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Effect of Internal Controls on Financial Performance of Public Technical and Vocational Education and Training Institutions in Nairobi County, Kenya

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Abstract

Technical and Vocational Education and Training (TVET) institutions are key drivers of skills development and employability in Kenya. They play a critical role in shaping educational landscape by equipping learners with practical and technical skills needed in the labor market. However, concerns regarding financial performance of these TVET institutions persist despite increased government funding and policy reforms such as the TVET Act (2013) and the formation of Technical and Vocational Education and Training Authority (TVETA). This study examined the effect of financial management practices, and specifically the influence of internal controls, on the financial performance of public TVET institutions in Nairobi County, Kenya. This research was guided by Contingency Theory and adopted a correlational research design. Structured questionnaires were used to collect data from 133 respondents drawn from principals, accountants, finance officers, and internal auditors in the 38 accredited public TVETs in Nairobi County, representing an 87.5% response rate. Data collected was analyzed by descriptive statistics, Pearson correlation, and regression analysis. Results of the study showed a strong positive and statistically significant correlation between internal control practices and financial performance ($r = 0.729$, $p < 0.01$), with internal controls explaining 53.1% of the variation in financial performance. Descriptive results indicate that internal controls are moderately effective, with strengths in authorization procedures and internal auditing, while weaknesses exist in the clarity and adequacy of financial policies. The study concludes that effective internal control systems significantly enhance financial performance in public TVET institutions. It recommends strengthening internal audit functions, improving financial policy implementation, enhancing staff capacity, and adopting integrated financial management systems to improve accountability and sustainability.

Keywords: Internal Controls, Financial Performance, TVET Institutions, Accountability.

1. INTRODUCTION

Internal controls are fundamental to the effective management of financial resources in both public and private sector organizations. They consist of policies, procedures, and mechanisms designed to safeguard assets and ensure the accuracy of financial records as well as enforcing compliance with laws and regulations (Mungai *et al.*, 2021). Globally, institutions are increasingly recognizing the importance of robust internal controls in enhancing transparency, accountability, and financial

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performance. These internal controls contribute significantly to the improvement of financial performance through enhancing reliable financial reporting, minimizing risks such as fraud and ensuring operational efficiency. A case study in china found out that effective internal controls improve decision making, reduce operational risks, and ultimately enhance profitability and investor confidence (Gu, 2022).

In the public sector, particularly in developing countries such as Kenya, the need for effective internal control systems is even more pronounced. Public institutions often operate under resource constraints while being required to meet high expectations for service delivery and accountability (Chepkirui & Oluoch, 2021). Technical and Vocational Education and Training (TVET) institutions are critical in equipping individuals with practical skills for employment and entrepreneurship. However, their financial sustainability depends heavily on sound financial management practices, including strong internal controls.

The effectiveness of these control practices can be understood through Contingency Theory, developed by Fred Fiedler in 1964. This theory holds that no universal management style works in all situations; rather, effective organizational practices are shaped by the specific environment, structure, size, and complexity of tasks within an institution (Jesmin Islam, 2012). The core proposition of the theory is that organizational success depends on how well internal systems are aligned with the specific conditions under which the organization operates, built on the assumption that each institution must adopt approaches unique to its circumstances (Betts, 2011). In the context of internal control practices, Contingency Theory emphasizes that the design and effectiveness of controls depend on institutional factors such as risk exposure, governance structures, regulatory requirements, and operational complexity. Therefore, institutions facing higher financial risks require stronger control mechanisms including strict authorization procedures, segregation of duties, and continuous monitoring systems to enhance accountability, ensure precision in financial reporting, and safeguard resources.

Empirical studies across different sectors and regions have consistently demonstrated a positive relationship between internal controls and organizational performance. Hamed (2023), in a study of Jordanian commercial banks operating in Saudi Arabia, found that effective internal control

systems significantly improve financial performance through risk reduction, improved operational efficiency, enhanced compliance, and asset protection. Similarly, Alshaiti (2023) reported that organizational structure, management support, and information system quality positively influence internal control systems and ultimately improve firm performance among Saudi Arabian firms. While these studies provide valuable insights, they are largely concentrated within private sector and highly regulated financial environments, limiting their applicability to public institutions operating under different governance and resource constraints. In the Kenyan public sector context, internal controls have equally been identified as critical determinants of financial performance. Chepkirui and Oluoch (2021) found a strong positive relationship between internal control practices, including physical controls, internal audits, and corporate governance, and financial performance in county referral hospitals. Likewise, Mungai et al. (2021), in a study of Kenyan public universities, established that stronger detective controls significantly contribute to improved financial performance. However, existing studies in Kenya have largely focused on sectors such as healthcare and higher education, with limited attention given to Technical and Vocational Education and Training (TVET) institutions. Moreover, some studies emphasize selected components of internal controls while overlooking the broader influence of comprehensive control systems on financial outcomes.

The government of Kenya has made significant investments in the TVET sector to support economic growth and youth employment. However, concerns have been raised regarding financial mismanagement, inefficiencies, and weak accountability mechanisms in some institutions (Mumbi, 2025). Reports from oversight bodies have highlighted issues such as improper record keeping, lack of segregation of duties, and weak internal audit functions (Auditor General-Kenya, 2020).

This study therefore sought to examine the effect of internal controls on the financial performance of public TVET institutions in Nairobi County, providing empirical evidence to support policy and management decisions.

1.1 Research Problem

Both the national and county governments of Kenya have been at the forefront of strengthening the performance of TVET institutions through policy and regulatory frameworks that emphasize internal controls a basis for accountability and financial sustainability. Instruments such as TVET Act, 2013, Kenya Vision 2030, and the formation of Technical and Vocational Education and Training Authority (TVETA) were designed to enhance governance structures, including internal control systems within public TVET institutions. Continued budgetary allocations and capitation by the National Treasury are also intended to reinforce internal control mechanisms by enhancing accountability, precise financial reporting and efficient utilization of funds.

Despite these robust interventions, public TVET institutions continue to face significant challenges in financial performance. Evidence from the office of Auditor General indicates significant financial irregularities within public TVET institutions, including unsupported expenditures amounting to approximately Kshs.4.7 billion in appropriations-in-aid without verifiable records of collection or remittance (Auditor General-Kenya, 2024) and (Auditor General, 2022). Further national audit findings reveal that over Kshs. 150 million allocated for infrastructure development in TVET institutions lacked adequate supporting documentation, pointing to weaknesses in internal control systems and financial accountability, this shows that many TVET institutions have failed to comply with financial regulations and lack basic financial controls leading to misuse of public funds and poor accountability (Auditor General, 2022). In addition, The National Assembly Public Investments Committee (2024), indicate that financial mismanagement has led to surcharges on institutional officials, with penalties reaching up to Kshs.3 million in some cases due to non-compliance with financial procedures. These issues have resulted in delayed project implementation, insufficient training resources, demotivated staff and poor service delivery. This mismatch between policy intentions and on the ground financial performance reveals a critical gap in the enforcement and effectiveness of internal control practices within these institutions.

Consequently, this study seeks to examine the effect of internal controls on the financial performance of public TVET institutions in Nairobi County, with the aim of identifying control weaknesses and recommending measures to strengthen financial governance and sustainability.

1.2 Research Objective

The study sought to examine the influence of internal control practices in public TVET institutions in Nairobi County, Kenya.

2. RESEARCH METHODOLOGY

For this study correlational research design was applied to understand the relationship between internal control practices and financial performance of public TVET institutions. The design was appropriate as it enabled the researcher to determine the strength and direction of the relationship between variables without manipulation. According to Haan (2019), correlational research is suitable for analyzing relationships among variables using statistical methods. The target population consisted of public TVET institutions in Nairobi County, focusing on key personnel involved in financial management, including principals, finance officers, accountants, and internal auditors. As noted by Pruthi et al., (2021) selecting knowledgeable respondents enhances the validity of research findings, the respondents selected had direct involvement with internal control systems. A census approach was adopted for this study, whereby data was collected from all 152 respondents within the target population. Applying census was justified because the population size was relatively small and manageable, making it feasible to include every unit without the need for sampling (Mweshi & Sakyi, 2020).

The study used structured questionnaires to collect data from the sample respondents. The data collected was analyzed using both descriptive statistics (mean and standard deviation) and inferential statistics, specifically correlation and regression analysis. According to Bhandari (2021), such statistical techniques are appropriate for correlational studies aiming to establish relationships between variables. The findings for study were presented using tables, to enhance clarity and explanation of results.

3. RESULTS

The study targeted 152 respondents drawn from public TVET institutions in Nairobi County, out of which 133 successfully participated, which gave a response rate of 87.5%, while 12.5% (n=19) did not respond. This level of response is deemed satisfactory for statistical exploration and enhances the reliability of the findings. Further, reliability testing produced a Cronbach's Alpha

coefficient of 0.734 across as shown in table one. This signified satisfactory internal consistency and affirming the suitability of the research instrument for data collection.

Table 1: Reliability Statistics

Independent Variables	Cronbach's Alpha	No. of Items
Internal Controls	.734	5
Financial Performance	.799	5

Table two shows that there is a strong positive and statistically significant relationship between internal controls and financial performance ($r = 0.729$, $p < 0.01$) among public TVET institutions in Nairobi County. This indicates that stronger internal control is linked to improved financial performance. The p-value of 0.000 confirms that the correlation is statistically significant and not due to chance.

Table 2: Reliability Statistics

Correlations		Internal Controls	Financial Performance
Internal Controls	Pearson Correlation	1	.729**
	Sig. (2-tailed)		.000
	N	133	133
Financial Performance	Pearson Correlation	.729**	1
	Sig. (2-tailed)	.000	
	N	133	133

3.1 Descriptive Statistics

3.1.1 Effect of internal controls on financial performance of Public TVETS in Nairobi County, Kenya.

Table three presents the descriptive statistics on internal controls in public TVET institutions in Nairobi County. The results indicate a **moderate level of effectiveness** of internal controls, as reflected by an overall mean of **3.262** and a standard deviation of **1.2014**, suggesting some dispersion in respondents' views. Higher mean scores were observed for **authorization procedures** ($mean = 3.74$) and **regular internal auditing** ($mean = 3.59$), indicating general

agreement on their existence. However, relatively lower mean scores on the **clarity of financial policies and procedures** (*mean* = 2.7) and their **adequacy** (*mean* = 3.12) suggest potential weaknesses in these areas. Overall, the findings imply that while internal control mechanisms are in place, their effectiveness varies across institutes.

Table 3: Internal Controls and financial performance

	N	Mean	Std. Deviation
The institution has clear financial policies and procedures.	133	2.7	1.218
There is regular internal auditing of financial operations.	133	3.59	1.168
The existing financial policies and procedures are adequate to guide financial operations	133	3.12	1.225
There is clear procedure for authorization before any financial expenditure.	133	3.74	1.166
Recommendations from internal audit reports are implemented promptly.	133	3.61	1.230
Average		3.262	1.2014

3.1.2 Financial Performance of Public TVET Institutions

Table four presents the descriptive statistics on the financial performance of public TVET institutions in Nairobi County. Findings indicate a high level of financial performance, as reflected by an overall mean of 4.324, with relatively low variability in responses. Respondents strongly agreed that institutional investments yield justifiable benefits relative to costs (*mean* = 4.47) and contribute to cost efficiency and reduced wastage (*mean* = 4.42). Additionally, there was agreement that financial resources lead to improvements in infrastructure and equipment (*mean* = 4.29) and that institutions achieve value for money (*mean* = 4.21). Overall, the results suggest that public TVET institutions are effectively utilizing financial resources to achieve positive performance outcomes.

Table 4: Financial Performance of TVET Institutions

Descriptive Statistics			
	N	Mean	Std. Deviation
The financial resources invested in this institution have resulted in visible improvements in infrastructure and equipment	133	4.29	1.043
The institution achieves significant value for money from the financial resources it invests.	133	4.21	.922
The benefits gained from institutional investments justify the costs incurred.	133	4.47	.803
The institution regularly reviews the results of its financial investments.	133	4.23	.968
Investments were made to improve cost efficiency and reduce operational waste.	133	4.42	.790
Average		4.324	4.526

3.2 Regression Analysis

To evaluate the predictive power of the independent variable, a linear regression model was computed. As presented in Table five, the Coefficient of Determination R Square of 0.531, with an adjusted R Square (0.528). This indicates that 53.1% of the variance in the financial performance of Public TVETs in Nairobi County is accounted for by Internal Controls. The remaining 46.9% of the variation is attributable to extraneous factors outside the scope of this model. The Standard Error of the Estimate (.46595) reflects a low level of prediction error, further validating the fit of the model to the observed data.

Table 5: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.729 ^a	.531	.528	.46595
a. Predictors: (Constant), Internal Controls				

Table six presents the ANOVA results for the regression model examining the effect of internal controls on financial performance. The findings indicate that the model is statistically significant ($F = 148.526$, $p < 0.05$), suggesting that internal controls significantly predict financial performance in public TVET institutions. The significance value ($p = 0.000$) confirms that the model provides a good fit for the data and that the relationship observed is unlikely to have occurred by chance.

Table 6: Analysis of Variance

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.247	1	32.247	148.526	.000 ^b
	Residual	28.442	131	.217		
	Total	60.688	132			
a. Dependent Variable: dependent						
b. Predictors: (Constant), internal001						

Table seven below presents the regression coefficients for the effect of internal controls on financial performance. The results indicate that internal controls have a positive and statistically significant effect on financial performance ($\beta = 0.729$, $B = 0.591$, $p < 0.05$). This implies that a one-unit improvement in internal controls leads to a 0.591 increase in financial performance, holding other factors constant. The t-value ($t = 12.187$) and significance level ($p = 0.000$) further confirm the strength and reliability of this relationship. Therefore, internal controls are a significant predictor of financial performance in public TVET institutions.

Table 7: Coefficients

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	2.312	.170		13.600
	Internal Controls	.591	.048	.729	12.187
a. Dependent Variable: dependent					

4. DISCUSSION

The study results showed that internal controls have a statistically significant and positive effect on the financial performance of public TVET institutions in Nairobi County. The strong correlation coefficient ($r = 0.729$, $p < 0.01$) and the regression results, which indicate that internal controls account for 53.1% of the difference in financial performance, emphasize the key role of internal controls in enhancing institutional financial outcomes. The descriptive analysis further indicates that internal control practices within the institutions are moderately implemented, with notable strengths in authorization procedures and internal auditing. These components appear to be well established, providing a structured framework for monitoring financial transactions and ensuring compliance with established guidelines. The study reports relatively high levels of financial performance across the institution which indicates that existing control mechanisms, particularly those related to auditing and authorization, play a significant role in supporting financial efficiency and value for money. Without comprehensive and well-integrated internal control systems, institutions may remain vulnerable to inefficiencies and financial mismanagement. The findings of this study conform to the propositions of Contingency Theory, which posits that the effectiveness of organizational systems depends on their alignment with contextual and operational factors. In the context of public TVET institutions, internal control systems must be tailored to address institution specific risks, regulatory requirements, and operational complexities. Institutions that effectively align their internal controls with their operating environments are more likely to achieve improved financial performance and enhanced accountability. The results of the study agrees with those of (Thabit, 2019), who found that effective internal control systems enhance organizational performance by improving risk management and accountability. Similarly, Lu and Ma (2019) established that strong internal controls improve financial reporting quality and reduce inefficiencies arising from weak governance structures. This current study supports the existing literature by confirming that robust internal control systems are essential for enhancing accountability, minimizing financial mismanagement and improving institutional financial performance. The study also contributes to the body of knowledge by providing context specific evidence from public TVET institutions, thereby addressing a gap in prior research. Overall, the findings emphasize the need for strengthening internal control frameworks, particularly in the

areas of policy formulation and implementation, to enhance financial sustainability and institutional performance.

5. CONCLUSION AND RECOMMENDATIONS

The study concludes that internal control practices are a critical determinant of financial performance in public TVET institutions. The significant positive relationship observed implies that strengthening internal control systems leads to improved financial accountability, efficiency, and overall institutional performance. However, the variation in the effectiveness of certain control components, particularly financial policies and procedures, suggests that not all institutions have fully optimized their control environments. Therefore, while internal controls are instrumental in enhancing financial performance, their impact depends on the level of implementation and institutional alignment.

The study recommends that public TVET institutions strengthen their internal control systems by enhancing the clarity and adequacy of financial policies and procedures. There is need to reinforce internal audit functions to ensure timely implementation of audit recommendations and continuous monitoring of financial activities. Institutions should also invest in capacity building through regular training of financial management staff to improve adherence to control procedures. Additionally, the adoption of integrated digital financial systems is recommended to enhance transparency, accuracy, and efficiency in financial operations.

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