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BEHAVIORAL CAPABILITY, INTERNAL CONTROL WEAKNESSES, AND ASSET MISAPPROPRIATION: THE MODERATING ROLE OF FRAUD CONTROL ENVIRONMENT

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Abstract

This study examines the effects of Behavioral Capability and Internal Control Weaknesses on Asset Misappropriation and investigates the moderating role of Fraud Control Environment in public sector organizations. Drawing on Attribution Theory and Fraud Diamond Theory, this study explains how individual capability and organizational governance interact in influencing asset misappropriation. A quantitative explanatory approach was employed using primary data collected through questionnaires distributed to employees involved in financial management, asset administration, and internal control. Purposive sampling was applied, resulting in 316 valid respondents. The data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM). The results indicate that Behavioral Capability does not significantly influence Asset Misappropriation, whereas Internal Control Weaknesses have a significant positive effect. Furthermore, Fraud Control Environment significantly strengthens the relationship between Behavioral Capability and Asset Misappropriation but weakens the relationship between Internal Control Weaknesses and Asset Misappropriation. These findings extend Attribution Theory by emphasizing the importance of organizational governance in shaping employee behavior and provide practical insights for strengthening fraud prevention and reducing asset misappropriation in public sector organization
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KAPABILITAS PERILAKU, KELEMAHAN PENGENDALIAN INTERNAL, DAN PENYALAHGUNAAN ASET: PERAN FRAUD CONTROL ENVIRONMENT SEBAGAI VARIABEL MODERASI

Keywords:
Penyalahgunaan aset; Kapabilitas Perilaku; Kelemahan Pengendalian Internal; Fraud Control Environment;.

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh Behavioral Capability dan Internal Control Weaknesses terhadap Asset Misappropriation, serta menguji peran Fraud Control Environment sebagai variabel moderasi pada organisasi sektor publik. Penelitian ini didasarkan pada Teori Atribusi dan Fraud Diamond Theory untuk menjelaskan interaksi antara kapabilitas individu dan tata kelola organisasi dalam memengaruhi penyalahgunaan aset. Penelitian menggunakan pendekatan kuantitatif eksplanatori dengan data primer yang dikumpulkan melalui kuesioner kepada pegawai yang terlibat dalam pengelolaan keuangan, administrasi aset, dan pengendalian internal. Teknik pengambilan sampel menggunakan purposive sampling dengan jumlah sampel sebanyak 316 responden. Analisis data dilakukan *menggunakan Partial Least Squares–Structural Equation Modeling (PLS-SEM). Hasil penelitian menunjukkan bahwa Behavioral Capability tidak berpengaruh signifikan terhadap Asset Misappropriation, sedangkan Internal Control Weaknesses berpengaruh positif signifikan terhadap Asset Misappropriation. Selain itu, Fraud Control Environment secara signifikan memperkuat hubungan antara Behavioral Capability dan Asset Misappropriation, namun memperlemah hubungan antara Internal Control Weaknesses dan Asset Misappropriation. Temuan ini memperluas penerapan Teori Atribusi dengan menegaskan pentingnya tata kelola organisasi dalam membentuk perilaku pegawai serta memberikan implikasi praktis bagi penguatan pencegahan fraud dan pengurangan penyalahgunaan aset pada organisasi sektor publik.*

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INTRODUCTION

Asset misappropriation has become one of the most frequent forms of occupational fraud that causes substantial financial losses and reduces organizational accountability. Although organizations continuously improve governance and strengthen internal control systems, cases of unauthorized use of organizational assets, manipulation of asset records, and misuse of government facilities remain prevalent. In the public sector, these practices not only result in financial losses but also reduce public confidence in government institutions. Therefore, identifying behavioral and organizational factors that encourage asset misappropriation has become an important issue in behavioral accounting and fraud prevention research.

According to Attribution Theory (Heider, 1958), an individual's behavior is determined by internal attributes and external situations. Internal attributes include knowledge, competence, capability, and personal judgment, whereas external factors include organizational policies, supervision, and the control environment. In fraud studies, Fraud Diamond Theory (Wolfe & Hermanson, 2004) further emphasizes that fraud cannot occur without sufficient capability possessed by the perpetrator. Employees with greater behavioral capability generally have a better understanding of organizational procedures, information systems, and weaknesses in internal control, enabling them to exploit existing opportunities when ethical constraints are weak.

Previous studies have reported inconsistent findings regarding the influence of behavioral capability on fraudulent behavior. Kassem and Higson (2019) found that capability significantly increases an individual's tendency to commit occupational fraud because knowledgeable employees are better able to exploit weaknesses in organizational control systems. Similarly, Vousinas (2019) reported that employee capability positively influences fraudulent behavior by enabling individuals to manipulate organizational procedures and avoid detection. In contrast, Suryandari & Yuesti (2020) argued that employee competence alone does not necessarily lead to fraudulent behavior because ethical values and organizational commitment may reduce the misuse of individual capability. These inconsistent findings indicate that behavioral capability does not consistently produce the same behavioral outcomes, suggesting that contextual factors may influence the relationship between behavioral capability and asset misappropriation.

Research concerning internal control weaknesses has also produced inconsistent empirical findings. Abdullahi & Mansor (2018) reported that weak internal control significantly increases fraud occurrence because ineffective supervision creates greater opportunities for employees to misuse organizational assets. These contradictory findings suggest that internal control weaknesses alone cannot fully explain asset misappropriation.

Several recent studies have emphasized the importance of organizational anti-fraud mechanisms in preventing fraudulent behavior. Similarly, Dorminey et al. (2021) demonstrated that organizations implementing stronger fraud control practices tend to experience lower fraud risk because employees perceive a greater likelihood of fraud detection and organizational sanctions. Nevertheless, previous studies have primarily examined Fraud Control Environment as an independent predictor of fraud prevention rather than as a moderating variable influencing behavioral relationships.

Based on the above literature, previous studies have generally examined behavioral capability, internal control weaknesses, and fraud prevention independently. Limited research has investigated how Fraud Control Environment interacts with behavioral capability and internal control weaknesses in explaining asset misappropriation. Consequently, the moderating role of Fraud Control Environment remains underexplored, particularly within public sector organizations. This gap provides an opportunity to develop a more comprehensive behavioral fraud model by integrating individual capability with organizational governance mechanisms.

Therefore, this study proposes that Behavioral Capability and Internal Control Weaknesses influence Asset Misappropriation, while Fraud Control Environment moderates both relationships. The findings are expected to enrich Attribution Theory and Fraud Diamond Theory by demonstrating that fraudulent behavior is influenced not only by individual capability and organizational weaknesses but also by the effectiveness of the organizational fraud control environment. Furthermore, this study provides practical implications for strengthening fraud prevention strategies through the integration of behavioral management and comprehensive fraud control systems.

Development hypothesis based on Literature review of study previous.

The Effect of Behavioral Capability on Asset Misappropriation

Behavioral capability reflects an individual's ability to understand organizational procedures, utilize technical knowledge, solve work-related problems, and perform tasks effectively. According to Attribution Theory (Heider, 1958), individual behavior is influenced by internal attributes, including knowledge, competence, experience, and capability. Employees possessing higher behavioral capability generally have a better understanding of organizational systems and are more capable of recognizing weaknesses within internal procedures. Consequently, such capability may become a strategic resource that can either improve organizational performance or be exploited to facilitate fraudulent activities when ethical considerations are ignored.

Fraud Diamond Theory proposed by Wolfe & Hermanson (2004) identifies capability as a critical element that enables fraud to occur. According to this theory, fraud cannot be successfully executed without individuals possessing the necessary knowledge, technical skills, authority, and experience to exploit organizational weaknesses. Capability enables employees to recognize opportunities, manipulate organizational procedures, conceal fraudulent activities, and avoid detection. In the context of asset misappropriation, employees with greater behavioral capability are more likely to understand asset administration procedures, inventory management systems, procurement processes, and organizational documentation, thereby increasing their ability to identify vulnerabilities within organizational control systems.

Previous empirical studies generally support the role of capability in explaining fraudulent behavior. Kassem & Higson (2019) found that employee capability significantly increases occupational fraud because knowledgeable individuals are better able to exploit weaknesses in organizational systems. Likewise, Vousinas (2019) reported that capability positively influences fraudulent behavior by enabling employees to manipulate procedures while minimizing the likelihood of detection. Similarly, Collectively, these studies suggest that employees with higher capability possess greater capacity to exploit organizational vulnerabilities when opportunities for fraud exist.

Based on Attribution Theory and Fraud Diamond Theory, behavioral capability represents an internal characteristic that influences employees' behavioral decisions when interacting with organizational conditions. Individuals possessing higher behavioral capability have greater technical competence and organizational knowledge to recognize weaknesses in internal control systems and exploit available opportunities. Therefore, it is proposed that behavioral capability positively influences asset misappropriation.

H1a: Behavioral Capability positively affects Asset Misappropriation.

The Moderating Role of Fraud Control Environment on the Relationship between Behavioral Capability and Asset Misappropriation

Fraud Control Environment refers to organizational conditions that support fraud prevention through ethical leadership, anti-fraud policies, effective monitoring, whistleblowing systems, internal supervision, and organizational commitment to integrity. A strong fraud control environment shapes employees' perceptions regarding the certainty of fraud detection and organizational sanctions.

According to Attribution Theory, external environmental factors influence how individuals translate their internal capabilities into observable behavior. Employees with high behavioral capability continuously evaluate organizational conditions before making decisions. When organizations establish a comprehensive Fraud Control Environment, capable employees become more aware of organizational monitoring systems and fraud prevention mechanisms. Consequently, the influence of behavioral capability on asset misappropriation becomes more apparent because capable employees continuously adjust their behavior according to the perceived fraud control environment.

Previous studies have demonstrated the importance of fraud control mechanisms. Dorminey et al. (2021) argued that comprehensive fraud prevention programs significantly influence employee behavior by strengthening organizational integrity. Likewise, Tuanakotta (2020) explained that fraud control systems reduce organizational vulnerability through integrated prevention, detection, investigation, and response mechanisms. However, previous studies generally positioned fraud control as an independent variable rather than examining its moderating role in behavioral relationships.

Therefore, this study proposes that Fraud Control Environment strengthens the relationship between behavioral capability and asset misappropriation because organizational fraud control systems shape how capable individuals respond to organizational opportunities and monitoring mechanisms.

H1b: Fraud Control Environment strengthens the positive effect of Behavioral Capability on Asset Misappropriation.

The Effect of Internal Control Weaknesses on Asset Misappropriation

Internal control represents organizational policies and procedures designed to safeguard assets, ensure reliable financial reporting, improve operational efficiency, and ensure compliance with regulations. Weak internal control reduces the effectiveness of supervision, segregation of duties, authorization procedures, and monitoring activities, thereby creating opportunities for asset misappropriation.

Conversely, ineffective internal controls increase organizational exposure to fraud because employees encounter fewer barriers when misusing organizational resources. This argument is supported by Abdullahi and Mansor (2018), who found that weak internal controls significantly increase fraud opportunities due to ineffective supervision and monitoring. From the perspective of Attribution Theory (Heider, 1958), employees evaluate both internal characteristics and external organizational conditions before engaging in unethical behavior. Accordingly, weak internal control systems create opportunities and external justification for fraudulent behavior by reducing the perceived likelihood of detection and increasing employees' confidence in exploiting organizational resources.Several empirical studies support this relationship. Another study conducted by Abdullahi and Mansor (2018) found that weak internal control significantly increases fraud occurrence because ineffective supervision creates opportunities for employees to exploit organizational assets. Similarly, Wijayanti et al. (2022) demonstrated that deficiencies in internal control positively influence asset misappropriation within public organizations. Likewise, Siregar and Tenoyo (2021) reported that ineffective internal control significantly contributes to fraud risk by reducing the probability of early fraud detection.

Based on these theoretical and empirical findings, organizations with weaker internal control systems provide greater opportunities for employees to misuse organizational assets.

H2a: Internal Control Weaknesses positively affect Asset Misappropriation.

The Moderating Role of Fraud Control Environment on the Relationship between Internal Control Weaknesses and Asset Misappropriation

Fraud Control Environment functions as a comprehensive organizational governance mechanism that integrates ethical leadership, internal monitoring, whistleblowing systems, fraud awareness, employee training, and anti-fraud policies. These mechanisms strengthen organizational integrity and influence employees' perceptions regarding fraud prevention, accountability, and the likelihood of fraud detection. Consequently, Fraud Control Environment complements formal internal control systems by fostering an organizational culture that discourages unethical behavior.

Although weak internal control increases opportunities for asset misappropriation, organizations implementing a strong Fraud Control Environment are better able to mitigate the adverse consequences of those weaknesses. Employees recognize that despite deficiencies in internal control procedures, organizational commitment to fraud prevention, continuous monitoring, ethical leadership, and effective whistleblowing mechanisms increase the probability of fraud detection and organizational sanctions. As a result, employees become less likely to exploit weaknesses in internal control for personal gain. Therefore, Fraud Control Environment serves as a complementary governance mechanism that reduces the negative impact of internal control weaknesses on asset misappropriation.

Previous studies support this argument. Tuanakotta (2020) emphasized that comprehensive fraud control systems enhance organizational resilience by integrating fraud prevention, detection, investigation, and response beyond formal internal control structures. Similarly, Dorminey et al. (2021) argued that an effective fraud prevention culture significantly influences employees' ethical decision-making and reduces opportunities for fraudulent behavior. Despite these findings, previous studies have primarily examined Fraud Control Environment as an independent predictor of fraud prevention, while limited research has investigated its role as a moderating variable in the relationship between internal control weaknesses and asset misappropriation, particularly in public sector organizations.

Based on Attribution Theory, employees evaluate organizational conditions before engaging in unethical behavior. A strong Fraud Control Environment creates an organizational context that discourages fraud by increasing employees' perceptions of monitoring effectiveness, ethical accountability, and the likelihood of detection. Consequently, Fraud Control Environment is expected to weaken the positive relationship between Internal Control Weaknesses and Asset Misappropriation by mitigating the opportunities created by ineffective internal controls.

H2b: Fraud Control Environment negatively moderates the relationship between Internal Control Weaknesses and Asset Misappropriation, such that a stronger Fraud Control Environment weakens the positive effect of Internal Control Weaknesses on Asset Misappropriation.

Research Framework

Based on Attribution Theory and Fraud Diamond Theory, employees possessing higher behavioral capability have greater technical competence and organizational knowledge to recognize organizational weaknesses and identify opportunities that may facilitate asset misappropriation. Behavioral capability enables employees to understand organizational procedures, access critical information, and perform complex tasks that may be exploited when ethical considerations and organizational governance are inadequate. Therefore, behavioral capability is theoretically expected to increase the likelihood of asset misappropriation.

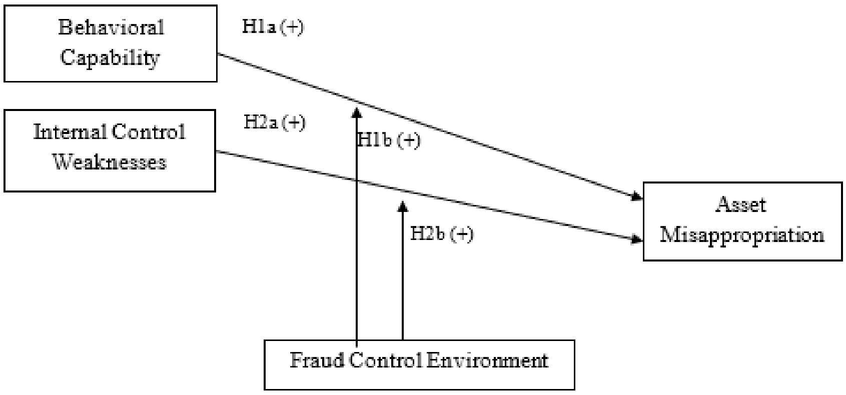

Figure 1
Research Framework
Source: Processed primary data, 2014

METHOD

This study employed a quantitative explanatory research design to examine the causal relationships among Behavioral Capability, Internal Control Weaknesses, Fraud Control Environment, and Asset Misappropriation. An explanatory approach was selected because the study aims to empirically test hypotheses developed from Attribution Theory and Fraud Diamond Theory and to explain the causal relationships among the proposed constructs.

The study was conducted in public sector organizations in Central Java Province. The target population consisted of employees responsible for financial management, accounting, procurement, asset administration, treasury, and internal control functions because these positions have direct responsibilities for managing and safeguarding government assets.

Primary data were collected using a structured questionnaire developed from previously validated measurement instruments and adapted to the context of public sector asset management. All questionnaire items were measured using a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) to provide greater response variability and improve measurement sensitivity.

The study employed purposive sampling, a non-probability sampling technique in which respondents were selected based on predetermined criteria relevant to the research objectives. According to Sekaran and Bougie (2020), purposive sampling is appropriate when researchers intentionally select respondents possessing specific knowledge and experience related to the phenomenon under investigation. Likewise, Hair et al. (2022) argue that purposive sampling is suitable for studies employing structural equation modeling because respondents are selected based on their ability to provide relevant information regarding the constructs being measured.

The respondent selection criteria were established to ensure data quality and consisted of: (1) employees working in financial management, accounting, procurement, internal control, treasury, or asset administration units; (2) employees having at least one year of working experience; and (3) employees directly involved in asset management or financial administration processes. The population of this study consisted of 1,500 employees working in public sector organizations in Central Java Province. The minimum sample size was determined using the Slovin formula with a 5% margin of error, resulting in a minimum required sample of approximately 316 respondents.

After determining the minimum sample size, the respondents were selected using a purposive sampling technique. This technique was considered appropriate because the study required respondents who met specific criteria relevant to the research objectives. The criteria included: (1) being employed in a public sector organization in Central Java Province, (2) having knowledge of or involvement in organizational asset management, financial administration, internal control, or supervisory activities, and (3) possessing sufficient work experience to understand the organizational environment and potential fraud risks.

A total of 1,000 questionnaires were distributed to employees who met the predetermined criteria across public sector organizations in Central Java Province. Of these, 400 questionnaires were returned. After data screening, incomplete questionnaires and responses from participants who did not meet the sampling criteria were excluded. Consequently, 312 valid questionnaires were retained and used for the final data analysis.

Although the final number of valid responses was slightly below the minimum sample size estimated using the Slovin formula, the sample was considered adequate for the subsequent Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis, given the complexity of the research model and the number of constructs and relationships examined.

The measurement model consisted of four latent constructs. Behavioral Capability (X1) was measured using four indicators (X1.1–X1.4) reflecting employees' ability to understand organizational procedures, apply technical knowledge, solve work-related problems, and utilize professional competence. The measurement items were adapted from the capability dimension of Fraud Diamond Theory proposed by Wolfe and Hermanson (2004) and further developed in occupational fraud studies by Kassem and Higson (2019).

Internal Control Weaknesses (X2) were measured using five indicators (X2.1–X2.5) representing weaknesses in authorization procedures, segregation of duties, monitoring activities, supervision, and documentation systems. The measurement items were developed based on the COSO Internal Control–Integrated Framework (2013) and previous studies examining internal control effectiveness in fraud prevention (Abdullahi & Mansor, 2018).

Fraud Control Environment (X3) was measured using five indicators (X3.1–X3.5) covering ethical leadership, anti-fraud policies, whistleblowing mechanisms, fraud awareness, and continuous monitoring. The indicators were adapted from Tuanakotta (2020) and supported by Dorminey et al. (2021) regarding organizational fraud prevention mechanisms.

Asset Misappropriation (Y) was measured using four indicators (Y1.1–Y1.4) representing unauthorized use of organizational assets, misuse of facilities, manipulation of asset administration, and violations of organizational asset management policies. These indicators were adapted from the Association of Certified Fraud Examiners (ACFE, 2024) and previous studies on occupational fraud and asset misappropriation.

Data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS 4 software. PLS-SEM was selected because it is suitable for predictive models involving moderating variables, complex structural relationships, and latent constructs measured by multiple indicators (Hair et al., 2022). The analysis was conducted in two stages. The first stage evaluated the measurement model (outer model) by assessing indicator reliability (outer loading), internal consistency reliability (Cronbach's Alpha and Composite Reliability), convergent validity using Average Variance Extracted (AVE), and discriminant validity using the Heterotrait–Monotrait Ratio (HTMT). The second stage evaluated the structural model (inner model) through collinearity assessment, coefficient of determination (R^2), predictive relevance (Q^2), effect size (f^2), standardized root mean square residual (SRMR), and hypothesis testing using the bootstrapping procedure with 5,000 subsamples. The moderating effect of Fraud Control Environment was examined using the product indicator approach to determine whether the interaction terms significantly strengthened the relationship between Behavioral Capability and Asset Misappropriation and weakened the relationship between Internal Control Weaknesses and Asset Misappropriation, consistent with the proposed theoretical framework.

Table 1
Operationalization of Research Variables and Measurement Indicators

Variable	Indicator Code	Indicator	Source
Behavioral Capability	X1.1	Ability to understand organizational procedures	Wolfe and Hermanson (2004); Kassem and Higson (2019)
	X1.2	Technical competence	Wolfe and Hermanson (2004); Kassem and Higson (2019)
	X1.3	Problem-solving ability	Wolfe and Hermanson (2004); Kassem and Higson (2019)
	X1.4	Professional capability	Wolfe and Hermanson (2004); Kassem and Higson (2019)
Internal Control Weaknesses	X2.1	Weak segregation of duties	COSO (2013); Abdullahi and Mansor (2018)
Fraud Control Environment	Z1.1	Ethical leadership	Tuanakotta (2020); Dorminey et al. (2021)
	Z1.2	Anti-fraud policy	Tuanakotta (2020); Dorminey et al. (2021)
	Z1.3	Whistleblowing system	Tuanakotta (2020); Dorminey et al. (2021)
	Z1.4	Fraud awareness	Tuanakotta (2020); Dorminey et al. (2021)
	Z1.5	Continuous monitoring	Tuanakotta (2020); Dorminey et al. (2021)
Asset Misappropriation	Y1.1	Unauthorized use of organizational assets	ACFE (2024)
	Y1.2	Misuse of organizational facilities	ACFE (2024)
	Y1.3	Manipulation of asset administration	ACFE (2024)
	Y1.4	Violation of asset management policies	ACFE (2024)

Source: Compiled by the authors based on the cited references.

RESULTS AND DISCUSSION

Results

The demographic and professional characteristics of the 316 respondents included in the final analysis. The distribution of respondents across gender, age, educational background, work experience, and organizational functions provides an overview of the characteristics of the research sample.

The respondents were drawn from various functions associated with financial management, accounting, asset administration, procurement, treasury, and internal control. This distribution is relevant to the objectives of the study because employees in these functions are directly or indirectly involved in the management, use, supervision, and control of organizational financial and asset-related resources.

Furthermore, all respondents had at least one year of work experience, indicating that they had sufficient exposure to organizational procedures and internal control practices. Therefore, the characteristics of the final sample provide an appropriate context for examining the relationships among the variables investigated in this study.
The measurement model was evaluated to assess the validity and reliability of the latent constructs before testing the structural model. Indicator reliability was examined using outer loading values. According to Hair et al. (2022), indicators with loading values greater than 0.70 adequately represent their respective latent constructs.

Table 2
Outer Loading

Latent Variable	Indicator	Indicator Description	Loading
Behavioral Capability	X1.1	Understanding organizational procedures	0.724
	X1.2	Technical competence	0.752
	X1.3	Problem-solving ability	0.784
	X1.4	Professional capability	0.749
Internal Control Weaknesses	X2.1	Weak segregation of duties	0.936
Fraud Control Environment	Z1.1	Ethical leadership	0.808
	Z1.2	Anti-fraud policy	0.701
	Z1.3	Whistleblowing system	0.801
	Z1.4	Fraud awareness	0.793
	Z1.5	Continuous monitoring	0.776
Asset Misappropriation	Y1.1	Unauthorized use of assets	0.787
	Y1.2	Misuse of organizational facilities	0.802
	Y1.3	Manipulation of asset administration	0.722
	Y1.4	Violation of asset management policies	0.845

Source: Processed Data (2026).

Table 2 Presents the outer loading values of all indicators used to measure the latent constructs. The results show that all indicators have outer loading values above the recommended threshold of 0.70, indicating satisfactory indicator reliability and supporting convergent validity (Hair et al., 2022). The outer loading values range from 0.701 to 0.936, with the highest loading observed for X2.1 (0.936) and the lowest loading observed for Z1.2 (0.701). Since all indicators meet the recommended threshold, no indicators were excluded from the measurement model, and all indicators were retained for subsequent analysis.

Table 3
Construct Reability and Validity

Variabel	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Behavioral Capability	0.840	0.853	0.885	0.603
Internal Control Weaknesses	0.943	0.944	0.957	0.818
Fraud Control Environment	0.836	0.937	0.884	0.603
Asset Misappropriation	0.892	0.893	0.915	0.603

Source: Processed Data (2026).

Table 3 shows that all latent constructs satisfy the recommended criteria for reliability and convergent validity. Cronbach's Alpha values range from 0.836 to 0.943, exceeding the recommended threshold of 0.70 and indicating satisfactory internal consistency. The Composite Reliability values (rho_A and rho_C) also exceed 0.70, confirming the reliability of all constructs. Furthermore, the Average Variance Extracted (AVE) values range from 0.603 to 0.818, which are above the minimum criterion of 0.50. These results demonstrate that all constructs possess adequate convergent validity and reliability, indicating that the measurement model is appropriate for subsequent structural model evaluation (Hair et al., 2022).

Structural Model Evaluation

Hypothesis testing was conducted using the bootstrapping procedure in SmartPLS. The significance of each structural relationship was determined based on the t-statistic (>1.96) and p-value (<0.05).

Table 4
Hypothesis Testing Results

Hypothesis	Structural Relationship	β	t	p	Decision
H1a	Behavioral Capability → Asset Misappropriation	-0.059	0.704	0.241	Rejected
H1b	Fraud Control Environment × Behavioral Capability → Asset Misappropriation	0.206	2.629	0.004	Supported

Hypothesis	Structural Relationship	β	t	p	Decision
H2a	Internal Control Weaknesses → Asset Misappropriation	0.383	4.560	0.000	Supported
H2b	Fraud Control Environment × Internal Control Weaknesses → Asset Misappropriation	-0.178	2.356	0.009	Supported

Source: Processed Data (2026).

The hypothesis testing results indicate that H1a is rejected, as Behavioral Capability does not significantly influence Asset Misappropriation (β = –0.059; t = 0.704; p = 0.241). Conversely, H1b is supported, indicating that Fraud Control Environment positively moderates the relationship between Behavioral Capability and Asset Misappropriation (β = 0.206; t = 2.629; p = 0.004). Furthermore, H2a is supported, demonstrating that Internal Control Weaknesses significantly increase Asset Misappropriation (β = 0.383; t = 4.560; p < 0.001). Finally, H2b is supported, indicating that Fraud Control Environment significantly weakens the positive relationship between Internal Control Weaknesses and Asset Misappropriation (β = –0.178; t = 2.356; p = 0.009).

Discussion

Behavioral Capability Does Not Significantly Influence Asset Misappropriation (H1a)

The empirical results indicate that Behavioral Capability does not have a significant effect on Asset Misappropriation (β = −0.059; t = 0.704; p = 0.241), indicating that H1a is rejected. This finding suggests that employees possessing higher behavioral capability do not necessarily exhibit a greater tendency to misuse organizational assets. Although employees with greater knowledge, technical competence, and work experience have a better understanding of organizational procedures, these capabilities are not automatically translated into fraudulent behavior. From the perspective of Attribution Theory (Heider, 1958), individual behavior is determined not only by internal characteristics such as knowledge and competence but also by external environmental factors that shape behavioral decisions. Likewise, Fraud Diamond Theory (Wolfe & Hermanson, 2004) identifies capability as one of the essential elements enabling fraud. However, capability alone is insufficient to trigger fraudulent behavior without the presence of opportunities, motivation, rationalization, or organizational conditions that support misconduct. Therefore, employees with higher capability may utilize their competence to improve organizational performance rather than to exploit organizational assets for personal benefit.

This finding is inconsistent with Kassem & Higson (2019) and Vousinas (2019), who reported that employee capability significantly increases occupational fraud because knowledgeable employees are better able to exploit weaknesses in organizational systems and avoid detection. Nevertheless, the present finding is more consistent with Suryandari & Yuesti (2020), who argued that employee competence alone does not necessarily encourage fraudulent behavior because ethical values, organizational commitment, and institutional accountability reduce the misuse of individual capability. The difference may be attributed to the organizational context of Indonesian public sector institutions, where hierarchical supervision, formal administrative procedures, mandatory documentation, and accountability mechanisms reduce the likelihood that capable employees misuse government assets.

Theoretically, this finding extends Attribution Theory by demonstrating that behavioral capability should not be viewed as an independent determinant of asset misappropriation. Instead, the influence of capability depends on organizational conditions that shape employees' behavioral responses. Practically, public sector organizations should continue investing in employee competency development because improving technical capability does not inherently increase fraud risk when accompanied by strong governance and ethical organizational values.

Fraud Control Environment Strengthens the Relationship between Behavioral Capability and Asset Misappropriation (H1b)

The empirical findings reveal that Fraud Control Environment positively moderates the relationship between Behavioral Capability and Asset Misappropriation ($\beta = 0.206$; $t = 2.629$; $p = 0.004$), indicating that H1b is supported. This result suggests that the relationship between employee capability and asset misappropriation becomes more pronounced under different organizational fraud control environments. Rather than acting solely as a preventive mechanism, Fraud Control Environment influences how employees interpret organizational monitoring, ethical expectations, and fraud prevention policies when making behavioral decisions.

According to Attribution Theory, individual behavior results from interactions between internal attributes and external situational factors (Heider, 1958). Employees possessing greater behavioral capability continuously evaluate their organizational environment before deciding how to utilize their competence. Consequently, Fraud Control Environment becomes an important contextual factor influencing the behavioral consequences of employee capability.

This finding is supported by Dorminey et al. (2021), who argued that fraud prevention mechanisms influence employees' ethical decision-making through organizational culture, leadership commitment, and continuous monitoring. Likewise, Tuanakotta (2020) emphasized that fraud prevention systems shape organizational behavior through integrated prevention, detection, investigation, and response mechanisms. While previous studies generally treated Fraud Control Environment as an independent predictor of fraud prevention, the present study demonstrates its role as a moderating variable influencing the relationship between employee capability and asset misappropriation.

From a theoretical perspective, this finding enriches Attribution Theory by emphasizing that employee capability should be interpreted within the organizational context rather than as an isolated individual characteristic. Practically, organizations should strengthen fraud control mechanisms not only to prevent fraud directly but also to influence how employees utilize their knowledge and professional competence in carrying out organizational responsibilities.

Internal Control Weaknesses Increase Asset Misappropriation (H2a)

The results demonstrate that Internal Control Weaknesses have a significant positive effect on Asset Misappropriation ($\beta = 0.383$; $t = 4.560$; $p < 0.001$), indicating that H2a is supported. This finding confirms that deficiencies in organizational control systems increase opportunities for employees to misuse organizational assets.

The result is consistent with the COSO Internal Control—Integrated Framework (2013), which states that ineffective internal controls reduce organizational safeguards over assets and increase exposure to fraudulent activities. Attribution Theory also explains that employees evaluate organizational conditions before engaging in unethical behavior. Weak segregation of duties, ineffective supervision, inadequate authorization procedures, and poor monitoring reduce the perceived likelihood of fraud detection and consequently encourage unethical behavior.

The findings are consistent with Abdullahi and Mansor (2018), Wijayanti et al. (2022), and Siregar and Tenoyo (2021), who concluded that ineffective internal control significantly increases fraud risk by creating opportunities for employees to exploit weaknesses in organizational systems. These findings reinforce the opportunity dimension of fraud theory, emphasizing that organizational control plays a crucial role in reducing fraud opportunities.

Theoretically, this finding supports both Attribution Theory and the governance perspective by demonstrating that organizational conditions substantially influence employee behavior. Practically, strengthening internal control systems through improved segregation of duties, monitoring activities, authorization procedures, and documentation remains one of the most effective strategies for reducing asset misappropriation in public sector organizations.

Fraud Control Environment Weakens the Relationship between Internal Control Weaknesses and Asset Misappropriation (H2b)

The moderating analysis indicates that Fraud Control Environment significantly weakens the positive relationship between Internal Control Weaknesses and Asset Misappropriation ($\beta = -0.178$; $t = 2.356$; $p = 0.009$), indicating that H2b is supported. This finding demonstrates that although weaknesses in internal control create opportunities for fraud, the presence of a strong Fraud Control Environment reduces the adverse impact of those weaknesses on asset misappropriation.

This finding is theoretically consistent with Attribution Theory, which explains that employees evaluate organizational conditions before deciding to engage in unethical behavior. A comprehensive Fraud Control Environment—characterized by ethical leadership, whistleblowing mechanisms, fraud awareness, continuous monitoring, and organizational commitment to integrity—changes employees' perceptions regarding the likelihood of fraud detection and organizational sanctions. Consequently, employees become less willing to exploit weaknesses in formal internal controls for personal gain.

The findings support Tuanakotta (2020), who emphasized that fraud control systems enhance organizational resilience through integrated prevention, detection, investigation, and response mechanisms beyond formal internal controls. Similarly, Dorminey et al. (2021) concluded that a strong fraud prevention culture significantly reduces employees' intentions to engage in unethical behavior. Unlike previous studies that primarily examined Fraud Control Environment as a direct determinant of fraud prevention, this study demonstrates its important role as a governance mechanism that moderates the relationship between internal control weaknesses and asset misappropriation.

Theoretically, this finding contributes to the behavioral accounting literature by demonstrating that organizational governance mechanisms can compensate for deficiencies in formal internal control systems. Practically, public sector organizations should not rely solely on procedural controls but should also strengthen ethical leadership, fraud awareness programs, whistleblowing systems, and continuous monitoring to reduce the likelihood of asset misappropriation. This integrated approach enables organizations to mitigate fraud risk even when imperfections remain within formal internal control structures.

CONCLUSION

This study examined the effects of Behavioral Capability and Internal Control Weaknesses on Asset Misappropriation, as well as the moderating role of Fraud Control Environment in public sector organizations. The empirical findings indicate that Behavioral Capability does not have a significant direct effect on Asset

Misappropriation, resulting in the rejection of H1a. In contrast, Internal Control Weaknesses have a significant positive effect on Asset Misappropriation, supporting H2a. The study also finds that Fraud Control Environment significantly moderates both proposed relationships. Specifically, Fraud Control Environment strengthens the relationship between Behavioral Capability and Asset Misappropriation (H1b supported) while weakening the positive relationship between Internal Control Weaknesses and Asset Misappropriation (H2b supported). These findings indicate that Fraud Control Environment plays an important role in shaping the relationship between employee capability, organizational control conditions, and asset misappropriation.

The findings contribute to the behavioral accounting literature by providing empirical evidence that Internal Control Weaknesses remain an important determinant of Asset Misappropriation, whereas Behavioral Capability alone is insufficient to explain employees' tendency to misuse organizational assets. In addition, the study highlights that Fraud Control Environment functions as an important contextual factor influencing the relationship between individual and organizational factors associated with asset misappropriation.

From a managerial perspective, the findings suggest that public sector organizations should strengthen both internal control systems and Fraud Control Environment through ethical leadership, effective whistleblowing mechanisms, continuous monitoring, fraud awareness programs, and periodic fraud risk assessments. These governance practices are expected to reduce opportunities for asset misappropriation while improving the effectiveness of existing organizational control systems.

This study has several limitations. First, the cross-sectional design captures respondents' perceptions at a single point in time and therefore cannot explain behavioral changes over time. Second, the use of self-administered questionnaires may introduce social desirability bias despite confidentiality assurances. Third, this study focuses only on Behavioral Capability, Internal Control Weaknesses, and Fraud Control Environment, and therefore does not consider other individual or organizational factors that may influence Asset Misappropriation.

Future studies are encouraged to employ longitudinal or mixed-method approaches to provide a deeper understanding of changes in fraud-related behavior over time. Researchers are also encouraged to examine additional variables, such as ethical climate, organizational commitment, leadership style, fraud awareness, digital governance, or organizational justice, to provide a more comprehensive explanation of Asset Misappropriation. Expanding the research context to private organizations, state-owned enterprises, and other public institutions would also improve the generalizability of the findings.

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