes, with collusion often manifesting as a specific type of "opportunity" or "capability" (social networking capability).

This document integrates empirical data from over sixty distinct research sources, synthesizing findings to offer a nuanced discussion that goes beyond simple causality. It explores the "why" and "how" of academic fraud, juxtaposing Indonesia's collectivist cultural values with the individualistic incentives of academic competition. It critically evaluates the "technological arms race" between institutional supervision and student evasion. It offers a comparative analysis of conflicting research findings to construct a holistic view of the current state of academic integrity in Indonesia. Indonesia's collectivist culture plays a dual role in academic integrity. On the one hand, the emphasis on community and helping others is a virtue. On the other hand, in an academic setting, this often translates into a moral obligation to help peers pass exams. Refusing to share an answer can be seen as antisocial or selfish, leading to social ostracization.

Economics Education students inhabit a unique intellectual space. Their curriculum is steeped in "Rational Choice Theory" and "Game Theory", which model human behavior as a series of calculations to maximize personal utility. Research indicates that "wrongful cooperation" is among the most frequently committed forms of fraud by Indonesian economics students. This suggests that cultural norms heavily reinforce the "rationalization" component of the Fraud Diamond; cheating is not viewed as a violation of integrity but as an act of solidarity. These students are also future educators, which creates a profound cognitive dissonance. Society expects them to be paragons of moral virtue, yet the academic system pressures them to achieve high grades to certify their competence. This tension can lead to intense "rationalization," where students convince themselves that obtaining the degree is the ultimate good, justifying the "temporary" evil of cheating (Pratama et al., 2023). However, research warns that this habituation to dishonesty can spill over into their professional lives, potentially leading teachers to tolerate unethical behavior in their own classrooms. Pressure acts as the ignition switch in the Fraud Diamond. For Indonesian Economics Education students, this pressure is not monolithic but a composite of several intense vectors (Table 7).

The correlation between pressure and fraud is well-established, but the mechanism is critical. Research by W. S. Albrecht et al. (2012) and recent Indonesian studies confirm that pressure positively affects dishonest behavior. When students feel "cornered" by the prospect of failure, viewed not as a learning opportunity but as a catastrophic loss of status, financial stability, or ethical constraints dissolve. For students in Economics Education, the pressure is amplified by the dual demand of mastering content (Economics) and pedagogy (Education). High workloads and tight deadlines create a scarcity of time, forcing a choice between "cutting corners" (cheating) and failing. Interestingly, some studies found that pressure was insignificant in specific contexts. Resilience and Self-Efficacy may explain this discrepancy. Students with high self-efficacy (belief in

their own ability to succeed) can withstand high pressure without resorting to fraud. Conversely, students with low self-efficacy or high academic procrastination are easily crushed by pressure, making them prime candidates for the Fraud Diamond's influence.

Table 7. Academic Misconduct Typology in Economic Education students

Pressure Type	Description	Specific Context for Economic Student	Impact Level
Academic Performance	The drive to maintain a high GPA for scholarships, honors, or passing thresholds.	Economics curricula involve rigorous quantitative analysis (econometrics statistics), which carry high failure rates.	
Parental/Family	The cultural obligation to uphold family honor through academic success.	Indonesian parents often view education as a primary vehicle for social mobility, creating an immense psychological burden.	Very High
Financial	The need to graduate quickly to enter the workforce or retain funding.	Exacerbated by COVID-19, failing a course means the family cannot afford tuition costs.	Moderate-High
Peer Competition	The fear of falling behind peers is perceived as cheating.	"Game Theory" dynamics: if peers cheat, the curve shifts, forcing honest students to cheat to compete.	High

Source: Processed Data (2024)

A pivotal finding from the user-provided discussion snippet is the assertion that "the use of information technology does not moderate the relationship between academic cheating behavior and diamond fraud factors." This finding positions IT as a neutral tool, a passive tool that neither exacerbates nor alleviates the fundamental psychological factors underlying fraud (Pressure, Opportunity, Ability, Rationalization). The argument posits that technology alone is insufficient to alter a student's ethical decision-making matrix; instead, the root causes remain psychological and situational. However, this finding stands in stark contrast to other significant studies in the field, necessitating a rigorous comparative analysis. A previous study by Sari et al. (2025) shows that IT misuse specifically amplifies "opportunity". While it may not change the *desire* (Pressure), it drastically increases the *feasibility* of the act for an accounting student. Otherwise, Basmar & Sulfati (2022) indicate that IT is a passive tool. It does not inherently increase the *impact* of pressure or rationalization. The root cause is the student's internal state, not the tool. The discrepancy between these user information snippets (IT as neutral) can be resolved by distinguishing between the passive IT infrastructure. The presence of computers or the internet can indeed be neutral. If a student is not pressured or inclined to cheat, having a laptop will not change their behavior. This supports the user information snippet's conclusion that "technology alone is not enough to change students' ethical decisions."

The practical implications of these findings are profound for educational institutions aiming to foster academic integrity. Interventions should prioritize reducing academic pressure through counseling services and workload management, as well as cultivating students' self-efficacy to diminish reliance on dishonest means. Furthermore, research consistently shows that students with higher digital skills are more likely to cheat, not less. This is counterintuitive to the idea that skilled students should find the work easier. Instead, skilled students find cheating easier. They know how to use search operators effectively, access "cheating marketplaces" (e.g., Chegg, CourseHero), and leverage AI.

Based on that result, whether there is technology or not, academic fraud is still committed. So that advice is given to lecturers to prevent academic fraud, lecturers can provide authentic assessment, for example, with case-based and project-based assignments to avoid cheating by students, because authentic assessment is an assessment that is carried out comprehensively to assess, starting from the process to the output of learning.

CONCLUSION

From the above explanation of the research findings, it can be inferred as follows:

1. Information technology use does not increase or decrease the impact of pressure on academic dishonesty; students under a lot of pressure during lectures will make every effort to perform their best without using technology.
2. The use of information technology does not increase or decrease the likelihood of academic dishonesty. Despite the abundance of opportunities available to students, they do not choose to use technology as a tool for exams or assignments.
3. Information technology use does not increase or decrease the impact of rationalization on academic dishonesty; students who are aware of its use are less likely to defend or explain it as a means of academic dishonesty.
4. Students' proficiency with technology varies, but they do not choose to use it to commit academic fraud. Therefore, the use of technology does not increase or decrease the influence of ability on academic cheating behavior.

Then, the suggestions put forward in this research for economics education students are as follows. Students are expected to reduce feelings of pressure during lectures by resolving problems immediately. Students are expected to uphold honesty and integrity. It is anticipated that students will realize that justifying academic cheating is wrong and that they are prohibited from doing so. Students are expected to have a sense of self-confidence—abilities they have—so that there is no feeling of wanting to commit another fraud. Students are expected to use the technology and information they have as wisely and effectively as possible.

Based on the research results, whether there is technology or not, academic fraud is still committed. So that advice is given to lecturers to prevent academic fraud, lecturers can provide authentic assessment, for example, with case-based and project-based assignments to avoid cheating by students, because authentic assessment is an assessment that is carried out comprehensively to assess, starting from the process to the output of learning.

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