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**Influence of Rationalization on Occurrence of Occupational Fraud Loss in Public
Secondary Schools in Nairobi County, Kenya**

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Abstract

Purpose: The purpose of this study was to determine the influence of rationalization on occurrence of occupational fraud loss in public secondary schools in Nairobi County, Kenya.

Methodology: The study adopted a positive paradigm with a descriptive design which targeted a sample of 101 public secondary schools in Nairobi County. An audit team leader from the government was the respondent for each school. Fishers sampling formulae was used to get a sample of 96 respondents. Stratified random sampling was used to ensure that all sub-counties were fairly represented in the sample. Primary data was used in this study through the administration of a semi structured questionnaire, data collected was analyzed using the statistical package for social sciences software (SPSS) version 21, using the linear regression analysis. This study adopted a positive paradigm and the results collected were presented in form of descriptive statistics, that is, mean and standard deviation in tables, charts and figures.

Findings: The study found that occupational fraud loss in public secondary schools is significantly influenced by rationalization ($\beta = 0.343$; $p < 0.05$).

Unique Contribution to Theory, Practice and Policy: From a policy perspective, the study highlights the importance of implementing stringent internal control mechanisms in educational institutions. Policymakers should prioritize frameworks that enhance fraud detection and prevention, including mandatory financial audits, job rotation, and whistleblowing policies to deter fraudulent activities.

Keywords: *Financial Pressure, Fraud Opportunity, Occupational Fraud Loss, Fraud, Predictors.*

JEL Codes: *K42, H75*

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INTRODUCTION

Occupational fraud is a significant challenge in many organizations, including educational institutions. The Association of Certified Fraud Examiners (ACFE) defines occupational fraud as the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the organization's resources or assets (ACFE, 2022). Occupational fraud often leads to financial losses, reputational damage, and reduced operational efficiency. One of the critical elements facilitating occupational fraud is rationalization, which refers to the psychological justifications individuals use to legitimize their fraudulent actions.

Rationalization is a component of the Fraud Triangle Theory, developed by Donald Cressey, which suggests that fraud occurs due to three factors: pressure (motive), opportunity, and rationalization (Cressey, 1953). In the context of occupational fraud, rationalization allows employees to justify unethical behaviour by perceiving their actions as necessary, harmless, or justified due to systemic issues such as unfair treatment, low salaries, or perceived organizational neglect (Murphy & Free, 2016). According to Ramamoorti et al. (2013), fraud perpetrators often convince themselves that their behaviour is not criminal or harmful, reducing any guilt associated with their actions.

Occupational fraud loss refers to the financial and non-financial losses an organization incurs due to fraudulent activities by employees. These losses can take multiple forms, including direct monetary theft, misappropriation of assets, falsification of records, and corruption. The ACFE (2022) reports that educational institutions globally are highly susceptible to fraud, with median losses exceeding \$50,000 per fraud case. The study of rationalization in the context of occupational fraud loss in secondary schools is crucial in understanding the psychological aspects of fraudulent behaviour and designing preventive measures.

Occupational fraud is a global problem affecting various industries, including education. According to the ACFE's 2022 Report to the Nations, occupational fraud results in an estimated loss of 5% of annual revenues for organizations worldwide (ACFE, 2022). Fraud within educational institutions manifests through payroll fraud, procurement fraud, and financial statement manipulation (Button et al., 2019). In the U.S., cases of fraud in public schools often arise from falsified expense reports, ghost employees, and unauthorized fund transfers (Rashid et al., 2020). Similarly, in Europe, studies highlight that school administrators and finance officers exploit gaps in financial control systems to misappropriate funds (Brennan & McGrath, 2019).

The rationalization of fraud is a common theme across global studies. Murphy and Free (2016) argue that employees engaging in fraud often view their actions as a means of rectifying perceived injustices, such as low wages or unfair treatment. In Asia, research indicates that rationalization often stems from cultural factors, such as group loyalty, which may justify fraudulent activities if they benefit a collective group rather than an individual (Pang et al., 2021).

In Africa, occupational fraud remains a persistent issue, exacerbated by weak regulatory enforcement and governance challenges. The Transparency International Corruption Perceptions Index (CPI) ranks many African countries among those with high levels of corruption (Transparency International, 2022). Within the education sector, financial mismanagement and misappropriation of funds are prevalent.

A study conducted in Nigeria found that school officials often rationalize fraud by citing poor government funding, delayed salaries, and lack of accountability (Owolabi, 2020). Similar cases are observed in South Africa, where fraudulent activities in schools include fictitious purchases, over-invoicing, and theft of school fees (Madue, 2021). According to a study by Chêne (2018), fraudulent activities in educational institutions across Africa are often facilitated by weak financial oversight, which creates opportunities for misappropriation of resources.

Rationalization in Africa often ties into socio-economic factors. Employees justify fraud by arguing that systemic corruption exists at all levels, making individual fraudulent acts seem relatively minor (Goredema, 2019). Furthermore, cultural norms sometimes influence rationalization, where fraudulent activities are seen as a way to redistribute wealth in contexts of economic disparity (Hope, 2019).

In Kenya, occupational fraud in secondary schools is a growing concern, with numerous cases of financial mismanagement and fund embezzlement being reported. The Ethics and Anti-Corruption Commission (EACC) has investigated multiple instances where school principals and bursars have been implicated in financial fraud, including unauthorized withdrawals, procurement fraud, and misappropriation of school fees (EACC, 2021).

The Kenya National Audit Office (KENAO) reports that public secondary schools frequently experience financial irregularities due to weak internal controls (KENAO, 2022). A study by Mutiso and Wambua (2021) found that over 30% of secondary school financial losses in Kenya result from fraudulent activities, often justified through rationalization mechanisms such as inadequate government funding, delayed salary payments, and personal financial struggles of school administrators.

Moreover, the culture of corruption in Kenya contributes to rationalization. Many school officials perceive fraud as a norm within the public sector, thus normalizing unethical behaviour (Ochieng, 2020). Employees may also justify fraud by claiming they are entitled to additional compensation due to increased workloads and underpayment (Mogaka et al., 2019).

The Kenyan government has introduced policy measures, such as the Public Finance Management Act and school audit systems, to curb fraud in secondary schools. However, enforcement remains inconsistent, allowing fraudulent activities to persist. Understanding the role of rationalization in these cases can help develop targeted interventions to mitigate occupational fraud losses.

The study of rationalization in the context of occupational fraud loss is critical in identifying psychological and systemic factors that facilitate fraud in secondary schools. While fraud is a global issue, its manifestations and justifications vary by region. In Kenya, rationalization is often linked to economic hardship, systemic corruption, and weak financial oversight. Addressing these issues requires a multi-faceted approach, incorporating financial audits, ethical training, and stricter enforcement of anti-fraud regulations in the education sector.

Problem Statement

Secondary education in Kenya constitutes one of the most vital fields in society. Kenya's Vision 2030 asserts education is integral to investment in the economy. They help in resource mobilization, marketing of products and creation of employment which helps in alleviating poverty (Karanja, 2023). However, fraud loss has become a challenge in Kenya (ACFE, 2019).

It has led to interest and trust loss in institutions, reduced number of investors and it has lowered customer's confidentiality.

ACFE (2017) estimated that commercial banks lose approximately 20.9 billion shillings to fraud annually, Kenya has become a target for fraudsters. Kenya had the highest incidence of fraud in the world (PWC, 2021). Fraud in Kenya is estimated to have tripled by 3 billion in 2017. PWC (2011), fraud statistics showed that fraud in Kenya nearly Surpassed the worldwide average of 34% by a factor of two and was markedly elevated compared to the 57% fraud prevalence in Africa. These figures indicate that fraud losses are increasing in Kenya.

Empirically, few studies have explained on the predictors of occupational fraud loss, most studies have focused on the individual profile, prior history or causes of fraud. Researchers have also for long disagreed on the predictors of occupational fraud loss (Aprilia, 2017). No study has been done on the predictors of occupational fraud loss in secondary schools in Kenya.

From prior studies, much has not been done to establish what accounts for fraud loss in the corporate sector. Furthermore, studies done have focused in developing countries using different theories. This study draws the predictors of fraud loss in Kenya, a developing country using the fraud triangle theory which guides fraud professionals to implement policies that help maintain the financial profit of their organizations by reducing fraud loss.

Specific Objectives

- i. To establish the influence of rationalization on occurrence of occupational fraud loss in public secondary schools in Nairobi County, Kenya.

LITERATURE REVIEW

Predictors of Occupational Fraud Loss

This study focused on the predictors of occupational fraud loss secondary schools using the fraud triangle which is a primary theory in research (Schuchter, 2013).

Rationalization

Rationalization refers to the internal process by which individuals justify unethical behavior in ways that make it appear morally acceptable to themselves (Albrecht & Wernz, 2009). It allows perpetrators to mentally reframe fraudulent acts such as embezzlement or financial misreporting as harmless or even justified. Common rationalizations include beliefs like "I'm only borrowing the money," "I'm underpaid and deserve this," or "no one is getting hurt" (Trumpeter et al., 2013). These justifications reduce cognitive dissonance and guilt, making it easier for individuals to commit fraud while maintaining a self-image of integrity.

Rationalization is particularly relevant in public secondary schools, where staff may perceive themselves as underappreciated or unfairly treated. For instance, a school bursar might justify the misappropriation of funds by citing delayed salaries or the belief that their personal efforts are not adequately recognized. This form of moral disengagement serves as a coping mechanism to validate unethical decisions.

However, research highlights that rationalization is not always a necessary condition for fraud. Some scholars argue that certain fraudulent acts occur solely due to opportunity, especially in environments with weak internal controls. Kakati and Goswami (2019) and Handoyo and Bayunitri (2021) emphasized that the availability of opportunity is often the strongest determinant, particularly in institutional settings where oversight is minimal. In such cases,

individuals may not go through a moral justification process but rather exploit loopholes simply because they can. This aligns with findings by Murphy (2012) and the AICPA (2002), who noted that rationalization remains the most underexplored and least observable element of the fraud triangle, with limited empirical evidence of its presence in every case.

Furthermore, Gobert and Punch (2007) challenged the assumption that guilt or moral conflict is always part of the fraudster's mindset. Their research, which analyzed fraud case narratives without direct perpetrator interviews, found that offenders often show no signs of remorse or inner conflict. This raises questions about the universality of rationalization as a factor and highlights the complexities of measuring psychological constructs like moral justification.

Despite this debate, the role of rationalization remains crucial for understanding how individuals *justify* fraud particularly in sectors like education, where fraud often stems not only from opportunity or financial pressure but also from perceived institutional neglect. Umar (2023) and Lokanan (2015) observed that rationalizations often arise from disillusionment with ethical conduct: individuals may conclude that ethical behavior has not yielded rewards and therefore feel justified in abandoning integrity.

Yet, in the context of Kenyan secondary schools, empirical literature specifically addressing rationalization as a driver of occupational fraud is limited. Most existing studies have concentrated on healthcare or corporate sectors, leaving a notable gap in understanding how school administrators, finance officers, and other internal actors rationalize their involvement in fraudulent acts. Additionally, there is little insight into how these justifications impact the scale and nature of fraud losses within schools.

Theoretical Framework

Fraud Tree Triangle

Rationalization is a crucial element of the Fraud Triangle, as it explains the psychological mechanisms that individuals use to justify fraudulent actions. In the context of public secondary schools in Kenya, rationalization allows individuals to mitigate the perceived severity of their misconduct, enabling them to convince themselves that their actions are acceptable or even necessary, despite being unethical or illegal. This justification process is an attitude or character trait that enables individuals to rationalize fraudulent behavior, making them more willing to engage in such practices. Fraud perpetrators often view their actions as non-criminal or as a form of irresponsibility for which they are not entirely accountable. They use defensive mechanisms such as "no one is hurt" or "this is for the sake of the company" to justify their behavior, thereby reducing their moral guilt.

Previous research has shown that individuals who engage in fraud often have a history of maintaining professional and moral integrity, but certain circumstances lead them to rationalize unethical behavior (Stanciu, 2011). Skousen et al. (2008) emphasized that fraud perpetrators actively seek justifications that make their actions seem acceptable, thus allowing them to proceed with fraudulent activities. Murphy (2012) further supported this argument by stating that rationalization is essential for individuals to overcome ethical barriers and commit fraud.

Cressey's findings indicate that without rationalization, fraud would not occur, as individuals need a mental framework that allows them to perceive their actions as justified. Rationalization is a fundamental component of fraudulent behavior, as it enables individuals to align their misconduct with their personal values and ethical beliefs. Understanding this psychological

process is critical for fraud prevention, as it provides insight into how individuals justify unethical actions and highlights the importance of addressing rationalization in fraud detection and deterrence.

Fraud Diamond Model

Wolfe and Hermanson (2004) extended the Fraud Tree Triangle by proposing the Fraud Diamond, which introduces a fourth critical element: capability. Capability refers to the traits and skills that enable individuals to exploit opportunities and override internal controls. This includes positional authority, intelligence, confidence, coercive ability, and a deep understanding of internal systems. In school settings, for instance, headteachers and finance officers may possess both the knowledge of financial systems and the authority to manipulate them without detection, making fraud not only justifiable (via rationalization) but doable.

The Fraud Diamond thus complements the original model by explaining *how* some individuals, even when under pressure and equipped with justifications, are still more likely than others to execute fraud successfully. This is particularly important in hierarchical institutions like schools, where certain actors have disproportionate access to power and information.

Conceptual Framework

Independent Variables

Dependent Variable

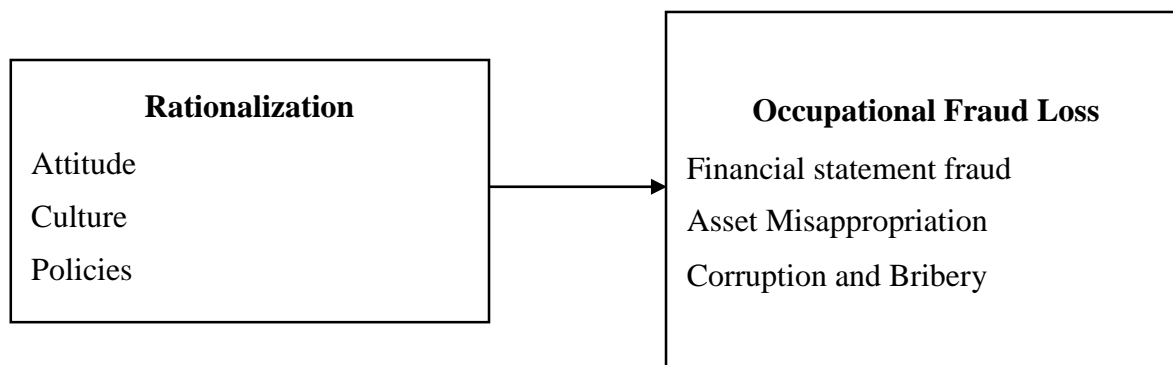


Figure 1: Conceptual Framework

METHODOLOGY

This study employed a descriptive survey research design, which is quantitative in nature. A descriptive design is used to collect data to answer questions regarding the current state of a subject (Kothari, 2004). It helps researchers understand group characteristics and propose solutions to identified problems (Kombo & Tromp, 2006). The study examined how pressure, opportunity, and rationalization influence occupational fraud loss.

The target population consisted of 101 public secondary schools in Nairobi County, with an audit team leader from each school serving as the respondent. To determine the sample size, Fischer’s formula was used, yielding a sample of 96 schools. A stratified random sampling technique was employed to ensure all sub-counties were proportionally represented. Schools were grouped by sub-county, and selections were made randomly within each stratum to maintain fairness and prevent bias. This method enhances the generalizability of the findings.

The study utilized primary data collection techniques, specifically a structured and semi-structured questionnaire. Questionnaires were chosen because they are cost-effective, provide

respondents ample time to answer accurately, and are suitable for literate participants (Mugenda & Mugenda, 2003). Responses were measured using a four-point Likert scale ranging from strongly disagree to strongly agree.

A pilot study was conducted to test the reliability and validity of the questionnaire. According to Mugenda and Mugenda (2003), a pilot study should include at least 10% of the sample size. Therefore, 10 respondents from public secondary schools in Kiambu County participated. Their responses helped refine the questionnaire before the main study, ensuring it effectively captured the required data.

Overall, this research design ensured that data collection and analysis were systematic, reliable, and representative of the target population, allowing for meaningful conclusions on occupational fraud loss in public secondary schools.

FINDINGS, ANALYSIS AND INTERPRETATION

Descriptive Statistics

Descriptive statistics describes a subject by outlining problems, through collecting data and tabulating their relationships.

Descriptive Analysis for Rationalization

The respondents were asked to indicate the extent to which they agreed with statements on rationalization as a predictor of occupational fraud loss in public secondary schools.

The results as presented in Table 1 indicate that a significant majority of respondents agreed or strongly agreed with the various rationalization justifications for fraud. The highest level of agreement (mean = 3.41, SD = 0.792) was observed for the justification that employees take school funds believing it is acceptable as long as they intend to repay them later. This suggests that many instances of fraud may not be perceived as theft by the perpetrators but rather as a temporary borrowing, which can lead to substantial financial losses. Similarly, a strong consensus (mean = 3.33, SD = 0.779) was found regarding the idea that unclear financial policies create loopholes that employees can exploit. This highlights a critical governance issue where ambiguous policies may enable fraudulent behavior due to a lack of clear guidelines and consequences.

Additionally, a notable proportion of respondents agreed that fraud occurs due to a lack of accountability (mean = 3.3, SD = 0.785) and a widespread perception that financial fraud is common and acceptable in school management (mean = 3.29, SD = 0.738). These findings suggest a cultural and systemic issue in public secondary school financial management, where weak enforcement of financial policies (mean = 3.29, SD = 0.753) contributes to an environment where employees believe they can engage in fraudulent activities without facing punishment. The lowest mean score (3.24, SD = 0.754) was recorded for the justification that employees commit fraud because they feel underpaid and believe they deserve extra financial benefits. While this reason was still widely accepted, it ranked slightly lower compared to other justifications.

Overall, the average mean score of 3.31 and standard deviation of 0.767 indicates that rationalization plays a significant role in occupational fraud loss within public secondary schools. The findings reveal that fraud is often not viewed as an outright crime but rather as an acceptable or justified action based on personal and systemic factors. Weak financial controls, lack of accountability, and poor policy enforcement further reinforce these behaviors.

Table 1: Descriptive Analysis for Rationalization

Statement	Strongly disagree	Disagree	Agree	Strongly agree	Mean	Std Dev
Most of the fraud committed is due to justification like employees believing that they deserve extra financial benefits due to feeling underpaid.	4.4%	5.6%	51.1%	38.9%	3.24	0.754
Most of the fraud committed is due to justification like employees thinking that taking school funds is acceptable as long as they intend to pay it back later.	5.6%	2.2%	37.8%	54.4%	3.41	0.792
Most of the fraud committed is due to justification like a widespread perception that fraud is a common and acceptable practice in school financial management.	4.4%	3.3%	51.1%	41.1%	3.29	0.738
Most of the fraud committed is due to justification like a lack of accountability, where employees believe they will not be punished for fraudulent activities.	5.6%	3.3%	46.7%	44.4%	3.3	0.785
Most of the fraud committed is due to justification like unclear financial policies that allow employees to manipulate funds without clear consequences.	5.6%	2.2%	45.6%	46.7%	3.33	0.779
Most of the fraud committed is due to justification like weak enforcement of financial policies, which creates a belief that fraud is easy to get away with.	4.4%	4.4%	48.9%	42.2%	3.29	0.753
Average					3.31	0.767

Correlation Analysis

The research study focused on obtaining the correlation between occupational fraud loss and its predictor (Rationalization). The correlation coefficient between Rationalization and Fraud Loss was 0.814, showing a strong positive correlation. This indicates that when employees justify their fraudulent actions, the occurrence of fraud loss increases. The statistical significance ($p = 0.000$) reinforces the validity of this result. In line with these findings, research conducted by Aidafitri and Arta (2019) proved that the existence of rationalization affects the occurrence of fraud in financial statements.

Table 2: Correlation Analysis

		Rationalization	Fraud Loss
Rationalization	Pearson Correlation	1	.814**
	Sig. (2-tailed)		0
	N	90	90
Fraud Loss	Pearson Correlation	.814**	1
	Sig. (2-tailed)	0	
	N	90	90

** Correlation is significant at the 0.01 level (2-tailed).

Bivariate Regression Analysis for Rationalization

The regression analysis results indicate that rationalization is a significant predictor of fraud loss in public secondary schools. The R-squared value of 0.663 suggests that 66.3% of the variation in fraud loss can be explained by rationalization, while the adjusted R-squared of 0.659 confirms the model's reliability. The F-statistic of 173.291 with a p-value less than 0.001 indicates that the regression model is highly significant, meaning rationalization has a substantial impact on fraud loss.

The unstandardized coefficient (B) for rationalization is 0.786, indicating that for every one-unit increase in rationalization, fraud loss increases by 0.786 units. The standardized beta coefficient (0.814) highlights a strong positive relationship between rationalization and fraud loss. Additionally, the high t-value of 13.164 and the significance level ($p < 0.001$) confirm that rationalization is a statistically significant factor influencing fraud loss.

The model was;

$$\text{Occupational Fraud Loss} = 0.704 + 0.786 \text{ Rationalization} + \varepsilon$$

These results conquer with those of Handoyo and Bayunitri (2021), who also found that insufficient internal controls that create opportunities for unethical behaviour are the leading causes of fraud within organizations.

Table 3: Bivariate Regression Analysis for Rationalization

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.814a	0.663	0.659	0.337979		
Model	Sum of Squares		df	Mean Square	F	Sig.
1	Regression	19.795	1	19.795	173.291	.000b
	Residual	10.052	88	0.114		
	Total	29.847	89			
Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.704	0.201		3.506	0.001
	Rationalization	0.786	0.060	0.814	13.164	0.000

a Dependent Variable: Fraud Loss

b Predictors: (Constant), Rationalization

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The study aimed to investigate the factors contributing to occupational fraud loss in public secondary schools in Nairobi County, with a focus on rationalization as key predictors. The

findings revealed a strong consensus among respondents that these factors significantly influence fraudulent activities in schools.

Rationalization emerged as a significant predictor. Many respondents indicated that perpetrators justify fraudulent actions by believing they deserve extra financial benefits, treating school funds as temporary loans, and taking advantage of unclear financial policies and weak enforcement. The mean score of 3.31 suggested that rationalization fosters a culture of fraud in school. Fraud loss analysis confirmed that financial fraud, revenue misstatements, cash fraud, inventory fraud, bribery, and corruption had increased over the past five years. With an average mean score of 3.31, the findings indicated widespread concerns about rising fraudulent activities in public secondary schools.

Conclusion

Rationalization enables fraudulent behavior, as perpetrators justify their actions through perceptions of entitlement, weak financial policies, and a culture that tolerates dishonesty.

The findings highlight that this factor contributes to the increasing prevalence of fraud in public schools, emphasizing the need for stronger internal controls, enhanced oversight, and stricter financial regulations. Addressing these issues through improved governance, better compensation structures, and ethical reinforcement can help reduce occupational fraud and promote financial integrity in public education institutions.

These findings support Cressey's (1953) proposition that rationalization is necessary for fraud to occur, particularly when combined with financial pressure and opportunity the other two legs of the triangle.

Recommendations

The study recommends that institutions have in place clear policies, enhance audit so as to prevent and detect fraud in institutions. The top management should also have a clear tone at the top and lead as role models in fight against fraud.

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