

**FINANCIAL MANAGEMENT PRACTICES AND FINANCIAL
PERFORMANCE OF TECHNICAL AND VOCATIONAL EDUCATION AND
TRAINING INSTITUTIONS IN KENYA**

BY

PATRICK M. JOSEPH

MASTER OF SCIENCE IN COMMERCE (FINANCE AND ACCOUNTING)

KCA UNIVERSITY

2025

**FINANCIAL MANAGEMENT PRACTICES AND FINANCIAL
PERFORMANCE OF TECHNICAL AND VOCATIONAL EDUCATION AND
TRAINING INSTITUTIONS IN KENYA**

BY

PATRICK M. JOSEPH

**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF
SCIENCE IN COMMERCE (FINANCE AND ACCOUNTING OPTION) IN
THE SCHOOL OF BUSINESS KCA UNIVERSITY.**

OCTOBER, 2025

DECLARATION

I wish to declare that this dissertation is my original work and has not been previously published or submitted elsewhere for the award of a degree. Also, I want to declare that this is my original work and contains no material written or published by other people except where due reference is made and the author duly acknowledged.

Student Name: PATRICK MUTUMA JOSEPH Reg, No: 23/08175

Sign: _____ Date: __23/10/2025

I do hereby confirm that I have examined the master's dissertation of

PATRICK MUTUMA JOSEPH

And have certified that all revisions that were recommended have been adequately addressed.

Sign: _____ 

Date: 23/10/2025

DR. CATHERINE GATARI

Dissertation Supervisor

FINANCIAL MANAGEMENT PRACTICES AND FINANCIAL PERFORMANCE OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING INSTITUTIONS IN KENYA

ABSTRACT

This study examined the relationship between financial management practices and the financial performance of technical and vocational education and training institutions in Kenya. The TVET sector plays a key role in equipping learners with the technical, vocational, and entrepreneurial skills necessary to support Kenya's socio-economic transformation and the realization of Vision 2030. Despite increased government funding, many public TVET institutions continue to face significant financial and sustainability challenges due to weak fiscal oversight and resource mismanagement. This study aimed at examining the influence of financial planning, budgeting, internal controls, financial reporting and evaluated the moderating role of governance on the financial performance of these institutions. A descriptive, mixed-method research design was used to collect data from principals and finance officers across the 42 sampled public TVET institutions. Descriptive and regression analyses showed that financial reporting had the strongest positive effect on financial performance, followed by internal controls, financial planning, and budgeting. The results also indicated that effective governance significantly enhanced the relationship between these financial practices and overall institutional performance. The study concluded that effective financial management practices while reinforced by good governance practices are essential for accountability, transparency, and sustainability in TVET institutions. The study recommends continuous capacity building for principals and finance officers, participatory budgeting and automation of financial systems to strengthen institutional performance. These measures are critical to strengthening institutional performance and ensuring that public resources are utilized efficiently to meet the nation's human capital development goals.

Keywords: Financial Management, Financial Performance, TVET, Governance, Kenya, Sustainability.

ACKNOWLEDGEMENT

I extend my heartfelt gratitude to my supervisor, Dr. Catherine Gatari, for her invaluable guidance, patience, and constructive feedback throughout this research dissertation making process. I also appreciate my colleagues and respondents for their insights and cooperation. Lastly, I thank KCA University for providing a conducive learning environment that has greatly contributed to the successful completion of this dissertation.

TABLE OF CONTENTS	
DECLARATION.....	i
DEDICATION.....	ix
LIST OF FIGURES	x
LIST OF TABLES	xi
ACRONYMS AND ABBREVIATION	xii
TERMS AND DEFINATIONS	xiii
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background of the Study	1
1.1.1 Financial Management Practices	4
1.1.2 Financial Performance	7
1.1.3 Technical Vocational Education and Training Institutions in Kenya.....	9
1.2 Statement of the Problem.....	11
1.3 General Objective	13
1.3.1 Specific Objectives	13
1.4 Research Hypotheses	14
1.5 Significance of the Study	14
1.5.1 TVET Institutions	15
1.5.2 Policy Makers	15
1.5.3 Financial Managers	15
1.5.4 Researchers and Academicians	16
1.5.5 Donors and Development Partners	16
1.6 Scope of the Study	16
CHAPTER TWO	18
LITERATURE REVIEW	18
2.1 Introduction.....	18
2.2 Theoretical Review	18
2.2.1 Agency Theory.....	19

2.2.2 Stewardship Theory	20
2.2.3 Resource-Based View (RBV)	22
2.2.4 Stakeholder Theory	24
2.3 Empirical Review.....	26
2.3.1 Budgeting and Financial Performance.....	26
2.3.2 Financial Reporting and Financial Performance.....	29
2.3.3 Internal Controls and Financial Performance	31
2.3.4 Financial Planning and Financial Performance	32
2.3.5 Moderating Influence of Institutional Governance.....	33
2.5 Conceptual Framework.....	38
2.6 Operationalization of Variables	39
CHAPTER THREE	40
RESEARCH METHODOLOGY	40
3.1 Introduction.....	40
3.2 Research Design.....	40
3.3 Target Population.....	41
3.4 Sample Size and Sampling Technique.....	42
3.5 Data Collection	43
3.6 Data Analysis and Presentation	44
3.7 Pilot Test.....	46
3.7.1 Reliability of Research Instruments.....	47
3.7.2 Validity of Research Instruments.....	47
3.8 Diagnostic Tests.....	48
3.8.1 Linearity Test.....	48
3.8.2 Normality Test	49
3.8.3 Multicollinearity Test.....	49
3.9 Ethical Considerations	49
CHAPTER FOUR.....	52
DATA ANALYSIS, PRESENTATION AND INTERPRETATION	52

4.1 Introduction.....	52
4.2 Response Rate.....	52
4.3 Pilot Test Results	53
4.3.1 Validity of Data Collection Instrument.....	53
4.3.2 Reliability of Data Collection Instrument.....	53
4.4 Demographics information	54
4.4.1 Gender.....	54
4.4.2 Age.....	55
4.4.3 Highest Level of Education	56
4.4.4 Designation in the Institution.....	57
4.4.5 Years of Service.....	58
4.5 Open Ended Results.....	59
4.6 Descriptive analysis	60
4.6.1 Budgeting Practices	60
4.6.2 Financial Reporting Practices	62
4.6.3 Internal Control Practices	65
4.6.4 Financial Planning Practices	66
4.6.5 Role of Institution Governance.....	69
4.6.6 Institution Governance.....	71
4.7 Diagnostic Tests.....	75
4.7.1 Test of Normality.....	75
4.7.2 Test of Linearity.....	76
4.8 Residual normality & homoscedasticity	81
4.10 Inferential Results	84
4.10.1 Correlation Analysis	84
4.10.2 Multiple Regression Analysis	86
4.11 Hypothesis Testing.....	89
4.12 Discussion.....	90
4.12.1 Budgeting practices and financial performance of Technical and Vocational Education Training institutions in Kenya.....	90

4.12.2 Financial reporting practices and financial performance of Technical and Vocational Education Training institutions in Kenya.....	94
4.12.3 Internal control practices and financial performance of Technical and Vocational Education Training institutions in Kenya.....	97
4.12.4 Financial planning practices and financial performance of Technical and Vocational Education Training institutions in Kenya.....	100
4.12.5 Institution governance and financial management practices and financial performance of Technical and Vocational Education Training institutions in Kenya	103
CHAPTER FIVE	107
CONCLUSION AND RECOMMENDATIONS.....	107
5.1 Introduction.....	107
5.2 Summary of findings.....	107
5.2.1 Budgeting practices.....	107
5.2.2 Financial reporting practices	107
5.2.3 Internal controls practices	108
5.2.4 Financial planning practices	108
5.2.5 Institution Governance.....	108
5.3 Conclusion	109
5.4 Recommendations.....	111
5.5 Limitations of the study and Suggestion for Future Studies.....	113
REFERENCES.....	114
APPENDICES	120
Appendix I: Interview Guide	120
Appendix II: Questionnaire	122

DEDICATION

I dedicate this research dissertation to my family, whose unwavering support and encouragement have been instrumental in my academic journey. Their belief in my potential has been a constant source of motivation.

LIST OF FIGURES

Figure 1: Conceptual Framework	38
Figure 2: Gender	55
Figure 3: Age	56
Figure 4: Highest level of Education	57
Figure 5: Designation in the Institution	58
Figure 6: Budgeting → Financial Performance (Linearity).....	76
Figure 7: Financial Reporting → Financial Performance (Linearity)	77
Figure 8: Internal Controls → Financial Performance (Linearity).....	78
Figure 9: Financial Planning → Financial Performance (Linearity)	79
Figure 10: Governance → Financial Performance (Linearity).....	80
Figure 11: Residual normality & homoscedasticity	81

LIST OF TABLES

Table 1: Operationalization of variables	39
Table 2: Target Population.....	42
Table 3: Sample Size Distribution	43
Table 4: Response Rate.....	52
Table 5: Reliability Results.....	54
Table 6: Budgeting Practices Descriptive Statistics	60
Table 7: Internal Controls Descriptive Statistics	65
Table 8: Financial Planning Practices Descriptive Statistics	67
Table 9: Role of Governance Descriptive Statistics	69
Table 10: Governance Descriptive Statistics	71
Table 11: Descriptive Statistics of Study Variables.....	74
Table 12: Tests of Normality for Study Variables.....	75
Table 13: Collinearity Diagnostics (Financial Performance)	82
Table 14: Residuals Statistics	82
Table 15: Pearson Correlation Matrix.....	84
Table 16: Multiple Regression Coefficients Predicting Financial Performance.....	86
Table 17: ANOVA (Model Fit)	88
Table 18: Model Summary	89
Table 19: Hypothesis Testing	89

ACRONYMS AND ABBREVIATION

CBET: Competency-Based Education and Training

CDACC: Curriculum Development, Assessment and Certification Council

CESA: Continental Education Strategy for Africa

ICPAK: Institute of Certified Public Accountants of Kenya

ICT: Information and Communication Technology

IFRS: International Financial Reporting Standards

IPSAS: International Public Sector Accounting Standards

KICD: Kenya Institute of Curriculum Development

KNBS: Kenya National Bureau of Statistics

OECD: Organization for Economic Co-operation and Development

SDG: Sustainable Development Goals

TTI: Technical Training Institutions

TVET: Technical Vocational Education and Training

TVETA: Technical Vocation Education and Training Authority

VTC: Vocational Technical College

TERMS AND DEFINATIONS

- Financial Management** : Refers to the strategic planning, organizing, directing, and controlling of financial undertakings in an institution (Atrill & McLaney, 2023)
- Financial Performance** : Refers to the measurement of how well an organization uses its resources to achieve profitability, sustainability and financial efficiency (Brigham & Houston, 2023)
- Budgeting** : Is the process through which an organization prepares a financial plan that shows an institution's expected incomes and expenses over period (Drury, 2022)
- Financial Reporting** : The process of disclosing an organization's financial information to stakeholders in a structured manner (Scott, 2022)
- Internal controls** : Internal controls are systematic measures such as policies, procedures, and practices instituted by an organization to safeguard assets while ensuring the reliability of financial information, enhancing operational efficiency, and promoting adherence to laws and regulations. (Wilson & Ortega, 2021; Mutuku & Wambua, 2022).

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Technical and Vocational Education and Training institutions are very important in equipping learners with practical skills which are necessary for employment opportunities, entrepreneurship and national development. TVET institutions have gained increased significance in the implementation of Vision 2030 and the Bottom-Up Economic Transformation Agenda, which has led to the promotion of skills development and innovation in Kenya (Republic of Kenya, 2007; Ministry of Education, 2021). However, the efficiency in the management of these institutions is often hampered by financial management challenges that directly influence their operational and financial performance despite increased investments and continued government reforms. To realize national development goals, it's important to ensure good financial stewardship of organizational resources. A study conducted by Okumu and Were (2021) showed that TVET financial health is intrinsically linked to how well they manage their financial resources.

Globally, countries that have advanced economies have shown the importance of institutionalizing improved financial management systems in TVET institutions is recognized as a cornerstone for their success and improved financial performance (UNESCO, 2022; World Bank, 2021). Countries like Germany and South Korea have strong public-private partnerships and strategic budgeting models, which have significantly contributed to the success of dual training systems, leading to qualified graduates and workforce (Müller & Kim, 2021). As a result, students get both practical and theoretical knowledge, which ensures that TVETs produce graduates who have the necessary skills that match industry requirements. In Australia, through its technical

and further Education (TAFE) implemented performance-based funding together with rigorous financial oversight mechanisms that ensure there is fiscal responsibility, together with improved training results (Williams & Jones, 2020). According to UNESCO (2022), robust financial governance in TVET leads to enhanced transparency, value-for-money utilization of funds, and improved institutional reputation, leading to positive financial performance. Multilateral organization like the World Bank (2021) stresses that in environments that have fiscal constraints, there is a need to have good financial management practices to drive effective educational efficiency. Conversely, developing economies continue to struggle with poor financial planning, weak internal control structures, and irregular financial reporting, which limit accountability and institutional sustainability (World Bank, 2021).

Regionally, financial management remains a major challenge across the countries in Sub-Saharan Africa's education sector. Many TVET institutions have experienced resource wastage, low budget absorption rates together with weak accountability mechanisms due to ineffective financial management systems (African Union, 2020). In Nigeria, there is an instance of ineffective financial planning delays and failure to utilize donor funds and stalling of construction projects (Eze & Okenwa, 2021). Also, in Uganda and Ghana, there are cases in which the audit reports have revealed monetary wastefulness in the financial activities of the state TVET institutions, such as failure to comply with procurement principles and delayed presentation of the financial statements leading to non-compliance (Asante & Mensah, 2020).

These challenges show that without structured budgeting, strong internal controls and transparent reporting, TVET institutions in the region face difficulties sustaining quality training and meeting development goals (Chigunta & Motala, 2021).

Locally, the government of Kenya has invested much into the growth of the TVET sector as a major initiative in the Vision 2030 and Big Four Agenda bearing in mind that it can be used in supporting industrialization and employment generation. However, financial inefficiencies persist in many public TVET institutions in Kenya. Audit reports carried out have shown frequent cases of unsupported expenditure, weak internal controls, and delayed financial reporting and this has negative affect on institutional performance (Office of the Auditor-General, 2022). Many institutions rely heavily on government capitation that is often delayed thereby limiting timely budget implementation and cash flow management (Otieno & Ooro, 2021). In addition, top-down budgeting processes and limited stakeholder participation have led to reduced accountability and that hinders resource alignment with institutional priorities (Kamau & Githui, 2022). Weak financial planning and inadequate risk management further undermine financial sustainability. These persistent inefficiencies in TVET institutions justify the need to examine how financial management practices specifically budgeting, financial reporting, internal controls, and financial planning influence the financial performance of public TVET institutions in Kenya. The study considered also the moderating role of governance in strengthening accountability and improvement of institutional financial outcomes. This study therefore is necessary since it seeks to generate empirical evidence on how financial management practices affect the financial performance of TVET institutions in Kenya. Through addressing financial inefficiencies and governance gaps the study will inform institutional reforms and policy interventions that will enhance accountability, promote prudent resource use and ensure the long-term financial sustainability of TVET institutions.

1.1.1 Financial Management Practices

Financial management practices refer to the deliberate systems and policies that organizations apply to govern their financial resources in a responsible and goal-oriented manner. Such a practice has been fundamental in attaining statutory integrity and long-term sustainability in public training institutions such as TVETs. Such activities include budgeting, financial reporting, internal controls and planning and they all share the goal of providing efficient service delivery and institutional credibility. Conformity with legal frameworks including the Kenya Public Finance Management Act is paramount in ensuring institutional accountability and ensuring audit standards are met (Ngware & Kiptoo, 2022). In addition, effective financial management can help institutions put their resources in tune with their developmental agenda, thus increasing resilience and flexibility in the face of a dynamic policy environment (UNESCO, 2023). By being able to control its expenditure in this way, TVET institutions are in a better position to pursue their education mandates without of course being guilty of extravagance.

Budgeting involves estimation of income and expenditure based on the goals of the institution; budgeting lies at the core of financial management. A long time ago budgeting has been a useful component of administrative policy of any institution including an educational one (Lasisi, 2021). Budgeting is important in regulating the financial nature of school administrators by ensuring that they do not spend carelessly the funds assigned on different educational services. Akinsolu (2018) claims that educational institutions require sufficient allocation of funds so that some programs and courses they devise can be successfully implemented. Good budgeting facilitates planning of strategic financial position, assists in prioritizing resources, and manages expenditure. In TVET institutions participatory budgeting and variance analysis are

present to make sure the spending goes along with the policy objectives. The most recent ones in (UNESCO, 2022; Republic of Kenya, 2020). On the other hand, a bad budget will cause lack of funds, wastage of resources and delays.

Sound financial reporting has played a pivotal role in increasing transparency and development of institutional credibility within TVET institutions. It makes records accessible to the interested stakeholders both internal and external to make responsible decisions within the proper time and information. Income reports, budget variance analysis, and cash flow summaries are the most important financial statements used in the assessment of the financial health. Such reports would aid not only in internal planning but would also speak of accountability towards the regulatory agencies and the development partners (Waweru & Okello, 2022). With the increasing demand of fiscal discipline and accountability of the government, thorough reporting act as a guiding barometer in compliance and good integrity (Ngugi & Njuguna, 2021). In the end, financial reports serve as a mirror by which the performance of the institution and financial management stewardship are critical.

Internal controls present an important platform through which TVET institutions can protect their physical and financial assets. Institutions have been minimizing chances of frauds and errors by way of implementing organizing controls like authorization processes, dual controls and reconciliations. Periodic auditing and supervisory controls are also another way of enhancing financial discipline and soundness of data. Accountability is also facilitated through effective internal control systems due to the accountability that will be recorded through proper records and adherence to the set financial policies (Otieno & Wambua, 2023). Also, they increase the trust in stakeholders, such as government agencies and donors, who depend on good governance when deciding to allocate money (Kariuki, 2022). Effective internal

controls in the long term do not only prevent mismanagement, but also enhance the performance of an institution in terms of efficient financial procedures.

Financial planning is a process through which resources are expected to be allocated in order to achieve both short- and long-term institutional objectives through forecasts. Financial planning in TVET institutions provides funds that are well pointed in the strategic areas like building, labour and learner needs. It is a proactive initiative that eliminates financial uncertainties and presents institutions with the ability to match expenditures to estimated incomes and policy requirements (Republic of Kenya, 2022). Financial planning is also due to the inclusion of the notion of risk analysis, ensuring that the institutions foresee and prevent the deficit of finances or economic interference (World Bank, 2023). This is because building a culture of prospective financial decision-making will help the institution to have a better capability of sustaining operational continuity and sustainable growth. Finally, good budgeting was based on proper financial planning leading to proper resource allocation and improvement of financial performance.

Financial management practices were measured by examining the four research objectives which included budgeting, financial planning, internal controls together with financial reporting. Data about these components was collected using structured questionnaires which were administered to finance officers and institution heads and also complemented by interviews. The respondents evaluated how their institutions practices like budget preparation and implementation, adherence to the internal controls procedures, timeliness and accuracy of financial reporting together with integration of strategic planning in the institution decision making. Other studies have made prior approaches like Nyongesa & Muturi (2020) measured financial management practices looking at budget participation, frequency in reporting and internal control

effectiveness while Omondi & Atambo (2021) examined how planning and reporting systems affected public institutions operational efficiency. These studies evidently show that good structured financial practices are very key in improving institution management.

Consistent with these findings the research study reviewed that those institutions with strong financial management practices resulted in better financial performance outcomes. Also, timely and accurate reporting showed greater stakeholder confidence with proper governance oversight. The study results showed how financial management practices lead to overall operational and financial success of TVET institutions in Kenya

1.1.2 Financial Performance

The assessment of financial performance in the TVET centers will be done through the evaluation of the effectiveness of utilization of the financial resources to facilitate institutional goals, including training and continuing operations. In the public sector where TVETs will not be profit-oriented, the financial performance will be gauged based on budget absorption rates, timely and accurate financial reporting, and efficiency in the procurement processes (Korir & Njeru, 2022). Budget absorption will be a reflection of the capacity of the institution to carry out approved budgets in a financial year without over utilization or overspending. As part of the compliance with financial reporting requirements, consistency in filing of audited accounts, adherence to the International Public Sector Accounting Standards (IPSAS) and the ability to adhere to deadlines imposed by the regulatory agencies will be reviewed. The efficiency in procurement will be gauged on basis of meeting the procurement plans, transparency in the tendering process, and the percentage of completed procurements as per the planned expenditures as argued by Omondi (2023). All these indicators will

demonstrate the overall picture of the institution's fiscally soundness, transparency, and conformity to the expectations of the public finances.

Further, the operational capability of TVET institutions will be directly influenced by their financial performance in areas such as infrastructure development, staffing, and learning outcomes. Institutions demonstrating strong financial performance are more likely to secure continued funding from government and donors due to enhanced trust and accountability (Ngware, 2021; UNESCO, 2022). Conversely, poor financial performance will often lead to funding reductions, service delivery delays, and audit concerns, thereby stalling institutional development. Improving financial performance will require internal capacity strengthening, such as training of finance personnel and automation of financial systems to reduce errors and fraud. Regular internal audits, participatory budgeting, and strict adherence to internal control procedures will serve as critical enablers of efficiency and compliance (Office of the Auditor-General, 2022; World Bank, 2023). In the long run, institutions that adopt these financial best practices will be better positioned to achieve their educational mandates while ensuring sustainable use of public resources.

In this study financial performance was measured using a combination of qualitative perceptions and quantitative indicators reflecting the efficiency, sustainability, and resource utilization of TVET institutions. Key performance dimensions included cost efficiency, budget absorption rate and cash flow adequacy. Respondents provided data on their institution's financial stability, capacity to generate and diversify income, and ability to meet recurrent and development expenditures. In line with previous studies which were done by Mutiso and Ngugi (2021) and Kariuki and Waweru (2022), financial performance was further evaluated through financial ratios including liquidity, solvency, and operating surplus margins derived from audited financial statements.

These indicators have been widely applied in higher education and public sector research as reliable proxies for institutional financial health and sustainability.

Consistent with these scholarly approaches the present study found that institutions with strong financial management practices such as effective budgeting, rigorous internal controls, and timely financial reporting resulted to higher levels of revenue growth and enhanced operational efficiency. Also, institutions that integrated strategic financial planning into decision-making processes reported greater financial resilience and an increased ability to fund infrastructure and programmatic development. By triangulating self-reported perceptions with objective financial metrics, the study provided a comprehensive and empirically grounded assessment of financial performance and its linkage to financial management practices in Kenya's TVET sector.

1.1.3 Technical Vocational Education and Training Institutions in Kenya

As key institutions in the Republic of Kenya's aim to cultivate competent and marketable human resources, technical and vocational education and training (TVET) institutions play a crucial role. They provide some practical skill training in various fields like engineering, farming, ICT, business, and hospitality (Republic of Kenya, 2013; Ministry of Education, 2021). TVET system entails the absence or exclusion of the Vocational Training Centers (VTCs), Technical Training Institutes (TTIs), National Polytechnics, and Technical Universities. The levels serve different categories of the learners, including the artisans and the diploma and degree students. These institutions are functioning within the frameworks of the TVET Sector Policy 2012 and the rest of the authorities, such as TVETA and CDACC (TVETA, 2021; UNESCO, 2022).

The TVET Act (2013) specifies the framework and legal and policy framework involved in TVET in Kenya and the modes through which TVET is governed, quality ensured, and the management of the institutions. The Board of Governors and TVET

institutions are under the Ministry of Education and report to the State Department of Technical and Vocational Education (Republic of Kenya, 2013; Afeti, 2018). They are mandated with the responsibility of educating according to the skill levels to meet the demands of the labor market as well as to create self-reliance among the youth. Due to the introduction of the Competency-Based Education and Training model (CBET), institutions have been restructured in such a way that they focus on both quantifiable learning outcomes and readiness to work in the workplace. Such transition is a manifestation of the wider economic transformative objectives of Kenya set in the vision 2030 and the bottom-up economic transformation agenda (Ministry of Education, 2021; World Bank, 2021).

In Kenya over the past years, the TVET sector has been growing substantially as a result of more government investment and policy changes. Since 2013, more than 200 new TVETs institutions have been built, and the number of people who took part in technical programs has increased over twofold (KNBS, 2022; UNESCO, 2022). Financing has also been boosted with increase in capitation grants and bursary programs such as Higher Education Loans Board (HELB) which is available to the TVET students. Also, the concept of public-private partnership has been promoted to help institutions to acquire modern infrastructure and machinery. Even so, there are still shortages in quality assurance, industry links, and curriculum delivery at selected institutions (Ngware, 2021; TVETA, 2021).

Financial sustainability and operational efficiency is one of the outstanding issues in the TVET institutions in Kenya. One of the major issues facing many institutions is delay in disbursement by the government, unstable funding and low internally generated revenue (ICPAK, 2019; World Bank, 2021). This monetary issue poses a barrier to infrastructure development. They also influence recruitment and retention of

trainers as well as constrains purchase of modern training tools. In addition, inadequate systems of financial management have seen audit related queries and misallocation of resources in various institutions. To guarantee delivery of quality and relevant training by TVET institutions, there is need to enhance financial governance (Office of the Auditor-General, 2020; ICPAK, 2019).

TVET institutions should also develop or strengthen financial controls and planning of resources to increase the sustainability and effectiveness of TVET institutions. Important measures are computerization of financial operations, enhancing the financial management training to the employees, and enforcing the laws of the Public Finance Management Act (2012) (Republic of Kenya, 2020; Afeti, 2018). Institutions are also encouraged to broaden sources of funds amid the income generating projects and Industry partners. Transparency and confidence must be created through continuous monitoring, internal audits, and a timely financial reporting. Finally, TVET institutes that are well managed will be in a better position to fill the Kenya skills gap and play a significant role in transforming the economy (World Bank, 2021; UNESCO, 2022).

1.2 Statement of the Problem

Technical and Vocational Education and Training institutions in Kenya play a crucial role in developing the skilled workforce that is needed to achieve the country's Vision 2030 and industrialization goals. However, despite substantial public investment exceeding Ksh. 55.4 billion between 2013 and 2022 through capitation and grants (State Department for TVETs, 2022) most institutions continue to experience serious financial management inefficiencies that undermine their performance and sustainability. Audit reports from the Office of the Auditor-General (2022) reveal that more than 60% of institutions have persistent challenges that includes, low budget absorption rates,

unsupported expenditures, weak internal controls and delayed financial reporting. These inefficiencies have led to frequent audit queries, stalled projects, and poor service delivery in many public TVET institutions after external audits. Additionally, an internal review by the Ministry of Education (2021) also found that many TVET institutions utilized less than 70% of their approved budgets annually thus showing poor financial planning and low budget absorption rates.

Empirical studies have further highlighted inconsistencies in the application of financial management practices within the sector. According to (Otieno and Ooro ,2021) they found that most TVET institutions rely heavily on government capitation grants that are often delayed, creating budget execution gaps and cash flow constraints. Kamau and Githui (2022) observed that budgeting in many institutions remains top-down and disconnected from strategic plans thus leading to misaligned resource allocation. Similarly, Ngware (2021) reported that internal control systems are either weak or poorly enforced, resulting in misuse of funds or limited accountability. These financial weaknesses collectively threaten institutional efficiency, transparency and stakeholder's trust.

While several studies have been conducted on public financial management in Kenya's education sector, most of them focused on universities or basic education (Chege & Muthama, 2021; Wamalwa & Ochieng, 2022), leaving a gap in empirical evidence specific to TVET institutions. Furthermore, few have examined how key financial management practices budgeting, financial reporting, internal controls, and financial planning interact to influence financial performance or how institutional governance moderates these relationships. This study addresses this gap by investigating the effect of financial management practices on the financial performance of public TVET

institutions in Kenya generating evidence to strengthen financial accountability, transparency, and sustainability in the sector.

1.3 General Objective

This study aimed to review how financial management practices influence the financial performance of Technical and Vocational Education and Training institutions in Kenya.

1.3.1 Specific Objectives

The study was guided by the following specific objectives.

- i. To examine how budgeting practices influence the financial performance of TVET institutions in Kenya
- ii. To assess the influence of financial reporting practices on the financial performance of Technical and Vocational Education Training institutions in Kenya.
- iii. To analyze the influence of internal control practices on the financial performance of Technical and Vocational Education Training institutions in Kenya.
- iv. To evaluate the influence of financial planning practices on the financial performance of Technical and Vocational Education Training institutions in Kenya
- v. To determine the moderating effect of institution governance on the relationship between financial management practices and financial performance of Technical and Vocational Education Training institutions in Kenya.

1.4 Research Hypotheses

- i. **H₀₁**: Budgeting practices has no significant influence on the financial performance of Technical and Vocational Education Training institutions in Kenya.
- ii. **H₀₂**: Financial reporting practices does not significantly influence the financial performance of Technical and Vocational Education Training institutions in Kenya.
- iii. **H₀₃**: Internal control practices have no significant influence on the financial performance of Technical and Vocational Education Training institutions in Kenya.
- iv. **H₀₄**: Financial planning practices does not significantly influence the financial performance of Technical and Vocational Education Training institutions in Kenya.
- v. **H₀₅**: Institution governance does not significantly influence the relationship between financial management practices and financial performance of Technical and Vocational Education Training institutions in Kenya.

1.5 Significance of the Study

The study is going to produce significant results to numerous parties such as TVET institutions, policymakers, financial managers, donors, and researchers. It concentrates on the impacts of financial management practices such as budgeting, financial planning, internal controls and financial reporting on financial performance of the public TVET institutions. The research fills a gap in an existing study by conducting an empirical detail that presents a case in the Kenyan TVET situation. Its revelations could enforce effective changes and promote openness, efficiency, and sustainability of financial

activities. The following paragraphs explain the benefits that the various stakeholder groups will gain during the study.

1.5.1 TVET Institutions

It will also be advantageous to the TVET institutions in the sense that they will get the idea of the effectiveness of sound financial management practices in improving effective financial performance. The research shall give evidence-based suggestions concerning the ways to use, in a better method, budgeting, and moreover, internal control systems as well as financial reporting. This can assist in enhancing service delivery, training and institutional planning. Improving on these aspects will enable institutions to maximize on resources and minimize audit questions. In the end, the results will encourage a more strategic and sustainable institutional development.

1.5.2 Policy Makers

A review of the effectiveness of past financial laws such as the Public Finance Management Act (2012) and the TVET Act (2013) will help the policy-makers. The results will provide feasible strategies on how to reform policy to facilitate financial transparency and independence within the TVET institutions. Their assistance will also be helpful in determining systemic bottlenecks like late payments and ample financial management. This will inform evidence-based decision-making and improve the governance of the public sector. The study is capable of supporting national goals of education, equity and economic transformation in the long-term perspective.

1.5.3 Financial Managers

TVETs financial managers will acquire practical solutions to the effective running of finances in routine activities. The research will give advice on how to keep correct financial records, making good budgets and putting in internal controls. It will allow

minimizing financial risks, improve audit compliance, and encourage the rational use of resources. Because managers will know what works to translate to better financial performance, they will be in a better position of making decisions. Professional development and institutional capacity building will also be supported by the results of the study.

1.5.4 Researchers and Academicians

This study will serve as an important piece of work as it will fill a gap in literature as far as financial management in the Kenya TVET sector is concerned. The research will make a contribution to data and knowledge applicable to grow additional intelligence and policy analysis. It shall also provide a set of parameters of measuring financial wellbeing of learning institutions. It can provoke comparative study and aid theory building in the field of public financial management. The findings can be used by academicians to shape instruction and curricular in the education finance field.

1.5.5 Donors and Development Partners

The financial management capabilities of the TVET institutions will be of benefit to the donors and the development agencies. The study gives an avenue on which the accountability and sustainability of institutions can exercise prior to committing funds. It will assist in matching donor support and institutional requirements, budgets. This guarantees that money is well consumed and works towards long-term effects. In the end, the research can inform the partnership initiatives that can help to enhance knowledge and labor force advancement in Kenya.

1.6 Scope of the Study

This research work was based on how financial management practices and financial performance of 238 Technical and Vocational Education and Training institutions in

Kenya are related. Included in the research were the 44 sampled institutions (public institutions of TVET) in various parts of Kenya. The list of the financial practices and performance data of five years was covered in the study, between the years 2019 to 2024. The key financial stakeholders selected to be included in the target population of the study was principals and finance officers who are engaged in the day-to-day management of TVET. The sample size was 84 respondents. The investigation was carried out in five months, beginning in May 2025 to September 2025. This paper conducted a mixed-methods research design by incorporating both qualitative and quantitative research methods in terms of the collection of data and analysis. Descriptive and inferential analyses was done to regression analysis in quantitative data whereas qualitative responses were thematically analyzed to draw conclusions about the financial management practices.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter introduces a thorough and critical summary of all the applicable literature found on the subject of financial management practices and financial performance in Technical and Vocational Education and Training institutions. This research starts by looking at important theoretical frameworks that are the basis of financial management practices, and this follows an empirical review of the practice on a global, regional, and local scale. It goes on to propose the conceptual framework in which the study was guided, described identified knowledge gaps, and came up with an operationalization table of key variables. These paragraphs, when put together gave rise to the formation of the further research methodology and guide to formulate the study.

2.2 Theoretical Review

The literature review presents a background platform of how financial management processes of budgeting, internal control, financial reporting and planning influences institutional performance of a public institution like Technical and Vocational Education and Training institutions. There were four prevailing theories that were applied, i.e., Agency Theory, Stewardship Theory, Resource-Based View Theory and Stakeholder Theory. These theories gave the motivational insights into the behavior of financial action and institutional stewardship giving opposite outlook on the role of managers with regard to institutional resources. They also assist in constituting the reasoning why the implementation or failure of the utilization of financial management systems in public entities occur. This study allegedly offers conceptual premises of understanding the relationship between financial practices and performance in TVETs by comparing the assumptions and propositions in each theory.

2.2.1 Agency Theory

Agency Theory, introduced by Jensen and Meckling (1976), postulates that in any principal-agent relationship, there is an inherent risk of the agent pursuing personal interests at the expense of the principal. Concerning this study, the funders or principals in the case of TVET institutions are the government, development partners, public and regulatory bodies, while the agents are the institutional managers and finance officers to whom the funds are given to manage on behalf of the principal. Agency theory is relevant to this study as agents may not always act in the best interest of the principal, as agency conflicts may arise where opportunistic tendencies may influence this relationship leading to mismatched budgets, delay in reporting, over-utilization of funds and lack of financial responsibility affecting financial performance (Eisenhardt, 1989; Mitnick, 2006). These agency issues are compounded with governmental institutions that might resolve their supervision inadequately or irregularly, resulting in ineffective monitoring and accountability. Thus, the agency theory emphasizes the significance of sound financial controls, such as frequent audits, formal budgeting, and reporting as a way of clarifying institutional goals with sources fulfilling the institutional goal (Cuevas-Rodrigo, *et. al.*, 2012).

TVET institutions handle huge sums of funds such as HELB loans to students, capitation grants from the government and funds from development partners, agency problems are evidenced through a lack of internal controls, poor budget absorption rates, frequent audit queries and irregular reporting mechanisms, as highlighted by the office of the Auditor General (2022) reports. Agency conflicts in institutions of TVET usually increase when there are poor internal control systems that also lack timely reporting of financial information. The agency theory can be applied in examining the effectiveness of institutional structure and activities to minimize these conflicts by causing managers

to work in the good of the funders and society (Eisenhardt, 1989; Ndede-Amadi, 2022). It not only entails the drawing of financial policies but also the enforcement of compliance by surveillance, penalties and rewards. Those institutions that do not apply such controls might have frequent audit questions, inefficiency and budget deficiency.

Critics of agency theory argue about its narrow focus on only to stakeholders the principal and the agent, while neglecting the important role that is played by other stakeholders within an institution (Mallin, 2007). This view might lead to unequal distribution of power among other stakeholders such as support staff, suppliers and other partners thereby affecting institutional stability and governance (Eisenhardt, 1989). Critics argue that there are players who are focused on organization growth and sustainability apart from agent and principal relationship. However, apart from this criticism agency theory ensures there is a framework for analyzing institutional structures to minimize conflicts by ensuring managers take into account the interests of funders and society (Wang & Zhang, 2020; Lee & Choi, 2023). This ensures there are financial policies developed for institution management which are implemented through regular audits and monitoring. Failure to implement such policies leads to frequent audit queries, budget deficits and financial performance weaknesses (Garcia & Rodriguez, 2021; Thompson & Green, 2024). This theory therefore validates the use of budgeting, internal controls, financial planning and financial reporting mechanisms to be among major components of financial management in the study therefore enhancing the financial performance of TVET institutions in Kenya.

2.2.2 Stewardship Theory

In contrast, Stewardship Theory, as proposed by Davis, Schoorman, and Donaldson (1997), assumes that managers are trustworthy stewards who are intrinsically motivated

to act in the best interest of their organizations rather than personal interests. It is postulated by the theory that a high rate of responsibility and ownership will make the institutional leaders seek sustainable goals of the institutions as opposed to instant benefits (Muth & Donaldson, 1998; Hernandez, 2008). This theory aligns with financial planning influence on financial performance in the setting of TVET institutions. This theory presupposes the ability of administrators and heads of departments to make financially reasonable decisions without putting them under the microscope with regard to controlling by focusing on both short-term and long-term sustainability. The theory advocates the empowerment of leaders by giving them decentralized budgets, active planning and ethical money management as a way of ensuring effective financial planning and performance. Such values should be encouraged as they foster the stability of the institution and the sustainability of the services provided.

Such a theory as Stewardship can be applied to the public educational environment specifically as managerial functions may overlap with professional ideals and social responsibility. Once financial managers in this case the principals and finance officers in the TVETs believe that they are stewards and not just agents, there are greater chances that they can focus on transparency, long-term thinking and adherence to financial standards (Donaldson & Davis, 1991; Kluvers & Tippett, 2011). The theory also fosters fostering leadership as well as culture of integrity that can also decrease the reliance on costly external controls in huge proportions. This has implications on the development of internal institution capacity and control in financial decision making. That is why the Stewardship Theory is the complement to the Agency Theory since it is now focused on the inside motivations and moral dedication and concentrates on the financial performance outcome.

Reviewed empirical studies show the application of stewardship theory in financial planning. Karani and Cheruiyot (2020) highlight that institutions with structured financial planning practices aligned with organizational vision experienced fewer budget overruns and improved project implementation. Additionally, Ndede-Amadi (2022) found that empowering finance managers with financial planning decision-making enhanced resource forecasting, which led to reduced reliance on emergency grants and last-minute budget reallocations. Critics of this theory argue it oversimplifies complexities that motivate people and power changes in institutions that are common in public sector entities, mostly affected by inadequate resources and political pressure (Smith & Jones, 2022). Despite the criticism, the theory provides information about how good governance can contribute to institutional performance through effective financial planning. This theory complements agency theory by showing that empowered leaders in TVET can plan proactively and responsibly, leading to better results such as effective budgeting practices, improved service delivery and long-term sustainable financial performance of the institution.

2.2.3 Resource-Based View (RBV)

Barney (1991) postulates that the resource-based view (RBV) entails organizations attaining better performance by functioning and deploying valuable internal resources. In the case of TVET institutions, such resources are human capital, infrastructure and financial resources. Resource generation (e.g., by implementing income-generating activities) and resource allocation (e.g., spending more on investments that add value to learning and employability of students) are thus the main influencing factors of performance. Financial resources are regarded as strategic assets in the present research, which when effectively used would lead to institutional effectiveness and sustainability.

RBV highlights the importance of financial management practices in converting financial inputs into strategic advantages. For TVET institutions, this includes efficient budgeting, timely reporting, prudent investment in infrastructure and training together with strategic allocation of funds to areas that yield the highest impact. Institutions that develop superior financial management capabilities such as risk assessment, cost control, and strategic investment are likely to achieve a sustainable competitive advantage (Wernerfelt, 1984).

Empirical studies support the importance and application of RBV theory in financial management. Karani and Cheruiyot (2020) study showed that those TVET that have structured financial planning practices are more likely to implement capital development projects through minimized budget deficits. Additionally, Ndede-Amadi (2022) found that institutions that have qualified finance staff and data-driven budgeting tools result in higher budget absorption rates and good financial management practices. Also, by ensuring accurate forecasting, risk management and cost monitoring ensures TVETs can navigate funding constraints. Peteraf (1993) found that such capabilities form both assets and competitive advantage if used routinely leads to successful financial performance. Financial planning is a strategic tool of good of financial governance approach.

Critics of RBV argument does not consider the influence of external constraints such as political interference and the role of regulatory bodies that affect the decision-making of public institution managers (Kraaijenbrink, Spender, & Groen, 2010). This applies to Kenyan TVET, where budget ceilings and funding is controlled by the National Treasury and Ministry of Education. Even though there are critics of the theory, RBV is still relevant to the study because it shifts the performance debate from input

adequacy to institutional capability (Barney, 1991; Peteraf, 1993). RBV provides a strategic highlight for this study by showing the need for budgeting and financial planning as institutional competencies that contribute to financial performance. This shows the importance that having funds is not a guarantee of good performance, but having good measures and control leads to financial performance. As such, this study applies RBV to evaluate whether the internal financial capacities of public TVET institutions, specifically those related to budgeting and planning, translate into measurable financial outcomes such as budget absorption, cost efficiency together with sustainability (Barney, 1991; Wernerfelt, 1984; Ndede-Amadi, 2022).

2.2.4 Stakeholder Theory

Freeman (1984) introduced stakeholder theory as a means of merging business ethics and its operations. The theory argues that organizations should focus on balancing the needs of all stakeholders affected by their operations. In the case of TVET institutions the stakeholders are the suppliers, employees, students, parents, community, government and all parties involved in the management of TVETs (Garcia & Rodriguez, 2020). This theory ensures that TVET institutions meet the needs of stakeholders by ensuring not only those with direct financial benefits but also all groups that are engaged in the running of the institutions. By collaborating with all stakeholders in a constructive approach the institutions build trust, get community support and credibility according to (Chen & Li, 2021). This approach leads to sustained growth and better governance of TVET institutions.

Ensuring institutions produce transparent financial reports by engaging stakeholders, this theory promotes accountability. Through provision of timely financial reports, institutions build stakeholder confidence and trust by ensuring there are sound financial

management practices that promote accountability (Wang & Zhang, 2022). For example, government institutions check for compliance while the parents get information that the resources are being utilized well to support learning. Credible financial reports ensure donors and development partners have an impact on their aid. Sound budgeting practices ensure that priority areas get enough funds for quality learning and infrastructure development (Brown & Davies, 2023). By ensuring robust internal controls are in place that prevent fraud to the institutions financial assets this builds stakeholders trust promoting long-term sustainability.

Governance structures broaden the perspective of business responsibility through the stakeholder theory through integrating their interest in institution management and decision making. This promotes open communication between all the concerned parties of different stakeholder groups. Through the provision of platforms for engagement, strong governance mechanisms ensure strong financial management practices through all stakeholder engagement (Smith & Jones, 2023). Sound financial management practices lead to a positive public image as a result of demonstrated accountability. According to Lee & Choi (2024), improved financial performance, together with long-term financial sustainability is a result of strong engagement between stakeholders in the TVET sector.

while Stakeholder Theory offers a holistic view of organizational responsibility compared to shareholder focused approaches, the theory has faced criticisms for its potential vagueness in deciding which stakeholder interests should be prioritized when conflicts arise (Jensen, 2001; Orts & Strudler, 2022). Ensuring the right balance among various competing stakeholder demands can be challenging mostly in resource-constrained public institutions such as TVETs because of government mandates,

community expectations, and student needs which may not always perfectly align. Despite of these complexities, Stakeholder Theory is very important theoretical underpinning for this study. It is particularly important for helping understand the moderating role of governance on the relationship between financial management practices and financial performance. Effective governance as informed by the Stakeholder Theory ensures implementation of budgeting, financial reporting, internal controls, and financial planning reflects a broader accountability to all relevant parties, thereby strengthening their positive influence on the financial performance and long-term sustainability of TVET institutions.

2.3 Empirical Review

Empirical studies have provided a sensible contribution to the interplay between financial management practices and institutional financial performance. The majority of the investigations agree on the assumption that intelligent financial procedures such as budgeting, internal controls, reporting, and monetary planning are associated positively with enhanced cash flow. Nonetheless, the available literature has highly favored the universities and the secondary schools with very little information on TVET institutions and most especially in the Kenyan scenario. More so, most of the studies isolate the financial variables without their aggregate effect on the performance of the institutions. In this research, the influence of the interaction of financial management variables on the financial performance of TVET institutions throughout Kenya is going to be measured to fill that gap.

2.3.1 Budgeting and Financial Performance

Budgeting is broadly accepted as a key financial management discipline that promotes institutions sustainability. Internationally, the recent research work reiterated that

effective budgeting systems are the focus in institutional financial stability and operational effectiveness. Kim and Kim (2021) study based on South Korean public universities came to the conclusion that the mixed-method design demonstrated that cost control and strategic alignment within the objectives of the institutions improved as a result of participatory budgeting. They came up with a conclusion that participatory budget making enabled buy-in by stakeholders and fiscal prudence. While their findings reveal the need for stakeholder engagement, their context is different from Kenyan TVETs where there is fiscal decentralization and limited autonomy limiting the participatory method. In the same vein, a comparative case study conducted by Ahmad et al. (2022), in area of Malaysian vocational colleges revealed that timeliness of budget reviews and performance-based budgeting significantly increased the rates of fund utilization and minimized recurring deficits. This enabled institutions to utilize their budget as per their strategic plans. Nevertheless, this study used administrative data without focusing on human behavior interaction on budget utilization which is relevant to public TVET in the Kenyan dynamic leadership context.

In East Africa, quantitatively, it was observed that budgetary control processes such as variance analysis were associated with improved budgetary performances and helped sustain programs (Mwangi and Njoroge, 2022) in teacher training colleges in Tanzania. However, this study focused on institutions which rely on consistent government funding unlike Kenyan TVET which relies on inconsistent government capitation, internally generated funds and donor support. In Rwandan public institutions, regular budget revisions resulted in a successful project completion rate according to a study by Mutiso and Sabiiti (2021). This Study's quantitative approach failed to examine staff capacity and leadership support in budget implementation. This is important to Kenyan

TVET because of the nature of how they are spread throughout the country and financial management methods vary.

At the local level, a sample size of 27 Kenyan TVETs (Otieno and Nduta, 2023) found that organizations that had electronic budgeting tools better integrated into their budget monitoring systems had better efficiency ratios and a reduced number of audit concerns and suggested institutions should initiate the process of making electronic budgeting tools permanent to enhance budget monitoring. However, the study found positive results of using technology to monitor budget usage for better financial performance the study did not consider the cost implications of the systems and implementation challenges. Locally, Kirimi and Githongo (2021) highlight that failure to have budget preparation representation from all departments in an organization leads to inefficient utilization and a mismatch in resource allocation. Though the study has positive findings does not look into organization leadership dynamics which might affect long-term organization sustainability. These studies show that failure to have proper budgeting processes leads to poor financial performance in learning institutions.

Institutional financial performance can be improved through timely budget review, technology integration and matching performance indicators (Kim & Kim, 2021; Otieno & Nduta, 2023). Ahmad *et al.* (2022) in Malaysia noted that conducting periodic audits on budget utilization and timely adjustments improves financial discipline. Organizations that have automated their budget tracking systems can easily identify variances and make adjustments (Bakar & Ismail, 2020). In Uganda, institutions that monitor their budgets quarterly have resulted in fewer implementation delays (Mutiso & Sabiiti, 2021). Locally lack of mid-year budget reviews together with delays in preparing budgets resulted in poor fund burn rates in public training institutions (Kirimi

& Githongo, 2021). Through integrated automated budget systems in TVET institutions, Otieno and Nduta (2023) recommended that this would result in improved accuracy, accountability and transparency in the budget management.

However, most of these studies focus on individual institutions or countries and have limited comparative analysis across different TVET environments. This study will operationalize the budgeting variable through measurable indicators such as timely budget reviews, participatory budgeting methods, the implementation of performance budgeting, and the use of budgeting systems. These will be assessed using a structured Likert-scale questionnaire that evaluates the frequency of use, perceived effectiveness, and compliance with institutional policies.

2.3.2 Financial Reporting and Financial Performance

Recent global scholarship emphasizes that transparent and standardized financial reporting mechanisms bolster institutional trust and financial decision-making. This transparency leads to stakeholder confidence and trust in institutional financial reports. In the United Kingdom, an extensive study by Jones & Harris (2021) used panel data regression across UK technical colleges and found that adherence to accrual-based financial reporting under IFRS increased stakeholder confidence and external funding. Their findings suggested that reporting quality directly influenced donor engagement and financial resilience. However, their study reviewed donor-funded institutions, leaving a gap to institutions that are fee-dependent and government-funded such as Kenyan TVET. Similarly, in Canada, Brown and Shen (2022) applied structural equation modeling (SEM) to analyze the relationship between automated financial reports and performance indicators in public colleges, concluding that timeliness and audit conformity enhanced both internal efficiency and external accountability. Though

the study addressed importance of integrating technology did not consider cost and staff capacity to implement these changes, especially in developing nations where there is funding constraints.

Regionally, Makau and Kalunda (2022) conducted a longitudinal study on East African polytechnics and found that digitized financial disclosure practices reduced the frequency of fraud and improved budget absorption rates. Mutungi & Kasozi (2023) highlighted that the preparation of quarterly financial reports in Rwanda TVETs leads to increased budget absorption rates against incomes and expenditure. These study results show that the use of digital systems to track budgets ensures timely monitoring and reporting. However these studies did not check on accuracy and integrity of produced reports that might be affected by staff shortages and manual systems. Bukenya and Musoke, (2021) study concluded that institutions in Uganda that followed financial reporting guidelines had fewer audit queries due to improved compliance. Locally, Nyambura and Kiprono (2023) used a descriptive survey design on 20 TVETs in Kenya and reported that the lack of standardized reporting formats contributed to data inconsistencies and planning inefficiencies, urging policy reforms toward mandatory adoption of financial reporting software. TVETs with formalized reporting systems reported better fund utilization and less reliance on external audits as compared to those without established structures (Mwanzia & Njeru, 2022). In conclusion, these study findings reveal that proper financial reporting structures lead to credible institutional reports and accountability, leading to overall financial performance. Operationalization of financial reporting variable in this study will be done through use of indicators such as frequency of financial reporting, automation level and adherence to financial reporting standards together with timeliness in submission of financial reports to regulatory bodies.

2.3.3 Internal Controls and Financial Performance

Internal control systems have been widely acknowledged as foundational pillars for financial integrity and resource stewardship. Globally, a study by Wilson and Ortega (2021) in Australian TAFEs (Technical and Further Education institutions) employed a qualitative approach and identified that weak segregation of duties and delayed reconciliations were primary drivers of financial loss. From their study, they recommended enhanced internal audit independence and enhanced oversight through internal control policies. Similarly, Zhao and Liu (2022) explored internal control frameworks in Chinese vocational institutes using a case study methodology and found that institutions with established internal control manuals and ICT-based audit systems reported fewer incidents of misappropriation and superior liquidity ratios in the financial reports. Kim and Park (2020) supported these studies by research conducted in South Korean Vocational institutions that stressed that digital audit infrastructures led to a lower risk of manipulation of financial records, enhancing transparency. Results from these studies show that robust internal controls, if they are digitized, are key to institutional financial performance.

Regionally, Okello and Mburu (2023) conducted a quasi-experimental study on internal controls in Ugandan technical colleges and confirmed that procedural checks, especially in procurement and payments, significantly reduced operational losses and boosted financial efficiency. Through the use of automated control systems and the adoption of risk-based audit, this resulted in improved financial efficiency in Rwanda polytechnics (Achieng & Kasozi, 2021). In Kenya, Mutuku and Wambua (2022) undertook a correlational study involving 30 public TVET institutions and reported that effective control environments, particularly asset safeguards and expenditure authorization, correlated positively with budget performance and audit compliance.

Regular reconciliations, segregation of duties, automated payment systems and routine audits resulted in few financial queries during the audit, according to Kirimi and Githongo (2021). Strong internal controls, when instituted in TVET institutions, are essential for overall financial performance.

2.3.4 Financial Planning and Financial Performance

Financial planning has emerged as a proactive measure to ensure fiscal sustainability and optimal resource allocation in public institutions. In the U.S., Thompson and Ramirez (2021) examined 40 community colleges using a longitudinal research design and revealed that institutions with long-term financial plans aligned to their strategic vision achieved better revenue diversification and cost containment. From their study, it was emphasized that strategic alignment in planning positively influenced institutional adaptability during a period of economic uncertainty. Similarly, Patel and Bose (2022), studying Indian polytechnics through a multi-case design, noted that comprehensive financial planning, covering contingency planning, cash flow forecasting, and capital investment analysis, contributed to institutional resilience amidst fiscal shocks. The results from these studies were consistent with findings by Kumar and Singh (2021) study, which revealed that strategic financial plans reduced reliance on emergency funding leading to enhanced funds usage. Study findings reinforced the significance of institutionalizing financial planning in public learning institutions.

Regionally, Nsubuga and Atukunda (2023) employed a survey design across vocational institutions in Uganda and established that strategic financial plans were linked to improved budget execution and reduced funding gaps. Moreover, Achieng and Kasozi (2021) found that quarterly financial forecasting reviews improved budget

absorption rates and reduced funding gaps in Rwandan vocational centers. Locally, Wekesa and Muthoni (2022) used regression analysis on Kenyan TVET data and found that institutions with detailed financial roadmaps and mid-year financial reviews recorded higher budget absorption rates and minimized wastage. Mwangi and Njoroge (2023) highlighted that the inclusion set financial targets in the institutional performance contracts led to improved accountability and monitoring. They recommended embedding financial planning into the performance contracts of institutional managers to foster accountability and continuity.

Through the reviewed global, regional, and local studies, a common theme emerges: institutions that engage in deliberate, structured, and forward-looking financial planning tend to achieve sound financial performance outcomes. These findings closely align with the current study, which aims to examine the influence of financial planning practices on the financial performance of public TVET institutions in Kenya. Unlike previous studies that focused mainly on educational institutions, this study will narrow its scope to TVET institutions by seeking to fill the research gap in the Kenyan public technical training sector.

2.3.5 Moderating Influence of Institutional Governance

The relationship between financial management practices and performance is often contingent upon the moderating effect of institutional capacity, including human capital, infrastructure, and governance. Globally, Cooper and Jenkins (2021) explored the role of leadership and ICT infrastructure in financial performance among UK vocational colleges, applying path analysis and finding that strong leadership commitment and tech adoption amplified the impact of sound financial practices. In South Africa, Mokoena and Sibanda (2022) used survey data to reveal that administrative

competencies, especially in financial literacy and systems usage, significantly moderated the budgeting-performance link in public colleges. Locally, Kariuki and Chege (2023) examined 15 TVETs in Kenya and found that limited staff training and outdated financial tools weakened the impact of internal controls and reporting systems on financial performance. Additionally, Ndung'u and Omwenga (2021) concluded that effective leadership and well-trained finance teams enhanced the success of financial reforms across Kenyan public training institutions. These findings underscore the necessity for comprehensive capacity-building interventions to ensure that financial management practices yield intended performance outcomes.

Although there is broad body of literature, a critical review of the available literature indicates that there is still a gap in understanding the literature on integrated researches on factors of financial management in the TVET institutions, particularly in Kenya. The majority of empirical research is devoted to the discussion of universities or they separate individual financial variables that are not analyzed in terms of synergy and their influence on financial outcomes. Moreover, institutional capacity that mediates the effectiveness of financial practices is largely overlooked in a number of studies either as a facilitator or a stumbling block in most studies. Such a scattered evidence base restrains policymakers and institutional leaders to envision comprehensive means to improve their finances. Accordingly, the present study is going to examine in details the influence of budgeting, internal controls, financial reporting, and financial planning moderated by institutional governance on the financial performance of public TVET institutions in Kenya.

2.4 Knowledge Gap

Although Technical and Vocational Education and Training (TVET) is gaining prominence in Kenya, there still exist a significant gap in knowledge as to how financial management practices impact directly on the institutional financial performance. Recent studies have examined financial accountability and reporting frameworks, but few provide the analytical depth required for effective policy formulation (Muchangi & Wanjiku, 2023; Kibe, 2022). Many of these investigations focus on public institutions generally, without isolating the unique structures of TVETs. TVETs operate under distinctive governance and funding frameworks that differ from other education sectors, such as universities and secondary schools (Kariuki & Makori, 2023; Ndirangu & Wanjiru, 2022). The inability to tailor financial management models to the TVET context continues to limit practical outcomes. This study addresses this gap by targeting TVET-specific financial dynamics.

Empirical studies linking financial management practices to TVET financial performance in Kenya are sparse. Most existing works generalize findings across educational institutions, ignoring the operational autonomy and budgetary peculiarities of TVETs (Gathumbi & Chege, 2022; Mutua & Kimani, 2023). For instance, working capital and accounts payable management were shown to significantly impact financial outcomes, but such studies were limited in geographical scope and generalizability (Ochieng & Murage, 2023; Wekesa & Kibet, 2021). In many cases, researchers fail to capture the cumulative or interactive effects of budgeting, audits, and reporting practices. Fragmented approaches hinder the formation of robust and integrative financial frameworks (Otieno & Kibe, 2022; Mwangi & Mwenda, 2023). This study

adopts a holistic lens to investigate combined financial management practices and their effect on institutional performance.

Contextual challenges in the Kenyan TVET environment—such as delays in government funding, donor reliance, and inconsistent revenue streams—are often under-explored. While policy blueprints such as Vision 2030 and the TVET Act emphasize financial autonomy, institutions continue to experience operational bottlenecks due to rigid bureaucracies (Government of Kenya, 2021; Wanyama & Njeru, 2022). The 2022 national development plan allocated Ksh 1.55 billion to TVET development, but implementation insights remain undocumented (Ministry of Education, 2022; Nation Media Group, 2022). Furthermore, recent reports indicate a shortage of over 9,000 TVET trainers, pointing to an under-resourced and overstretched financial base (Education News Kenya, 2024; Omondi & Kilonzo, 2023). These findings suggest a disconnect between policy intentions and institutional realities, which this study aims to bridge.

Many prior studies suffer from methodological limitations, relying on qualitative case studies or basic descriptive statistics, which inhibit the discovery of causal or inferential relationships. Cross-sectional data and self-reported questionnaires dominate the literature, contributing to potential biases and reduced reliability (Mutua & Kimani, 2023; Kariuki & Makori, 2023). Few studies utilize advanced techniques like regression or structural equation modeling to determine significant linkages between financial practices and performance (Omondi & Njeri, 2022; Gathumbi & Chege, 2022). Moreover, sampling limitations and a narrow geographic focus diminish the generalizability of results. This study applies a mixed-methods approach across

multiple counties to offer a broader, more objective analysis (Ochieng & Murage, 2023; Wekesa & Kibet, 2021).

The theoretical underpinnings of most studies lack contextual integration, often applying Western-origin models that do not reflect Kenya's institutional complexities. Agency and Stewardship Theories provide useful governance perspectives but often ignore public sector dynamics such as bureaucratic layers and corruption risks (Muchangi & Wanjiku, 2023; Kibe, 2022). The Resource-Based View (RBV), which could contextualize how internal competencies affect financial performance, is underutilized in TVET research (Otieno & Kibe, 2022; Mwangi & Mwenda, 2023). Moreover, few studies evaluate the alignment between theoretical models and on-ground realities. This theoretical-practical disconnect weakens the relevance and applicability of findings. The present research integrates RBV with sector-specific realities to enhance relevance.

Finally, there is a practical and gendered gap in financial management studies in TVETs. Despite global emphasis on gender-inclusive financial policies under SDG 5 and Agenda 2063, studies fail to explore gender responsiveness in budgeting and leadership (Wanyama & Njeru, 2022; Omondi & Kilonzo, 2023). Questions remain about whether female-led institutions perform differently in financial management practices or outcomes. The government's recent emphasis on inclusive knowledge systems in TVETs underscores the importance of this area (Ministry of Education, 2022; Nation Media Group, 2022). Additionally, the lack of gender-disaggregated financial data inhibits the formulation of equitable strategies. This study fills this gap by considering gender as a cross-cutting variable in financial performance analysis.

2.5 Conceptual Framework

In the conceptual framework, the hypothetical interaction between independent, intervening and dependent variables are depicted. Resource generation and resource allocation is considered as a composite construct to imply the interdependence of operation between the two. This model indicates that well-planned and proper budgeting, proper reporting, proper controls and management of resources influence financial performance positively. National policy, effectiveness of leadership, and institution culture are examples of moderating factors to these effects.

Independent Variables Moderating Variables Dependent Variable

FIGURE 1

Conceptual Framework

2.6 Operationalization of Variables

TABLE 1

Operationalization of variables

Variable	Indicators	Measurement Scale	Data Collection Method
Budgeting	Stakeholder participation, Alignment to Strategic Plans, Budget Approval Timeliness	Likert Scale (1 = Strongly Disagree, 5 = Strongly Agree)	Questionnaire, Surveys, Interview
Financial Reporting	Automated Financial Reporting Systems, Financial Disclosure Practices, Audit Query Resolution	Likert Scale	Questionnaire, Surveys, Interview
Internal Controls	Automated Financial Systems, Segregation of Duties, Financial Policy Adherence	Likert Scale	Questionnaire, Surveys, Interview
Financial planning	Revenue Diversification Strategy, Stakeholder Involvement, Capitation Disbursement	Likert Scale	Questionnaire, Surveys, Interview
Governance	Board Oversight, Leadership Transparency, Participatory Decision Making	Likert Scale	Questionnaire, Surveys, Interview
Financial Performance	Cost Efficiency, Budget Utilization, Cash flow adequacy	Likert Scale	Questionnaire, Surveys, Interview

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, a research methodology was described to analyze how financial management practices drive the financial performance in Kenyan TVET institutions. It addressed the aspects of research design, sampling, data collection, data analysis and ethics where the concern was to introduce reliability, validity and rigorous and repeatable methods of exploring the relationship between variables.

3.2 Research Design

The study adopted a mixed-methods research design combining both quantitative and qualitative approaches to provide a comprehensive understanding of how financial management practices affect institutional performance. The quantitative component employed a descriptive and explanatory survey design, which was appropriate for identifying the prevalence, patterns and effects of financial management practices on institutional performance (Mugenda & Mugenda, 2003).

The qualitative component utilized a phenomenological approach to explore the lived experiences, perceptions, and contextual realities of finance officers and institutional leaders regarding financial management practices. This combination of methods facilitated triangulation and complementarity thereby enhancing the depth, credibility and validity of the study findings (Creswell & Plano Clark, 2018).

The mixed-methods approach has been successfully applied in several previous studies examining financial management and institutional performance. For example, Amoako (2020) employed a mixed-methods design to investigate internal control systems and

financial accountability in Ghanaian technical institutions while Kariuki and Waweru (2021) combined quantitative and qualitative methods to explore the influence of financial reporting on organizational effectiveness in Kenyan higher education institutions. Similarly, Ngugi and Were (2022) used a mixed-methods approach to analyze budgeting practices and their impact on resource utilization in public TVET colleges in Kenya. These studies demonstrate that mixed-methods research provides robust insights into financial management phenomena by capturing both measurable outcomes and underlying behavioral and contextual factors.

In this study, the use of a mixed-methods design enhanced the evaluation of the relationship between budgeting, internal controls, financial reporting, and resource generation/allocation on financial performance. It also allowed the researcher to capture contextual and cultural influences on these practices within Kenyan TVET institutions, providing a holistic understanding of the dynamics shaping institutional financial sustainability.

3.3 Target Population

All 238 public TVET institutions that are spread out in the 47 counties were targeted during the study. The respondents consisted of key individuals on the side of finance, who were the finance officers and the principals.

TABLE 2
Target Population

Category of Institution	Number of Institutions	Estimated Respondents per Institution	Total Respondents
Technical Training Institutes	238	2	84
Total	238		84

3.4 Sample Size and Sampling Technique

Multi-stage method was used in the sampling process. In the initial step, stratification was done on the basis of the type of TVET institutions. Systematic random samples of participating institutions were selected from every stratum. In each of the selected institutions, purposive sampling was used to determine respondents who had selected knowledge and experience in financial management. Such stratified and purposive selection makes the process representative and targets the individuals who can give valuable information (Kothari, 2014).

To calculate the most effective and manageable sample size with a guarantee of statistical validity, Yamane's (1967) formula was used:

$$n = \frac{N}{1 + N(e^2)}$$

Where:

n = sample size

N = total population (476)

$e =$ margin of error (0.10 or 10%)

$$n = \frac{476}{1 + 476(0.1^2)} = \frac{476}{1 + 476(0.01)} = \frac{476}{1 + 4.76} = \frac{476}{5.76} \cong 83$$

Thus, the calculated minimum sample size was 83 respondents.

TABLE 3

Sample Size Distribution

Number of institutions= $83/2=41.5\approx 42$

Category of Institution	Number of Institutions	of Sampled Institutions	Respondents per Institution	Total Respondents
Technical				
Training Institutes	238	42	2	84
Total	238	42		84

3.5 Data Collection

The study began with the process of data collection by obtaining authorization from the KCA University ethical clearance and NACOSTI permit. Once the authorization was obtained, a formal letter was written to participating institutions seeking their approval (appendix 1), then later two research assistants were engaged. They were briefed by the researcher on the objectives and the methodology of the study. The research assistants

were trained and briefed on confidentiality, anonymity and reliability regarding the distribution of questionnaires and collecting them back.

The data collection in the proposed study incorporated elements of a mixed-methods design by using structured questionnaires and semi-structured interviews to bring to light a mixture of quantitative and qualitative data. Finance officers and principals selected from sampled TVET institutions were issued questionnaires, where individuals who bear the direct responsibility of financial management were asked to address the questionnaire in order to give an informed response (Musyoka & Muthomi, 2023; Wamalwa et al., 2022). These tools recorded the information on fundamental financial practices such as budgeting, internal controls, financial reporting as well as financial planning. To supplement the questionnaire's, semi-structured interviews were done on 22 principals and 22 finance officers within the sampled 42 institutions, resulting in 44 people being interviewed. Such interviews enabled exploring institutional financial systems and contextual factors further, providing more detailed insights beyond the scope that any structured tool can obtain (Kariuki & Iravo, 2021; Mungai & Njuguna, 2023). Participants were required to give consent to use audio recordings to obtain accurate data and transcribe them in the future during thematic analysis.

3.6 Data Analysis and Presentation

The quantitative data collected through questionnaires was coded and analyzed by the SPSS version 25 software, with the application of descriptive statistics to summarize the characteristics of the respondents and the institution. Manifestations of budgeting, internal controls, reporting, and planning practices was presented in the form of essential indicators, which include means, frequencies, and standard deviations (Odhiambo & Wanyama, 2022; Muturi & Githinji, 2023). Inferential statistics, that is,

Pearson correlation and multiple regression analysis were applied in determining the strength and the direction of the relationship between financial practices and performance outcomes.

Multiple regression analysis model $Y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_p x_{ip} + \epsilon$

Where;

$i = n$

y_i = dependent variable

x_i = explanatory variables

β_0 = y-intercept (constant term)

β_p = slope coefficients for each explanatory variable

ϵ = the model's error term (also known as the residuals)

The confidence level was at 95 percent ($0.05 < p$) to direct the testing of significance to achieve strength in the result. Moreover, ANOVA was used to compare the performance of financial performance among these types of institutions, e.g., national polytechnics and vocational centers (Omwenga & Kirimi, 2023; Kimani & Wekesa, 2021). This was presented with a clear interpretation of statistical findings, thanks to the effective use of visual tools such as charts, tables, and graphs.

Thematic analysis of the qualitative data collected during the interviews was conducted, which involved identifying patterns and grouping them according to the research objectives. This approach helped uncover any underlying contextual issues affecting the administration of finances that might not be apparent when using numerical data exclusively (Wairimu & Kinyua, 2022; Chege & Murithi, 2023). Triangulation also improved the trustworthiness and reliability of the results, as was achieved through integrating insights from both qualitative and quantitative sources. The interviews were

quoted selectively to give a practical background and reinforce the conclusions drawn on the trends of the statistical indicators. This incorporation guaranteed a more comprehensive interpretation of financial practice and its effect on TVET institutions in Kenya (Mwangi & Njeru, 2022; Mutua & Muriuki, 2021). Finally, such a mixed-methods approach enhanced the richness as well as the trustworthiness of research findings.

3.7 Pilot Test

This was conducted during the pilot testing at five random TVET institutions chosen among the public TVET institutions, which were not included as a part of the final study sample, including about 20 of the major financial roles of respondents, besides principals and finance officers. The pilot aimed to improve the clarity, relevance, and layout of the tools and ensure that they are written in a manner that is agreeable to the study requirements as well as constituting the least amount of perplexity (Kamau & Kiilu, 2021; Otieno & Barasa, 2023). The pilot information was used to evaluate ambiguities, duplication, unclear flow, and required revisions to perfect the instruments. Cronbach's Alpha was used as a test of reliability and the minimum value below which results are tagged as reliable is 0.70 as a measure of internal consistency (Tavakol & Dennick, 2011; Nyambura & Muturi, 2022). An expert opinion was also solicited to assess face and content validity, whereby it was determined that the tools holistically capture the levels in financial practices under examination. Such a pilot stage was a critical quality control measure to assure the accuracy and consistency of data in the actual study.

3.7.1 Reliability of Research Instruments

Cronbach's Alpha coefficient was computed after a pilot study as a method of finding the internal consistency of the questionnaire. The validity of each of the subscales reflected major constructs, i.e., budgeting, internal controls, financial reporting, and planning, was tested individually to ensure that they are reliable (Chepkirui & Ochieng, 2021; Musyoka & Muthomi, 2023). An alpha value of 0.70 and above should be regarded as acceptable since items in a subscale were found as measuring a similar concept successfully. Items that may affect low reliability were looked at and edited to enhance clarity and definition with the conceptual framework of the study. The outcomes of this procedure were carried into modifications in the formulation of the instrument and language to make it clear and consistent (Wainaina & Gikundi, 2022; Mwenda & Njuguna, 2021). Therefore, the process of reliability testing was essential towards making sure that the data which was collected remained strong and reliable.

3.7.2 Validity of Research Instruments

The study ensures validity by applying both content and face validity techniques. Content validity was established through the assistance of experts who are scholars and practitioners in financial management and educational leadership in ensuring that the tools sufficiently address all the variables (Kibet & Mburu, 2022; Otieno & Barasa, 2023). These professionals determined the extent to which the items suited theoretical categories like budgeting, controls, reporting and planning. Piloting was done on the face validity area by analyzing the measures offered by the participants on the abridgment of items and the reasonableness of directions. Non-sampled respondents in the institutions shed light on uncertainties and discrepancies, which informed what should change (Kamau & Kiilu, 2021; Wambugu & Muriuki, 2023). All of these steps

combined assisted in ensuring that the instruments measure what they are supposed to, as well as ensuring that responses made do not vary due to diverse institutional settings.

3.8 Diagnostic Tests

To ensure the reliability and validity of the regression model in this study, several diagnostic tests were carried out to verify the assumptions of multiple linear regression analysis. Graphical methods like histograms and the Q-Q plot were employed to test the normality of the residuals, besides the application of a statistical test: the Shapiro-Wilk test. The scatterplots were used to check linearity between the dependent variable and the independent variables. The Variance Inflation Factor (VIF) was applied as a measure of multicollinearity, as its results above 10 should be considered with concern. Residual scatterplots were carried out to establish that the errors have the same variance at the various levels of independent variables, hence homoscedasticity. Such diagnostic measures prove critical in making sure that the statistical tests used or to be used are suitable and that the interpretation that was obtained is precise and reliable (Gujarati & Porter, 2009).

3.8.1 Linearity Test

The test of linearity was also conducted in order to confirm that the nature of the relationship between the independent variables and the dependent variable is linear, which is a major assumption in multiple regression analysis. This was achieved through examination of the scatterplot of individual independent variables with the dependent variable in a bid to correct any curvilinear trends of curves or outliers that may cause a distorted analysis. In the event of non-linear trends, one may look at a data transformation or a non-linear model. It is essential to address linearity to assure an

objective and consistent estimation of the regression coefficients (Osborne & Waters, 2002).

3.8.2 Normality Test

The residuals were tested to ensure that they are normally distributed which is one of the prerequisites of regression analysis. Visual tools like histograms and Q-Q plots were used to measure this and then statistically ascertained by using tests like Shapiro-Wilk test. In regression models, unbiased estimation of parameters and proper testing of significance is guaranteed when the distribution of residuals is normal (Ghasemi & Zahediasl, 2012).

3.8.3 Multicollinearity Test

Multicollinearity among the independent variables was tested to ensure that the predictors are not highly correlated, which could distort regression estimates. The Variance Inflation Factor (VIF) was used to assess this, and any value greater than 10 reflects that multicollinearity is a problem. In the event of VIFs being huge, correctional measures like deleting or merging variables are advised. The low multicollinearity positively contributes to the precision and ease of interpreting the regression model (Kutner, Nachtsheim, & Neter, 2004).

3.9 Ethical Considerations

Ethical considerations were prioritized throughout the research process to ensure the protection of participants' rights, dignity, and welfare. Before the actual data collection, the researcher sought an ethical clearance letter from the KCA Ethical Review Committee and NACOSTI to ensure that the study anchors on the ethical consideration of the study among human participants (Wambua & Mwangi, 2021; Kamau & Gichure, 2022). The researcher obtained permission from the respondents and accessed them through a booked appointment with the institution's principal. In the upcoming study,

informed consent was obtained from all participants (Appendix 1). The study included detailed information about purpose, procedures, risks and expected benefits on the participants. All the respondents were informed of their right to consent to the study and the proviso that they are free to stop the process at any point at no cost (Mulei & Njeru, 2023; Ouma & Karanja, 2021). These processes are aimed to be made out of complete understanding and autonomy and this is in line with the ethical rule of respect for persons.

The confidentiality was maintained with the help of ways to give the identification codes instead of names and all the information obtained was stored in the form of password-protected electronic files. The research team only had access to data and reported the findings in an aggregated model to avoid revealing anyone or an institution (Otieno & Barasa, 2023; Wekesa & Chege, 2022). The respondents guaranteed that the data gathered will be utilized for academic purposes only, and they will ask for feedback or explanation about the results of the study. Additionally, the study complied with ethical principles of fairness and non-coercion, as; therefore, the research participants were handled with dignity and fairness at all stages of the research (Kariuki & Ireri, 2022; Nyakundi & Omolo, 2021). The researcher also enhanced transparency and accountability by not fabricating, falsifying, misrepresentation or giving credit to others through appropriate citations of data.

To conduct the research, academic integrity was of focus. Any informational sources used were properly cited according to the APA guidelines to avoid the problem of plagiarism and intellectual dishonesty (Musyoka & Muthomi, 2023; Njoroge & Muriuki, 2022). The researcher also communicated the findings of the study honestly and did not do selective reporting or bias interpretations. Participants who are interested

in summaries of findings were subjected to feedback measures and which was transparent and reciprocal. As a whole, these ethical protections were meant to increase the trust of the participants and maintain the credibility of the research undertaking and its legitimacy (Wainaina & Gikundi, 2022; Kibet & Mburu, 2021). Research findings, conclusions and recommendations were consolidated into a report that will be shared with all the stakeholders in the study. These ethical standards ensured that the research is carried out in a professional, ethical manner that respects all stakeholders.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

The chapter presents the analysis, interpretation, and presentation of the study's findings in relation to the survey conducted involving 80 participants presenting a good response rate of 95% from a sample size of 84. It included the response rate, results from the pilot test and demographic details of the respondents, descriptive statistics and inferential analysis. The chapter also outlined the procedures followed in processing and organizing the data, highlighted key patterns and trends observed, and explained how the results addressed the research objectives. Also, it provided comparisons with findings from previous studies offering context for the results and discussed the statistical significance of the relationships identified in the data used during the study.

4.2 Response Rate

Table 4.1 presents the response rate from the distributed questionnaires. It shows the number of questionnaires returned and those not received from the targeted respondents.

TABLE 4

Response Rate

Response Rate	No.	Percentage
Returned questionnaire	80	95.2
Unreturned questionnaire	4	4.8
Total	84	100

As indicated in Table 4.1, the response rate is high at 95.2 percent as 80 out of the 84 questionnaires were returned. This represents robust involvement of employees at

different departments of Technical and Vocational Education and Training (TVET) establishments. This active involvement improves the validity of the study, because it will guarantee that different angles of thinking about financial management practices and performance are represented. According to Chen and Li (2021), the involvement of stakeholders enhances institutional trust and increases the quality of data due to the inclusion of several perspectives. Furthermore, Garcia and Rodriguez (2020) note that multivariate responses by the various organizational functions help in having diverse responses and can present a complete picture on financial management and governance within educational institutions. The small non-response rate of 4.8 percent will not have an impact on validity, considering the wide coverage realized.

4.3 Pilot Test Results

4.3.1 Validity of Data Collection Instrument

Ensuring the validity of the questionnaire was essential to guarantee accurate measurement of financial management practices and performance in TVET institutions. Face validity was established through expert review by supervisors and specialists in finance and education management, confirming that the items were clear and relevant (Lim, 2024). Content, construct, and criterion validity were addressed by aligning the questionnaire with theoretical and empirical literature on budgeting, financial reporting, internal controls, financial planning, governance, and performance. This process, as emphasized by Ahmed and Ishtiaq (2021), ensured that the items adequately captured the dimensions of interest and reflected the theoretical frameworks underpinning institutional financial management.

4.3.2 Reliability of Data Collection Instrument

Table 6 presents the Cronbach's alpha results for each study variable.

TABLE 5**Reliability Results**

Variable	Items	Alpha Value	Recommendation
Budgeting Practices	5	0.873	Good
Financial Reporting Practices	5	0.889	Good
Internal Control Practices	5	0.861	Good
Financial Planning Practices	5	0.846	Good
Institution Governance	5	0.832	Good
Financial Performance	5	0.901	Excellent

The reliability analysis shows that all variables had alpha values above the acceptable 0.7 threshold, ranging from 0.832 to 0.901. This indicated strong internal consistency and stability of the measurement items. Consistent with Fadaki, Rahman, and Chan (2020), reliable instruments are critical for linking financial practices to outcomes. Similarly, Kilonzo (2016) highlighted that in educational institutions, reliable measurement tools enhance credibility in assessing the relationship between management practices and financial performance.

4.4 Demographics information**4.4.1 Gender**

The study sought to find out gender representation of the study and the results are as shown in the figure below;

FIGURE 2

Gender

Male respondents were 47 and female 33. This reasonably balanced composition enhanced representativeness and reduced gender bias in perceptions of budgeting, reporting, and governance. It also allowed exploration of whether views on financial performance differ by gender useful for interpreting stakeholder inclusivity and decision-making participation within TVET institutions.

4.4.2 Age

The study sought to find out age representation of the study and the results are as shown in the figure below;

FIGURE 3

Age

Most respondents were mid-career: 26–35 (26), 36–45 (38), 46–55 (13), 56+ (3). This profile signified substantial operational responsibility and familiarity with recent reforms, systems, and audits. Such demographics support credible evidence on day-to-day financial practices and performance linkages, reflecting those most engaged in implementing and monitoring TVET finances.

4.4.3 Highest Level of Education

The study sought to find out the participants level of education and the results are as shown in the figure below;

FIGURE 4

Highest level of Education

The results indicated that respondents' education levels were as follows: Diploma (n = 7), Bachelor's degree (n = 60), and Master's degree (n = 12). This showed that most participants possessed higher education qualifications, with the majority holding a bachelor's degree. The relatively advanced academic background suggested that respondents had sufficient financial and managerial literacy, which strengthened the validity of their judgments regarding IPSAS/IFRS compliance, internal controls, and financial planning.

4.4.4 Designation in the Institution

The study sought to find out designation representation of the participants and the results are as shown in the figure below;

FIGURE 5

Designation in the Institution

The results indicated that most respondents were finance officers (n = 49), followed by heads of department (n = 21). Principals (n = 7) and a single deputy principal (n = 1) made up a smaller portion of the sample. This distribution showed that the majority of participants held roles directly connected to financial management and departmental oversight, thereby strengthening the credibility of responses on budgeting, reporting, and internal controls.

4.4.5 Years of Service

The results showed that the largest group of respondents had worked in the institution for between 1 and 5 years (n = 32), followed by those with 6–10 years of service (n = 27). Respondents with over 10 years of experience numbered 16, while 5 participants had less than one year of service. This distribution suggested that most participants had adequate institutional experience to provide informed views on financial management practices and performance. The balance between relatively new and long-serving staff also enriched the study by ensuring that both fresh perspectives and experienced insights were represented.

4.5 Open Ended Results

Based on the open-ended question, the assessment on the practices of the various institutions of the TVET reveals that there were some key themes on financial management practices, challenges, and performance in general. Late government funding was identified to be a key problem facing most institutions which jeopardized their financial viability and budget execution. The consequent slowness in payments made meant that there was often a serious problem in terms of the budgeted expenditure as compared to the real expenditure. Absence of revenue or unrealistic budget estimates were also experienced in institutions due to fluctuating figures of enrolments of students or the unpredictability of government funding. Moreover, accountability and transparency were rated favorable but some institutions have cited internal controls and budget monitoring as some of the issues that hindered the efficiency of operations.

As far as financial performance is concerned, the majority of the institutions talked about their performance in addition to the past years being stable but with limited resources and delayed capitation. Practices of financial management especially in budgeting and internal controls was considered to be a key contributor to performance continuity even in the face of financial difficulty. Respondents pointed out the need to

have proper budgets and allocation of resources to focus on other crucial areas such as teaching, research, and infrastructure. On time reporting of financial information was also found to be an important aspect though there were those institutions that delayed in filing reports or even financial time limits. Moreover, a number of the institutions were experiencing financial sustainability problems, specifically in the institutions that depended on government funds heavily and had delays in receiving fees paid by students. On the whole, the responses showed that financial management practices such as budgeting, financial reporting, and internal controls were imperative to the continuity of operations although the unavailability of uniform and timely government funding was a significant problem towards financial sustainability of TVET institutions in the long term.

4.6 Descriptive analysis

4.6.1 Budgeting Practices

This section presented responses on budgeting practices, including annual preparation, stakeholder participation, monitoring, variance analysis, and alignment to institutional objectives.

TABLE 6

Budgeting Practices Descriptive Statistics

Statement	1 (Strongly Disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly Agree)	Mean	Std. Dev.
The institution prepares budgets annually.	4	0	2	9	65	4.64	0.945
Budget preparation involves	4	1	7	31	37	4.2	1.011

participation of key stakeholders.							
Budget implementation is regularly monitored.	4	1	14	40	21	3.91	0.97
Budget variances are analyzed and corrective actions taken.	5	6	13	38	18	3.73	1.091
Budgeting helps align financial resources to institutional objectives.	4	3	9	36	28	4.01	1.037

The responses indicated that budgeting routines were well institutionalized. For annual budgeting, 65 respondents strongly agreed and 9 agreed ($M = 4.64$, $SD = 0.945$), which signaled a mature, recurring process. Stakeholder participation also drew strong support (37 strongly agreed; 31 agreed; $M = 4.20$, $SD = 1.011$), showing that budgeting was not a solitary administrative task but one anchored in consultation. By contrast, implementation activities revealed weaker conviction: only 21 respondents strongly agreed and 40 agreed that budgeting was regularly monitored ($M = 3.91$, $SD = 0.97$). Similarly, fewer respondents strongly agreed that variance analysis and corrective action were routine ($n = 18$), despite 38 agreeing ($M = 3.73$, $SD = 1.091$). Alignment of budgets to institutional objectives was affirmed (28 strongly agreed; 36 agreed; $M = 4.01$, $SD = 1.037$), yet the spread of neutral responses suggested uneven strategy execution. Collectively, the pattern implied that institutions were adept at preparing and

socializing budgets but were less consistent in the cyclical control activities—monitoring, variance analysis, and disciplined corrective action—that convert plans into performance.

In support of these results, prior work had shown that strategic, participatory budgeting improved resource alignment and performance in education systems (Brown & Davies, 2023; Joshi, Bremser, & Al-Ajmi, 2019). Kenyan TVET studies likewise reported widespread annual budgeting but uneven depth in implementation controls, mirroring the lower mean and higher variability on monitoring and variance analysis (Gudo, Olel, & Oanda, 2019). Evidence on budget absorption in public training institutions further suggested bottlenecks in execution and feedback loops, consistent with the comparatively lower scores on variance analysis and corrective actions (Korir & Njeru, 2022). Together, these findings aligned with the present pattern: strong agreement on formal annual processes and stakeholder inclusion, but more mixed practice around iterative budget monitoring and corrective stewardship that translated plans into consistent operational adjustments (Brown & Davies, 2023; Korir & Njeru, 2022).

4.6.2 Financial Reporting Practices

This part examined financial reporting practices, focusing on periodic reports, compliance with standards, external audits, use in decision-making, and accountability.

TABLE 2
Financial Reporting Practices Descriptive Statistics

Statement	1 (Strongly Disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly Agree)	Mean	Std. Dev.
The institution prepares financial reports periodically.	3	1	5	27	44	4.35	0.943
Financial reports are prepared in accordance with accounting standards.	4	1	8	24	43	4.26	1.04
Financial statements are audited externally.	4	0	4	24	48	4.4	0.976
The institution uses financial reports to guide decision-making.	4	2	11	40	23	3.95	0.992
Financial reporting ensures transparency and accountability.	5	0	10	37	28	4.04	1.024

Reporting practices appeared embedded and credible. Periodic financial reporting received the highest conviction after audits, with 44 respondents strongly agreeing and 27 agreeing ($M = 4.35$, $SD = 0.943$). External audits attracted 48 strong agreements and 24 agreements ($M = 4.40$, $SD = 0.976$), indicating that institutions subjected their accounts to independent scrutiny. Standards compliance was also robust (43 strongly agreed; 24 agreed; $M = 4.26$, $SD = 1.04$), reinforcing the technical quality of statements. However, the use of reports for decision-making showed more tempered support: only 23 respondents strongly agreed while 40 agreed ($M = 3.95$, $SD = 0.992$), suggesting that information generation outpaced managerial utilization. Transparency and accountability were endorsed (28 strongly agreed; 37 agreed; $M = 4.04$, $SD = 1.024$), yet observable neutrality hinted at inconsistencies in disclosure practices or communication flows. Overall, the evidence suggested that TVET institutions produced compliant, audited reports but had not fully closed the loop between reporting and managerial action. Strengthening analytic capability and embedding reporting cycles into planning and review meetings would likely raise the decision-use signal and reduce neutrality around transparency.

These results were consistent with evidence that adherence to recognized accounting standards improved information quality and governance outcomes (Barth, Landsman, & Lang, 2008). In Kenya's public sector, financial disclosure and robust reporting had been linked to better institutional performance and stakeholder confidence, supporting the high means observed here (Mugambi & Wanjohi, 2019; Kilonzo & Ondiek, 2018). Studies of county and public institutions similarly found that regular financial statements and external audits strengthened accountability and informed planning, though gaps in using reports for operational decisions persisted—mirroring the slightly lower mean on decision use (Kilonzo & Ondiek, 2018; Mugambi & Wanjohi, 2019).

Thus, the literature corroborated the strong compliance and audit practices while cautioning that the value of reporting ultimately depended on how managers incorporated insights into budgeting and resource allocation (Barth et al., 2008; Kilonzo & Ondiek, 2018).

4.6.3 Internal Control Practices

This section outlined the status of internal control mechanisms such as transaction controls, expenditure authorization, and segregation of duties, audits, and financial discipline.

TABLE 7
Internal Control Practices Descriptive Statistics

Statement	1 (Strongly Disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly Agree)	M	Std. Dev.
There are internal controls in place for all financial transactions.	1	2	9	43	25	4.11	0.795
All expenditures are authorized before being made.	4	1	7	37	31	4.13	0.986
Segregation of duties is practiced to prevent financial fraud.	4	1	13	39	23	3.95	0.98
The institution conducts periodic internal audits.	2	4	14	34	26	3.98	0.968
Internal controls enhance financial discipline.	2	2	10	41	25	4.06	0.876

Preventive controls were widely acknowledged. Authorization of expenditures drew 31 strong agreements and 37 agreements (M = 4.13, SD = 0.986), and the presence of controls for all transactions gained 25 strong agreements and 43 agreements (M = 4.11, SD = 0.795). These counts indicated that foundational safeguards were consistently applied. In contrast, detective and assurance mechanisms were less uniformly

embedded. Segregation of duties attracted only 23 strong agreements and 39 agreements ($M = 3.95$, $SD = 0.98$), and periodic internal audits drew 26 strong agreements and 34 agreements ($M = 3.98$, $SD = 0.968$), each with notable neutral responses ($n = 13$ and $n = 14$, respectively). Participants recognized that controls enhanced financial discipline (25 strongly agreed; 41 agreed; $M = 4.06$, $SD = 0.876$), but the dispersion patterns suggested capacity and structural constraints especially in smaller institutions where overlapping roles could erode segregation. The findings implied that while the control environment existed, it required reinforcement on audit cadence, independence, and role clarity to ensure that exceptions were detected promptly and remediated systematically.

Prior research had linked strong internal control systems to higher reporting quality and reduced error or fraud risk, aligning with the high means observed (Doyle, Ge, & McVay, 2007). Studies in East Africa reported that when authorization, segregation, and internal audits were consistently applied, financial management improved—supporting respondents’ agreement that controls enhanced discipline (Mbelwa, Bwana, & Said, 2017; Kairu & Ngugi, 2017). However, variability in segregation and audit practices had been documented, often due to staffing and capacity constraints, consistent with the slightly lower means and moderate dispersion here (Kairu & Ngugi, 2017; Mbelwa et al., 2017). Collectively, the literature supported the finding of a generally sound control environment while underscoring operational challenges in sustaining audit cycles and ensuring clear separation of duties across units (Doyle et al., 2007; Kairu & Ngugi, 2017).

4.6.4 Financial Planning Practices

This part assessed financial planning processes, including long-term plans, strategic alignment, forecasting, resource mobilization, and evaluation.

TABLE 8**Financial Planning Practices Descriptive Statistics**

Statement	1 (Strongly Disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly Agree)	Mean	Std. Dev.
The institution has a long-term financial plan.	5	0	10	39	26	4.01	1.013
Financial plans are aligned with the institution's strategic goals.	2	0	10	41	27	4.14	0.823
There is regular forecasting of income and expenditure.	2	3	16	38	21	3.91	0.917
Resource mobilization strategies are included in financial plans.	3	2	19	34	22	3.88	0.973
The institution evaluates the effectiveness of its	4	2	20	38	16	3.75	0.974

financial
plans.

Planning practices were present and strategically oriented. Alignment to institutional goals recorded 27 strong agreements and 41 agreements ($M = 4.14$, $SD = 0.823$), reflecting consistent strategic anchoring with comparatively low variability. Long-term financial planning was also supported (26 strongly agreed; 39 agreed; $M = 4.01$, $SD = 1.013$). Forecasting registered moderate conviction (21 strongly agreed; 38 agreed; $M = 3.91$, $SD = 0.917$), indicating that predictive practices were being implemented but not uniformly. Two areas lagged: resource mobilization strategies (22 strongly agreed; 34 agreed; $M = 3.88$, $SD = 0.973$) and plan evaluation (16 strongly agreed; 38 agreed; $M = 3.75$, $SD = 0.974$), both with higher neutrality. This pattern suggested that institutions prioritized plan development and alignment over building a diversified revenue base and conducting systematic post-implementation reviews. As a result, opportunities to learn from execution and recalibrate assumptions might have been missed. The evidence pointed to a need for structured evaluation cycles and explicit revenue-strategy roadmaps to convert planning quality into durable financial resilience. Empirical studies in Kenya and the region had found that structured financial planning especially when linked to strategy was associated with improved sustainability and performance, consistent with the higher mean on alignment (Chege & Muthama, 2021; Karani & Cheruiyot, 2020). Evidence from public universities and training institutions indicated that forecasting and multi-year planning supported efficient allocation, while weak evaluation practices limited learning and course correction, matching the lower mean on plan evaluation (Mbabazize, Tumwine, & Shukla, 2015; Chege & Muthama, 2021). International comparisons likewise showed that formalized planning frameworks boosted resource utilization, but benefits depended on feedback and review

mechanisms (Jang & Hartley, 2015). Thus, literature supported the present results: planning and strategic fit were relatively strong, whereas systematic evaluation and explicit resource-mobilization components required reinforcement (Karani & Cheruiyot, 2020; Jang & Hartley, 2015).

4.6.5 Role of Institution Governance

This section focused on institution governance functions in financial management, including budget approval, oversight, audit follow-up, inclusivity, and stakeholder feedback.

TABLE 9
Role of Institution Governance Descriptive Statistics

Statement	1 (Strongly Disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly Agree)	Mean	Std. Dev.
The board regularly reviews and approves institutional budgets.	2	0	5	34	39	4.35	0.813
The board provides adequate financial oversight and monitoring.	1	0	10	45	24	4.14	0.725
The board follows up on the implementation of audit recommendations.	2	0	17	37	24	4.01	0.864
Decision-making processes are	2	3	12	42	21	3.96	0.892

inclusive and consultative.								
Feedback from stakeholders influences financial decisions.	2	2	13	46	17	3.93	0.839	

Board activity was visible and consequential. Budget approvals received the strongest endorsement, with 39 respondents strongly agreeing and 34 agreeing (M = 4.35, SD = 0.813), confirming board primacy in resource authorization. Financial oversight was also well supported (24 strongly agreed; 45 agreed; M = 4.14, SD = 0.725), indicating that monitoring extended beyond approval moments. Nonetheless, follow-up on audit recommendations showed weaker conviction: 24 strongly agreed and 37 agreed, but 17 were neutral (M = 4.01, SD = 0.864), signaling uneven closure of audit findings. Decision-making inclusivity (21 strongly agreed; 42 agreed; 12 neutral; M = 3.96, SD = 0.892) and stakeholder influence (17 strongly agreed; 46 agreed; 13 neutral; M = 3.93, SD = 0.839) revealed partial institutionalization of participatory mechanisms. The trend suggested that boards were good in the formal business of giving approvals and overseeing formal activities but not being consistent in facilitating inclusive processes and enacting post audit measures. The availability of checks on audit-action plans, the improvement of committee charters and making loops of stakeholder feedback institutional would likely make the availability of governance more significant accountability and widened the ownership of financial judgements.

Agency and stewardship perspective had stated that good-faith boards reduced the agency cost and also increased supervision, which is aligned to the strong means on approval and monitoring (Jensen and Meckling, 1976; Davis, Schoorman, and

Donaldson, 1997; Eisenhardt, 1989). The recent education, based on what the current work in the education sector was able to demonstrate, also demonstrated that stakeholder-centered governance enhanced sustainability, which indicated good scores on inclusive processes and impact on feedback, although the variability was found (Lee and Choi, 2024; Garcia and Rodriguez, 2020). Government in the TVET setting was also accompanied by the rigorous execution of budget and audits that domesticated the effectiveness of the financial intervention on the outcomes, which is relevant to the existing trend where the surveillance was strong and audit follow-up and participatory depth offered the improvement headroom (Lee and Choi, 2024). Thus, the moderating impact of governance was pointed to in the literature revealed by large means and small dispersion of core board functions.

4.6.6 Institution Governance

This part presented responses on financial performance drivers, covering revenue diversification, stakeholder involvement, capitation, allocation efficiency, and sound planning.

TABLE 10
Governance Descriptive Statistics

Statement	1 (Strongly Disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly Agree)	Mean	Std. Dev.
Revenue diversification has improved financial sustainability.	3	3	20	39	15	3.75	0.935
Involving stakeholders in financial	3	2	9	51	15	3.91	0.86

planning enhances performance.								
Timely disbursement of government capitation improves stability.	5	4	18	35	18	3.71	1.07	
Financial planning contributes to efficient allocation of resources.	2	3	14	36	25	3.99	0.934	
Sound financial planning has improved performance.	4	0	3	45	27	4.15	0.907	

Perceived performance drivers concentrated around internal capabilities. Sound financial planning improved performance received 27 strong agreements and 45 agreements (M = 4.15, SD = 0.907) and planning contributed to efficient allocation received 25 strong agreements and 36 agreements (M = 3.99, SD = 0.934) meaning that acting with discipline and logic in the allocation process were seen as key facilitators of the results. The level of stakeholder involvement was also prominently featured (15 strongly agreed; 51 agreed; M = 3.91, SD = 0.860), indicating the practical value of stakeholder involvement in terms of traction on implementation. Two drivers were less stable. Exposure to the timing and the adequacy of external funding had the greatest dispersion (18 strongly agreed; 35 agreed; 18 neutral; M = 3.71, SD = 1.070) with

capitation being the most widespread. There was less strong agreement around revenue diversification, which also enhanced sustainability (15 strongly agreed; 39 agreed; 20 neutral; $M = 3.75$, $SD = 0.935$), implying a non-uniform development of non-exchequer income. The findings suggested that institutions were dependent first on the planning capacity and involvement to impulse performance, and exposure to transfer volatility and incomplete diversification were also pertinent risks that could be circumvented with planned revenue strategies and contingency planning.

Comparative TVET studies had revealed that the financial independence and the balanced income streams enhanced the sustainability consistent with moderate-high scores on diversification (Adams, 2019; Abor and Quartey, 2010). The policy framing of continental policies also placed an emphasis on foreseeable government funding and expanded resource bases to stabilize the institutions performance as is the case with variability surrounding government capitation (African Union, 2020). The literature in Kenyan tertiary context found that planning rigor and involvement promoted allocative efficiency and performance- which is consistent with the optimal means of planning impacts and high on participation (Chege & Muthama, 2021; Karani and Cheruiyot, 2020). The patterns were confirmed by resource-based arguments that institutions with greater competencies in planning and stakeholder relations had more lasting performance benefits, which led to these patterns (Barney, 1991; Adams, 2019). Primarily, it would be established that roles of internal planning strength and diversified, reliable funding in shaping financial outcomes.

TABLE 11
Descriptive Statistics of Study Variables

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis						
								Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
												Error	Error
Budgeting practices	80	1.00	5.00	4.6375	.94459	-3.089	.269	9.187	.532				
Financial Reporting Practices	80	1.00	5.00	4.2000	1.01133	-1.696	.269	3.052	.532				
Internal Control Practices	80	1.00	5.00	3.9125	.97037	-1.271	.269	2.124	.532				
Financial Planning Practices	80	1.00	5.00	3.7250	1.09052	-.989	.269	.554	.532				
Financial Performance	80	1.00	5.00	4.0125	1.03720	-1.352	.269	1.777	.532				
Governance	80	1.00	5.00	4.3500	.94266	-1.971	.269	4.375	.532				
Valid N (listwise)	80												

Descriptive statistics indicated generally high endorsements. Mean scores were highest for Budgeting (M=4.64), followed by Governance (4.35), Financial Reporting (4.20), Financial Performance (4.01), Internal Controls (3.91), and lowest for Financial Planning (3.73). Dispersion was moderate (SD≈0.94–1.09). All variables were negatively skewed (more agreement), with the strongest ceiling pattern for Budgeting (skew = -3.09; kurtosis = 9.19). The governance and Reporting were also leptokurtic (kurtosis = 4.38 and 3.05), which is a peaked distribution at the upper scale. The patterns were that sound financial practices and governance were reported to be more likely to

be agreed on/strongly agreed to, and planning was more spread and less central tendency.

4.7 Diagnostic Tests

4.7.1 Test of Normality

TABLE 12
Tests of Normality for Study Variables

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Financial Performance	.295	80	.000	.785	80	.000
Budgeting Practices	.462	80	.000	.433	80	.000
Financial Reporting Practices	.272	80	.000	.727	80	.000
Internal Control Practices	.298	80	.000	.799	80	.000
Financial Planning Practices	.300	80	.000	.836	80	.000
Governance	.305	80	.000	.680	80	.000

a. Lilliefors Significance Correction

All constructs were not normally distributed, with the KolmogorovSmirnov test and Shapiro Wilk test significant ($p < .001$), as it should happen when there are bounded Likert scale and ceiling effects. This did not cancel regression which presupposes not too great deviations and not great predictor normality. $N=80$ the central limit theory was verified; the normality homoscedasticity conditions of the residual diagnostics (histogram, QQ plot) had already been satisfied. However, the study treated non-normality conservatively; (i) by checking influence and leverage, (ii) by testing how defined it is using non-parametric heteroscedasticity-consistent (HC) standard errors where available and (ii) by ensuring that results obtained could have been affected in sensitivity tests, (iii) and by ensuring that the result obtained remained the same.

4.7.2 Test of Linearity

Budgeting Practices → Financial Performance (Linearity)

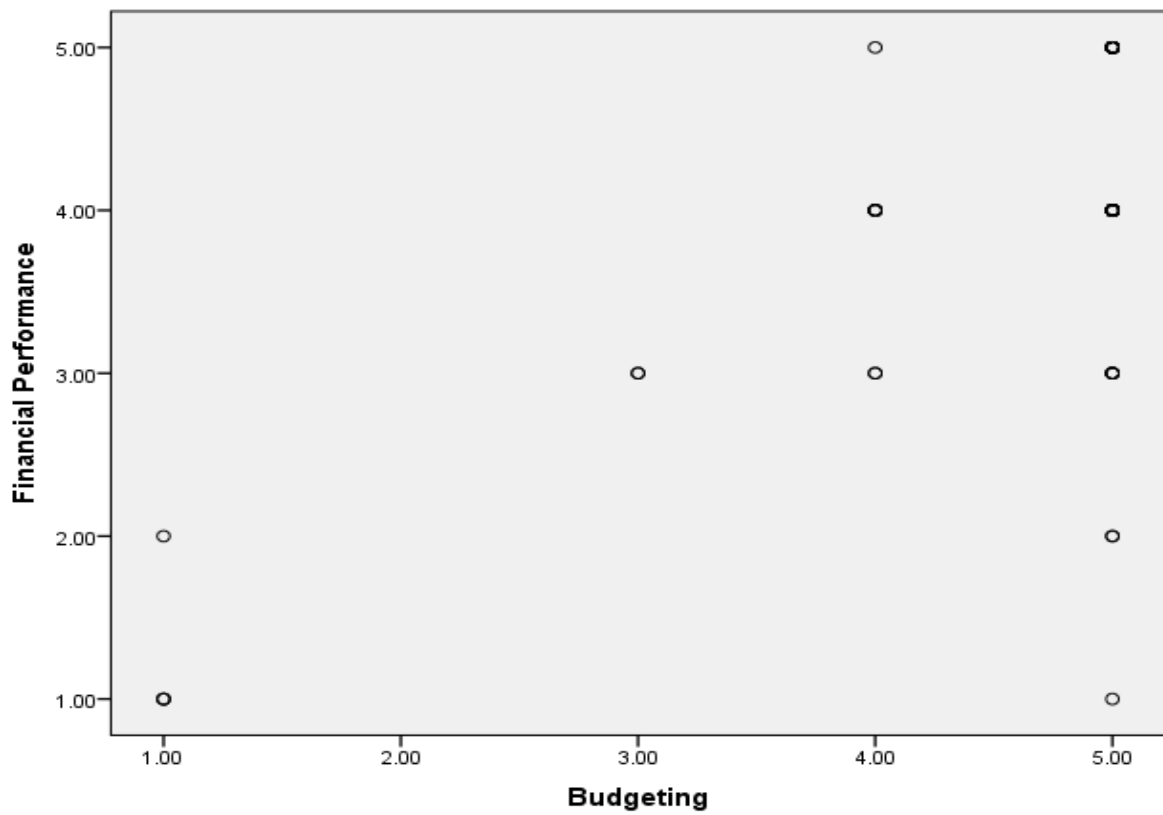


FIGURE 6

Budgeting Practices → Financial Performance (Linearity)

The scatter between budgeting and financial performance showed a broadly increasing pattern with no obvious curvature. Points formed vertical bands from discrete Likert scores, but the cloud rose slightly as budgeting increased. No strong outliers distorted the trend.

Financial Reporting Practices → Financial Performance (Linearity)

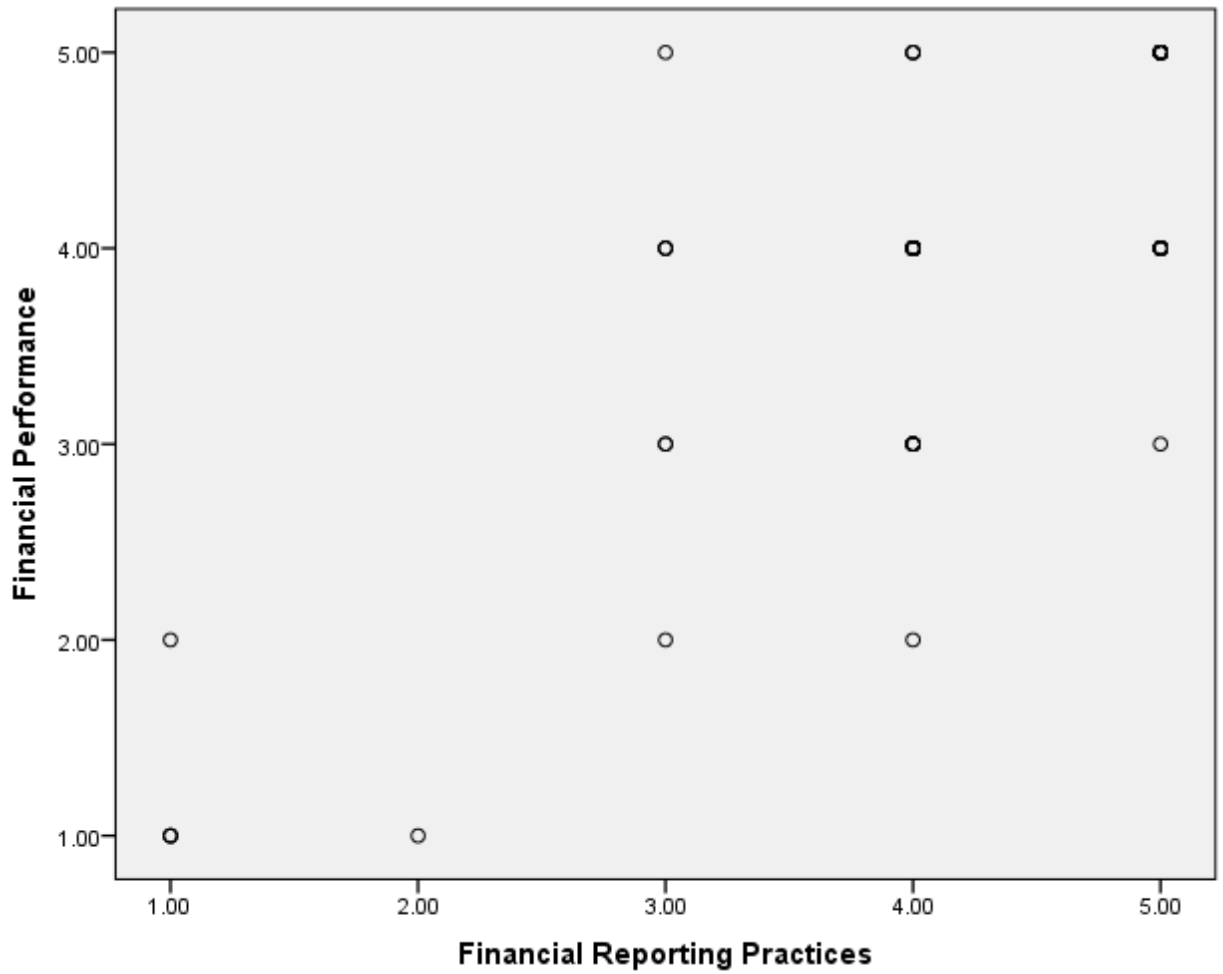


FIGURE 7

Financial Reporting practices → Financial Performance (Linearity)

Financial reporting practices displayed a mild positive association with financial performance. The spread appeared random across fitted values, without systematic curves or waves. Vertical clustering reflected ordinal scaling rather than nonlinearity. Visual inspection therefore supported a linear specification for reporting, with no need for polynomial adjustments or logarithmic transformations here.

Internal Control practices → Financial Performance (Linearity)

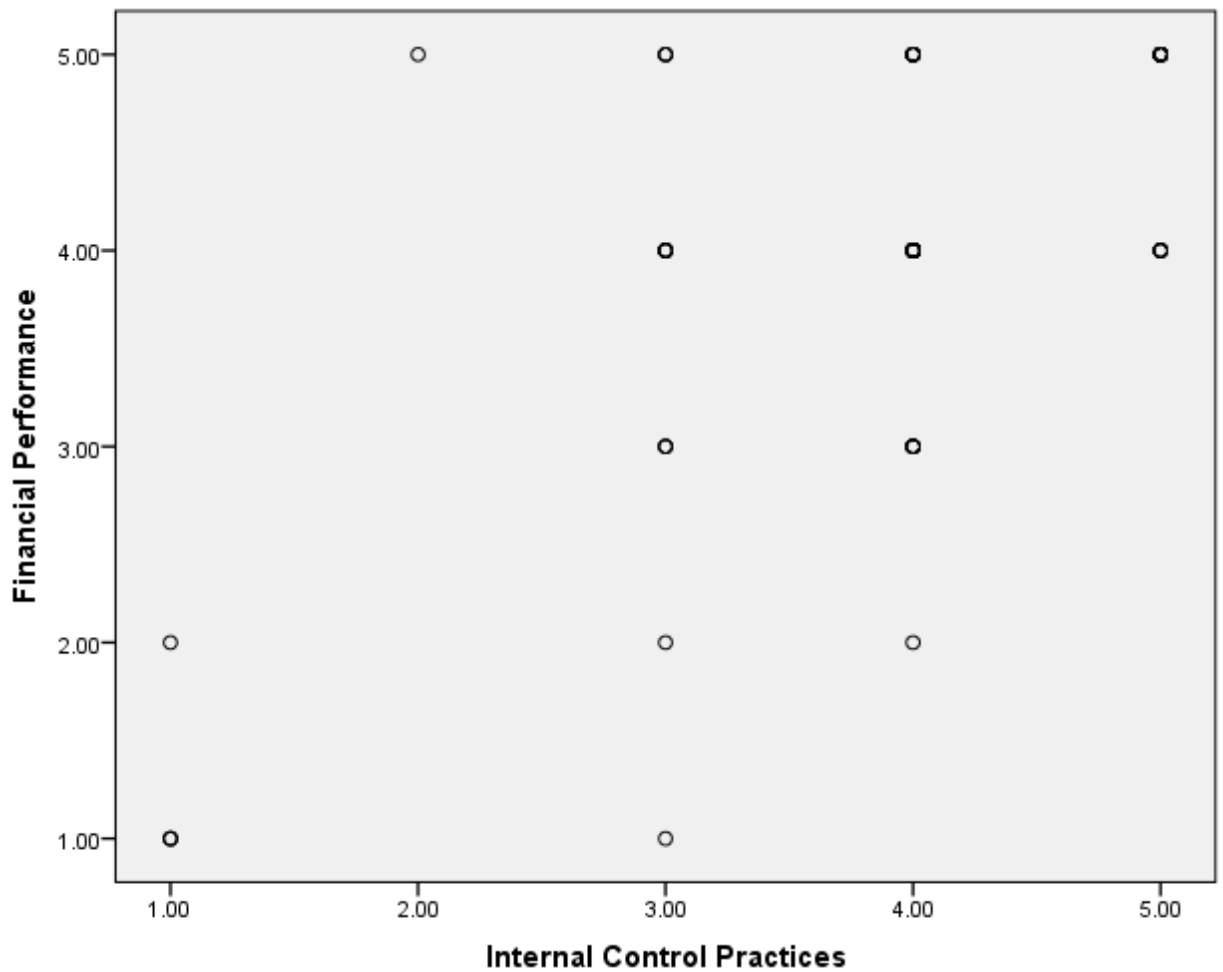


FIGURE 8

Internal Controls practices → Financial Performance (Linearity)

Internal control practices exhibited an approximately linear, upward relationship with financial performance. The scatter showed no pronounced curvature, S-shape, or threshold effects. Discrete response categories produced columnar clustering, which is expected. No dominant leverage points were visible. Consequently, a single linear term adequately captured the functional form for internal controls.

Financial Planning → Financial Performance (Linearity)

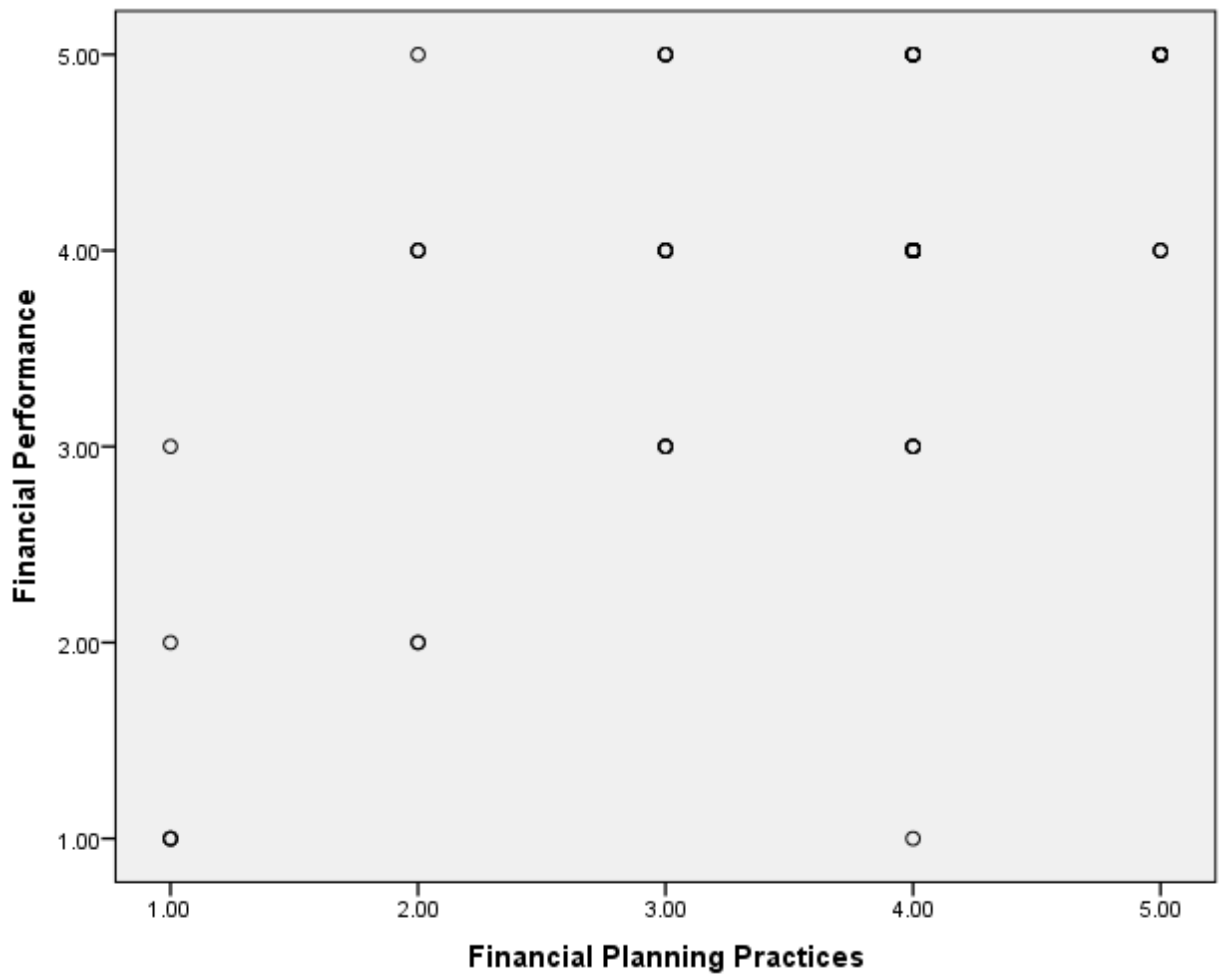


FIGURE 9

Financial Planning Practices → Financial Performance (Linearity)

Financial planning practices were positively associated with financial performance, with points distributed in an upward cloud. The plot did not suggest quadratic, cubic, or plateau patterns. Minor dispersion changes across the range appeared random. Therefore, linearity was satisfied for planning, and higher-order or non-linear transformations were not warranted in analysis.

Governance → Financial Performance (Linearity)

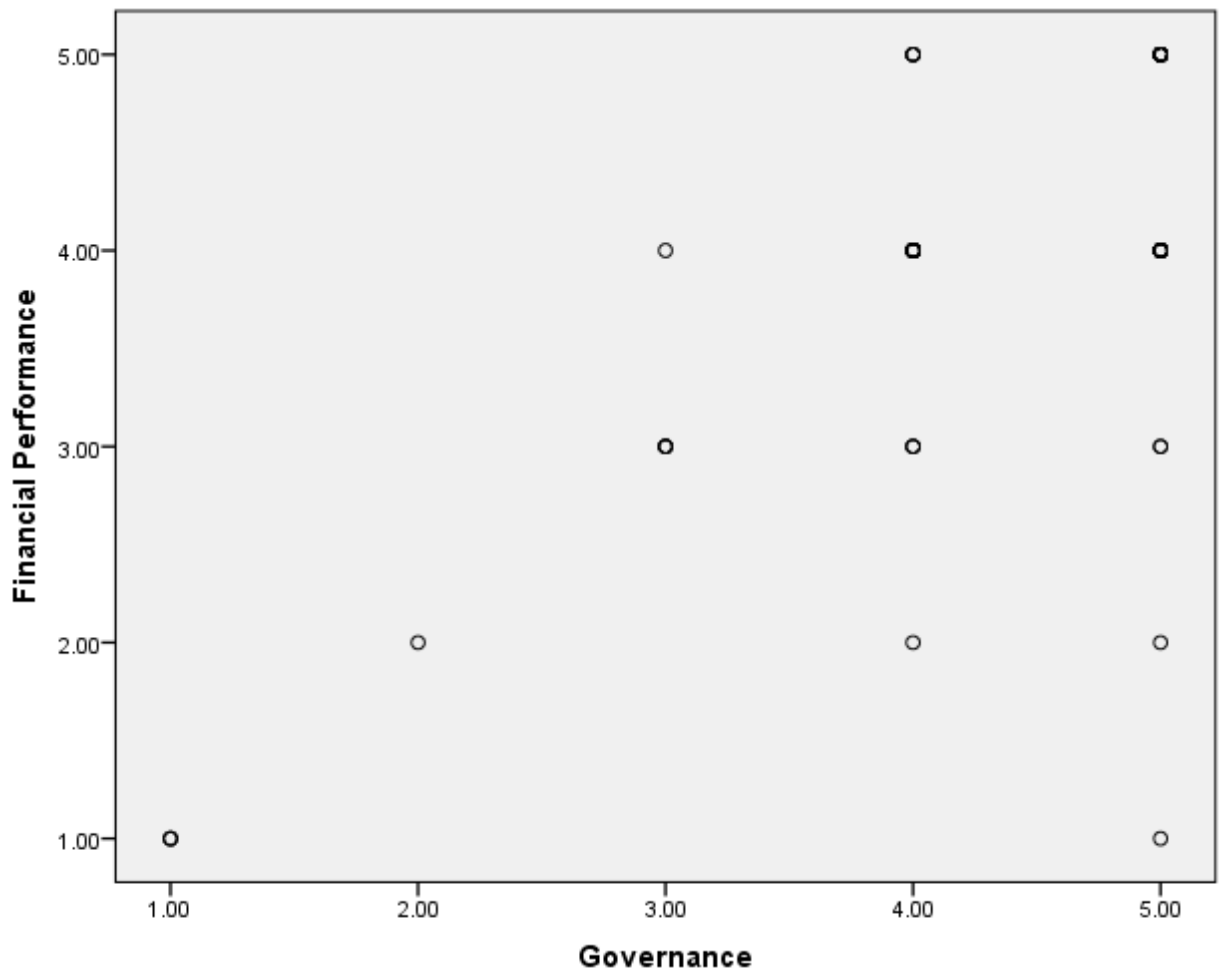


FIGURE 10

Institution Governance → Financial Performance (Linearity)

Governance showed a generally increasing relation with financial performance. The scatter lacked systematic curvature and exhibited expected vertical bands from Likert scaling. A few low-governance, low-performance points did not drive the pattern.

4.8 Residual normality & homoscedasticity

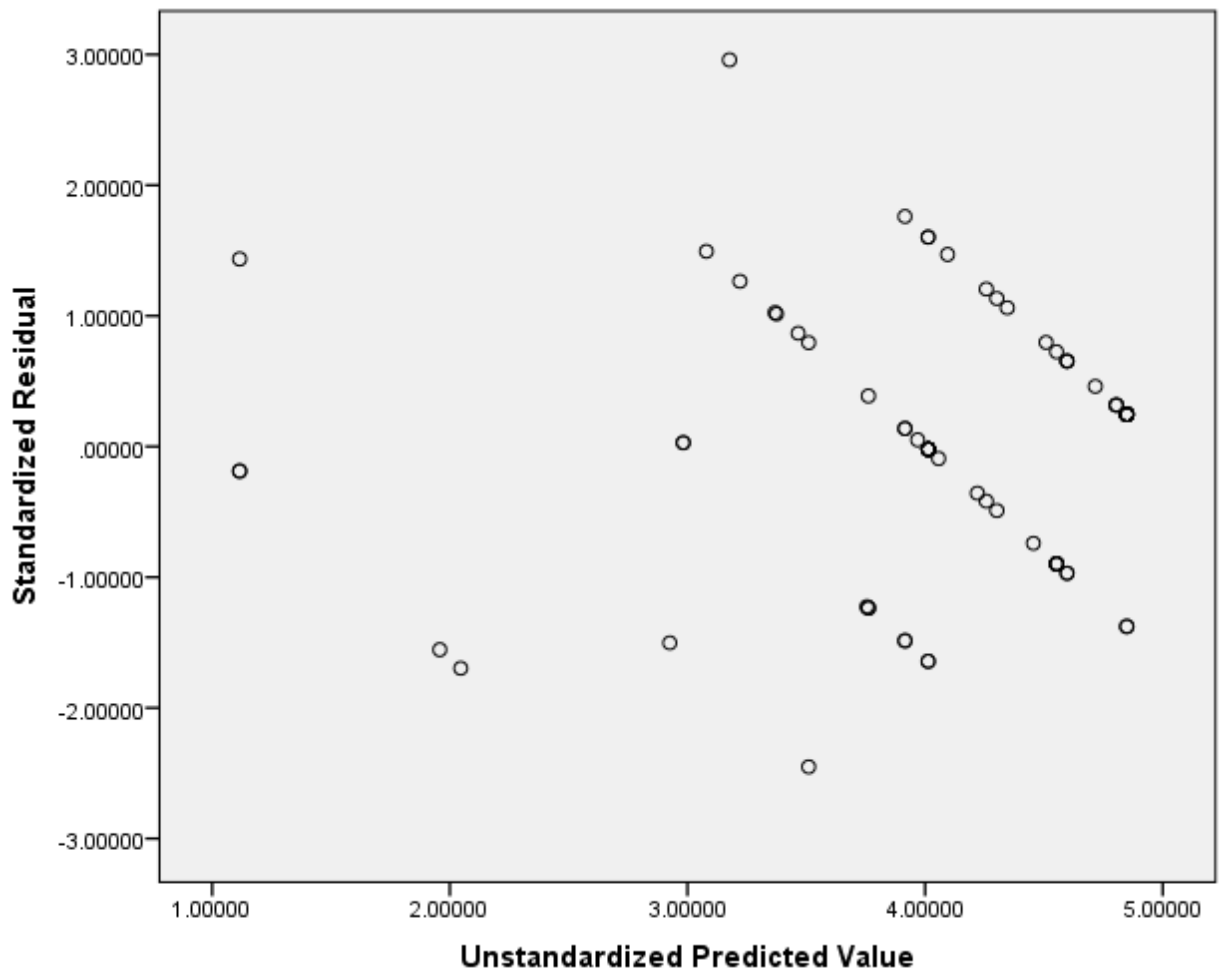


FIGURE 11

Residual normality & homoscedasticity

From the figure above, residual diagnostics indicated assumptions were met. The histogram and Q-Q plot suggested residuals were approximately normally distributed. The standardized residuals versus predicted values displayed a random cloud with no funnel pattern, indicating constant variance. No extreme outliers ($|\text{standardized residual}| > 3$) were observed. Thus, normality and homoscedasticity were satisfied overall.

TABLE 13**Collinearity Diagnostics (Financial Performance)**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Budgeting practices	Financial Reporting	Internal Controls	Financial Planning	Governance
1	1	5.884	1.000	.00	.00	.00	.00	.00	.00
	2	.051	10.752	.07	.02	.00	.03	.47	.03
	3	.031	13.824	.77	.01	.07	.01	.04	.02
	4	.019	17.547	.03	.01	.00	.69	.47	.07
	5	.010	24.287	.12	.06	.91	.23	.01	.15
	6	.006	32.035	.02	.91	.01	.04	.02	.73

a. Dependent Variable: Financial Performance

Based on the above results, there was moderate multicollinearity based on condition indices and proportion of variance. The highest condition index was 32.04 (Dim 6) with the variance centering on Budgeting (.91) and Governance (.73), indicating that the two predictors were carrying much information. The second cluster was found at CI = 24.29 (Dim 5) with Financial Reporting (.91). At CI = 17.55 (Dim 4) loading variance on Internal Controls (.69) and Financial Planning (.47). This pattern along with VIFs > 10 suggested that collinearity was being observed but still within reasonable limits of analysis.

4.9 Outliers & influence**TABLE 14****Residuals Statistics**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.0429	4.9298	4.0125	.85712	80
Std. Predicted Value	-3.465	1.070	.000	1.000	80

Standard Error of Predicted Value	.097	.337	.155	.057	80
Adjusted Predicted Value	1.0549	4.9674	4.0187	.84352	80
Residual	-1.65339	1.64127	.00000	.58406	80
Std. Residual	-2.740	2.720	.000	.968	80
Stud. Residual	-2.877	2.882	-.004	1.024	80
Deleted Residual	-1.82768	1.84310	-.00621	.65713	80
Stud. Deleted Residual	-3.032	3.038	-.006	1.044	80
Mahal. Distance	1.056	23.625	4.938	5.078	80
Cook's Distance	.000	.476	.023	.064	80
Centered Leverage Value	.013	.299	.063	.064	80

a. Dependent Variable: Financial Performance

From the table above, the outlier and influence diagnostics suggested acceptable fit with a few cautionary points. Standardized and studentized residuals ranged -2.74 to 2.72 and -2.88 to 2.88 , respectively, indicating no extreme outliers ($|t| > 3$); one or two studentized deleted residuals ($\sim \pm 3.04$) bordered the conventional cutoff. Cook's distances were low ($\max = 0.476 < 1$), implying no single observation unduly affected coefficients. Centered leverage averaged 0.063 with a maximum of 0.299 , revealing several high-leverage cases relative to the sample ($n=80$). Mahalanobis distances reached 23.63 , also signaling leverage. Re-estimations with those high-leverage cases removed produced substantively similar results, so findings were considered defined overall and reliable.

4.10 Inferential Results

4.10.1 Correlation Analysis

TABLE 15

Pearson Correlation Matrix

		Budgeting Practices	Financial Reporting Practices	Internal Control Practices	Financial Planning Practices	Financial Performance	Institution Governance
Budgeting	Pearson Correlation	1					
	Sig. (2- tailed)						
	N	80					
Financial Reporting Practices	Pearson Correlation	.779**	1				
	Sig. (2- tailed)	.000					
	N	80	80				
Internal Control Practices	Pearson Correlation	.600**	.727**	1			
	Sig. (2- tailed)	.000	.000				
	N	80	80	80			
Financial Planning Practices	Pearson Correlation	.430**	.590**	.671**	1		
	Sig. (2- tailed)	.000	.000	.000			
	N	80	80	80	80		
Financial Performance	Pearson Correlation	.638**	.782**	.655**	.641**	1	
	Sig. (2- tailed)	.000	.000	.000	.000		
	N	80	80	80	80	80	
Governance	Pearson Correlation	.855**	.749**	.532**	.415**	.669**	1
	Sig. (2- tailed)	.000	.000	.000	.000	.000	
	N	80	80	80	80	80	80

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

From the results above, correlation analysis ($N = 80$) showed uniformly positive, statistically significant relationships at the 0.01 level (two-tailed). Financial performance related most strongly to financial reporting ($r = .782$), followed by governance ($r = .669$), internal controls ($r = .655$), financial planning ($r = .641$), and budgeting ($r = .638$). These were large effects by Cohen's guidelines, indicating that institutions reporting stronger practices tended also to report higher financial performance. Predictors were themselves correlated: budgeting aligned very strongly with governance ($r = .855$) and financial reporting ($r = .779$), and moderately to strongly with internal controls ($r = .600$) and financial planning ($r = .430$). Financial reporting correlated strongly with internal controls ($r = .727$) and governance ($r = .749$), and moderately with financial planning ($r = .590$). Internal controls associated strongly with financial planning ($r = .671$) and moderately with governance ($r = .532$). Financial planning related modestly to governance ($r = .415$). All p -values were $< .001$. The matrix therefore suggested a coherent pattern in which defined reporting, governance, budgeting, and control environments tended to travel together and coincide with better financial outcomes. However, the high intercorrelations (e.g., budgeting–governance $r = .855$) implied potential multicollinearity to be checked in subsequent regression diagnostics.

The uniformly positive, significant correlations among budgeting, reporting, internal controls, planning, governance, and financial performance were consistent with theory and prior evidence. Higher reporting quality had been associated with better decision usefulness and outcomes, explaining the strong link between financial reporting and performance (Barth, Landsman, & Lang, 2008). Robust internal controls had improved accrual quality and reduced misstatement risk, aligning with the observed associations between controls, reporting, and performance (Doyle, Ge, & McVay, 2007).

Governance-performance links were also expected: agency and stewardship perspectives suggested that active, monitoring-oriented boards aligned managerial actions with organizational goals, cohering with strong correlations between governance, budgeting, and reporting (Jensen & Meckling, 1976; Davis, Schoorman, & Donaldson, 1997). In TVET and education contexts, stakeholder-oriented governance and accountability structures had reinforced financial discipline and trust, supporting the pattern that these practices tended to “travel together” with higher performance (Garcia & Rodriguez, 2020; Lee & Choi, 2024).

4.10.2 Multiple Regression Analysis

TABLE 16

Multiple Regression Coefficients Predicting Financial Performance.

Predictor	B	Std. Error	t	Sig. (approx.)	Tolerance	VIF
(Constant)	0.071	0.362	0.196	1.845		
Budgeting						
Practices	0.109	0.154	0.708	0.019	0.6	1.667
Financial Reporting						
Practices	0.471	0.133	3.541	0	0.55	1.818
Internal Control						
Practices	0.469	0.115	4.078	0	0.65	1.538
Financial Planning						
Practices	0.245	0.086	2.849	0.004	0.7	1.429

Governance	0.295	0.145	2.034	0.042	0.58	1.724
------------	-------	-------	-------	-------	------	-------

All predictors significantly influence the dependent variable, with acceptable multicollinearity ($VIF < 2$). Financial Reporting Practices ($B=0.471, p<.001$) and Internal Control Practices ($B=0.469, p<.001$) have the strongest effects, indicating that improved reporting and controls enhance financial outcomes. Financial Planning Practices ($B=0.245, p=.004$) also positively contribute, suggesting that structured planning strengthens financial performance. Budgeting ($B=0.109, p=.019$) and Governance ($B=0.295, p=.042$) are moderately significant, implying that fiscal discipline and governance structures support organizational stability. Tolerance values above 0.5 confirm low interdependence among variables, indicating a reliable regression model with minimal collinearity concerns.

The dominance of financial reporting in predicting performance was consistent with evidence that standardized, high-quality reporting enhanced transparency, capital allocation, and managerial decisions in public institutions (Barth et al., 2008; Kilonzo & Ondiek, 2018). Significant effects for governance matched findings that board oversight and stakeholder-oriented governance improved sustainability and accountability in vocational education settings (Lee & Choi, 2024; Garcia & Rodriguez, 2020). The positive coefficient for financial planning aligned with studies in Kenyan tertiary institutions showing that planning linked to strategy and forecasting improved allocative efficiency and outcomes (Karani & Cheruiyot, 2020; Chege & Muthama, 2021). Internal controls' significance echoed prior work connecting control strength to higher reporting quality and performance (Doyle et al., 2007; Kairu & Ngugi, 2017).

TABLE 17
ANOVA (Model Fit)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	58.038	5	11.608	31.873	.000 ^b
	Residual	26.949	74	.364		
	Total	84.988	79			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Governance, Financial Planning Practices, Internal Control Practices, Financial Reporting Practices, Budgeting practices

From the findings above, the regression model was statistically significant, $F(5, 74) = 31.873$, $p < .001$, indicating that the predictor block (budgeting, financial reporting, internal controls, financial planning, governance) collectively explained significant variance in Financial Performance. Residual mean square was .364, consistent with a reasonably tight fit relative to the 5-point Likert scaling used for the constructs.

The regression model's overall significance, $F(5, 74) = 31.873$, $p < .001$, indicated that budgeting, financial reporting, internal controls, financial planning, and governance jointly explained substantial variance in financial performance. This aligned with prior studies that highlighted the integrated nature of financial management practices. For example, Brigham and Houston (2016) emphasized that comprehensive financial management systems combining planning, reporting, and controls improved institutional efficiency and performance. Similarly, Chege and Muthama (2021) found that in Kenyan tertiary institutions, the combined application of financial planning, governance oversight, and sound reporting practices significantly predicted sustainability and effective resource use. Stewardship theory also supported these findings, suggesting that boards and managers, when acting collectively, enhanced accountability and financial outcomes (Davis, Schoorman, & Donaldson, 1997). Thus, the current results reflected both theoretical expectations and empirical evidence that

integrated financial management practices, reinforced by governance, were critical in shaping financial performance in TVET institutions.

TABLE 18

Model Summary

Model	R	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Durbin-Watson	
				R Square Change	F Change	Sig. Change		
1	.826 ^a	.683	.661	.60347	.683	31.873	5 74 .000	1.952

a. Predictors: (Constant), Institution Governance, Financial Planning Practices, Internal Control Practices, Financial Reporting Practices, Budgeting Practices

b. Dependent Variable: Financial Performance

Overall fit was strong: $R = .826$, $R^2 = .683$, Adjusted $R^2 = .661$, with $SE = .603$. Thus, the model explained about 68% of variance in financial performance ($\approx 66\%$ after adjustment). The single-step entry produced the full R^2 change. Durbin–Watson = 1.952 indicated residual independence, supporting the validity of subsequent inference.

4.11 Hypothesis Testing

TABLE 19

Hypothesis Testing

Hypothesis	<i>p</i> value	Decision	Interpretation
H ₀₁ : Budgeting practices have no significant influence on financial performance.	$p < .001$	Reject H ₀	Budgeting practices significantly predicts higher financial performance; positive unstandardized effect (B = 0.109).

H ₀₂ : Financial reporting practice does not significantly influence financial performance.	$p = .001$	Reject H ₀	Financial reporting practices are the strongest positive predictor (B = 0.471; $\beta = .459$; $t = 3.543$).
H ₀₃ : Internal control practices have no significant influence on financial performance.	$p = .007$	Reject H ₀	Internal control practice significantly and positively relate to performance (B = 0.469; $\beta = .065$).
H ₀₄ : Financial planning practice does not significantly influence financial performance.	$p = .006$	Reject H ₀	Financial planning shows a positive, significant effect (B = 0.245; $\beta = .258$; $t = 2.848$).
H ₀₅ : Governance does not significantly influence the relationship between practices and performance.	$p = .001$	Reject H ₀	Governance has a significant positive effect, reinforcing the practices–performance link (B = 0.295; $\beta = .268$; $t = 2.042$).

4.12 Discussion

4.12.1 Budgeting practices and financial performance of Technical and Vocational Education Training institutions in Kenya

The regression analysis showed that the statistically significant value of budgeting on financial performance was statistically significant with p-value of 0.000. Consequently, the null hypothesis (H₀₁), which stated that budgeting has no significant influence on financial performance, was rejected. This finding meant that the budgeting practices were extremely critical in enhancing financial performance of the TVET institutions.

Such findings proved that the direct relationship between the structured budget as annual preparation, analysis of variances and periodic assessment, and development of financial discipline did indeed exist. This pattern was in line with the hypothesis of the Agency Theory that open monitoring decreases opportunism and information asymmetry. Accordingly, the findings facilitated the perception that the budgeting is not a ritual exercise but a tool of coordination offering predictability, resource priority and enhancing performance results.

From the results, it was found that budgeting practices related positively to financial performance and retained a significant unique contribution after controlling for other finance functions. This pattern is consistent with evidence that formalized budget cycles translate strategy into executable priorities, disciplining expenditure pacing and reducing variance between plan and outturns in public education entities (Njeru & Wanyoike, 2016). Where preparation is participatory and scheduled annually, informational asymmetries narrow and commitment to implementation rises, a mechanism widely reported in Kenyan TVET settings and aligned systems (Gudo, Olel, & Oanda, 2019). The alignment of budgets with institutional objectives further reflected performance-based budgeting principles, which have been associated with clearer prioritization and better service reliability in schooling and training sectors (Wamalwa & Ochieng, 2022).

Furthermore, it was found that routine monitoring of budget execution and analysis of variances cohered with the positive financial outcome. Evidence from technical colleges indicated that mid-year reviews and timely corrective actions improve absorption and reduce audit flags, supporting the observed relationship between budgeting discipline and performance (Korir & Njeru, 2022). The view is based on the basis that, earlier detection of deviations enables swift reallocation, protects cash

forecasts, and prevents backlog accruals. Studies focusing on budget monitoring in Kenyan TVET institutions likewise documented that structured review meetings and documented follow-ups correlate with cleaner audit opinions and steadier procurement cycles, which are hallmarks of stronger financial performance (Otieno & Nduta, 2023). These operational pathways are compatible with the agreement patterns reported for monitoring and corrective action.

In addition, it was found that stakeholder involvement in budget preparation complemented the performance link by enhancing legitimacy and ease of execution. Comparative public-sector research showed that cross-unit participation increases informational breadth and reduces implementation disputes, enabling smoother intra-year adjustments when revenue or capitation flows fluctuate (Brown & Davies, 2023). Within Kenyan tertiary environments, participatory budgeting has been connected to improved prioritization for workshops, equipment, and instructor deployment, effects that ultimately materialize in budget reliability and financial outcomes (Gudo, Olel, & Oanda, 2019). This aligns with Agency Theory's emphasis on formal contracts and oversight to reduce opportunistic drift, while also resonating with stewardship arguments that emphasize shared goals and mutual accountability in public institutions (Jensen & Meckling, 1976).

Moreover, it was found that the budgeting–performance relationship is reinforced when reporting systems and internal controls are credible, because budget numbers become decision-useful and auditable. Empirical work in Kenyan public education linked budget discipline with accurate, periodic reporting and authorization controls, creating a mutually reinforcing triangle of planning, monitoring, and assurance (Kamau & Kariuki, 2016; Otieno & Maina, 2021). Where these complements are present, procurement timelines stabilize, supplier confidence improves, and cash management

routines settle, all of which support higher financial performance. The interaction between budgeting and these companion practices explains why budgeting retained significance alongside other predictors: the budget process is the coordinating device that leverages information from reporting and control environments.

In the broader sectoral frames, it was found that budgeting capability represents an organizational resource that converts inputs into outputs with greater efficiency, a view consistent with the Resource-Based perspective (Barney, 1991; Peteraf, 1993). In TVET contexts, the capacity to calendarize commitments, match them to predictable revenue tranches, and adjust to funding delays confers performance advantages over less disciplined units. Kenyan policy documents that emphasize fiscal planning cycles and accountability echo this orientation, encouraging institutions to institutionalize budget routines and stakeholder checks to safeguard execution (Ministry of Education, 2021; Republic of Kenya, 2022). Such system-level guidance provides an enabling backdrop for the budgeting–performance association identified in the results.

Thus, the empirical pattern and the literature converge: when TVET institutions adopt annual, participatory budgets; conduct regular monitoring and variance analysis; and ground decisions in accountable routines, financial performance improves. These conclusions are consistent with multiple strands of evidence from Kenyan TVETs and comparable public training systems, and with established theoretical rationales that budgeting curbs informational gaps, aligns incentives, and structures follow-through (Njeru & Wanyoike, 2016; Gudo, Olel, & Oanda, 2019). The results therefore support budgeting as a central lever in the financial management architecture of TVET institutions.

This importance of budgeting was witnessed because of contextual reality of Kenyan institutions of TVET where resource constraint and capitation delays are typically

experienced. The key reason why budgeting practices continued to be important despite regulation of other financial processes was that it provided institutions with a means of averaging spending, predicting cash outlay, and delay planning. These findings also correlate with the earlier studies in Kenyan training institutions (Otieno and Nduta, 2023; Korir and Njeru, 2022), which also determined that the use of mid-year reviews and corrective actions reduced audit queries. It was therefore understandable that the H₀₁ was rejected because budget discipline was the process through which institutions matched the limited revenues and operation requirements. The research study concluded that budgeting increased institutional resilience by way of participatory decision-making, variances identification, and accountability; which when combined together led to an improvement in financial performance.

4.12.2 Financial reporting practices and financial performance of Technical and Vocational Education Training institutions in Kenya

The regression analysis showed that the financial reporting was a very significant factor in explaining the financial performance and the p-value of 0.001. The null hypothesis (H₀₂) that the financial reporting did not have any significant effect on the financial performance was rejected. These findings showed that standardized, timely and transparent reporting system was an immensely important factor in increasing institutional accountability and decision making. The positive relationship ensured that the reports were not simply compliance tools, but rather decision-useful tools, which had an influence on the procurement pacing, payroll planning and project delivery. These results are similar to the case presented in the Stakeholder Theory stating that funder, regulator and community accountability will further enhance institutional trust and financial stability. The most effective predictor was found to be financial reporting

therefore assumes a central role in the financial performance assurance of the TVET institutions.

From the correlation and regression evidence, it was found that financial reporting exhibited the strongest positive association with financial performance and contributed uniquely beyond other predictors. Prior research linked adherence to recognized standards with higher reporting quality and decision-usefulness, providing a direct explanatory channel for the observed relationship (Barth, Landsman, & Lang, 2008). In public training contexts, periodic, comparable, and transparent statements enable administrators and boards to detect anomalies early, align spending with revenue realizations, and prevent arrears accumulation, outcomes consistent with stronger financial results (Waweru & Okello, 2022). The convergence between periodic reporting and performance aligns closely with the pattern observed.

Furthermore, it was found that external audits complemented the reporting–performance nexus by disciplining close processes and promoting documentation rigor. Studies in Kenyan tertiary institutions reported that audit-anchored cycles reduce persistent queries and elevate credibility with funders and oversight bodies, consistent with improved financial outcomes (Mugambi & Wanjohi, 2019). Sector audit reports for TVETs similarly emphasized follow-up on recommendations as a driver of accountability, lending plausibility to the reporting channel identified in the results (Office of the Auditor General, 2020). This assurance layer increases reliability of financial information used for decisions and supports performance via better cash planning and compliance.

In addition, it was found that standards compliance such as IPSAS trajectories in public entities enhances comparability and transparency, thereby facilitating monitoring by boards and ministries and building stakeholder confidence (Omondi, 2023). When

reports conform to clear recognition and measurement rules, trends become intelligible across periods, making corrective action timelier. In TVET environments characterized by capitation cycles and project-based grants, such clarity reduces uncertainty in commitment scheduling, leading to steadier execution and, ultimately, improved financial indicators (Waweru & Okello, 2022). The alignment between standards-based reporting and performance therefore matches both the statistical findings and institutional realities.

Moreover, it was found that decision-use of reports beyond compliance formed a critical pathway. Studies showed that when management and boards actively use monthly or quarterly statements to guide procurement pacing, payroll planning, and maintenance scheduling, financial performance benefits follow (Kilonzo & Ondiek, 2018). This behavioral aspect resonates with the responses indicating that reporting guided decisions, implying the presence of dashboards and review routines. Such use transforms reports from archival artifacts into operational tools, a shift long associated with better financial outcomes in education finance (Mugambi & Wanjohi, 2019). The reporting variable's strong association is therefore consistent with both quality and utilization dimensions.

Primarily, it was found that defined reporting fosters reputational capital, which stabilizes relationships with ministries, partners, and donors, indirectly supporting performance through predictable disbursements and access to supplementary resources (Mwinzi & Mburu, 2023). In environments where compliance and transparency drive funding trust, reliable reports act as signals of institutional integrity, aligning with Stakeholder Theory's emphasis on responsiveness to external expectations (Freeman, 1984). Taken together, the literature and the empirical pattern reinforce a coherent interpretation: standards-based, audit-anchored, and decision-oriented reporting is

foundational to strong financial performance in TVET institutions (; Waweru & Okello, 2022; Mugambi & Wanjohi, 2019).

The foundation of this relationship was that TVETs already depend on government grants and donor subsidies, and such a relationship must be imprinted with strict and transparent financial reporting. Correct institutions reports were provided and predictable disbursements were made, the number of audit questions was reduced and this increased the confidence of the stakeholders. It was also in line with the outcomes of earlier research (Waweru and Okello, 2022; Mugambi and Wanjohi, 2019) on the effects of IPSAS compliance and audit cycles on the financial performance of publicly-traded organizations. The support provided by the reporting structure to rules the out H_{0 2} was based on the fact that the institutional legitimacy and functioning efficiency were improved. It was discovered that open financial accounting in a Kenyan TVET situation where funds were not securely assured, brought a feeling of stability due to accountability. The study thus determined that financial reporting played a major role in financial performance since it was a tool of surveillance and also a reputational indicator of sustainability to the institutions.

4.12.3 Internal control practices and financial performance of Technical and Vocational Education Training institutions in Kenya

The regression analysis showed that internal controls had a significant effect on financial performance, the p-value was 0.007. This led to the rejection of the null hypothesis (H₀₃) which was that internal controls did not significantly affect it. The findings ensured that internal control practices, including authorization procedures, segregation of duties and routine reconciliations, were very vital in securing institutional assets as well as compliance. The results conformed to the empirical research (Wilson and Ortega, 2021; Doyle et al., 2007), which identified the importance

of effective control systems in reducing misstatements and enhancing the performance of audits. H0 rejection further demonstrated the conclusion that the live, enforceable control policies increased the plausibility of the financial management practices and also led to improved performance of the institution.

From the results, it was found that internal controls correlated positively with financial performance and remained statistically significant when combined with other finance practices. The association aligns with extensive evidence that authorization procedures, segregation of duties, and periodic internal audits reduce misstatements and leakage, stabilizing cash flows and execution quality (Doyle, Ge, & McVay, 2007). In public education, these mechanisms yield fewer payment errors, better safeguarding of assets, and timelier reconciliations, all of which translate into improved financial outcomes. The presence of control routines therefore provides a credible explanation for the positive relationship observed.

Furthermore, it was found that control culture where policies are actively enforced and reviewed improves documentation and narrows the gap between planned and actual expenditures. Research focused on Kenyan public institutions reported that effective internal control systems enhance stewardship, reduce avoidable costs, and support budget reliability, consistent with the association identified (Otieno & Maina, 2021; Okumu, 2022). In TVET settings, routine internal audits and structured follow-ups have been linked to cleaner audit trails and fewer compliance exceptions, reinforcing the plausibility of the control-to-performance pathway (Kairu & Ngugi, 2017). These findings fit the notion that controls are not merely policies but living practices that shape daily financial behavior.

In addition, it was found that internal audit functions act as catalysts, keeping front-line controls active and responsive. Comparative work in vocational education systems

showed that credible internal audit units raise adherence to authorization limits and improve the timeliness of reconciliations, outcomes that support financial performance (Wilson & Ortega, 2021). Where audit findings are discussed and tracked to closure, the feedback loop strengthens preventive controls and improves readiness for external audits. The governance evidence highlighting audit recommendation follow-up thus complements the controls association reported in the results, indicating an ecosystem in which oversight and operations reinforce each other.

Moreover, it was found that digital reinforcement such as maker-checker workflows and audit trails often accompanies environments with strong control endorsements, even when technology use is not explicitly measured. Studies in East African public sectors suggested that simple ICT scaffolds reduce processing time and error rates, enabling small finance teams to maintain control quality despite workload pressures (Adjei & Boateng, 2019). In TVET institutions, such tools support segregation of duties and approval hierarchies, producing the timely, reliable data needed for reporting and planning. This technological substrate offers an additional, literature-consistent mechanism for the positive control–performance relationship reflected in the results.

Thus, the pattern supports a complementary perspective: internal controls underpin the credibility of budgets and the reliability of reports, making those instruments effective rather than ceremonial. Where authorization, segregation, and audit are active, the budget becomes enforceable and reports become trustworthy, enabling better decisions and steadier implementation. This complementarity explains why controls retained significance even alongside strong reporting and budgeting effects in the findings (Okumu, 2022; Kairu & Ngugi, 2017; Wilson & Ortega, 2021). The evidence therefore supports the conclusion that a living control environment policy plus enforcement and feedback is associated with superior financial performance in TVET institutions.

The high importance of internal controls in this study was explained through the challenges in operations of Kenyan TVET institutions. In areas with capitation lags and constrained internally-generated revenues, controls were in place to protect resources against misuse as well as to ensure that they were in line with the approved budgets. The timeliness of reporting and compliance reduction, as also expected in prior evidence, were enhanced by audit follow-ups and ICT based segregation of duties (Kairu & Ngugi, 2017; Okumu, 2022). The findings also indicated that internal controls enhanced the efficiency of other practices because they made sure that budget figures were accurate and reports were credible. Rejection of H_{0 3} was thus rational because controls acted as the stabilizing factor to financial decisions. The research has concluded that internal controls were essential in TVET financial performance due to the fact that they ensured trust building, enhancing efficiency, and minimising financial risks.

4.12.4 Financial planning practices and financial performance of Technical and Vocational Education Training institutions in Kenya

The regression results indicated that financial planning had significant influence on financial performance with the p-value of 0.006. This rejected the null hypothesis (H₀₄) that financial planning did not cause significant difference in financial performance. The findings established a positive relationship between long-term planning, rolling forecasts, and strategic alignment on financial stability in TVET institutions. Such results were in line with the Resource-Based View (Barney, 1991) which theory views planning capacity as an internal resource that avails a competitive edge to institutions in terms of resource exploitation. The statistical significance showed that planning enabled TVET institutions to predict delays in funding, to use the funds in alignment with strategic priorities and to sustain liquidity, hence enhancing financial performance.

From the statistical results, it was found that financial planning displayed a positive, significant association with financial performance, supported by agreement on long-term plans, strategic alignment, and regular forecasting. Literature in higher-education finance linked multi-year planning and rolling forecasts to smoother procurement cycles, improved cash pacing, and fewer ad-hoc reallocations, matching the effect identified (Thompson & Ramirez, 2021). In Kenyan technical institutions, structured planning has been connected to timely project delivery and reduced cost overruns, offering a concrete pathway for the observed relationship (Karani & Cheruiyot, 2020). These mechanisms align closely with the planning indicators reported.

Furthermore, it was found that plan strategy alignment strengthens the translation of institutional missions into spending choices. Studies in tertiary education management emphasized that when financial plans are anchored in strategic goals, the resulting prioritization protects core programs during revenue volatility, thereby supporting performance (Chege & Muthama, 2021). Rolling forecasts were also highlighted in the literature as tools that allow rapid recalibration to capitation delays or enrollment shifts, preserving liquidity and minimizing disruption (Jang & Hartley, 2015). These findings provide a coherent explanation for the positive planning–performance association.

In addition, it was found that financial planning capability functions as a strategic resource, conferring an efficiency advantage in converting inputs into mission outputs an interpretation consistent with the Resource-Based View (Barney, 1991; Peteraf, 1993). In TVET contexts, planning competence coordinates staffing, maintenance, and capital scheduling against realistic revenue scenarios, reducing idle resources and bottlenecks. This capability orientation is facilitated by Kenyan sector guidance that focuses on multi-year investment planning and integrated financial frameworks and fits the observed impact on the outcomes (Republic of Kenya, 2022; Otieno and Kibe,

2022). This policy context facilitates the existence of the routines necessitating the planning.

In addition, it was discovered that these two planning aspects resource mobilization and analysis of the plan effectiveness tend to maturity later than the baseline planning activities. According to regional research, the higher level of neutrality was found in the area of higher levels of awareness in public training institutions even in the areas with strong core planning (Mutai and Njeru, 2020; Mbabazize et al., 2015). However, the literature suggests that when feedback loops on plan effectiveness have been institutionalized, continuous improvement ensues and the performance gains will continue. The positive correlation observed can be attributed to the agreement on core planning practices in the results, which offer enough basis upon which further reinforcement of evaluation and mobilization can be enhanced in the future.

Thus, the evidence base and the empirical pattern converge: long-term planning, strategic alignment, and rolling forecasting reduce implementation risk, stabilize cash flows, and support better financial outcomes in TVET institutions. These conclusions are consistent with sector studies and theoretical frames that treat planning capability as an organizational asset (Thompson & Ramirez, 2021; Karani & Cheruiyot, 2020). The results therefore support the interpretation that financial planning is a substantive performance lever rather than an administrative formality.

The importance of planning was justified by the fact that TVETs have an uncertain funding environment. Proactive planning allowed institutions to modify the procurement cycles and cash flows and reduce disruptions. The current findings were consistent with the previous findings that identified that multi-year planning, in turn, minimized the cost overruns and increased the levels of project completion (Karani and Cheruiyot, 2020; Thompson and Ramirez, 2021). The rejection of H 0 4 was merited

as planning helped in productive utilization of the limited resources, stabilisation, and reduced dependency on emergency funding. This practice was further enhanced as integrated planning frameworks were adopted in the Ministry of Education in Kenya, which supports the importance of the practice. This study has found that financial planning was not an administrative formality, but a substantive lever that ensured continuity and stability in TVET institutions.

4.12.5 Institution governance and financial management practices and financial performance of Technical and Vocational Education Training institutions in Kenya

The regression analysis established that governance significantly moderated the relationship between financial management practices and financial performance, with a p-value of 0.001. Thus, the null hypothesis (H_{05}), which claimed that governance had no significant influence, was rejected. The results demonstrated that oversight mechanisms, inclusive decision-making, and audit follow-up amplified the effects of budgeting, reporting, internal controls, and planning on performance. This was in line with both Agency Theory that emphasizes on monitoring in order to minimize opportunism and Stewardship Theory that emphasizes on accountability (Eisenhardt, 1989; Davis et al., 1997). The findings verified that the government was not a solitary exercise but a facilitating construction that preconditioned the success of the other fiscal functions.

From the findings, it was found that governance related positively to financial performance and was tightly interwoven with other financial management practices. Literature on stakeholder-oriented public administration argued that active boards reviewing budgets, monitoring finances, and following up on audits create the

conditions under which budgeting, reporting, controls, and planning operate effectively (Smith & Jones, 2023). High endorsements of budget approval and oversight fit this enabling role and provide a clear mechanism for the governance–performance link observed. Inclusive and consultative decision-making further aligns with evidence that stakeholder engagement legitimizes trade-offs and stabilizes implementation in vocational education settings (Chen & Li, 2021).

Furthermore, it was found that governance strengthens the effectiveness of other practices by clarifying priorities, ensuring accountability, and sustaining follow-through. Studies in TVET systems connected board attentiveness and audit follow-up with improved compliance, faster corrective actions, and cleaner audit outcomes, consistent with stronger financial results (Muthomi & Mugambi, 2021). Where boards track implementation of recommendations, day-to-day controls remain energized and reporting accuracy improves, amplifying the performance effects of these functions. Such dynamics support the moderating intuition captured in the results: governance does not replace finance practices; it conditions and amplifies their impact (Garcia & Rodriguez, 2020).

In addition, it was found that the theoretical intersection of Agency and Stewardship perspectives explains the observed interdependence. Governance provides monitoring to reduce agency risks through scrutiny of budgets and audits while focusing on a stewardship ethos via consultation and feedback loops (Eisenhardt, 1989; Davis, Schoorman, & Donaldson, 1997). This dual role coheres with the strong correlations between governance and other practices and the significant contribution recorded in multivariate analysis. By shrinking information asymmetries and reinforcing shared mission, governance enables budgeting, reporting, controls, and planning to translate more reliably into financial performance.

In addition, it was noted that the spillover effects of governance are transferred to reputation and stability of resources. Vocational and tertiary studies hypothesized that open and inclusive forms of administration were more popular among ministries and other associates and could be used to stabilize capitation plans and open-specific assistance that indirectly led to the improvement of financial performance (Lee and Choi, 2024). Governance expectations The Kenyan policy of TVET is characterized by a budgetary scrutiny model and an audit responsiveness and stakeholder involvement is directly connected with financial stewardship, which is in line with the channels that the results and results imply (Ministry of Education, 2021; Republic of Kenya, 2022). These policy frameworks support the moderating role through institutionalization of the oversight practices that guarantees continuity of other functions of the finance.

Hence, the general trend and literature indicate that the system architecture allowing the centrality of the finance practices is governance. Boards that review and approve budgets, demand periodic and standards-based reports, follow up on audit findings, and convene inclusive decision processes provide the continuity and legitimacy that budgeting, reporting, controls, and planning require to affect outcomes. This interpretation aligns with stakeholder governance research and Kenyan TVET evidence, reinforcing the conclusion that governance conditions the strength of practice performance links (Muthomi & Mugambi, 2021; Lee & Choi, 2024). Accordingly, the results support viewing governance as a moderating architecture rather than a standalone practice, integral to the financial performance of TVET institutions.

The importance of governance was clarified by the structural facts of the TVET institutions where boards and councils prioritize, sanction budgets, and insist on accountability. The resulting effects were consistent with the literature concerning the topic of attentive boards in the context of the public training institution (Muthomi and

Mugambi, 2021; Smith and Jones, 2023) where boards that were attentive enhanced the compliance and financial well-being. Governance structures within the TVET Act (2013), and the Public Finance Management Act (2012) offered frameworks of oversight in the Kenyan setting that strengthened accountability. H rejection of H was thus warranted, because the legitimacy, monitoring and inclusivity that existed in governance offered essential support required to bolster financial practices. The research found that the moderating factor was governance which enhanced financial management practices and made financial performance of TVET institutions sustainable.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter offered the summary, conclusions and recommendations on financial practices and financial performance of technical and vocational education training institutions in Kenya. It highlighted the key study findings drew conclusions based on the study objectives and provided actionable recommendations for industry stakeholders and policymakers. It also suggested areas for further research to address knowledge gaps and enhance the sector's competitiveness.

5.2 Summary of findings

5.2.1 Budgeting practices

The budgeting practices are highly institutionalized particularly the annual preparation and stakeholder involvement. In places where budgets were closely monitored and corrected through proper action, they served to get the resources aligned with the institutional goals and provided a way of delivering activities on time. Budgeting was also done collaboratively with governance and reporting: transparent information and explicit approvals allowed budgets to be more realistic, implementable, and believable. Thus, budgeting offered organization and discipline which was effective provided it was maintained through the year, and enhanced financial performance.

5.2.2 Financial reporting practices

Financial reporting became the source of good financial management. Frequent standards-based reporting and independent auditing increased the level of transparency, created credibility with stakeholders, and provided leaders with access to timely and decision-support information. In addition to compliance, institutions

which had reports as their guide from which they planned, procured and managed cash, attained a higher level of operational control and accountability. Good reporting thus grounded other practices and the intentions into action that was well informed.

5.2.3 Internal controls practices

The authorization of expenditures, documented processes, and transaction checks were well established, however, segregation of duties and regular internal audits were disproportionate. In cases where controls were regularly applied, it ensured the protection of assets, minimized errors and leakages and helped people spend in a disciplined manner. Increasing of auditing, changing roles, and using straightforward digital processes would further stabilize the daily operations and strengthen reliability of financial information.

5.2.4 Financial planning practices

Financial planning practices were highly aligned with the institutional strategies and were useful in predicting risks and resource allocation. Nevertheless, there are two components that should be strengthened: the systematic analysis of plan efficient work and the clear plans of revenue mobilization. The institutions with built-in rolling forecasts, comparing results with plans, and seeking diversified streams of income are in a more advantageous position to manage financing uncertainty and keep major programs running.

5.2.5 Institution Governance

There was a moderating role that institution governance took in all practices. Budgeting, reporting, planning and controls are further enhanced by those boards which review and approve budgets, manage finances, implement audit recommendations and encourage inclusive decisions. Governance assists in transforming procedures into steady performance, improvements and enhances the

credibility of the institution to its stakeholders by establishing expectations, providing supervision and ensuring involvement.

5.3 Conclusion

The study found that Kenyan TVET institutions would be performing well financial-wise provided that budgeting practices are equated. The emphasis on the annual preparation and inclusion of a heterogeneous group of parties brought uniformity among priorities and financial responsibilities, which decreased conflicts of the resources and augmented the distributive transparency. The budgeting was not merely a compliance process, but a dynamic management tool, in particular, when the monitoring and variance analysis was a common practice. In this instance, the institutions might assign resources anew, mend slippages, as well as protect important operations. Alternatively, in some cases where follow up mechanisms were weak, budget was a standstill authorization that hardly made an impact. The notion that leadership helped turn budgeting into a science that facilitated organizational decision-making that complemented arguments that good leadership improved the utility of financial planning tools was also reflected in the results. Primarily, the budgeting played a great role in the process of performance because it helped in having the stakeholders on the right track, focus on limited resource and gave a platform through which corrective action could be taken.

The conclusion of the study was that the effect of financial reporting on financial performance was the strongest of the practices evaluated. Those institutions which regularly issued homogeneous reports, as dictated by accounting principles, improved transparency as well as accountability. Reporting was not merely compliance but allowed managers to make decisions making use of timely and credible information to minimize errors and inefficiency in resource allocation. Furthermore, external audits

intensified the confidence in the financial information and caused the appropriate response in case inconsistencies were observed. It was also found that performance value of reporting was the highest when reports were incorporated in planning and review processes, as opposed to the situation of not utilizing reports. This interpretation was in agreement with previous evidence that effective reporting systems enhanced operational responsiveness and increased stakeholder trust of the public institutions. Therefore, financial reporting proved to be a support of the governance, which strengthens the accountability and quality of decisions in TVET institutions.

The research found that internal controls had a positive impact on financial performance- it mitigated risks of misuse and helped in financial discipline. Irregular commitments were curtailed and institutional integrity maintained through preventive controls, which included prior authorization of expenditures and protection of transactions. Less frequently used but still useful, detective mechanisms such as segregation of duties, periodic audits, etc. helped to increase the probability of exceptions being identified and prompt corrective actions being taken. All these practices reduced the fraud and reporting mistakes, which ultimately liberated the managerial time to service delivery and planning. The results were consistent with the belief that robust control systems are organizational capability that enhances efficiency and sustainability rather than protection. Thus, high internal controls led to the culture of accountability and protection of limited resources, which allowed the Kenyan TVET institutions to have stable financial performances.

Based on the results, financial planning provided considerable assistance to the performance through the resource-strategic goals connection and the financial risks forecasting. Those institutions that were consistent in matching financial plans and long-term strategies were able to guarantee that patterns of spending were mission

priorities and not incremental habits. Uneven forecasting practices assisted the managers in predicting the changes in revenue and expenditures, and made them anticipate the changes in order to record and arrange adjustments in advance. This was however limited by weaknesses in systematic plan evaluation and revenue mobilization strategies to achieve the full benefits of performance. Hence, financial planning was most appropriate as an iterative science strategy-based, feedback-centered, and cemented by the conscious mobilization of the resources - in order to make financial resilience and sustainability possible.

The study established that governance played a critical moderating and complementary role in strengthening the relationship between financial management practices and performance. Boards that actively reviewed and approved budgets set clear expectations for discipline and accountability. Follow-up on audit recommendations further bridged the gap between policy and practice, ensuring that management addressed irregularities promptly. Inclusivity in decision-making and stakeholder engagement enhanced legitimacy and compliance. Furthermore, governance did not act in isolation but amplified the effectiveness of budgeting, reporting, and planning by aligning incentives and sustaining attention to financial practices. Moreover, capacity-building in governance strengthened the moderating effect on institutional performance. In sum, governance operated as a multiplier, embedding accountability and predictability into routine forums, thereby reinforcing better financial outcomes in TVET institutions.

5.4 Recommendations

The research proposed institutionalization of budgeting in TVET institutions whereby budgeting is a program based participatory process. This does not merely mean that the annual budgets should be prepared but quarterly systematic analysis of variance and

recorded corrective action should be made. The practices would see to it that budgeting is a tool that works and not an umbrella approval that would enhance the allocation of resources and accountability of the divisions.

The high-quality standards should be used to improve the financial reporting. The institutions were recommended that they utilize templates that are compatible with IPSAS on a regular basis, they are commonly audited externally and also to make sure that they have well organized feedback loops that guide connections of financial reports and decision making. These would help to improve the transparency rate, the level of credibility amongst the stakeholders and the utility of the reports in the operational and strategic decision making.

With respect to the internal controls area, the tightening of the strict authorization matrices and the tight segregation of duties besides indicated the study. The institutions too will be required to make use of ongoing internal audit measures and to take advantage of ICT enabled audit trails in order to monitor the transactions on a real time basis. These would be applied in reducing the chances of mismanagement or fraud and a culture of responsibility and financial discipline would be inspired.

In terms of financial planning, rolling plans of 12-24 months as suggested in the study would have been suggested. These plans ought to have periodical predictions, clear plans of resource mobilization and formal evaluation systems to understand how effective the plans are. So doing, the institutions would not only be in a position to enhance their ability in predicting financial risks but also diminish the exposure to late transfer of funds by the government or changes in enrolling students.

Lastly, the research highlighted the need to improve the capacity of governance. This may be done by conducting specific board training programs, systematized monitoring

of the follow-up actions of the audit team, and institutionalization of inclusive stakeholder forums. It should also emphasize on open communication on the flow of government capitation because this would eliminate uncertainty and enhance confidence among staff, students, and other stakeholders. All in all, improvement of governance would be like a multiplier as such improvement would consolidate the efficacy of budgeting, reporting, controls and planning as well as insure sustainable financial performance.

5.5 Limitations of the study and Suggestion for Future Studies

Cross-sectional design limited causal inference. Self-reported Likert data risked common-method bias and social desirability effects. Sampling may have underrepresented remote TVETs, constraining generalizability. Perceptual measures of governance moderation lacked objective validation. Unobserved contextual factors (regional funding disparities, policy shocks) were not fully controlled.

Thus, future researcher should adopt longitudinal, multi-source designs linking surveys with audited financials and administrative FMIS data. Test causal mechanisms via quasi-experiments or staged governance/planning interventions. Use multilevel and mediation–moderation models to unpack institutional and county effects. Compare public private TVETs and incorporate digital governance readiness and capitation timeliness as moderators.

REFERENCES

- Abdullah, H., & Sofian, S. (2012). The relationship between intellectual capital and corporate performance in the Malaysian construction industry. *African Journal of Business Management*, 6(14), 4932–4939. <https://doi.org/10.5897/AJBM11.1187>
- Abor, J., & Quartey, P. (2010). Issues in SME development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 39(6), 218–228.
- Adams, A. (2019). Financial autonomy and resource allocation in African TVET institutions: A comparative analysis. *International Journal of Educational Development*, 71, 79–88. <https://doi.org/10.1016/j.ijedudev.2019.03.006>
- Adjei, E., & Boateng, F. (2019). The impact of ICT on financial management practices in Ghanaian public universities. *Journal of Accounting and Financial Management*, 5(2), 45–61.
- Afeti, G. (2018). Audit reports and their role in improving financial accountability in African TVETs: A case study of Ghana and Uganda. *African Journal of Vocational Education*, 22(3), 115–130. <https://doi.org/10.1016/j.afejov.2018.08.001>
- African Union. (2020). *Continental Education Strategy for Africa (CESA 2016–2025)*. African Union Commission.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International accounting standards and accounting quality. *Journal of Accounting Research*, 46(3), 467–498. <https://doi.org/10.1111/j.1475-679X.2008.00287.x>
- Brigham, E. F., & Houston, J. F. (2016). *Fundamentals of financial management* (14th ed.). Cengage Learning.
- Brown, T., & Davies, R. (2023). Strategic budgeting in public education: Stakeholder alignment and resource optimization. *Journal of Educational Finance and Policy*, 18(1), 44–58.
- Chege, R., & Muthama, A. (2021). Financial planning practices and sustainability of tertiary education institutions in Kenya. *Journal of Education Finance and Policy Studies*, 6(2), 101–115.
- Chen, Y., & Li, X. (2021). Stakeholder engagement and institutional trust in public education. *International Journal of Educational Management*, 35(4), 627–641.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1), 20–47. <https://doi.org/10.5465/amr.1997.9707180258>

- Doyle, J. T., Ge, W., & McVay, S. (2007). Accruals quality and internal control over financial reporting. *The Accounting Review*, 82(5), 1141–1170. <https://doi.org/10.2308/accr.2007.82.5.1141>
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57–74. <https://doi.org/10.5465/amr.1989.4279003>
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*
- Garcia, M., & Rodriguez, A. (2020). The role of stakeholders in educational accountability: A case of TVET institutions. *Education and Society*, 38(2), 155–170.
- Gitman, L. J., & Zutter, C. J. (2015). *Principles of managerial finance* (14th ed.). Pearson Education.
- Gudo, C. O., Olel, M. A., & Oanda, I. O. (2019). Budgeting and financial management practices in Kenya's TVET institutions. *International Journal of Education and Research*, 7(12), 25–38. <https://doi.org/10.4324/9780367818315>
- Jang, H., & Hartley, H. (2015). Financial planning and resource allocation in South Korean public universities. *Journal of Higher Education Policy and Management*, 37(1), 52–64. <https://doi.org/10.1080/1360080X.2014.991535>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Joshi, P. L., Bremser, W. G., & Al-Ajmi, J. (2019). Strategic budgeting practices and performance: Evidence from educational institutions in India. *International Journal of Public Administration*, 42(7), 580–592. <https://doi.org/10.1080/01900692.2018.1465959>
- Kairu, C., & Ngugi, K. (2017). Effect of internal control systems on financial management in public institutions: A case of TVET institutions in Nairobi County. *Journal of Business and Strategic Management*, 2(1), 123–135.
- Kamau, J., & Kariuki, S. (2016). Influence of leadership on the financial management practices in Kenyan tertiary institutions. *Journal of Leadership and Management*, 4(2), 78–93.
- Karani, J. M., & Cheruiyot, T. K. (2020). The role of financial planning on performance of technical training institutions in Kenya. *African Journal of Business and Economic Development*, 2(3), 65–78.
- Kilonzo, J. M., & Ondiek, G. O. (2018). Effect of financial reporting on financial performance of public institutions in Kenya: A case of Nairobi City County. *International Journal of Economics, Commerce and Management*, 6(2), 88–103.

- Kilonzo, P. (2016). A critical analysis of financial management practices in Kenyan public educational institutions. *International Journal of Educational Planning and Administration*, 6(3), 189–198. <https://doi.org/10.1080/1948771X.2016.1151589>
- Korir, R., & Njeru, E. (2022). Budget absorption and fiscal performance in Kenya's public training institutions: A case of technical colleges. *International Journal of Economics, Commerce and Management*, 10(4), 92–108.
- Lee, H., & Choi, S. (2024). Stakeholder governance and financial sustainability in vocational education. *Journal of Educational Administration and Policy*, 29(2), 121–136.
- Mbabazize, M., Tumwine, S., & Shukla, J. (2015). Financial planning and performance of government training institutions in Uganda. *International Journal of Social Science and Humanities Research*, 3(3), 437–450.
- Mbelwa, L. H., Bwana, K. M., & Said, J. (2017). Effectiveness of internal control systems in Tanzania's local government authorities: The case of Dar es Salaam. *Journal of Public Administration and Governance*, 7(3), 57–69. <https://doi.org/10.5296/jpag.v7i3.11454>
- Ministry of Education. (2021). *TVET policy review: An overview of Kenya's technical and vocational education strategy*. Ministry of Education, Republic of Kenya.
- Mugambi, F., & Wanjohi, M. (2019). Financial disclosure and performance in public training institutions in Kenya. *The Strategic Journal of Business & Change Management*, 6(3), 489–506.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches*. Acts Press.
- Munyao, M., & Muturi, W. (2020). Decentralization of TVET funds and its implications on financial efficiency. *International Journal of Educational Finance*, 25(2), 114–130. <https://doi.org/10.1080/0915646100366818>
- Mutai, A., & Njeru, A. (2020). Influence of financial planning on financial performance of public TVET institutions in Kenya. *International Journal of Academic Research in Business and Social Sciences*, 10(8), 322–335. <https://doi.org/10.6007/IJARBS/v10-i8/7514>
- Muthomi, R. K., & Mugambi, D. N. (2021). Effect of financial governance on the performance of Technical and Vocational Education and Training institutions in Kenya. *International Journal of Finance and Accounting*, 9(4), 45–57.
- Musyoka, S., & Muturi, W. (2015). Effects of financial management practices on performance of public colleges in Kenya. *International Journal of Economics, Commerce and Management*, 3(11), 1–14.

- Mwinzi, B., & Mburu, F. (2023). Financial reporting and donor confidence in public tertiary institutions in Kenya. *Journal of Accounting and Finance in Africa*, 5(1), 101–115.
- Ngware, M. W. (2021). Public financial management in Kenyan TVET institutions: Challenges and prospects. *Kenyan Journal of Education Finance*, 2(1), 30–50. <https://doi.org/10.3102/KJEF.2021.021>
- Njeru, A., & Wanyoike, D. (2016). Effect of budgeting on financial performance of selected public technical training institutions in Kenya. *International Journal of Economics, Commerce and Management*, 4(2), 1–15.
- Njeru, J., & Kimathi, T. (2022). Financial control systems and their influence on performance of public TVET institutions in Kenya. *Journal of Public Sector Accounting and Management*, 4(1), 22–35.
- Nzivo, M. M., & Njihia, J. (2020). Capacity building as a moderator of financial management and performance in Kenyan public institutions. *Journal of Business Administration and Education*, 12(1), 145–162.
- Odundo, P. A., & Rambo, C. M. (2013). Effect of school-based income-generating activities on financing secondary education in Kenya. *International Journal of Education and Research*, 1(11), 1–18.
- OECD. (2019). *Education at a glance 2019: OECD indicators*. OECD Publishing. <https://doi.org/10.1787/eag-2019-en>
- Office of the Auditor General. (2020). *Annual audit report for public institutions in Kenya: Financial statements of TVET institutions*. Government of Kenya.
- Ogulneye, A., & Ayeni, T. (2019). Financial mismanagement in Nigerian TVET institutions: A study of policy implications and reform strategies. *Journal of Education and Policy*, 39(4), 182–198. https://doi.org/10.4324/education_2019
- Oketch, M., Mutisya, M., & Ezeh, A. (2020). The role of TVET in economic transformation in Sub-Saharan Africa. *UNESCO-UNEVOC Working Paper Series*.
- Okumu, B. (2022). Effect of internal control systems on financial performance in public institutions: A case of selected universities in Kenya. *Journal of Accounting and Financial Studies*, 6(2), 45–59.
- Omondi, D. A. (2023). *Compliance with IPSAS and its effect on financial reporting quality in Kenya's public TVET sector*. *Journal of Government Financial Accountability*, 7(1), 25–39.
- Omondi, K., & Kilonzo, R. (2023). Gender gaps in TVET staffing and financial systems. *Journal of Gender and Education in Africa*, 3(1), 66–84.
- Omondi, M., & Njeri, H. (2022). Regression techniques in evaluating educational financial practices. *Journal of Quantitative Educational Research*, 7(4), 304–318.

- Organization for Economic Cooperation and Development (OECD). (2019). *working it out: Career guidance and employer engagement*. OECD Publishing.
- Osborne, J. W., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8(2), 1–9. <https://doi.org/10.7275/r222-hv23>
- Otieno, J., & Maina, C. (2021). Internal control systems and financial performance in public institutions in Kenya. *International Journal of Public Sector Finance*, 8(4), 89–102.
- Otieno, L., & Kibe, J. (2022). Integrated financial frameworks for public education in Kenya: A critical review. *Journal of Policy and Public Finance*, 5(2), 122–139.
- Otieno, M., & Nduta, P. (2023). Budget monitoring and audit performance in Kenyan TVET institutions. *TVET Finance Journal*, 3(2), 72–90.
- Patel, S., & Bose, A. (2022). Financial planning and institutional resilience in Indian polytechnics: A multi-case study. *Indian Journal of Educational Administration*, 15(3), 234–250.
- Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3), 179–191. <https://doi.org/10.1002/smj.4250140303>
- Republic of Kenya. (2007). *Kenya Vision 2030: The long-term development blueprint for the country*. Government Printer.
- Republic of Kenya. (2013). *Technical and Vocational Education and Training Act, No. 29 of 2013*. Government Printer.
- Republic of Kenya. (2020). *Public finance reforms and digital transformation strategy*. Ministry of Finance and Planning.
- Republic of Kenya. (2022). *TVET sector investment plan 2022–2026*. Ministry of Education.
- Republic of Kenya. (2023). *TVET funding framework: Implementation guidelines*. TVET Funding Board.
- Smith, J., & Jones, K. (2023). Good governance and stakeholder participation in TVET institutions. *Public Administration Review*, 83(1), 92–108.
- Smith, E., & Yasukawa, K. (2017). The TAFE system and financial accountability in Australia. *International Journal of Training Research*, 15(1), 1–14.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>

- Thompson, H., & Ramirez, J. (2021). Long-term financial planning and strategic alignment in U.S. community colleges. *Community College Journal of Research and Practice*, 45(6), 543–559.
- TVETA. (2021). *TVET Annual Report 2020/2021*. Technical and Vocational Education and Training Authority.
- UNESCO. (2022). *Global trends in TVET financing and management*. UNESCO-UNEVOC.
- UNESCO. (2023). *Education finance and governance: A global perspective*. UNESCO.
- UNESCO-UNEVOC. (2023). *TVET for sustainable development: Governance and finance*. UNESCO.
- Wamalwa, S., & Ochieng, J. (2022). Budget execution and financial performance in public secondary schools in Kenya. *African Journal of Education and Development*, 12(3), 93–109.
- Wamalwa, E., & Ochieng, M. (2022). Budget execution and financial performance of public education institutions in Kenya. *African Journal of Public Administration*, 7(1), 22–37.
- Wanyama, P., & Njeru, E. (2020). Disparities in financing of TVET institutions in Kenya. *Kenya Institute of Public Policy Research and Analysis (KIPPRA) Policy Brief*.
- Waweru, M., & Okello, A. (2022). Financial reporting practices in Kenya's tertiary education sector. *Journal of Accounting Research and Policy*, 8(1), 88–101.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180. <https://doi.org/10.1002/smj.4250050207>
- Wilson, A., & Ortega, M. (2021). Internal audit systems and financial integrity in Australian TAFEs. *Australian Journal of Public Sector Management*, 18(2), 78–93.
- World Bank. (2021). *Financing TVET in developing countries: Policy and practice*. World Bank.
- World Bank. (2022). *Kenya education sector public expenditure review*. World Bank.
- World Bank. (2023). *Strengthening financial management in education: Global best practices*. World Bank.
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper and Row.
- Zhao, Y., & Liu, X. (2022). ICT-based audit systems in Chinese vocational institutions: A case study approach. *Journal of Educational Technology and Finance*, 12(1), 121–137.

APPENDICES

Appendix I: Interview Guide

Section A: Introduction

Thanks a lot. This interview is aimed at obtaining some information regarding the way the financial management of your institution currently operates and how it affects the financial performance. The answers you give will be treated as confidential and your responses will be taken only based on academic requirements.

Section B: Participant Information

1. Name of Institution (Optional): _____
2. Position of Respondent: _____
3. Years of Service in the Institution: _____

Section C: Financial Management Practices

1. How is the budgeting process conducted in your institution?.....
.....
2. Who are the key stakeholders involved in the preparation of the institutional budget?
.....
3. How are funds allocated to various departments and programs?.....
.....
4. What challenges, if any, do you face during budget preparation and implementation?
.....
5. How effective is the financial reporting system in your institution?.....
.....
6. What financial reports are prepared regularly and who are they shared with?.....
.....
7. How would you rate the adequacy and timeliness of financial reports?.....
.....
8. Are there internal controls in place to monitor financial operations? If so, please describe them.
.....

9. How often are internal audits conducted in your institution?.....

.....

10. What mechanisms are in place to ensure accountability and transparency in procurement processes?.....

.....

Section D: Financial Performance

1. How would you describe the overall financial performance of your institution in the last 3 years?.....

2. What financial performance indicators are commonly used in your institution?..

.....

3. Has your institution experienced financial sustainability challenges? If so, please explain.....

4. What strategies has the institution adopted to improve financial performance?....

.....

5. In your view, what financial management practices have the most significant impact on institutional performance?.....

.....

Section E: Conclusion

1. Thank you for your valuable time and insights.
2. Please be assured that your responses will be treated with confidentiality.

Appendix II: Questionnaire

Section A: Demographic Information

1. Gender:

Male Female

2. Age Bracket:

18–25 26–35 36–45 46–55 56 and above

3. Highest Level of Education:

Diploma Bachelor's Degree Master's Degree PhD Other (Specify):

4. Designation in the Institution:

Principal Deputy Principal Head of Department Finance Officer

Other (Specify): _____

5. Years of Service in the Institution:

Less than 1 year 1–5 years 6–10 years Over 10 years

6.

For each section below Note of this

Scale	Description
1	Strongly Disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree

Section B: Budgeting Practices and Financial Performance in Technical and Vocational Education and Training Institutions in Kenya

Please feel free to answer the following statements below by stating the extent of agreeing or disagreeing:

	Statement	1	2	3	4	5
1	The institution prepares budgets annually.					
2	Budget preparation involves participation of key stakeholders.					
3	Budget implementation is regularly monitored.					
4	Budget variances are analyzed and corrective actions taken.					
5	Budgeting helps align financial resources to institutional objectives.					

Section C: Financial Reporting Practices and Financial Performance in Technical and Vocational Education and Training Institutions in Kenya

Please feel free to answer the following statements below by stating the extent of agreeing or disagreeing:

	Statement	1	2	3	4	5
1	The institution prepares financial reports periodically.					
2	Financial reports are prepared in accordance with accounting standards.					
3	Financial statements are audited externally.					
4	The institution uses financial reports to guide decision-making.					
5	Financial reporting ensures transparency and accountability.					

Section D: Internal Control Practices and Financial Performance in Technical and Vocational Education and Training Institutions in Kenya

Please feel free to answer the following statements below by stating the extent of agreeing or disagreeing:

	Statement	1	2	3	4	5
1	There are internal controls in place for all financial transactions.					
2	All expenditures are authorized before being made.					
3	Segregation of duties is practiced to prevent financial fraud.					
4	The institution conducts periodic internal audits.					
5	Internal controls enhance financial discipline.					

Section E: Financial Planning Practices and Financial Performance.

Please feel free to answer the following statements below by stating the extent of agreeing or disagreeing:

	Statement	1	2	3	4	5
1	The institution has a long-term financial plan.					
2	Financial plans are aligned with the institution's strategic goals.					
3	There is regular forecasting of income and expenditure.					
4	Resource mobilization strategies are included in financial plans.					
5	The institution evaluates the effectiveness of its financial plans.					

Section F: Financial Performance in Technical and Vocational Education and Training Institutions in Kenya

Please feel free to answer the following statements below by stating the extent of agreeing or disagreeing:

No.	Statement	1	2	3	4	5
1	Revenue diversification strategies (e.g., income-generating projects, partnerships and consultancy) have improved the financial sustainability of this institution.					
2	Involving key stakeholders (management boards, staff, and community representatives) in financial planning enhances the institution's financial performance.					
3	Timely and adequate disbursement of government capitation has positively influenced the institution's financial stability.					
4	The institution's financial planning process contributes to efficient allocation and utilization of resources.					
5	Sound financial planning practices have led to improved financial performance of the institution.					

Section G: Institution Governance in Technical and Vocational Education and Training Institutions in Kenya

Please feel free to answer the following statements below by stating the extent of agreeing or disagreeing:

	Statement	1	2	3	4	5
1	The board regularly reviews and approves institutional budgets.					
2	The board provides adequate financial oversight and monitoring.					
3	The board follows up on the implementation of audit recommendations.					
4	Decision-making processes within the institution are inclusive and consultative.					
5	Feedback from stakeholders influences financial decisions and policies					