

Factors Influencing Fraud in Educational Institutions: The Moderating Role of Personal Integrity

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Abstract

Purpose: *The purpose of this research is to analyze the influence of a sense of financial accountability, religiosity, and morality on fraud in educational institutions, with personal integrity as a moderating variable. Previous research has shown inconsistent results regarding the influence of a sense of financial accountability, religiosity, and morality on fraud; therefore, personal integrity was used as a moderating variable because it can determine an individual's consistency in applying moral values and honesty, thereby helping to explain the differences in previous research findings.*

Methodology/approach: *This research uses a quantitative approach based on primary data obtained through the distribution of questionnaires to teachers, financial directors, treasurers, and school administrators at Amal Usaha Muhammadiyah Pendidikan Sepanjang, with a total of 36 respondents. Data analysis was conducted using Partial Least Squares (PLS) with the assistance of SmartPLS.*

Findings: *The results indicate that a sense of financial accountability and religiosity have a positive and significant effect on fraud prevention. Conversely, morality does not have a significant effect on fraud. Personal integrity was found to act as a partial moderator, with only one interaction showing a significant effect.*

Practical implications: *This research emphasizes that educational institutions need to strengthen their oversight systems and culture of accountability in order to minimize the potential for fraud within these institutions.*

Originality/value: *This study develops a fraud prevention model for educational institutions by emphasizing the role of personal integrity in strengthening accountability and religiosity to prevent fraud.*

Keywords:

Feeling Financial Accountability; Religiosity; Morality; Personal Integrity

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INTRODUCTION

Fraud is not limited to the business and government sectors, but is also rampant in educational institutions. Both academic fraud and fraud in the management of educational funds pose serious problems because they undermine individual integrity and the credibility of educational institutions. A research by Asma & Biduri (2023) shows that the factors of pressure, opportunity, rationalization, gender, and religiosity have a significant influence on academic fraud in hybrid learning settings. This reinforces the argument that fraud in educational institutions stems not only from academic pressure but also from personal values and weak internal controls. These findings are consistent with the research by Rachmadaniar & Biduri (2023) which revealed a higher tendency when driving factors are not managed effectively.

In addition to academic dishonesty, fraud in educational institutions also frequently occurs in the management of BOS (School Operational Assistance) funds. The BOS Fund is a substantial public fund allocated by the government to support teaching and learning activities. However, weak accountability often makes this fund vulnerable to misuse, such as fictitious entries, inflated expenses, or misuse of funds. This demonstrates that financial accountability is crucial in preventing fraud, as emphasized in research on accountability in public fund management (S. Biduri et al., 2022; Purnamasari, 2021). This context demonstrates that feeling financial accountability is an individual's awareness of their responsibility to manage and account for funds is a key factor in curbing fraud in educational institutions.

Religiosity is also an important factor in preventing fraud. A research by (Ridwan & Diantimala, 2021) proving that religiosity plays a positive role in addressing academic dishonesty. This is supported by Herawaty & Masbirorotni (2022) who add that the "fraud diamond" (pressure, opportunity, rationalization, capability) can be mitigated through religiosity and ethical use of technology. A study by (Br & Maria, 2022; Wardani & Puspitasari, 2023) consistently found that students' religiosity is negatively associated with academic dishonesty, including during the COVID-19 pandemic. Thus, religiosity not only shapes an individual's moral character but also serves as a mechanism for self-control to prevent deviant behavior, both in academic contexts and in the management of BOS funds.

In addition to accountability and religiosity, morality serves as an important filter for individual behavior. A review article (Dzomira, 2014) confirms that morality and internal control systems play a significant role in reducing instances of fraud. A similar point is emphasized in Ramandei et al. (2020) which highlights the importance of ethics and internal controls in nonprofit organizations—a topic particularly relevant to educational institutions. High ethical standards are believed to reduce the likelihood of rationalizing fraudulent behavior. However, although accountability, religiosity, and morality are important, research findings regarding individual behavior in

educational institutions remain inconsistent, making it necessary to include additional variables to strengthen these relationships.

In this context, personal integrity is treated as a moderating variable. Personal integrity not only reflects honesty and consistency of values, but also serves as a moral safeguard linking a sense of financial accountability, religiosity, and morality to fraud. Previous research (Dewi et al., 2019; Ramandei et al., 2020) indicates that the personal integrity of officials and individuals plays a crucial role in determining the quality of accountability and preventing the abuse of authority. Thus, testing personal integrity as a moderator is expected to explain the inconsistencies in previous findings and provide both theoretical and practical contributions to efforts to prevent fraud in educational institutions, whether in the form of academic dishonesty or irregularities in the management of BOS funds.

Academic misconduct and irregularities in the management of BOS funds essentially share a fundamental commonality: a lack of self-control and a low sense of responsibility on the part of individuals. Such misconduct is often linked to academic pressure and reinforced by the rationalization that such actions do not directly cause harm to any specific party.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This research is based on the Fraud Diamond Theory proposed by (Wolfe & Hermanson, 2004). The Fraud Diamond Theory is an extension of the Fraud Triangle Theory by (Cressey, 1953) and consists of four elements: incentive, rationalization, opportunity, and capability. An incentive is a motivator driven by pressure or demands to meet basic needs. This can lead to fraudulent behavior, which is perceived as a means of fulfilling those needs. Opportunity arises from weaknesses in a system, thereby creating openings for fraudulent acts. Weak internal control and accounting systems can enable individuals to devise fraudulent schemes that are difficult to detect and prove. Rationalization is a condition in which a fraud perpetrator seeks justification for their actions. The perpetrator will attempt to devise a morally acceptable justification before committing the fraud; furthermore, the perpetrator also views their actions as normal. Capability relates to the competencies or skills possessed by an individual and their personal characteristics. The ability of an individual to understand something deeply (Humphrey et al., 2023).

This research is also relevant to the use of the Theory of Planned Behavior (TPB), which is one of the most commonly used theories for explaining financial behavior. Individual behavior is determined by the intention to perform an action, which is influenced by three main factors: attitudes toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). In the context of this study, the TPB can help explain how these factors influence lecturers' financial well-being. Financial literacy and gender can influence lecturers' attitudes toward financial management. In terms of religiosity, lecturers at Muhammadiyah universities may be influenced

by subjective norms shaped by Islamic values that encourage prudent and responsible financial management (Bai, 2023). The intention to manage finances well, based on attitudes, subjective norms, and perceived behavioral control, will ultimately result in financial behavior (Wijayanti & Santoso, 2022).

Previous research has confirmed that transparency and accountability in school financial management are key factors in preventing misconduct and maintaining public trust (Gaspar et al., 2022; Gusnardi et al., 2021). However, previous research has focused primarily on institutional governance, leaving little attention to the role of individual factors such as a sense of financial accountability, religiosity, morality, and personal integrity. Several studies indicate that fraud prevention depends not only on internal control systems but also on individual moral values and integrity; morality and internal controls have been shown to play a significant role in curbing fraud, particularly in the management of public funds (Izza Noor Abidin et al., 2025; S. Biduri, H. Fitriyah, 2022). In addition, recent studies emphasize that transparent governance plays a crucial role in ensuring accountability and enabling more effective oversight of the use of education budgets (S. O. and S. Biduri, 2024; Via & Abidin, 2025). Based on this study, a research gap is evident.

H₁: Feeling financial accountability has a positive effect on Fraud

This research develops the concept of feeling financial accountability by integrating two main dimensions: felt accountability and financial responsibility. Feeling financial accountability reflects an individual's internal awareness of their responsibility in financial management, which stems from personal moral imperatives. According to a research by Rahman & Yulian (2021) Accountability has no effect on fraud, as it demonstrates that financial statements that lack accountability cannot prevent the occurrence of financial fraud.

H₂: Religiusitas has a positive effect on Fraud

Religiosity not only shapes an individual's moral character but also serves as an internal control mechanism to prevent deviant behavior, such as academic fraud within educational institutions. Several other studies have found that students' religiosity is negatively associated with academic dishonesty. A research by (Ridwan & Diantimala, 2021) states that religiosity plays a positive role in addressing academic dishonesty.

H₃: Morality has a positive effect on Fraud

An individual factor influencing fraud is morality. It is believed that the higher an individual's moral standards, the less likely they are to engage in fraudulent behavior. This is supported by the findings of a research study by (Ilyas & Umar, 2023) which states that morality has a positive influence on fraud prevention.

H₄: Personal integrity strengthens positive effect feeling financial accountability on Fraud

Individuals with a high sense of accountability tend to be more cautious and responsible in

managing funds, making them less likely to engage in fraudulent activities. A research by Ramandei et al. (2020) shows that an individual's personal integrity is a key determinant of accountability and the abuse of authority.

H₅: Personal Integrity strengthens positive effect religiusitas on Fraud

Religiosity is a way of life that society believes can control a person's actions and behavior, thereby minimizing actions or behaviors that are not permitted by religion (Made Feri Cahyadi & Edy Sujana, 2020). However, religiosity alone is not always sufficient to ensure ethical behavior in financial practices if it is not supported by other internal moral qualities, one of which is personal integrity. Personal integrity reflects an individual's consistency in upholding moral and ethical values, including a commitment to the principles of honesty and accountability in every decision. Individuals with high levels of religiosity, supported by strong personal integrity, tend to be more consistent in practicing anti-fraud behavior, thereby further strengthening fraud prevention efforts.

H₆: Personal Integrity strengthens positive effect moralitas on Fraud

Morality is often viewed as one of the key factors capable of reducing fraud, as it reflects a set of values and ethical standards that guide individual decisions in situations where opportunities for fraud arise. However, the influence of morality on fraud does not always work to its fullest potential if it is not supported by other moral character traits, such as personal integrity. Integrity is a measure of the strength of one's personal commitment. Integrity plays an active role in fraudulent acts (Kurniawan & Haq, 2022).

METHOD

Research Subject

The research subject refers to the conditions that describe the situation to be observed, thereby providing a comprehensive and clear picture of the research (Lubis et al., 2024). This study was conducted at the Muhammadiyah Educational Institution in the Sepanjang area. The population consists of all the elements that can be used to draw conclusions (S. Hermawan & Amirulloh, 2016). In this research, the population consisted of teachers, financial directors, treasurers, and operators at Muhammadiyah Educational Institutions, with the sample comprising the entire population or a selected group from the population used in the study (S. Hermawan & Amirulloh, 2016).

Data Collection

The data used in this research is subject data, and the data source is primary data collected via a questionnaire. The questionnaire aims to determine the occurrence and severity of each identified inefficiency. Data collection was conducted using a closed-ended questionnaire measured on a 1-5 interval scale, ranging from "Strongly Disagree" to "Strongly Agree." (Lewaherilla, 2021). The respondents to the questionnaire were the treasurers of Muhammadiyah

schools ranging from kindergarten to high school in the Sepanjang area of Sidoarjo.

Data Processing and Analysis Methods

The primary data for this study were collected directly from respondents via questionnaires administered to teachers, financial directors, treasurers, and administrative staff at Muhammadiyah Educational Institutions in the Sepanjang region, with a total of 36 respondents comprising the study sample. A total of 36 respondents were selected using a purposive sampling technique, where participants were chosen based on specific criteria, particularly individuals directly involved in financial management and administrative activities within the institution. Partial Least Squares (PLS) data analysis using SmartPLS software version 3.0 was used in this study.

Measurement Model (Outer Model)

A measurement model that depicts the relationships between indicators and their latent variables, designed to identify the characteristics of the indicators for each latent variable. The model is evaluated by examining its validity and reliability.

Validity Test

Validity tests are divided into two categories: convergent validity and discriminant validity. Convergent validity tests are conducted to ensure that indicators truly measure the same construct, using the Outer Loading >0.7 and Average Variance Extracted (AVE) >0.5 metrics, while discriminant validity tests are used to ensure that latent constructs do not overlap with other constructs. The measurement is performed using Cross Loading, where the construct value must be greater than the construct values of other variables, as well as Fornell-Larcker, where the numbers in the table must taper off (Pering, 2023).

Reliability Test

There are two methods used in reliability testing to ensure the consistency of indicators in measuring constructs: Cronbach's Alpha and Composite Reliability. The Cronbach's Alpha and Composite Reliability values are expected to be >0.7 . These figures indicate a high level of reliability, meaning the questionnaire is considered valid and reliable (Yarsasi et al., 2025). Both validity and reliability tests are performed automatically using algorithms within PLS.

Structural Model (Inner Model)

This model testing was conducted to determine the relationships among constructs, the significance levels, and the R-squared value of the research model. The structural model in PLS was evaluated using R^2 (R-squared) and path coefficients or p-values. The path coefficients or internal model values indicated by the t-statistic were greater than the critical t-value, specifically 1.96 (Yarsasi et al., 2025).

Hypothesis Test

Hypothesis testing is conducted using structural equation modeling to evaluate and provide a basis

for decision-making regarding the population. In this study, tests were performed on the p-value and t-statistic, a process that involves path coefficients.

P-value

This was done to test whether there are significant relationships between constructs (path coefficients) in the structural model. A p-value of less than 0.05 indicates a significant relationship at the 95% confidence level. The smaller the p-value, the stronger the relationship is considered to be (Yarsasi et al., 2025).

T-statistic

Used to test the significance of path coefficients and whether the relationship between variables is statistically significant. If $t > 1.96$ or $p < 0.05$, the relationship between variables is considered significant. Conversely, if $t < 1.96$ or $p \geq 0.05$, the relationship between variables is considered insignificant (Yarsasi et al., 2025).

Both are calculated automatically in PLS using the bootstrapping technique to determine the estimated relationships between variables.

RESULTS AND DISCUSSION

RESULTS

This research focuses on fraud prevention at Muhammadiyah educational institutions in the Sepanjang region. Although teachers, financial staff, and operators play crucial roles within educational institutions, they are not immune to committing fraudulent acts. Therefore, this study aims to analyze the factors contributing to fraud in educational institutions, emphasizing the roles of feeling financial accountability, religiosity, and morality, as well as testing the moderating influence of personal integrity in these relationships.

DATA ANALYSIS

Measurement Model (Outer Model)

This model is used to test the validity and reliability of the research constructs. Data analysis was conducted by tabulating the responses from the distributed questionnaires.

Validity Test

Convergent Validity Test (Outer Model)

The analysis was conducted by evaluating the Outer Loading values, which must be greater than 0.70, and the Average Variance Extracted (AVE), which must exceed 0.50, in order for the indicators to be classified as good and meet the standards. The following table presents the Outer Loading results for each variable indicator:

Table 1. Outer Loading

	Moderating Effect 1	Moderating Effect 2	Moderating Effect 3	X1	X2	X3	Y	Z
X13				0.937				
X15				0.88				
X22					0.856			
X23					0.95			
X35						1.000		
Y1							0.892	
Y3							0.878	
Z3								1.000
Z3 * X13	0.735							
Z3 * X15	0.851							
Z3 * X22		0.876						
Z3 * X23		0.78						
Z3 * X35			0.922					

Source: Processed using SmartPLS 3

Based on Table 1, the outer loading values for all indicators are ≥ 0.70 , so the data can be considered valid.

Table 2. Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)
Moderating Effect 1	0.808
Moderating Effect 2	0.777
Moderating Effect 3	1.000
X1	0.827
X2	0.818
X3	1.000
Y	0.783
Z	1.000

Source: Processed using SmartPLS 3

Based on Table 2, it can be seen that the AVE values for all constructs meet the criteria, as indicated by values of ≥ 0.50 .

Discriminant Analysis

The analysis was conducted by evaluating the cross-loading values for each variable, which must be higher than the values for the other variables in the construct. In addition, the Fornell-Larcker criterion was applied, which requires higher diagonal values (convergence) for the construct to be deemed valid. The following table presents the cross-loading and Fornell-Larcker results for each variable indicator.

DISCUSSION

The Effect of Feeling Financial Accountability on Fraud

The test results indicate that feelings of financial responsibility has a positive and significant effect on fraud ($\beta = 0.369$; $p = 0.034$; $t = 2.126$). Thus, the likelihood of fraud occurring in educational institutions decreases as public awareness of financial responsibility increases. From a psychological perspective, all matters must be subject to administrative and moral accountability, which is conceptually reflected in a sense of financial responsibility. Financial management must involve administrative and moral accountability, which is conceptually bounded by a sense of financial responsibility. This view aligns with an internal control framework that prioritizes transparency and accountability as a means of combating fraud. Sukhemi (in Puspitasari, 2023) notes that internal controls have a negative impact on foundation poverty, meaning that the more robust the accountability system, the lower the poverty rate. This finding reinforces the results of previous research. This view aligns with the internal control framework, which identifies transparency and accountability as strategies for combating fraud. Puspitasari (2023) In his research, he demonstrated that internal controls have a negative impact on foundation budgeting; the stronger the accountability system, the lower the incidence of fraud. This conclusion is supported by research Dwiyantri et al. (2022) reveals that internal control systems play a significant role in preventing fraud. Fraud theory explains that effective control mechanisms reduce the likelihood of fraud occurring. Based on this, financial responsibility in this study can be understood as an internal psychological regulation that comes into play before or when a person faces a situation that carries a risk of an accident.

The Effect of Religiosity on Fraud

This study demonstrates that religiosity has a significant effect on fraud ($\beta = 0.280$; $p = 0.021$; $t = 2.323$). Thus, it can be concluded that individuals are less likely to commit fraud as their level of religiosity increases. These findings are consistent with the results of previous studies Puspitasari (2023) which reveals that these conditions have a negative impact on religiosity. Religion creates internal barriers rooted in spiritual values, which motivate individuals to refrain from actions that

conflict with their beliefs. A research by Syahda & Nurhadianto (2023) also revealed that religion helps prevent fraud involving BOS funds. Religious faith—both vertical (toward God) and horizontal (toward superiors and organizations)—also encompasses the principle of organizational accountability. Research findings Fadhila Nurmawaddah & Munari (2025) reinforces these findings by demonstrating that Islamic principles can curb opportunistic behavior. Meanwhile, spiritual values can reduce the desire for materialism, which often serves as a catalyst for fraud, as explained in the journal (Nugroho et al., 2024). Thus, in the context of this study, religion serves as an inherent moral constraint that limits the rationalization of state theory.

The Effect of Morality on Fraud

Unlike the other two variables, morality did not have a significant effect on fraud ($\beta = 0.054$; $p = 0.723$; $t = 0.355$). This finding is consistent with the results of Puspitasari (2023) which also revealed that circumstances do not influence personal morality. A Research by Syahda & Nurhadianto (2023) also reached a similar conclusion, namely that morality does not contribute to preventing fraud involving BOS funds. In fact, research by Dwiyantri et al. (2022) shows that personal morality can undermine some of the connections within fraud prevention algorithms. This suggests that morality is an internal concept that is not necessarily always reflected in behavior when a person faces pressure or has an opportunity. Research by Anzwar & Sholihah (2023) reveals that morality alone is not enough without a strong regulatory system. On the other hand, materialistic orientation and financial pressure can alter a person's morality, as explained in the journal (Nugroho et al., 2024). Insignificant results may also be influenced by respondent characteristics; in Islamic-based educational institutions, respondents tend to have relatively homogeneous moral standards and ethical values because they are part of an organizational environment that instills similar religious values and moral responsibilities. This situation results in low variation in responses regarding morality, so the influence of morality on fraud prevention is not statistically significant. Therefore, in the context of educational institutions, if personal morality is not supported by a solid organizational environment and regulations, it is highly unlikely to be effective in preventing situations.

Personal Integrity Does Not Moderate the Effect of Financial Accountability on Fraud

The results of the moderation test indicate that personal integrity does not significantly moderate the effect of perceived financial accountability on fraud. The moderation coefficient for this relationship indicates that personal integrity does not substantially strengthen or weaken the relationship between perceived financial accountability and fraud. Most of the respondents are individuals who have long been part of the Muhammadiyah educational environment, which has an organizational culture that emphasizes trustworthiness, accountability, and Islamic work ethics. As a result, there are no significant differences in the level of personal integrity among the

respondents; thus, personal integrity has not been able to significantly strengthen the relationship between a sense of financial accountability and fraud prevention. These findings suggest that although personal integrity is an important ethical trait, the influence of accountability on fraud prevention is more strongly influenced by external factors such as internal control systems and an organizational culture that supports transparency. Syahda & Nurhadianto (2023) revealed that integrity plays a role in strengthening character-based controls; however, in this case, the internal control system served as the primary barrier against fraud. Thus, personal integrity in this study was insufficient to reinforce the influence of a sense of financial accountability on fraud; rather, it was the more formal control system that played a crucial role.

Personal Integrity Moderates the Relationship Between Religiosity and Fraud

The results of the moderation test indicate that personal integrity significantly strengthens the effect of religiosity on fraud prevention. The moderation coefficient ($\beta = 0.299$; $p = 0.007$) indicates that personal integrity strengthens the relationship between religiosity and fraud prevention. Theoretically, this finding aligns with the view that personal integrity strengthens the spiritual-value-based moral control exercised by individuals. (Dwiyanti et al., 2022; Fadhila Nurmawaddah & Munari, 2025) indicates that integrity can strengthen the influence of moral or religious values on ethical decision-making. With high integrity, individuals are more likely to internalize religious values in their behavior, which in turn reduces the potential for fraud. Thus, in educational institutions, personal integrity serves as a reinforcement of religiosity in preventing cheating.

Personal Integrity Does Not Moderates Morality on Fraud

The results of the moderation test indicate that personal integrity does not amplify the effect of morality on fraud prevention. The insignificant moderation coefficient suggests that internal morality is not sufficiently influenced by personal integrity in preventing fraud. These findings are consistent with previous research Anzwar & Sholihah (2023) which states that morality is not always a sufficiently strong determining factor in fraud prevention without the support of structural factors. These results may also be influenced by the homogeneity of the respondents' characteristics (finance directors, treasurers, teachers, and operators), who share relatively uniform moral and religious backgrounds, thereby limiting variations in personal morality and integrity. This situation means that personal integrity does not play a significant moderating role in strengthening the influence of morality on fraud prevention. Although personal integrity plays an important role, internal factors such as morality cannot always prevent fraud without supporting oversight and controls. Therefore, personal integrity alone is not sufficient to strengthen the relationship between morality and fraud prevention. Thus, morality requires strong support from the organizational system and culture to function effectively in fraud prevention within educational

institutions.

Table 3. Cross Loading

	Moderating Effect 1	Moderating Effect 2	Moderating Effect 3	X1	X2	X3	Y	Z
X13	0.239	0.277	0.306	0.937	0.571	0.668	0.611	-0.129
X15	0.345	0.26	0.306	0.88	0.516	0.69	0.447	-0.164
X22	0.261	0.131	0.058	0.359	0.856	0.528	0.36	0.072
X23	0.289	0.245	0.243	0.663	0.95	0.678	0.595	-0.127
X35	0	0.147	0.15	0.742	0.68	1.000	0.527	-0.091
Y1	0.143	0.331	0.128	0.483	0.524	0.472	0.892	-0.235
Y3	0.138	0.19	0.09	0.57	0.455	0.461	0.878	-0.188
Z3	0	-0.103	-0.083	-0.157	-0.057	-0.091	-0.24	1.000
Z3 * X13	0.831	0.241	0.376	0.177	0.248	0.302	0.08	0.187
Z3 * X15	1	0.573	0.707	0.339	0.295	0.326	0.178	0.043
Z3 * X22	0.297	0.931	0.581	0.268	0.157	0.056	0.302	-0.151
Z3 * X23	0.685	0.829	0.628	0.256	0.258	0.245	0.207	0
Z3 * X35	0.651	0.673	1.000	0.335	0.189	0.15	0.123	-0.083

Source: Processed using SmartPLS 3

Table 4. Fornell Larcker Criteria

	Moderating Effect 1	Moderating Effect 2	Moderating Effect 3	X1	X2	X3	Y	Z
Moderating Effect 1	0.899							
Moderating Effect 2	0.505	0.882						
Moderating Effect 3	0.651	0.673	1.000					
X1	0.311	0.295	0.335	0.909				
X2	0.304	0.221	0.189	0.6	0.904			
X3	0.346	0.147	0.15	0.742	0.68	1.000		

Y	0.159	0.296	0.123	0.593	0.554	0.527	0.885	
Z	0.098	-0.103	-0.083	-0.157	-0.057	-0.091	-0.24	1.000

Source: Processed using SmartPLS 3

Based on the data in Tables 1 and 3, the cross-loading values for each variable are higher than those for the other variables in the construct. In addition, the Fornell-Larcker results show larger (converging) diagonal values. Thus, the construct is deemed valid because it meets the criteria for discriminant validity.

Reability Test

The testing was conducted by evaluating Cronbach's Alpha and Composite Reliability, which must be above 0.70 for the construct to be considered reliable. The following table presents the results of the reliability test for each variable indicator.

Table 5. Construct Reability

	Cronbach's Alpha	rho_A	Composite Reliability
Moderating Effect 1	0.786	1.000	0.893
Moderating Effect 2	0.725	1.000	0.874
Moderating Effect 3	1.000	1.000	1.000
X1	0.795	0.849	0.905
X2	0.789	0.933	0.9
X3	1.000	1.000	1.000
Y	0.724	0.725	0.879
Z	1.000	1.000	1.000

Source: Processed using SmartPLS 3

Based on the table, all construct values for each variable whether measured by Cronbach's Alpha or Composite Reliability exceed 0.70. This indicates that all variables meet the criteria and are deemed reliable.

Structural Model (Inner Model)

The analysis was conducted by examining the R-squared value to determine the extent to which the independent variables can explain the variation in the dependent variable. The higher the R-squared value, the better the predictive ability and accuracy of the model used. R-squared criteria include >0.75 (strong), >0.50 (moderate), and >0.25 (weak). The following table presents the R-squared measurement results.

Table 6. R-Square

Research Variable	R Square	R Square Adjusted
Y	0.487	0.445

Source: Processed using SmartPLS 3

Based on the results of the analysis, an R-squared value of 0.487 indicates that the independent variables account for 48.7% of the variation in the dependent variable. This value falls into the moderate category. This means that the model has reasonably good predictive power, although there are other variables outside the model that account for 51.3% of the variation in the dependent variable.

Hypothesis Test

Hypothesis testing was conducted by evaluating the P-value and T-statistic, with the condition that the hypothesis is accepted if the P-value is less than 0.05 and the T-statistic is >1.96. Conversely, the hypothesis is rejected if the P-value is greater than 0.05 and the T-statistic is >1.96. The following table presents the results of the hypothesis testing based on the bootstrapping procedure in PLS.

Table 7. Path Coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Moderating Effect 1 -> Y	-0.031	-0.004	0.146	0.215	0.83
Moderating Effect 2 -> Y	0.299	0.327	0.111	2.697	0.007
Moderating Effect 3 -> Y	-0.266	-0.303	0.17	1.562	0.119
X1 -> Y	0.369	0.367	0.174	2.126	0.034
X2 -> Y	0.28	0.263	0.121	2.323	0.021
X3 -> Y	0.054	0.069	0.152	0.355	0.723

Source: Processed using SmartPLS

Based on the tables, it can be concluded that:

1. H1 is accepted because the P-value is 0.034 < 0.05 and the t-statistic is 2.126 > 1.96, which means that X1 has a positive and significant effect on Y.
2. H2 is accepted because the P-value is 0.021 < 0.05 and the t-statistic is 2.323 > 1.96, which means that X2 has a positive and significant effect on Y.
3. H3 is rejected because it has a P-value of 0.723 > 0.05 and a t-statistic of 0.355 < 1.96, which means that X3 does not have a significant effect on Y.
4. H4 is rejected because it has a P-value of 0.830 > 0.05 and a t-statistic of 0.215 < 1.96, which

means that moderator variable 1 does not moderate the effect on Y.

5. H5 is accepted because it has a P-value of $0.007 < 0.05$ and a t-statistic of $2.697 > 1.96$, which means that moderator variable 2 moderates the effect on Y.
6. H6 is rejected because it has a P-value of $0.119 > 0.05$ and a t-statistic of $1.562 < 1.96$, which means that moderator variable 3 does not moderate the effect on Y.

CONCLUSION, IMPLICATION AND LIMITATION

This research concludes that feeling financial accountability and religiosity have a significant positive effect on fraud prevention in Muhammadiyah educational institutions, while morality does not significantly affect fraud prevention. In addition, personal integrity is only able to moderate the relationship between religiosity and fraud prevention, whereas the moderation effect on feeling financial accountability and morality is not significant. These findings indicate that fraud prevention in educational institutions is influenced not only by formal control systems, but also by the internalization of accountability and religious values within individuals.

The implications of this research indicate that educational institutions need to strengthen transparency and accountability in managing school finances, especially BOS funds, through clearer financial procedures, periodic internal evaluations, standardized financial documentation, and more transparent reporting systems. In addition, strengthening ethical values and integrity through training, mentoring, and the implementation of Islamic-based organizational values can support fraud prevention efforts within educational institutions.

This research has several limitations. First, the number of respondents used in this study was relatively limited, consisting of only 36 respondents from Muhammadiyah educational institutions in the Sepanjang area, which may affect the generalizability of the findings. Second, the respondents tended to have relatively homogeneous moral and religious backgrounds, which may have influenced the insignificant effect of morality and several moderating relationships. Third, this research only focused on several internal factors related to fraud prevention and did not include other variables such as organizational culture, leadership style, or internal control effectiveness.

Therefore, future research is expected to involve a larger and more diverse sample from different educational institutions in order to obtain broader findings. Further studies may also consider additional variables related to organizational systems and governance in explaining fraud prevention within educational institutions.

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