Journal of Business Management and Economic Development

E-ISSN 2986-9072 P-ISSN 3031-9269

Volume 3 Issue 03, September 2025, Pp. 1126-1141

DOI: https://doi.org/10.59653/jbmed.v3i03.1985

Copyright by Author





Fraud Triangle, Use of Information Technology, and Academic Dishonesty of Accounting Students: Testing Religiosity as a Moderator

Ramadona Simbolon

Universitas Islam Sumatera Utara, Indonesia Corresponding Email: ramadona@fe.uisu.ac.id

Received:05-08-2025 Reviewed: 05-09-2025 Accepted: 20-10-2025

Abstract

This study aims to analyze the influence of pressure, opportunity, rationalization, and the use of information technology on academic fraud and to examine the role of religiosity as a moderator. This research was conducted at the Islamic University of North Sumatra with accounting students as respondents. The sample was selected using purposive sampling with the criteria of accounting students who had previously taken an exam, resulting in 162 respondents. The data obtained will be analyzed using Moderated Regression Analysis with an interaction test approach. This research adopts the fraud triangle theory approach into the realm of education at one Islamic University, which has cultural and academic environmental characteristics based on Islam. Additionally, this research adds the variable of information technology usage, which is relevant to current digital developments, and tests religiosity as a moderator, providing a psychological and moral perspective on students' tendency to cheat. The research findings revealed that rationalization and the use of information technology have a positive and significant impact on academic dishonesty, while pressure and opportunity do not. The interesting findings of this study indicate that religiosity acts as a moderator in the relationship between pressure and rationalization toward academic dishonesty. Educational institutions, particularly accounting study programs, need to instill and internalize religious and ethical values in the learning process, thereby building and strengthening an academic culture of integrity and reducing tolerance for various forms of justification that can encourage cheating.

Keywords: Fraud triangle, use of information technology, religiosity

Introduction

Academic fraud is an increasingly concerning phenomenon in higher education environments, including in Indonesia. This fraud encompasses various forms of academic ethical violations, such as cheating during exams, plagiarism, falsification of research data, and

the unethical use of information technology to gain academic advantage. According to (Sozon, Mohammad Alkharabsheh, Fong, & Chuan, 2024), academic dishonesty can damage academic integrity and lower the quality of graduates, ultimately impacting the workforce and society at large. At the Islamic University of North Sumatra (UISU), this phenomenon is a serious concern because it relates to the academic and ethical values that students are supposed to uphold.

Factors influencing academic dishonesty can be explained thru the Fraud Triangle theory proposed by (Cressey, 1950), which consists of pressure, opportunity, and rationalization. Pressure can come from academic demands, competition among students, or high family expectations. Opportunities arise when academic supervision and control systems are weak, giving students the chance to cheat without high risk. Meanwhile, rationalization occurs when students justify their cheating behavior, for example, by claiming that everyone does it or that the education system is unfair (Dias-Oliveira, Morais, Pasion, & Hodgson, 2024).

In the digital age, the use of information technology also plays a significant role in both promoting and hindering academic dishonesty. Technological advancements provide convenience for students to access information and complete assignments, but on the other hand, they also open up opportunities for them to plagiarize and cheat online (Chiang, Zhu, & Yu, 2022). Research conducted by (Cotton, Cotton, & Shipway, 2024; Ortiz-bonnin & Blahopoulou, 2025) indicates that the wider the access to information technology, the greater the likelihood of students engaging in academic dishonesty if there are no strong regulations and ethics in place. Therefore, the use of technology in the academic world must be balanced with ethical awareness and strict regulations to prevent its misuse.

One factor that can reduce students' tendency to engage in academic dishonesty is their level of religiosity. Religiosity refers to the extent to which a person internalizes religious values in daily life, including in academic behavior (Karimi, Liobikienė, & Alitavakoli, 2022). Some studies indicate that individuals with high levels of religiosity tend to have stronger morals and are less likely to engage in unethical behavior (Chan, Ananthram, Thaker, & Liu, 2022). Thus, religiosity can act as a moderating variable that weakens the relationship between pressure, opportunity, rationalization, and the use of information technology on academic dishonesty.

This research focuses on accounting students at the Islamic University of North Sumatra, considering that the field of accounting is closely related to ethics and professionalism. In the world of work, accounting graduates are expected to have high standards of integrity, especially since they will be dealing directly with financial aspects and public trust (van den Berg & Rothmann, 2024). Therefore, understanding the factors that influence academic dishonesty among accounting students is crucial to ensure they have a strong moral foundation before entering the professional world. Considering these various factors, this study aims to examine the influence of pressure, opportunity, rationalization, and the use of information technology on academic dishonesty, and to see how religiosity can play a role in moderating these relationships. The results of this research are expected to contribute to educational institutions in designing more effective academic policies to prevent cheating,

as well as raise student awareness about the importance of ethics in the academic and professional world.

This research is expected to provide new insights into the field of academic ethics, particularly in the context of accounting students at UISU. By understanding the factors that drive academic dishonesty and how religiosity can play a role in reducing such unethical behavior, it is hoped that the university can take strategic steps to create a more integrity-based academic environment.

Literature Review

The main theories underlying this research are the fraud triangle theory, the theory of planned behavior, and the theory of religion. These theories explain the variables that can influence academic dishonesty. The Fraud Triangle theory was first developed by (Cressey, 1950) and is a key foundation for understanding the reasons that motivate someone to commit academic dishonesty. According to this theory, fraud occurs when three main elements are present: pressure, opportunity, and rationalization. Pressure can stem from high academic demands, opportunities arising from weak oversight systems, and rationalization allowing individuals to justify their cheating (Sari et al., 2025). In an academic context, this theory can be applied to describe how students cheat when they experience academic pressure, have the opportunity to cheat without consequences, and are able to justify their actions with certain reasons.

In addition to the Fraud Triangle Theory, this study also refers to the Theory of Planned Behavior (Ajzen, 1991). This theory provides an understanding that there are 3 (three) main factors influencing individual behavior: attitude toward the behavior, subjective norms, and perceived behavioral control. In the context of academic dishonesty, students' attitudes toward cheating (e.g., whether they consider it acceptable or not), subjective norms (such as social environmental pressure or peer pressure), and perceived behavioral control (the ease or difficulty of cheating) contribute to their decision to engage in unethical behavior (Beck & Ajzen, 1991). Thus, this theory provides insights into how psychological and social factors can influence students' propensity to engage in academic dishonesty, particularly in environments rife with academic pressure and intense competition.

Next, this study considers the Theory of Religiosity, which states that religious values and a person's level of religiosity can influence their ethical behavior. According to (Putri, Rahmawati, & Bashir, 2025), religiosity reflects the extent to which individuals can internalize religious teachings in their lives, including in academic aspects. Previous research has shown that individuals with high levels of religiosity tend to uphold moral and ethical values more, making them less likely to engage in academic dishonesty (Chan et al., 2022). Thus, religiosity serves as a moderating variable that reduces the impact of pressure, opportunity, rationalization, and the use of information technology on students' tendency to engage in academic dishonesty.

The Influence of Pressure on Academic Dishonesty

The main factors that drive students to engage in academic dishonesty can be explained thru the Fraud Triangle theory, which includes pressure, opportunity, and rationalization (Cressey, 1950). Academic pressure can stem from high grade demands, heavy workloads, or parental and societal expectations. Opportunities arise when weak monitoring systems allow students to cheat or plagiarize without significant consequences (Sari et al., 2025). Meanwhile, rationalization occurs when students justify their cheating behavior, for example, by claiming that everyone does it or that the education system is unfair (Clinciu, Cazan, & Ives, 2021). Therefore, to reduce academic dishonesty, a comprehensive approach is needed, including strict enforcement of academic regulations, increased ethical awareness, and the strengthening of moral and religious values within the academic environment.

Academic pressure is one of the main factors that drives students to engage in academic dishonesty. This pressure can come from various sources, such as the demands to get high grades, excessive workloads, academic competition, and high expectations from family and society (Yan, 2025). According to (Cressey, 1950), pressure is one of the elements that drives individuals to engage in fraudulent behavior when they feel they have no other alternative to achieve their goals. In an academic context, students who feel pressured by high academic expectations or fear of failure are more likely to seek shortcuts, such as cheating or plagiarizing (Miles, Campbell, & Ruxton, 2022; Nelson, Santamaría, Javens, & Ricaurte, 2025). The higher the level of academic stress experienced by students, the greater the likelihood they would engage in cheating behavior as a coping strategy against that Additionally, academic pressure can also stem from economic factors, where students at risk of losing scholarships or financial support often feel compelled to cheat in order to maintain their academic performance (Eshet, 2024; Zhao et al., 2022).

Students who work while studying are also at higher risk of cheating due to limited time for studying and completing academic assignments (Zhao et al., 2022). However, the impact of pressure on academic dishonesty can be minimized by a supportive academic environment, stress management programs (Choo & Tan, 2023), and an ethics and religiosity-based approach that teaches students to cope with pressure in a more positive and honest way (Ridwan & Diantimala, 2021). Therefore, educational institutions play an important role in reducing academic pressure thru more flexible policies and adequate psychological support for students.

H1: Pressure influences academic dishonesty.

The Influence of Opportunity on Academic Dishonesty

Opportunity is one of the main factors influencing academic dishonesty behavior, as explained in the Fraud Triangle Theory by (Cressey, 1950). In an academic context, opportunities for cheating arise when there are weaknesses in the supervision system, a lack of strict sanctions, and easy access to resources that support cheating, such as the internet and digital technology (Dias-Oliveira et al., 2024). Students who perceive the likelihood of getting caught while cheating or plagiarizing as low are more likely to engage in dishonest behavior (Chala, 2021; Ortiz-bonnin & Blahopoulou, 2025). A study by (Marksteiner, Nishen, & Dickhäuser, 2021; Miles et al., 2022; Zhao et al., 2022) found that students are more likely to

cheat if they are in a less supervised environment or if they feel that such actions will not have serious consequences for their academic performance. Therefore, the opportunity for cheating can be reduced by increasing academic supervision and tightening academic integrity policies (Guruge, Kadel, Shailendra, & Sharma, 2025; Sozon, Pok, Sia, & Alkharabsheh, 2024).

Beside the weak supervision system, the opportunity for cheating also increases with the development of information technology, which provides easier access to academic resources, including plagiarism websites and academic assignment writing services (Chiang et al., 2022). Technology allows students to quickly copy and disseminate information, making them more susceptible to unethical behavior (Afedzie & Onyina, 2022). However, some studies show that technology can also be a tool for preventing cheating if used correctly, such as thru plagiarism detection systems and technology-based exams with strict surveillance (Alsabhan, 2023). Therefore, universities need to take strategic steps to minimize opportunities for cheating by integrating technology into their monitoring systems and the enforcement of academic codes of conduct.

H2: Opportunity influences academic dishonesty

The Influence of Rationalization on Academic Dishonesty

Rationalization is one of the elements in the Fraud Triangle Theory that allows individuals to justify their cheating behavior so that they still feel like moral people (Cressey, 1950). In an academic context, students who cheat often seek justification for their actions, such as believing that everyone does it, feeling that the education system is unfair, or thinking that cheating is the only way to survive academic pressure (Miles et al., 2022). Research conducted by (Cheng, Hung, & Hsu, 2021; Huang, Shao, Wu, & Yang, 2025) found that students with a strong moral justification mindset were more likely to engage in academic dishonesty compared to those with high ethical awareness. Additionally, another common reason students use to rationalize cheating is the perception that their actions don't really harm others or that they are only "borrowing" information temporarily (Sayidah, Hartati, & Muhajir, 2020).

Rationalization is also often influenced by social norms and academic culture in educational settings. If students see their peers cheating without serious consequences, they are more likely to adopt the same behavior and consider it acceptable (Vučković, Peković, Blečić, & Đoković, 2020). Research by (Krou, Acee, Pino, & Hoff, 2019) shows that an academic environment permissive of cheating increases the level of rationalization among students. To reduce this tendency toward rationalization, educational institutions need to instill academic integrity values from an early age, clarify the consequences of cheating, and create an academic culture that emphasizes the importance of honesty and individual responsibility (Çelik & Razı, 2023; Enciso & Bueno, 2024). Additionally, religiosity can also act as a suppressor of rationalization, as students with high levels of religiosity tend to have stronger moral control and ethical awareness, making them less likely to justify academic dishonesty (Dogi, Mangoting, & Hokil, 2025; Okolo, Appiah, & Wingenbach, 2025).

H3: Rationalization influences academic dishonesty.

The Influence of Information Technology Use on Academic Dishonesty

The use of information technology has brought significant changes to the world of education, including in the area of academic dishonesty. Technology makes it easier for students to access various information sources, but it also opens up greater opportunities for them to cheat, such as cheating during online exams, plagiarizing, and using third-party services to complete academic assignments (Chiang et al., 2022). According to research by (Alguacil, Herranz-Zarzoso, Pernías, & Sabater-Grande, 2024), the higher the level of technology use in the learning process, the greater the likelihood of students engaging in academic dishonesty if there is no adequate monitoring system. Technology also facilitates the illegal dissemination of academic materials thru various digital platforms, such as social media groups and online forums, making it easier for students to obtain answers or assignments without having to do the work themselves (Gaumann & Veale, 2024; Pikhart & Al-Obaydi, 2025; Sozon, Pok, et al., 2024).

Although technology can increase the risk of academic dishonesty, its proper use can also be employed as a prevention tool. Plagiarism detection systems, artificial intelligence-based exams, and online exam monitoring platforms can reduce the likelihood of students cheating (Balalle & Pannilage, 2025). Additionally, increasing digital literacy and awareness of academic ethics thru the responsible use of technology can help reduce students' tendency to cheat (Leaton Gray, Edsall, & Parapadakis, 2025). Thus, educational institutions need to adopt a balanced strategy in the use of technology, namely by leveraging the advantages of technology to support academic integrity while also suppressing its potential misuse in acts of cheating.

H4: The use of information technology influences academic dishonesty.

The Influence of Religiosity as a Moderating Variable

Religiosity plays an important role in shaping individual morality, including in decision-making related to ethical or unethical behavior. In an academic context, religiosity can serve as a deterrent to cheating by reinforcing values of honesty, responsibility, and integrity within students (Jamaluddin & Lufityanto, 2021; Ridwan & Diantimala, 2021). A study conducted by (Onu, Onyedibe, Ugwu, & Nche, 2021) showed that students with high levels of religiosity tend to have a stronger moral compass and are less likely to engage in academic dishonesty compared to those who are less religious. This aligns with the Self-Concept Maintenance theory developed by (Mazar, Amir, & Ariely, 2008), which states that individuals tend to maintain a positive self-image and will avoid behaviors that contradict their moral values, including religious values.

Religiosity as a moderator can weaken the relationship between factors driving academic dishonesty, such as pressure, opportunity, rationalization, and the use of information technology, and the act of cheating itself. For example, a student is experiencing high academic pressure or has a great opportunity to cheat, a strong level of religiosity can make them reconsider before taking unethical action (Benitez & Wingenbach, 2025). This is due to the belief that cheating is contrary to religious teachings and can bring about moral or spiritual consequences (Singh, Sadiq, & Kaur, 2020). Thus, religiosity serves as an internal control

mechanism that limits students' tendency to engage in cheating behavior despite strong driving factors. Furthermore, some studies indicate that educational institutions that instill religious values in the learning process tend to have lower rates of academic dishonesty (Onu et al., 2021). Religious education provided consistently can increase students' ethical awareness and reduce rationalization of cheating behavior. Therefore, universities, especially those based on Islamic values like the University of North Sumatra, can strengthen character education based on religiosity to instill values of honesty and academic ethics from an early age. With this approach, religiosity is not only an individual factor shaping student behavior, but also a part of an institutional strategy to prevent academic dishonesty more broadly.

H5: Religiosity moderates the relationship between pressure and academic dishonesty.

H6: Religiosity moderates the relationship between opportunity and academic dishonesty.

H7: Religiosity moderates the relationship between rationalization and academic dishonesty.

H8: Religiosity moderates the relationship between information technology use and academic dishonesty.

Research Method

This study uses a quantitative approach with a survey method aimed at examining the relationship between pressure, opportunity, rationalization, and information technology use and academic cheating among students, as well as the role of religiosity as a moderating variable. According to (Creswell & Creswell, 2018), the quantitative approach is used to test hypotheses thru the collection of numerical data and statistical analysis to find patterns of relationships between variables. The design of this study is causal, aiming to identify the cause-and-effect relationship between the independent and dependent variables (Tabachnick & Fidell, 2019).

The population in this study consists of accounting students at the University of North Sumatra Islamic University who are actively enrolled in classes during the current academic year. The sampling technique used purposive sampling, which is a method of selecting samples based on specific criteria (Hair, Black, Babin, & Anderson, 2014). The sample criteria in this study were students who had taken core accounting courses and had previously faced academic situations that could potentially lead to cheating. The sample size was determined using Slovin's formula with a 5% margin of error (Adhikari, 2021), resulting in a total of 162 respondents.

Data was collected thru the distribution of questionnaires using a 5-point Likert scale to measure each research variable, ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire consists of several sections, namely questions about the respondents' demographics, questions related to academic stress, opportunities for cheating, rationalization of actions, the use of information technology, and the level of religiosity of students. Additionally, the validity and reliability of the instrument will be tested using exploratory

factor analysis (EFA) and Cronbach's Alpha coefficient to ensure the internal consistency of the data (Hair et al., 2014).

The data obtained will be analyzed using Moderated Regression Analysis (MRA) with an interaction testing approach to examine the role of religiosity in weakening the influence of pressure, opportunity, rationalization, and the use of information technology on academic cheating (Baron & Kenny, 1986). Additionally, classical assumption tests such as normality, heteroskedasticity, and multicollinearity will be conducted to ensure the accuracy of the regression model used (Tabachnick & Fidell, 2019). Data processing will be carried out using the statistical software STATA to obtain more accurate and comprehensively interpretable analysis results.

Results

Based on instrument testing using EFA and Cronbach's Alpha, it was found that all questionnaire items in this study met validity and reliability. Subsequently, normality assumptions were checked using the Kolmogorov-Smirnov test, which yielded a significance value of 0.057. Since this value is greater than the significance level of 0.05, it can be concluded that the research data used are normally distributed. Next, to detect multicollinearity assumptions, the tolerance and variance inflation factor (VIF) values were used. The results in Table 1 show that the research data used did not exhibit multicollinearity because the VIF and tolerance values were within acceptable limits, allowing the research to be conducted using a regression model.

Variable Tolerance VIF Pressure 0.701 1.427 **Opportunity** 0.366 2.734 Rationalization 0.274 3.648 Anti-Fraud Technology 0.345 2.901 Religiosity 0.864 1.158

Table 1. Result of Tolerance and VIF

Furthermore, the evaluation of the heteroscedasticity assumption was conducted thru a scatterplot analysis between predicted values and residuals. The observation results showed no specific pattern in the scatterplot, indicating that the data did not have a heteroscedasticity problem. Based on the test results, it can be concluded that all assumptions have been met. Therefore, further hypothesis testing was conducted using multiple regression analysis, which is presented in Table 2.

Table 2. Result of Multiple Regression

Variable	Predicted Sign	Coef	t-statistic	p-value
Pressure	+	0.034	0.280	0.780
Opportunity	-	0.080	0.497	0.621
Rationalization	+	0.492	3.096	0.003
Anti-Fraud technology	+	0.417	3.435	0.001

Fraud Triangle, Use of Information Technology, and Academic Dishonesty of Accounting Students: Testing Religiosity as a Moderator

Religiosity	-	0.072	0.645	0.522
F value	23.633			
R2	0.682			

Based on Table 2, the F-value obtained is 23.633 with a significance (Sig.) of 0.000. Therefore, it can be concluded that the regression model in this study is significant. This means that pressure, opportunity, rationalization, the use of information technology, and religiosity simultaneously have a significant effect on academic cheating because the Sig. value is 0.000 < 0.05. Therefore, the requirements for the data to be able to interpret the coefficient values in multiple linear regression analysis have been met. Furthermore, the R value of 0.826 is close to 1, so the correlation coefficient is considered strong. Additionally, the R-squared value of 0.682 indicates that the variables of pressure, opportunity, rationalization, the use of information technology, and religiosity contribute 68.2% to academic cheating. The remaining 31.8% is influenced by other variables not examined in this study. Furthermore, the t-test in Table 2 reveals that rationalization and the use of information technology have a positive and significant effect on academic cheating, as their probability values are significant. However, pressure, opportunity, and religiosity do not have a significant effect on academic cheating, as the probability values of these three variables are not significant, namely 0.780; 0.621; and 0.522, which are greater than 0.05.

Table 3. Result of Mediating Regression Analysis

Variable	Predicted	Coef	t-statistic	p-value
	Sign			_
Pressure*Religiosity	-	0.022	2.354	0.022
Opportunity*Religiosity	+	0.006	0.422	0.675
Rationalization*Religiosity	+	0.037	2.811	0.007
Information technology*Religiosity	+	0.012	1.261	0.213
F value	11.773			
R2	0.457			

Table 3 shows the results of the moderating regression analysis, and it was found that the F-value is 11.773, so the regression model is also declared significant because the significance value of 0.000 is less than 0.05. The R-squared value of 0.457 means that the contribution of pressure, opportunity, rationalization, and the use of information technology to academic cheating is 45.7% after interacting with the moderating variable, namely religiosity. Furthermore, the results of the t-test in Table 3 reveal that religiosity acts as a moderator in the relationship between pressure and rationalization toward academic cheating, as its probability values are significant, namely 0.022 and 0.007, which are less than 0.05. Conversely, religiosity does not moderate the relationship between opportunity and the use of information technology toward academic cheating, as the probabilities of each of these relationships are not significant, namely 0.675 and 0.213, which are greater than 0.05.

Discussion

The research findings reveal that rationalization has a positive and significant effect on academic dishonesty. Individuals involved in unethical behavior attempt to justify their actions to remain consistent with their self-concept as good people. Rationalization allows students to reduce feelings of guilt or moral conflict over cheating by providing internal justifications, such as "everyone else does it too," "I cheated because I was pressed for time," or "this is just once and it doesn't hurt anyone." The research findings are consistent with the fraud triangle theory developed by (Cressey, 1950), where rationalization is one of the three main elements that enable someone to commit fraud. In an academic context, rationalization becomes a loophole for moral justification, making students feel it's acceptable to deviate from ethics without feeling guilty. The system of values regarding integrity and ethics is not strongly established; students find it easier to seek justification for their actions rather than refrain from cheating. Students who are able to rationalize cheating behavior are more likely to do it repeatedly (McIntire, Calvert, & Ashcraft, 2024). Students with a high level of rationalization also feel that cheating is acceptable under certain conditions, thus strengthening their intention and realization of academic cheating behavior (Dias-Oliveira et al., 2024; Krou et al., 2019).

The results of this study also revealed that rationalization and the use of information technology have a positive and significant effect on academic cheating. The higher the intensity or ease of use of information technology among students, the greater the potential for academic dishonesty. Although information technology offers many benefits in supporting the learning process, it also opens up new opportunities for cheating easily, quickly, and discreetly. Students can utilize information technology such as the internet, instant messaging applications, filesharing platforms, and artificial intelligence (AI) to find answers instantly, engage in digital collusion, copy others' work, or use third-party services to complete academic assignments (Désiron & Petko, 2023; Huang et al., 2025). Furthermore, this study explains that pressure, opportunity, and religiosity do not affect academic cheating. This finding is not consistent with the fraud triangle theory by (Cressey, 1950). Social norms and academic culture play a key role in shaping students' decisions to engage in academic cheating compared to the available pressures and opportunities (Ali, Aftab, Nur, Ibrahim, & Mohamed, 2024; Taşkın & Kokoç, 2025; Yu, Glanzer, & Johnson, 2021; Zhao et al., 2024). Therefore, accounting students who study at institutions that consistently instill and uphold ethical values tend to have higher moral awareness, as well as a stronger commitment to integrity and honesty in fulfilling their academic responsibilities.

Furthermore, a significant finding in this study indicates that religiosity acts as a moderating variable in the relationship between stress and rationalization toward academic cheating. Religiousness reflects a system of values and norms derived from religious teachings, which shapes individuals' moral consciousness to act honestly, perform good deeds, and avoid behaviors that contradict spiritual values (Al-Thani, 2025; Elsayed, Lestari, & Fotini, 2023). Students with high levels of religiosity tend to use their religious teachings as a basis for decision-making, making them more capable of refraining from cheating behavior, even under pressure or with a tendency to rationalize academic dishonesty. Thus, the understanding that academic dishonesty is not only an unethical act but also contradicts religious teachings can

serve as a strong internal mechanism in preventing academic misconduct. Therefore, educational institutions, particularly accounting study programs, need to strengthen ethics education, build an academic culture that upholds integrity, and minimize tolerance for various forms of rationalization that encourage academic dishonesty. One strategic approach that can be taken is to instill and internalize religious values throughout the learning process and campus life.

Conclusion

This study aims to analyze the influence of pressure, opportunity, rationalization, and the use of information technology on academic dishonesty and to examine the role of religiosity as a moderating variable. This research is relevant because of the important role universities play in creating a nation of moral and highly integrated generations. The research findings revealed that rationalization and the use of information technology have a positive and significant impact on academic cheating, while pressure and opportunity do not. The interesting findings of this study indicate that religiosity acts as a moderator in the relationship between stress and rationalization toward academic cheating. Educational institutions, particularly accounting study programs, need to instill and internalize religious and ethical values in the learning process, thereby building and strengthening an academic culture of integrity and reducing tolerance for various forms of justification that can encourage cheating. The sample for this study is still limited, so future researchers can explore students in other universities and study programs. Future researchers can also add other variables considered to potentially influence academic dishonesty, such as commitment

Declaration of conflicting interest

The authors declare that there is no conflict of interest in this work.

Funding acknowledgment (optional)

No funding was received from any financial organization to conduct this research

References

- Adhikari, G. P. (2021). Calculating the Sample Size in Quantitative Studies. *Scholars' Journal*, 4(December), 14–29. https://doi.org/10.3126/scholars.v4i1.42458
- Afedzie, R., & Onyina, P. (2022). Ethical use of information technology in higher education. In Springer Nature Singapore Pte Ltd. https://doi.org/10.1080/02680513.2023.2213267
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211. https://doi.org/10.47985/dcidj.475

- Al-Thani, H. (2025). Religion and spiritual well-being: a qualitative exploration of perspectives of higher education faculty in Qatar and its challenge to western well-being paradigms. *Frontiers in Psychology*, *16*(April), 1–13. https://doi.org/10.3389/fpsyg.2025.1549863
- Alguacil, M., Herranz-Zarzoso, N., Pernías, J. C., & Sabater-Grande, G. (2024). Academic dishonesty and monitoring in online exams: a randomized field experiment. *Journal of Computing in Higher Education*, *36*(3), 835–851. https://doi.org/10.1007/s12528-023-09378-x
- Ali, W., Aftab, A., Nur, A. C., Ibrahim, A. R., & Mohamed, A. A. (2024). Investigating Factors Leading to Develop Academic Dishonesty and Cheating Behaviors During Board Examinations in Balochistan, Pakistan. *Jurnal Lingua Idea*, *15*(1), 126. https://doi.org/10.20884/1.jli.2024.15.1.10904
- Alsabhan, W. (2023). Student Cheating Detection in Higher Education by Implementing Machine Learning and LSTM Techniques. *Sensors*, 23(8). https://doi.org/10.3390/s23084149
- Balalle, H., & Pannilage, S. (2025). Reassessing academic integrity in the age of AI: A systematic literature review on AI and academic integrity. *Social Sciences and Humanities Open*, 11(June 2024), 101299. https://doi.org/10.1016/j.ssaho.2025.101299
- Baron, R. M., & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. https://doi.org/10.1177/1350506818764762
- Beck, L., & Ajzen, I. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of Research in Personality*, 25(3), 285–301. https://doi.org/10.1016/0092-6566(91)90021-H
- Benitez, J. A., & Wingenbach, G. (2025). Masks Off: Exploring Undergraduates' Motivations to Cheat During COVID-19. *Journal of Academic Ethics*, 23(4), 1593–1608. https://doi.org/10.1007/s10805-025-09616-0
- Çelik, Ö., & Razı, S. (2023). Facilitators and barriers to creating a culture of academic integrity at secondary schools: an exploratory case study. *International Journal for Educational Integrity*, 19(1), 1–30. https://doi.org/10.1007/s40979-023-00125-4
- Chala, W. D. (2021). Perceived seriousness of academic cheating behaviors among undergraduate students: an Ethiopian experience. *International Journal for Educational Integrity*, 17(1), 1–15. https://doi.org/10.1007/s40979-020-00069-z
- Chan, C., Ananthram, S., Thaker, K., & Liu, Y. (2022). Do religiosity and ethical principles influence ethical decision-making in a multi-faith context? Evidence from India. *Journal of Business Research*, 149, 772–785. https://doi.org/10.1016/j.jbusres.2022.05.065
- Cheng, Y. C., Hung, F. C., & Hsu, H. M. (2021). The relationship between academic dishonesty, ethical attitude and ethical climate: The evidence from Taiwan. *Sustainability (Switzerland)*, *13*(21), 1–16. https://doi.org/10.3390/su132111615
- Chiang, F. K., Zhu, D., & Yu, W. (2022). A systematic review of academic dishonesty in online learning environments. *Journal of Computer Assisted Learning*, 38(4), 907–928.

- Fraud Triangle, Use of Information Technology, and Academic Dishonesty of Accounting Students: Testing Religiosity as a Moderator
 - https://doi.org/10.1111/jcal.12656
- Choo, F., & Tan, K. (2023). Abrupt academic dishonesty: Pressure, opportunity, and deterrence. *The International Journal of Management Education*, 21(2), 100815. https://doi.org/10.1016/j.ijme.2023.100815
- Clinciu, A. I., Cazan, A. M., & Ives, B. (2021). Academic Dishonesty and Academic Adjustment Among the Students at University Level: An Exploratory Study. *SAGE Open*, 11(2). https://doi.org/10.1177/21582440211021839
- Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2024). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International*, 61(2), 228–239. https://doi.org/10.1080/14703297.2023.2190148
- Cressey, D. R. (1950). The Criminal Violation of Financial Trust. *American Sociological Review*, 15(6), 738–743. https://doi.org/10.2307/2086606
- Creswell, J. W., & Creswell, J. D. (2018). Research Design Qualitative: Qualitative, Quantitative, and Mixed Methods Approaches. In *SAGE Publications, Inc* (Fifth Edit). https://doi.org/10.4324/9780429469237-3
- Désiron, J. C., & Petko, D. (2023). Academic dishonesty when doing homework: How digital technologies are put to bad use in secondary schools. *Education and Information Technologies*, 28(2), 1251–1271. https://doi.org/10.1007/s10639-022-11225-y
- Dias-Oliveira, E., Morais, C., Pasion, R., & Hodgson, J. (2024). "It Is No Big Deal!": Fraud Diamond Theory as an Explanatory Model for Understanding Students' Academic Fraudulent Behavior. *SAGE Open*, 14(3), 1–13. https://doi.org/10.1177/21582440241266091
- Dogi, D. C. P., Mangoting, Y., & Hokil, C. (2025). Beyond Attitudes: Spiritual Intelligence and Rationalization as Predictors of Academic Dishonesty. *International Journal of Organizational Behavior and Policy*, 4(2), 77–90. https://doi.org/10.9744/ijobp.4.2.77-90
- Elsayed, K. G., Lestari, A. A., & Fotini, F. A. (2023). Role of Religion in Shaping Ethical and Moral Values Among the Youths in Athens, Greece. *Journal of Sociology, Psychology & Religious Studies*, 5, 11–20. https://doi.org/https://doi.org/10.53819/81018102t5153
- Enciso, R., & Bueno, D. C. (2024). Upholding Academic Integrity: Strategies for Fostering Plagiarism Awareness and Prevention among MAEd Science Education Students. *Institutional Multidisciplinary Research and Development Journal*, 7(8), 440–455. https://doi.org/10.13140/RG.2.2.29088.19207
- Eshet, Y. (2024). Academic Integrity Crisis: Exploring Undergraduates' Learning Motivation and Personality Traits over Five Years. *Education Sciences*, 14(9). https://doi.org/10.3390/educsci14090986
- Gaumann, N., & Veale, M. (2024). AI providers as criminal essay mills? Large language models meet contract cheating law. *Information and Communications Technology Law*, 33(3), 276–309. https://doi.org/10.1080/13600834.2024.2352692
- Guruge, D. B., Kadel, R., Shailendra, S., & Sharma, A. (2025). Building Academic Integrity: Evaluating the Effectiveness of a New Framework to Address and Prevent Contract Cheating. *Societies*, 15(1), 1–25. https://doi.org/10.3390/soc15010011

- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). Multivariate Data Analysis. In *Pearson Education* (Seventh Ed). https://doi.org/10.1007/978-3-319-01517-0_3
- Huang, C. L., Shao, X., Wu, C., & Yang, S. C. (2025). Navigating the digital learning landscape: insights into ethical dilemmas and academic misconduct among university students. *International Journal of Educational Technology in Higher Education*, 22(1). https://doi.org/10.1186/s41239-025-00516-2
- Jamaluddin, S. F., & Lufityanto, G. (2021). The Paradox of Integrity: Cheating Awareness Among Religious High School Student in Yogyakarta [Paradoks Integritas: Kesadaran akan Perilaku Kecurangan di Kalangan Siswa Sekolah Menengah Atas Berbasis Agama di Yogyakarta]. *ANIMA Indonesian Psychological Journal*, Vol. 36. https://doi.org/10.24123/aipj.v36i1.2500
- Karimi, S., Liobikienė, G., & Alitavakoli, F. (2022). The Effect of Religiosity on Proenvironmental Behavior Based on the Theory of Planned Behavior: A Cross-Sectional Study Among Iranian Rural Female Facilitators. *Frontiers in Psychology*, 13(February). https://doi.org/10.3389/fpsyg.2022.745019
- Krou, M. R., Acee, T. W., Pino, N. W., & Hoff, M. A. (2019). Rationalizing the Decision to Cheat: An Empirical Analysis to Determine Whether Social Rational Orientation Can Predict Academic Dishonesty. *Journal of College and Character*, 20(1), 9–24. https://doi.org/10.1080/2194587x.2018.1559196
- Leaton Gray, S., Edsall, D., & Parapadakis, D. (2025). AI-Based Digital Cheating At University, and the Case for New Ethical Pedagogies. *Journal of Academic Ethics*, 23(4), 2069–2086. https://doi.org/10.1007/s10805-025-09642-y
- Marksteiner, T., Nishen, A. K., & Dickhäuser, O. (2021). Students' Perception of Teachers' Reference Norm Orientation and Cheating in the Classroom. *Frontiers in Psychology*, 12(February). https://doi.org/10.3389/fpsyg.2021.614199
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people. *Journal of Marketing Research*, 45(6), 633–644. https://doi.org/http://dx.doi.org/10.1509/jmkr.45.6.633
- McIntire, A., Calvert, I., & Ashcraft, J. (2024). Pressure to Plagiarize and the Choice to Cheat: Toward a Pragmatic Reframing of the Ethics of Academic Integrity. *Education Sciences*, 14(3). https://doi.org/10.3390/educsci14030244
- Miles, P. J., Campbell, M., & Ruxton, G. D. (2022). Why Students Cheat and How Understanding This Can Help Reduce the Frequency of Academic Misconduct in Higher Education: A Literature Review. *Journal of Undergraduate Neuroscience Education*, 20(2), a150–a160. https://doi.org/10.59390/lxmj2920
- Nelson, A. S., Santamaría, P. V., Javens, J. S., & Ricaurte, M. (2025). Students' Perceptions of Generative Artificial Intelligence (GenAI) Use in Academic Writing in English as a Foreign Language †. *Education Sciences*, 15(5). https://doi.org/10.3390/educsci15050611
- Okolo, E. C., Appiah, I., & Wingenbach, G. (2025). Conflicts between academic misconduct and University honor codes: implications for ethical behavior. *International Journal for Educational Integrity*, 21(1). https://doi.org/10.1007/s40979-025-00198-3
- Onu, D. U., Onyedibe, M. C. C., Ugwu, L. E., & Nche, G. C. (2021). Relationship between

- religious commitment and academic dishonesty: is self-efficacy a factor? *Ethics and Behavior*, 31(1), 13–20. https://doi.org/10.1080/10508422.2019.1695618
- Ortiz-bonnin, S., & Blahopoulou, J. (2025). Chat or cheat? Academic dishonesty, risk perceptions, and ChatGPT usage in higher education students. *Social Psychology of Education*, 1–21. https://doi.org/https://doi.org/10.1007/s11218-025-10080-2
- Pikhart, M., & Al-Obaydi, L. H. (2025). Reporting the potential risk of using AI in higher Education: Subjective perspectives of educators. *Computers in Human Behavior Reports*, 18(February), 100693. https://doi.org/10.1016/j.chbr.2025.100693
- Putri, C. M., Rahmawati, N., & Bashir, U. (2025). Examining the role of religiosity in shaping ethical perceptions of creative accounting among accounting students. *Journal of Accounting and Investment*, 26(2), 842–857. https://doi.org/10.18196/jai.v26i2.26561
- Ridwan, R., & Diantimala, Y. (2021). The positive role of religiosity in dealing with academic dishonesty. *Cogent Business and Management*, 8(1). https://doi.org/10.1080/23311975.2021.1875541
- Sari, D. E., Asila, N. F., Mustofa, R. H., Suranto, Jatmika, S., Ahmad, N. L., ... Fadhilah, R. (2025). Using the Fraud Triangle framework to explore the impact of information technology misuse on academic fraud in accounting education: evidence from Indonesia. *Cogent Education*, 12(1). https://doi.org/10.1080/2331186X.2025.2476302
- Sayidah, N., Hartati, S. J., & Muhajir. (2020). Academic cheating and characteristics of accounting students. *International Journal of Financial Research*, 11(1), 189–196. https://doi.org/10.5430/IJFR.V11N1P189
- Singh, J., Sadiq, M., & Kaur, K. (2020). Integrating ethical sensitivity through religiosity in accounting education. *Accounting*, 6(6), 975–982. https://doi.org/10.5267/j.ac.2020.7.022
- Sozon, M., Mohammad Alkharabsheh, O. H., Fong, P. W., & Chuan, S. B. (2024). Cheating and plagiarism in higher education institutions (HEIs): A literature review. *F1000Research*, *13*(May), 1–34. https://doi.org/10.12688/f1000research.147140.2
- Sozon, M., Pok, W. F., Sia, B. C., & Alkharabsheh, O. H. M. (2024). Cheating and plagiarism in higher education: a systematic literature review from a global perspective, 2016–2024. *Journal of Applied Research in Higher Education*, (September), 2016–2024. https://doi.org/10.1108/JARHE-12-2023-0558
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using Multivariate Statistics* (Seventh Ed). https://doi.org/10.4324/9781315181158-21
- Taşkın, N., & Kokoç, M. (2025). Behavioural engagement, academic dishonesty, and performance gaps: Comparing online and paper—pencil based tests in an online learning context. *Education and Information Technologies*, *30*(13), 18895–18919. https://doi.org/10.1007/s10639-025-13514-8
- van den Berg, E., & Rothmann, S. (2024). Twenty-first-century competencies and capabilities for financial accounting students. *South African Journal of Economic and Management Sciences*, 27(1), 1–11. https://doi.org/10.4102/sajems.v27i1.5535
- Vučković, D., Peković, S., Blečić, M., & Đoković, R. (2020). Attitudes towards cheating behavior during assessing students' performance: student and teacher perspectives.

Journal of Business Management and Economic Development

- International Journal for Educational Integrity, 16(1), 1–28. https://doi.org/10.1007/s40979-020-00065-3
- Yan, L. (2025). Are effects of academic stress on students' learning motivation and screen device usage consistent in different stressful scenarios? *Acta Psychologica*, 257(May), 105108. https://doi.org/10.1016/j.actpsy.2025.105108
- Yu, H., Glanzer, P. L., & Johnson, B. R. (2021). Examining the relationship between student attitude and academic cheating. *Ethics and Behavior*, 31(7), 475–487. https://doi.org/10.1080/10508422.2020.1817746
- Zhao, L., Mao, H., Compton, B. J., Peng, J., Fu, G., Fang, F., ... Lee, K. (2022). Academic dishonesty and its relations to peer cheating and culture: A meta-analysis of the perceived peer cheating effect. *Educational Research Review*, *36*(April), 100455. https://doi.org/10.1016/j.edurev.2022.100455
- Zhao, L., Yang, X., Yu, X., Zheng, J., Mao, H., Fu, G., ... Lee, K. (2024). Academic Cheating, Achievement Orientations, and Culture Values: A Meta-Analysis. *Review of Educational Research*, *XX*(X), 1–45. https://doi.org/10.3102/00346543241288240