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### The Moderating Role of Religiosity and Ethics Education on The Relationship Between Fraud Diamond Dimensions and Machiavellian Traits in Academic Fraud

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#### ABSTRACT

*This study investigates the influence of the fraud diamond elements and Machiavellian traits on academic fraud, with religiosity and ethics education serving as moderating variables. Primary data were collected through questionnaires from 192 undergraduate students at the Institut Bisnis & Teknologi Kalimantan and Universitas Lambung Mangkurat. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that rationalization, capability, and Machiavellianism have significant effects on academic fraud, while pressure and opportunity do not. However, the patterns vary across institutions, highlighting that the influence of preceding factors is contextual. Furthermore, both religiosity and ethics education fail to serve as consistent and effective preventive measures, suggesting that these values have not been fully internalized by students. This study contributes by revealing the nuanced and contextual nature of factors leading to fraud and the limitations of conventional value-teaching methods in higher education.*

### 1. INTRODUCTION

The Indonesian education system places character education as a fundamental pillar in shaping students with integrity. Of the 18 character values set by the Ministry of National Education, honesty is a core value that must be instilled from an early age. However, in practice, the value of honesty is becoming increasingly rare, especially in higher education (Simabur et al., 2023). A primary cause of this decline in academic honesty is the tendency of students to prioritize academic outcomes over the learning process. This has led to various forms of academic dishonesty, which are fundamentally acts of fraud—violations of norms committed for personal gain (Kartika & Maria, 2022). The rapid development of information technology in the current digital era further complicates academic integrity issues.

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Open and extensive access to information should be a tool for learning, but in practice, it is often misused by students, particularly during online exams. Studies show that 64% of lecturers and 57% of 172 students stated that dishonest practices, such as cheating, are easier to perform in an online exam context (Christiana & Alvina, 2021). This phenomenon indicates that while technological advancement offers convenience, the oversight of academic integrity must be tightened to prevent misuse that damages educational values (Yessyani et al., 2023). Amidst these challenges, higher education institutions have a strategic role in maintaining and strengthening academic integrity through effective policies. As institutions with the strategic responsibility to produce professional human resources, universities are not only required to create academically capable graduates but also those with high moral integrity, ethics, and professional responsibility (Hidayah & Sholiqin, 2022). This responsibility is highly relevant in accounting education, which emphasizes honesty and adherence to professional codes of ethics (Marisa & Susilowati, 2024). Therefore, universities must design policies and procedures that can effectively prevent and handle academic fraud.

The accounting profession demands very high ethical standards, so a failure to build integrity during education can have serious consequences in the workplace. Academic dishonesty, if not properly addressed, risks becoming the root of unethical practices in the profession, such as financial statement manipulation or abuse of authority, which can harm companies and stakeholders. Candra et al. (2019) affirm that cheating behavior not addressed during college can carry over into the professional world and lead to serious legal consequences. Therefore, instilling academic integrity is a vital foundation for the formation of ethical accounting professionals. Data from the Association of Certified Fraud Examiners Indonesia (2019) show an increasing trend in fraud cases, including a rise in financial statement fraud from 7% in 2022 to 23%, with a prediction of reaching 42% in the next 12 months (Tiswiyanti & Herawaty, 2024). Academic fraud is a persistent problem that remains a real threat to the quality of education and the reputation of higher education institutions. This behavior not only damages academic values but also has the potential to produce a generation of graduates with low levels of integrity.

To understand the causes of academic fraud, the Fraud Diamond Theory by Wolfe & Hermanson (2004) is highly relevant. This theory highlights four key elements that trigger fraud: pressure, opportunity, rationalization, and capability (Verdiana & Mudrikah, 2023). In addition, the Machiavellian character, marked by a manipulative and pragmatic tendency, describes individuals who use any means to achieve their goals. In an academic setting, students with this trait tend to justify cheating, which ultimately damages institutional trust and reputation (Putry & Agung, 2021). Therefore, it is important to examine the relationship between Machiavellian traits and the elements of the Fraud Diamond.

Previous research Tiswiyanti & Herawaty (2024), shows that the Fraud Diamond dimensions directly affect academic fraud, while religiosity does not show a significant moderating role. This suggests that although spiritual factors are important, their influence on controlling fraud is still debatable. Other studies have also shown diverse findings. Nusron & Sari (2020) found that opportunity and rationalization influence fraud, but pressure, capability, and religiosity are not significant. Conversely, Vacumi & Halmawati (2022) found that religiosity has a negative and significant influence on the tendency for accounting fraud.

Religiosity is used as a moderating variable because it is believed to be an internal control that can limit the urge to cheat. Religious aspects include understanding, commitment, and obedience to religious teachings, which play a role in shaping individual ethics and responsibility (Verdiana & Mudrikah, 2023). Weak religiosity is believed to contribute to a greater likelihood of cheating (Azizah & Reskino, 2023). In addition to religiosity, ethics education is also expected to positively influence academic behavior. Ethics education builds students' understanding of moral values and ethical principles in decision-making (Alfitriani & Erawati, 2021), that students who are equipped with ethics education tend to have a higher awareness to avoid cheating (Ardilia, 2022). In line with this, Hejase & Tabch (2012) state that religious values, personal values, and academic experiences in Business Ethics play an important role in shaping students' ethical mindsets and decisions, particularly regarding loyalty and religious values in a business context. These values can serve as internal control

mechanisms that reduce the risk of academic cheating, making them relevant as a basis for understanding the moderating role of religiosity and ethics education in the relationship between the Fraud Diamond and Machiavellianism toward academic cheating.

This study aims to analyze the interaction between internal factors such as the fraud diamond and Machiavellian traits, and external factors such as religiosity and ethics education, to identify factors that can mitigate academic fraud. This study involves participants from two different study programs, namely S1 Accounting at the Institut Bisnis dan Teknologi Kalimantan and S1 Public Health at Universitas Lambung Mangkurat, with a cross-disciplinary approach intended to broaden the understanding of academic fraud in diverse contexts. The results of this study are expected to provide an applicable policy contribution to higher education institutions, particularly in strengthening oversight mechanisms and forming a culture of academic integrity.

## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### Theory of Planned Behavior

This study uses the Theory of Planned Behavior (TPB). According to its originator, Icek Ajzen (1985), this theory emphasizes the importance of an individual's intention to perform a behavior, which is measured by how strong their desire is to try and the effort they put in to realize that behavior. In other words, intention is the primary predictor of a desired behavior. The theory explains that a person's intention is influenced by three main factors that affect the success of their actions. First, an individual's attitude toward a behavior is determined by their belief in the outcome they will get; a positive belief about the outcome tends to form a positive attitude toward the behavior. Second, subjective norms refer to social pressure from the surrounding environment which, when stronger, increases an individual's tendency to perform a behavior. Third, perceived behavioral control refers to the extent to which an individual feels they have the capability to act; a high belief in this capability increases the likelihood that the action will be performed in line with the intention. In the context of academic fraud research, TPB is relevant because it explains how an individual's attitude, social norms, and perceived control over risks or consequences influence their intention and tendency to commit fraudulent behavior, from both internal and external factors (Ghozali, 2020).

### The Fraud Diamond Dimensions

The Fraud Diamond Theory, introduced by Wolfe & Hermanson (2004), is an extension of the Fraud Triangle Theory first proposed by Donald Cressey in 1953. This theory identifies four main factors that influence an individual to commit fraud: pressure, opportunity, rationalization, and capability. According to Wolfe & Hermanson (2004) Pressure is a primary factor triggering academic fraud due to an individual's drive to meet certain needs or expectations, such as financial, academic targets, or social expectations. This pressure often causes anxiety, pushing individuals to seek unauthorized ways to achieve their goals.

The opportunity to commit fraud, according to Wolfe & Hermanson (2004), arises when there is a weakness in the system that allows an individual to exploit a loophole and act undetected. Albrecht et al. (2015), in their book *Fraud Examination*, state that the opportunity for fraud emerges when an individual feels supported and is in a condition that allows fraud without detection, with external factors like support from certain parties or easy access to resources encouraging such behavior. Rationalization, according to Wolfe & Hermanson (2004), is a self-justification mechanism used by individuals to reduce their guilt over their actions, leading them to believe that fraud is a reasonable behavior proportionate to the potential benefits or risks. Research by Simabur et al. (2023) shows that rationalization occurs when fraud is considered common, not harmful to others, or without negative impact, which creates an internal justification for individuals to feel no guilt despite violating ethical or academic norms. Capability, according to Wolfe & Hermanson (2004), includes personal characteristics and skills that allow an individual to exploit loopholes to commit fraud. Without

this capability, fraud is highly unlikely to occur. Research by Rachmawati et al. (2024) indicates that individuals with high creativity and tactical skills are more likely to be involved in academic fraud, feeling confident in avoiding detection and able to manage guilt afterward, making it easier for them to violate academic norms.

### **The Effect of Pressure on Academic Fraud**

Pressure, according to Simabur et al. (2023), is a situation where a person feels the need to commit fraud. The higher the pressure, the greater the likelihood that academic fraud will occur. Pressure is a compulsion to meet a need due to a push from others, leading to an act of fraud. Research conducted by Novita & Jannah (2022) and Simabur et al. (2023) shows that pressure has a positive and significant influence on the occurrence of academic fraud among students.

**H1:** Pressure has a Positive Effect on Student Academic Fraud

### **The Effect of Opportunity on Academic Fraud**

Opportunity, according to Novita & Jannah (2022), is a condition exploited by someone to commit fraud, especially when there is weak control. In situations with little oversight, individuals often feel freer to take unethical actions. The chance to cheat can arise either intentionally, such as planning the cheating in advance, or unintentionally, when a pressing situation forces someone to take a shortcut. Research by Nusron & Sari (2020) and Novita & Jannah (2022) shows that opportunity has a significant positive influence on the studied variable. These results support the argument that the presence of an opportunity can improve expected performance or outcomes.

**H2:** Opportunity has a Positive Effect on Student Academic Fraud

### **The Effect of Rationalization on Academic Fraud**

Rationalization, according to Gautama et al. (2023), is a self-justification, based on wrong behavior, with the hope of reducing the guilt of the fraudster after performing the action. Rationalization provides a basis for students to condone the fraud they commit. Research by Nusron & Sari (2020) and Gautama et al. (2023) shows that rationalization has a positive effect on academic fraud. This means that the stronger an individual is in justifying fraudulent actions, the greater the likelihood they will engage in such behavior.

**H3:** Rationalization has a Positive Effect on Student Academic Fraud

### **The Effect of Capability on Academic Fraud**

According to Wolfe & Hermanson (2004), the element of capability plays a crucial role in the context of fraud, because this ability allows the perpetrator to understand and exploit existing opportunities in a hidden manner. Without an individual who has the right skills and knowledge, many fraudulent acts would not be possible. This shows that the success of fraud is highly dependent on a combination of the right individual and the capability they possess. Research by Ramadhan & Ruhayat (2020) and Putri & Pesudo (2022) shows that capability has a significant positive effect on the studied variable. These results support the understanding that an increase in capability can have a positive impact on the expected outcomes.

**H4:** Capability has a Positive Effect on Student Academic Fraud

### **The Effect of Machiavellianism on Academic Fraud**

Machiavellianism is the behavior of a person who is identified with deceptive, cold, stubborn, disregarding of others, sarcastic, and unconcerned with the surrounding environment or situation (Vacumi & Halmawati, 2022). According to the Italian political philosopher Niccolò Machiavelli, Machiavellianism is the view that humans as beings can be controlled by their own self-interest and emotions. Research conducted by Putri & Agung (2021) states that Machiavellianism has a positive and significant effect on the tendency for academic fraud. This means that individuals with this character, marked by prioritizing

personal interests and a tendency toward manipulative behavior, are more likely to engage in dishonest behavior in an academic environment.

**H5:** Machiavellianism has a Positive Effect on Student Academic Fraud

### **The Effect of Pressure, Opportunity, Rationalization, and Capability on Academic Fraud with Religiosity as a Moderating Variable**

Pressure arises when individuals feel burdened by academic, social, or personal demands, which pushes them to take shortcuts such as committing fraud (Simabur et al., 2023). High religiosity helps individuals cope with pressure by providing a moral compass, making them tend to avoid fraudulent behavior (Verdiana & Mudrikah, 2023). Opportunities to commit fraud often occur due to weak oversight that allows individuals to act without fear of sanctions (Novita & Jannah, 2022). High religiosity can weaken the influence of opportunity because individuals are more obedient to ethical values (Novita & Jannah, 2022). Rationalization allows individuals to justify fraudulent actions to make them seem personally acceptable (Gautama et al., 2023). However, high religiosity fosters a moral awareness that encourages individuals to reject the justification for fraud (Verdiana & Mudrikah, 2023). An individual's capability to conceal fraudulent actions increases the potential for fraud (Wolfe & Hermanson, 2004). However, religiosity can be a moral control that prevents the misuse of this capability (Putri & Pesudo, 2022). Individuals with Machiavellian traits tend to prioritize personal outcomes and disregard moral values, which makes them susceptible to fraudulent actions (Putry & Agung, 2021). Nevertheless, high religiosity can suppress this influence because it strengthens the values of honesty and responsibility (Verdiana & Mudrikah, 2023).

**H6:** Religiosity Weakens the Effect of Pressure on Student Academic Fraud

**H7:** Religiosity Weakens the Effect of Opportunity on Student Academic Fraud

**H8:** Religiosity Weakens the Effect of Rationalization on Student Academic Fraud

**H9:** Religiosity Weakens the Effect of Capability on Student Academic Fraud

**H10:** Religiosity Weakens the Effect of Machiavellianism on Academic Fraud with Religiosity as a Moderating Variable

### **The Effect of Pressure, Opportunity, Rationalization, and Capability on Academic Fraud with Ethics Education as a Moderating Variable**

Pressure arises when individuals feel stressed by academic or social demands, which pushes them to take shortcuts such as fraud (Simabur et al., 2023). Ethics education helps students form ethical behavior by instilling values of justice, honesty, and responsibility, making them more capable of avoiding the temptation to cheat in high-pressure situations (Ardilia, 2022). Opportunities for fraud often arise due to weak oversight or security systems (Novita & Jannah, 2022). Ethics education strengthens students' moral awareness, making them more likely to reject such opportunities even when the system allows them (Ardilia, 2022). Rationalization enables individuals to justify fraudulent actions (Gautama et al., 2023). Ethics education changes the way students think about right and wrong, encouraging them to reject justifications for unethical behavior (Ardilia, 2022). Technical skills or the use of technology to conceal fraud increase the risk of cheating (Wolfe & Hermanson, 2004). Ethics education provides a moral foundation for students to use their abilities responsibly (Ardilia, 2022). traits often involve disregarding moral norms for personal (Putry & Agung, 2021). Ethics education helps students develop a strong moral commitment, so they reject manipulative and fraudulent behavior (Ardilia, 2022).

**H11:** Ethics Education Weakens the Effect of Pressure on Student Academic Fraud.

**H12:** Ethics Education Weakens the Effect of Opportunity on Student Academic Fraud.

**H13:** Ethics Education Weakens the Effect of Rationalization on Student Academic Fraud.

**H14:** Ethics Education Weakens the Effect of Capability on Student Academic Fraud.

**H15:** Ethics Education Weakens the Effect of Machiavellianism on Student Academic Fraud.

## **3. RESEARCH METHOD**

This study employs an **associative research** design with a quantitative approach, aiming to understand the relationships between variables and systematically present factual

characteristics of the population. The data utilized is quantified qualitative data, meaning descriptions, opinions, or categories are converted into numerical data for statistical analysis to describe student academic fraud behavior. The primary data source is obtained directly from respondents via an online questionnaire. Data collection was conducted by distributing a Google Forms-based questionnaire through social media platforms like WhatsApp and Instagram.

The population consists of all active undergraduate students in the Accounting program at Institut Bisnis dan Teknologi Kalimantan and the Public Health program at Universitas Lambung Mangkurat. Purposive sampling was used, with respondents who fully completed the questionnaire and belonged to the 2021, 2022, or 2023 cohorts as criteria. Specifically, based on the 2023 odd semester data from the Higher Education Database, the population includes 461 Accounting students and 445 Public Health students. A total of 192 respondents met these criteria and constituted the research sample.

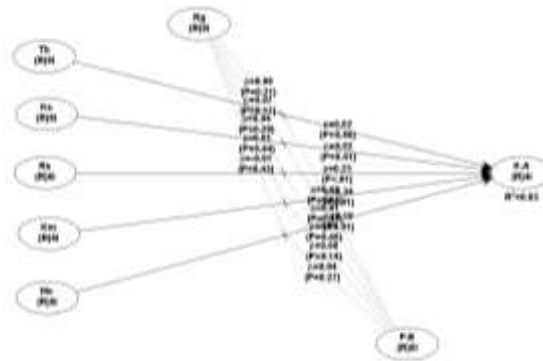
Each research variable is measured using a 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree). Prior to distribution, the research instrument underwent validity and reliability testing through a pilot study on a small sample to ensure accuracy and consistency. Operational definitions and indicators for each variable are as follows: (a). Academic Fraud: Dishonest behavior, intentional or unintentional, to gain illegitimate grades or achievements in academic activities (Christian & Silvana, 2023). Indicators: Cheating, Plagiarism, Fabrication, Facilitation. (b). Pressure: A psychological state where individuals face demands that drive them to commit fraud due to limitations in achieving goals honestly (Novita & Jannah, 2022). Indicators: Demand for high grades, insufficient time, financial constraints. (c). Opportunity: Reflects a situation of weak oversight that creates loopholes for dishonest behavior (Novita & Jannah, 2022). Indicators: Minimal oversight in fraud prevention and detection, low check frequency, lenient penalties. (d). Rationalization: The process of justifying fraudulent actions to make them seem personally acceptable (Novita & Jannah, 2022). Indicators: Awareness that others have engaged in fraud, committing fraud with peers as solidarity, belief that the act harms no one. (e). Capability: Refers to an individual's skills and strategies to effectively commit fraud (Christian & Silvana, 2023). Indicators: Possession of strategies for planning fraudulent acts, ability to exploit available opportunities, capacity to manage guilt during fraudulent acts. (f). Machiavellianism: A manipulative, egocentric, and amoral trait used to achieve personal goals (Aziz, 2015). Indicators: Increased secrecy, systematic lying, moral flexibility, self-orientation. (g). Religiosity: The degree of internalization and application of religious values in daily life (Tonasa et al., 2021). Indicators: Courage to face trials by relying on God, belief in God's oversight, understanding and appreciation of religious teachings, frequency of worship. (h). Ethics Education: The learning process of moral values and ethical principles to foster professional and responsible behavior (Alfitriani & Erawati, 2021). Indicators: Delivery of ethical and professional values, increased ethical awareness post-ethics education, absence of ethical change despite receiving ethics education.

The collected data will be analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), with the assistance of WarpPLS software. This analysis encompasses the evaluation of the measurement model (*outer model*) to test instrument validity and reliability, and the evaluation of the structural model (*inner model*) to test variable relationships and research hypotheses.

#### 4. RESULTS

Next, the data will be analyzed using Partial Least Squares Structural Equation Modeling (SEM-PLS), followed by a discussion of the results for each inter-variable relationship. According to Sholihin & Ratmono (2020:40), Structural Equation Modeling (SEM) is a multivariate statistical method used to simultaneously analyze the relationships between variables. In this study, the SEM-PLS approach was chosen for its ability to handle complex models with multiple latent constructs. The data was collected through a survey, and the analysis was performed using WarpPLS software. The measurement model used is reflective, where the indicators are considered representations of the latent constructs. Therefore,

changes in the constructs are directly reflected in their indicators, as displayed in the path model.



**Diagram Path Analysis SEM**  
 Sourcer: Output WarpPLS 7.0

The SEM-PLS analysis process involves two main components: outer model and the inner model. Each is evaluated to assess the quality of the measurements and the relationships between the constructs in the model.

**Outer Model**

The analysis of the outer model for reflective indicators is performed through several tests: (a) internal consistency reliability, (b) convergent validity, and (c) discriminant validity. The internal consistency reliability test is performed to ensure the accuracy, consistency, and precision of the instrument in measuring the construct. In this study, the reliability of the construct is measured using composite reliability (as the upper limit) and Cronbach's alpha (as the lower limit). A variable is considered reliable if its composite reliability value is greater than 0.70 and its Cronbach's alpha value is greater than 0.60 (Sholihin & Ratmono, 2020:43)

**Table 2 Internal Consistency Reliability**

Variable	Internal Consistency	
	Cronbach's alpha	Composite Reliability
Pressure	0.81	0.858
Opportunity	0.879	0.909
Raionalization	0.897	0.921
Capability	0.917	0.936
Machiavellianism	0.847	0.882
Religiosity	0.928	0.941
Ethics Education	0.792	0.854
Fraud Academic	0.775	0.856

Source: Output WarpPLS 7.0

Based on the analysis, all variables showed a composite reliability value of more than 0.70 and a Cronbach's alpha of more than 0.60. Thus, all variables in this study met the reliability requirements for further analysis.

Convergent validity in this study was assessed through outer loading and AVE analysis to ensure the consistency of indicators in reflecting the same construct. Although the ideal standard is outer loading  $\geq 0.70$  with a p-value  $\leq 0.05$ , a value of  $\geq 0.50$  is still acceptable for new questionnaires. Most indicators met these criteria with statistical significance ( $p < 0.001$ ), indicating that convergent validity was generally achieved.

However, two indicators in the ethical education variable had loading values below 0.50 and were declared invalid. Meanwhile, six of the eight constructs showed AVE values  $\geq 0.50$ , while the other two, pressure and Machiavellianism, did not meet this criterion due to the presence of indicators in both variables that were still tolerated despite their loading values being below the standard.

Discriminant validity, which is determined by comparing the square root of the Average Variance Extracted (AVE) of each construct with the correlations between constructs. Discriminant validity is considered to be met if the square root of the AVE of a construct is higher than its correlation with other constructs, indicating that each variable can be empirically distinguished and measured using different constructs. A model is considered to have adequate discriminant validity if the square root of the AVE for each construct is greater than the correlation between that construct and other constructs in the model (Sholihin & Ratmono, 2020:45).

Table 3 Discriminant Validity

Variable	X1	X2	X3	X4	X5	Z1	Z2	Y
X1	<b>(0.657)</b>	0.355	0.494	0.436	0.462	-0.068	0.164	0.434
X2	0.355	<b>(0.79)</b>	0.57	0.54	0.42	0.048	0.129	0.408
X3	0.494	0.57	<b>(0.813)</b>	0.812	0.618	-0.21	0.117	0.677
X4	0.436	0.54	0.812	<b>(0.842)</b>	0.642	-0.281	0.079	0.692
X5	0.462	0.42	0.618	0.642	<b>(0.697)</b>	-0.158	0.256	0.572
Z1	-0.068	0.048	-0.21	-0.281	0.158	<b>(0.816)</b>	0.392	-0.224
Z2	0.164	0.129	0.117	0.079	0.256	0.392	<b>(0.723)</b>	0.065
Y	0.434	0.408	0.677	0.692	0.572	-0.224	0.065	<b>(0.773)</b>

Source: Output WarpPLS 7.0

The test results show that all constructs, namely pressure, opportunity, rationalization, capability, Machiavellianism, religiosity, ethical education, and academic fraud, have values that meet both criteria. Thus, this model is declared to have good discriminant validity.

**Inner Model**

Table 4 Inner Model

Description	X1	X2	X3	X4	X5	Z1	Z2	Y
<b>R-square</b>								0,569
<b>VIFs</b>	1,557	1,933	4,123	4,136	2,550	1,902	1,860	2,370
<b>Q-square</b>								0,575

Source: Output WarpPLS 7.0

Structural model testing was conducted to analyze the relationship between latent constructs by considering the R-square, Q-square, Full Collinearity VIF, and Goodness of Fit (GoF) values. The coefficient of determination ( $R^2$ ) value of 0.569 indicates that the model has moderate to strong predictive power, where 56.9% of the variation in academic fraud can be explained by the research variables ((Sholihin & Ratmono, 2020:100) Furthermore, the predictive relevance Q-square of 0.575 indicates that the model has high predictive relevance to academic fraud, classified as a large effect according to the Stone-Geisser  $Q^2$  measure. In addition, the results of the Full Collinearity VIF analysis show that all VIF values are below the threshold of 5, indicating no collinearity issues between indicators. This

ensures that each construct in the model can be measured independently without overlap, thereby increasing the reliability and accuracy of the measurement results. The Goodness of Fit test results show that the main goodness-of-fit indicators include APC, ARS, and AFVIF. Model evaluation shows that ARS of 0.569 is statistically significant ( $p < 0.001$ ), which indicates the model's ability to explain variance. In testing the moderation model with WarpPLS, the main focus was on the AFVIF value, which indicates the potential for multicollinearity due to interactions between variables. The AFVIF value of 3.586 is below the limit ( $\leq 5$ ), which means that there are no substantial multicollinearity issues in this model. However, the APC value of 0.088 ( $p = 0.054$ ) is not statistically significant ( $p < 0.05$ ), indicating that the strength of the relationship between constructs in the model as a whole is not significant, due to problems with convergent validity earlier. According to Tenenhaus et al. (2005), the GoF measure is used to assess the validity of SEM-PLS models, with GoF values  $\geq 0.10$  considered small,  $\geq 0.25$  medium, and  $\geq 0.36$  large. The GoF value of 0.682 found in this model falls into the large category, indicating that the model has a high ability to explain empirical data and can be considered valid overall.

Hypothesis testing in this study was conducted using the resampling method available in WarpPLS software. This method is included in the nonparametric approach that does not require classical assumptions, such as the normality of data distribution, making it suitable for use in SEM-PLS analysis ((Sholihin & Ratmono Dwi, 2020:101). With this bootstrapping method, the path coefficient values, and p-value values of each relationship between variables can be estimated with a high degree of accuracy. In line with the direction of the effect proposed in the hypothesis, significance testing was carried out with a one-tailed test assumption, which is a one-sided test that allows researchers to interpret the significance value according to the hypothesized relationship pattern. The hypothesis is accepted if the p-value  $\leq 0.05$ , while a p-value  $> 0.05$  but  $\leq 0.10$  can be interpreted as marginally significant and used as material for exploring the pattern of relationships between variables.

Table 5 Hypotesis

Hyp	Line of Influence	Path coefficient	P-value	Description
H1	X1 > Y	0,048	0,253	Insignificant
H2	X2 > Y	-0,003	0,484	Insignificant
H3	X3 > Y	0,273	<0,001	Significant
H4	X4 > Y	0,304	<0,001	Significant
H5	X5 > Y	0,175	0,007	Significant
H6	X1*Z1>Y	0.090	0.103	Insignificant
H7	X2*Z1>Y	-0.091	0.100	Insignificant
H8	X3*Z1>Y	-0.071	0.160	Insignificant
H9	X4*Z1>Y	0.089	0.052	Significant
H10	X5*Z1>Y	-0.028	0.173	Insignificant
H11	X1*Z2>Y	0.052	0.116	Insignificant
H12	X2*Z2>Y	-0.005	0.235	Insignificant
H13	X3*Z2>Y	-0.006	0.432	Insignificant
H14	X4*Z2>Y	0.080	0.066	Significant
H15	X5*Z2>Y	-0.004	0.237	Insignificant

Source: Output WarpPLS 7.0

As a continuation of the combined outer and inner model testing, a comparative analysis was conducted to evaluate the differences in strength and direction of the relationships between the main variables based on the institutional context of each respondent. Using structural model estimation through WarpPLS, a difference test was conducted to examine the differences in path coefficient values and significance (p-value) between the two respondent groups.

Table 6 Hypotesis Diffrence Test

CODE	ULM			IBITEK		
	Coefficient	One Tailed P-value	Description	Coefficient	One Tailed P-value	Description
Tk	0,016	0,218	Insignificant	0,206	<0,001	Significant
Ks	0,021	0,208	Insignificant	0,094	0,089	Significant
Rs	0,125	0,05	Significant	0,394	<0,001	Significant
Km	0,462	<0,001	Significant	0,008	0,234	Insignificant
Mc	0,234	<0,001	Significant	0,189	<0,001	Significant
Rg*Tk	0,134	0,042	Significant	0,158	0,029	Significant
Rg*Ks	-0,105	0,070	Significant	0,002	0,246	Insignificant
Rg*Rs	-0,053	0,148	Insignificant	-0,114	0,065	Significant
Rg*Km	0,076	0,109	Insignificant	-0,116	0,063	Significant
Rg*Mc	-0,026	0,198	Insignificant	-0,007	0,237	Insignificant
PE*Tk	0,55	0,144	Insignificant	-0,008	0,235	Insignificant
PE*Ks	0,015	0,441	Insignificant	0,023	0,206	Insignificant
PE*Rs	0,120	0,109	Insignificant	0,041	0,172	Insignificant
PE*Km	0,021	0,416	Insignificant	-0,036	0,181	Insignificant
PE*Mc	-0,150	0,61	Significant	-0,034	0,185	Insignificant

Source: Output WarpPLS 7.0

### The Effect of Pressure on Academic Fraud

In the analysis of the combined model, the coefficient value of the influence of pressure on academic fraud was 0.017 and the *p-value* was 0.404 (greater than  $\alpha=5\%$ ), indicating that pressure did not have a significant effect on academic fraud. However, in a separate analysis, pressure had a significant effect on IBITEK Accounting students, but not on ULM Public Health students. This indicates that the effect of pressure is contextual and depends on institutional characteristics. Therefore, these findings do not fully support the theory that pressure can encourage individuals to engage in cheating as a response to external or internal demands. Based on these results, the first hypothesis, which states that pressure has a positive effect on academic fraud, can be rejected (H1 rejected). These findings are consistent with the research by Nusron & Sari (2020), but differ from Novita & Jannah (2022), who found that pressure due to economic factors and performance expectations triggers cheating behavior. This inconsistency shows that the sources and contexts of pressure vary in their influence on cheating. Within the framework of the Theory of Planned Behavior (TPB), pressure was not proven to form the intention to cheat, indicating that personal values of honesty and social norms play an important role in restraining the urge to deviate. The questionnaire results show that pressure from academic workload and financial problems is common for most students. Although this pressure has the potential to trigger cheating, not all students respond to it in the same way. Therefore, universities are advised to reevaluate the proportion of coursework and provide counseling or academic assistance services to help students manage pressure. Tuition relief programs can also be a preventive measure so that economic pressure is not

used as a justification for cheating. With this approach, students are expected to uphold academic integrity even in challenging situations.

### **The Influence of Opportunity on Academic fraud**

In the analysis of the combined model, the coefficient value of the influence of opportunity on academic fraud was 0.016 and *the p-value* was 0.412 (greater than  $\alpha=5\%$ ), indicating that opportunity did not have a significant effect on academic fraud. When analyzed separately, the influence of opportunity was significant for IBITEK Accounting students, while it was not significant for ULM Public Health students. This indicates that the influence of opportunity is contextual and depends on institutional characteristics. This finding is not entirely in line with the theory that the existence of low-risk opportunities encourages cheating behavior. Based on these results, the second hypothesis, which states that opportunity has a positive effect on academic fraud, can be rejected (H2 rejected). This finding is in line with Simabur et al. (2023), but differs from Novita & Jannah (2022), who reported a significant positive effect of perceived weak supervision. This inconsistency confirms that the existence of opportunity alone is not sufficient to encourage cheating if it is not supported by internal factors. Within the TPB framework, opportunity has not been proven to strengthen perceptions of control over cheating. The results of this study show that these perceptions are not strong enough to encourage the intention to cheat, because internal factors such as personal attitudes towards honesty or social norms that uphold integrity have a more dominant influence. Based on the questionnaire results, students generally view weak enforcement of rules as an opportunity to cheat. However, this perception does not necessarily encourage all students to do so, as most choose not to deviate from academic values. However, it would be beneficial for universities to respond to this situation by strengthening their monitoring systems and the consistency of academic sanctions. This can be achieved through education and dissemination of policies, academic ethics training, and the integration of integrity values into learning activities. Thus, it is hoped that a strict but educational academic environment can shape students' perceptions of the risks of cheating and encourage them to uphold honesty.

### **The Influence of Rationalization on Academic Fraud**

In the analysis results of the combined model, the coefficient value of the influence of rationalization on academic fraud is 0.254 and *the p-value* is  $<0.001$  (smaller than  $\alpha=5\%$ ), which indicates that rationalization has a significant effect on academic fraud. When analyzed separately, this significant effect was also consistently found among IBITEK Accounting students and ULM Public Health students. This is in line with the theory that the ability to mentally justify cheating increases the tendency to do so. Based on these results, the third hypothesis, which states that rationalization has a positive effect on academic fraud, can be accepted (H3 accepted). These results are supported by the research of Gautama et al. (2023), but contradict Verdiana & Mudrikah (2023), who did not find a significant effect. Within the TPB framework, rationalization influences attitudes toward cheating and the norms that support it, thereby increasing the intention to cheat. Students who are able to construct internal justifications tend to view cheating as personally and socially acceptable behavior, which ultimately increases the likelihood of such behavior occurring. Based on the questionnaire results, students tend to condone cheating, even considering it a form of solidarity or a way to pursue grades. This mindset shows that rationalization functions as an important mental justification mechanism in encouraging cheating in academic settings. As a follow-up, universities are advised to raise student awareness of the negative impacts of academic fraud through educational approaches. This can be done by providing guidance on integrity, holding critical discussions on the justification of cheating, and involving senior students as role models of honesty. Thus, students are expected to reevaluate their flawed mindset and build strong social norms to reject cheating, thereby creating a healthy culture of cooperation without sacrificing academic ethics.

### **The Influence of Capability on Academic Fraud**

In the analysis of the combined model, the coefficient value of the influence of ability on academic fraud was 0.342 and the *p-value* was  $<0.001$  (smaller than  $\alpha=5\%$ ), indicating that ability has a significant influence on academic fraud. However, in a separate analysis, it was found that only ULM Public Health students had a significant influence, while IBITEK Accounting students did not. This indicates that the influence of ability is contextual and depends on institutional characteristics. This finding is not entirely in line with the theory that states that mastery of knowledge and skills can be used to exploit loopholes in the academic system, making it easier for individuals to commit dishonest acts when the opportunity arises. Based on these results, the fourth hypothesis, which states that ability has a positive effect on academic fraud, can be accepted (H4 accepted). This finding is supported by Putri & Pesudo (2022), but contradicts Nusron & Sari (2020), who state that there is no significant effect. Within the TPB framework, ability is an aspect of behavioral control that reinforces the intention to cheat. Students who feel capable of cheating technically and psychologically tend to be more confident in avoiding consequences, thereby increasing the likelihood of cheating behavior. Based on the questionnaire results, students tend to view their ability as a pragmatic means to take shortcuts to achieve desired results, especially when grades are prioritized over the learning process. To overcome this, universities need to develop a strong academic culture through relevant ethics education, effective supervision, and learning activities that emphasize honesty, so that students become accustomed to relying on their own abilities.

### **The Influence of Machiavellianism on Academic Fraud**

In the analysis of the combined model, the coefficient value of the influence of *Machiavellianism* on academic fraud was 0.185 and the *p-value* was 0.004 (smaller than  $\alpha=5\%$ ), indicating that *Machiavellianism* has a significant influence on academic fraud. When reviewed separately, this significant influence was also consistently found in IBITEK Accounting students and ULM Public Health students. This is in line with the theory that emphasizes that individuals with manipulative tendencies and personal goal orientation are more likely to justify the means to achieve their desires. Based on these results, the fifth hypothesis, which states that *Machiavellianism* has a positive effect on academic fraud, can be accepted (H5). These results are in line with Putry & Agung (2021), but differ Gautama et al. (2023), who found that *Machiavellianism* as a moderating variable can act as a moderator to suppress academic fraud. Within the TPB framework, *Machiavellianism* influences all components that shape intention, from permissive attitudes toward cheating and disregard for social norms to beliefs about one's ability to do so. Therefore, *Machiavellian* personality becomes a factor that strengthens students' intentions and tendencies to engage in academic fraud. Based on the questionnaire results, students with high levels of *Machiavellianism* tend to devise strategies for academic gain, even if it conflicts with honesty. This shows that manipulative behavior is not only a response to a situation but also a reflection of a personal orientation that prioritizes results over process. To overcome this, universities need to combine a reflective approach with consistent enforcement of rules. Through discussions that encourage self-evaluation and ethical understanding, students are invited to realize that manipulative behavior can be detrimental to themselves in the long run. In addition, instilling values of openness and healthy collaboration through group assignments can reduce the tendency to cheat. By creating an academic environment based on integrity and transparency, the intention to cheat among individuals with Machiavellian tendencies can be suppressed more effectively.

### **The Influence of Pressure on Academic Fraud with Religiosity as a Moderating Variable**

In the analysis of the combined model, the coefficient value of the interaction between  $X1*Z1$  and academic fraud was 0.090 with a *p-value* of 0.051. This indicates that religiosity significantly moderates the effect of pressure on academic fraud. When analyzed separately, the moderating effect of religiosity is significant but with a pattern that also reinforces the tendency to commit violations, both among ULM and IBITEK students. In other words, religiosity cannot yet function as a protective value, but can actually exacerbate the pattern of

academic violations that occur. These results contradict the theoretical assumption that religious values can reduce an individual's tendency to cheat when under pressure. Based on these results, the sixth hypothesis, which states that religiosity weakens the influence of pressure on student academic fraud, cannot be accepted (H6 rejected). These findings are consistent with the study by Tiswiyanti & Herawaty (2024), but differ from the results of Verdiana & Mudrikah (2023), who found that religiosity can weaken the influence of pressure on cheating. Based on the TPB framework, pressure affects attitudes and perceptions of control over cheating behavior, but religiosity is not effective enough to intervene in this influence in this context. This may reflect that the religious values held by some students are more symbolic or ritualistic in nature, so they are not strong enough to prevent the normalization of cheating when in high-pressure situations. Thus, more effort is needed from academic institutions to deepen these values so that they can function as a more effective value control mechanism in the academic context.

### **The Influence of Opportunity on Academic Fraud with Religiosity as a Moderating Variable**

In the analysis of the combined model, the coefficient value of the interaction between X2\*Z1 and academic fraud was -0.091 with a *p-value* of 0.05. This indicates that religiosity significantly moderates the effect of opportunity on academic fraud. However, the moderating effect of religiosity was significant at ULM and weakened the effect of opportunity, but not at IBITEK. This pattern illustrates that the effect of religious values is highly dependent on the context of values and the institution where those values are implemented, so it cannot be generalized as a consistent moral control mechanism for all student groups. These findings are partly in line with the theoretical assumption that religious values can act as value controls. Based on these results, the seventh hypothesis, which states that religiosity weakens the influence of opportunity on student academic fraud, can be accepted (H7 accepted). These results are in line with the findings of Verdiana & Mudrikah (2023) but differ from those of Tiswiyanti & Herawaty (2024), who state the opposite. Within the TPB framework, opportunity increases the perception of behavioral control over cheating, and religiosity has not been proven to reduce this effect in this context. These findings illustrate that religious values cannot fully control the effect of opportunity in encouraging academic misconduct, thus requiring further exploration of the mechanism of values and the context in which they are exercised.

### **The Influence of Rationalization on Academic Fraud with Religiosity as a Moderating Variable**

In the analysis of the combined model, the coefficient value of the interaction between X3\*Z1 and academic fraud was -0.071 with a *p-value* of 0.08. This indicates that religiosity significantly moderates the effect of rationalization on academic fraud. However, when analyzed separately, the moderating effect of religiosity was significant at IBITEK, but not at ULM, which means that the ability of religiosity to control rationalization of academic misconduct may differ depending on the context or characteristics of each population. This finding is not entirely in line with the theoretical assumption that religiosity can mitigate the effects of rationalization. Based on these results, the eighth hypothesis, which states that religiosity weakens the influence of rationalization on academic fraud among students, can be accepted (H8 accepted). These findings support the study by Putri & Pesudo (2022), but differ from Verdiana & Mudrikah (2023), who found no moderating effect. In the context of TPB, rationalization influences attitudes toward cheating, and religious values should be an effective control against cheating behavior. However, these findings indicate that the internalization of religious values has not yet become an effective control for students when faced with the rationalization of academic violations. This insignificant moderation pattern shows that religiosity may still be at a normative or symbolic level. Therefore, further study is needed on the intensity of the internalization of religious values and the context of their application in academic decision-making.

### **The Influence of Ability on Academic Fraud with Religiosity as a Moderating Variable**

In the analysis results for the combined model, the coefficient value of the interaction effect of  $X4*Z1$  on academic fraud was 0.089 with a *p-value* of 0.052. This indicates that religiosity significantly moderates the effect of ability on academic fraud. When analyzed separately, the moderating effect of religiosity was significant, with a coefficient pattern that weakened the influence of ability at IBITEK, which was significant, but actually strengthened this influence at ULM, which was insignificant. In other words, religiosity cannot yet function as a protective value, but can actually worsen the pattern of academic misconduct that occurs. These results are not in line with the theoretical assumption that religious values can mitigate the effects of ability. Although religious values should limit the use of technical abilities to cheat, the results show that students' religiosity does not sufficiently influence this relationship. Based on these results, the ninth hypothesis, which states that religiosity weakens the influence of ability on student academic fraud, cannot be accepted (H9 rejected). This finding is in line with the results of Verdiana & Mudrikah (2023), but differs from Putri & Pesudo (2022). In the TPB framework, ability increases the perception of control over cheating, and the results of this study show that this perception is not influenced by students' level of religiosity. The influence of religiosity is not significant in moderating the effect of ability on academic fraud. This indicates that religious values have not been fully internalized as an effective control mechanism but remain at a normative or symbolic level. Therefore, further research is needed on the intensity of internalization and implementation of religious values so that they can become a reliable value control mechanism in daily academic thinking and behavior.

### **The Influence of Machiavellianism on Academic Fraud with Religiosity as a Moderating Variable**

In the analysis results for the combined model, the coefficient value of the interaction between  $X5*Z1$  and academic fraud was -0.028 with a *p-value* of 0.173. This indicates that the religiosity- *t* does not significantly moderate the weakening of the *Machiavellian* influence on academic fraud. Separately, the analysis also shows that the moderating effect is not significant for ULM students or IBITEK students. This pattern is consistent, indicating that religiosity values are not yet able to reduce the deviant characteristics associated with Machiavellianism. This shows that although religiosity theoretically functions as an internal controller based on moral values, it is not strong enough to reduce the influence of *Machiavellian* manipulative characteristics. Based on these results, the tenth hypothesis, which states that religiosity weakens the influence of *Machiavellianism* on student academic fraud, cannot be accepted (H10 rejected). These results are in line with Verdiana & Mudrikah (2023),, and within the TPB framework, show that permissive attitudes toward cheating formed by *Machiavellian* orientation are more dominant than religious values, rendering religiosity ineffective in weakening this relationship. This underscores the need for the development of more integrative and applicable religious values to create a real value control effect for more ethical academic behavior patterns.

### **The Influence of Pressure on Academic Fraud with Ethics Education as a Moderating Variable**

In the analysis of the combined model, the coefficient value of the interaction between  $X1*Z2$  and academic fraud was 0.052 with a *p-value* of 0.116. This indicates that ethics education does not have a significant effect in weakening the influence of pressure on academic fraud. When analyzed separately, the moderating effect of ethics education was also insignificant in both educational institutions, IBITEK and ULM. This means that ethical values cannot yet be used as a consistent mechanism to moderate the relationship between academic pressure and cheating behavior. This finding contradicts the theoretical assumption that ethics education can strengthen moral principles in the face of pressure. Therefore, the eleventh hypothesis, which states that ethics education weakens the influence of pressure on student academic fraud, cannot be accepted (H11 rejected). These results are reinforced by the findings of Alfitriani & Erawati (2021), of (Ardilia, 2022), although they differ from the results. Within the TPB framework, academic pressure can influence the intention to cheat. However,

these findings indicate that ethics education has not been fully internalized as an effective control. This is due to low perceived control under pressure, which can reduce the effectiveness of ethics education in suppressing cheating intentions, even though ethics still shapes attitudes and norms that do not support cheating. Therefore, institutions need to facilitate learning experiences that can internalize ethical values deeply and meaningfully.

### **The Effect of Opportunity on Academic Fraud with Ethics Education as a Moderating Variable**

In the analysis results for the combined model, the coefficient value of the interaction effect of  $X2*Z2$  on academic fraud was  $-0.005$  with a *p-value* of  $0.235$ , indicating that ethics education does not significantly moderate the effect of opportunity on academic fraud. When analyzed separately, the moderating effect was also not significantly weakened in the IBITEK and ULM populations. In other words, ethical values have not been sufficiently internalized as a control for academic behavior to moderate the effect of opportunity on academic misconduct at each institution. This indicates that students are still driven to cheat when the opportunity arises, even though they have received ethics education. Based on these findings, the twelfth hypothesis, which states that ethics education weakens the influence of opportunity on student academic fraud, cannot be accepted (H12 rejected). These findings are reinforced Alfitriani & Erawati (2021), but differ from (Ardilia, 2022), who found a positive influence of ethics education on ethical behavior. Within the TPB framework, this indicates that the existence of opportunity remains a dominant factor in encouraging cheating intentions, regardless of students' level of ethical understanding, because ethics education is not strong enough to intervene in the perception of behavioral control that arises from the ease of cheating. Therefore, institutions need to expand the application of ethical values from mere formal norms to reflective and contextual experiences that can prevent academic misconduct in various situations.

### **The Effect of Rationalization on Academic Fraud with Ethics Education as a Moderating Variable**

In the analysis results of the combined model, the coefficient value of the interaction between  $X3*Z2$  and academic fraud was  $-0.006$  with a *p-value* of  $0.432$ , indicating that ethics education did not significantly weaken the influence of rationalization on academic fraud. When analyzed separately, the moderating effect was also not significant in weakening the effect on the populations at IBITEK and ULM. In other words, ethical values cannot yet function as a consistent mechanism to control the impact of opportunity on academic misconduct in any institution, because students tend to continue to justify cheating even after receiving ethics education. Therefore, the thirteenth hypothesis (H13), which states that ethics education can weaken the influence of rationalization on academic fraud, cannot be accepted (H13 is rejected). This is in line with the study by Alfitriani & Erawati (2021), differs (Ardilia, 2022). From a TPB perspective, an individual's ability to rationalize cheating seems to have a greater influence on the formation of permissive attitudes and intentions to cheat than the internalization of ethical values, indicating the weak role of ethics education in counteracting the cognitive influence of rationalization. This emphasizes the need to expand the role of institutions from merely imparting normative values to providing reflective and applicable experiences that can make these values grow and be lived out in daily thinking and behavior.

### **The Influence of Capability on Academic Fraud with Ethics Education as a Moderating Variable**

In the analysis of the combined model, the coefficient value of the interaction between  $X4*Z2$  and academic fraud was  $0.080$  with a *p-value* of  $0.066$ . This indicates that ethics education significantly moderates the effect of capability on academic fraud. When analyzed separately, the moderating effect of ethics education did not show any apparent significance, with a coefficient pattern that strengthened the effect at ULM, which was insignificant, and then at IBITEK, which weakened the effect of IBITEK capability but remained insignificant. In other words, ethical values have not been sufficiently internalized as a controller of academic

behavior to moderate the effect of capability on academic misconduct at the level of each institution. This finding does not fully correspond with the theoretical assumption that ethical values can strengthen academic integrity and control the effect of capability on academic misconduct. Therefore, the fourteenth hypothesis, which states that ethical education weakens the influence of capability on student academic misconduct, cannot be accepted (H14 rejected). This finding is in line with Alfitriani & Erawati (2021), but differs from (Ardilia, 2022). In the TPB framework, capability increases the perception of behavioral control, and this effect appears to be more dominant than the influence of ethics education on attitudes and norms, so that ethics education is not strong enough to resist the intention to cheat driven by the feeling of being able to cheat effectively. This suggests that institutions need to broaden their focus from teaching normative values alone to reflective and contextual experiences, so that ethical values can grow and have a real impact on everyday academic thinking and behavior.

### **The Influence of Machiavellianism on Academic fraud with Ethical Education as a Moderating Variable**

In the analysis results of the combined model, the coefficient value of the interaction effect of  $X_5 * Z_2$  on academic fraud was -0.004 with a *p-value* of 0.237, indicating that ethics education did not have a significant effect in weakening the influence of *Machiavellianism* on academic fraud. When analyzed separately, the moderating effect was found to be significant among ULM students but not significant among IBITEK students, with the effect pattern continuing to weaken the relationship between *Machiavellianism* and academic fraud. This means that the manipulative orientation and personal interests inherent in *Machiavellian* character remain the main drivers of cheating behavior. This occurs even though students have received ethics education, because ethical values have not been sufficiently internalized as a control for academic behavior to mitigate the *Machiavellian* effect of academic misconduct at each institution. These findings do not fully correspond with the theoretical assumption that the values of ethical education can reduce the effects of manipulative character by strengthening moral values and academic integrity. Based on these results, the fifteenth hypothesis, which states that ethical education weakens the influence of *Machiavellianism* on student academic fraud, cannot be accepted (H15 rejected). This is in line with the findings of Alfitriani & Erawati (2021), but differs from (Ardilia, 2022). In the TPB framework, individuals with a *Machiavellian* mindset view cheating as a strategy to achieve personal goals. These findings indicate the limitations of ethics education in addressing values rooted in specific personalities, as the capability of ethics education to intervene in subjective norms and perceptions of behavioral control is not strong enough. This suggests that institutions need to develop more reflective and applicable methods of teaching ethical values in order to shape mindsets and actions that are in line with the moral values being taught.

## **5. CONCLUSION**

This study analyzes the influence of Fraud Diamond (pressure, opportunity, rationalization, and capability), Machiavellianism, and the moderating roles of religiosity and ethics education on academic fraud among 192 accounting and public health students. The results show that rationalization, capability, and Machiavellianism significantly influence cheating. However, pressure and opportunity do not have a significant influence. The findings also reveal that religiosity does not significantly moderate the relationship between these variables and cheating, while ethics education only significantly moderates the influence of pressure. More specifically, the findings show that the influence of pressure and opportunity is contextual and differs between institutions. Rationalization and Machiavellianism consistently serve as the main drivers of fraud, in line with the theory that individuals justify fraudulent behavior as a rational strategy. However, religiosity and ethics education have not functioned as consistent and effective controls, indicating that these values have not been fully internalized. This implies that institutions need to review their approach to ethics

education to make it more relevant and capable of shaping ethical academic behavior in a profound way.

Two important aspects can be concluded from the findings of this study, namely suggestions for further research and prevention strategies for universities. For future research, it is recommended to focus on four things: first, examining in more depth why academic pressure has different impacts on different populations; second, analyzing the interaction between variables such as social norms and self-control with the institutional context; third, developing more in-depth instruments for measuring religiosity and ethics education, for example through ethical dilemma scenarios; and fourth, testing theoretical models on a broader population to improve the generalization of findings. Meanwhile, for universities, comprehensive prevention strategies are needed, starting with balancing academic loads, providing counseling and financial assistance, strengthening supervision and sanctions, and developing reflective and applicable ethics education. The goal is to instill an academic culture that upholds honesty, independence, and integrity, as well as effectively address Machiavellian tendencies.

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