THE INTERPLAY BETWEEN INTERNAL CONTROLS AND FINANCIAL PERFORMANCE: EVIDENCE FROM PRIVATE HEALTH INSTITUTIONS IN MOROGORO MUNICIPALITY, TANZANIA

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ABSTRACT

Our study investigates the intricate relationship between internal controls and financial performance within the context of private health institutions operating in Morogoro Municipality, Tanzania. The study aims to provide empirical evidence regarding the impact of effective internal control systems on the financial performance of these institutions. Our approach is thorough, encompassing a mix of qualitative and quantitative methods, drawing insights from a dataset comprising responses from 100 participants. The collected information was subjected to descriptive analysis. Furthermore, we conducted multiple linear regressions to scrutinize the connection between internal control and financial performance. The results of the multiple linear regression unveiled that factors such as the control environment, monitoring activities, control activities, employee education, and employee age, exerted a favorable influence on financial performance. Notably, these variables exhibited statistical significance across various thresholds: 1%, 5%, and 10%. These findings underscore the role of the internal control framework and specific socio-economic traits like employee age and educational background in significantly shaping the financial performance of private healthcare establishments. The implications of the study emphasize the pivotal importance of robust internal control implementations and the fostering of employee education and retention, both contributing factors to achieving enhanced financial performance.

Keyword: - *Internal controls, financial performance, private health institutions, Morogoro Municipality, Tanzania*

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1. INTRODUCTION

On a global scale, private healthcare institutions encompass a diverse range of organizations that provide an array of medical services. These services span from inpatient and outpatient care, diagnostic and therapeutic procedures, laboratory analyses, medication distribution, and other health-related offerings [1]. The significance of these establishments is rooted in their essential role in ensuring individuals receive appropriate medical care, preventive measures, and treatments for various ailments. This category comprises not only hospitals but also clinics, rehabilitation centers, nursing homes, and various other healthcare facilities. It also encompasses a variety of entities, including government bodies, non-governmental organizations, and private companies. The delivery of

healthcare services through these institutions is governed by a spectrum of policies designed to guarantee patient safety, quality of care, and equitable access to healthcare.

Consequently, private healthcare institutions refer to healthcare facilities that operate independently without relying on government funding, conducting their operations as profit-oriented entities [1]. This sector stands apart due to its independence from government oversight, allowing it the flexibility to define its own policies and procedures. While these institutions have faced criticism for their profit-centered approach, they play a crucial role in regions where public healthcare systems lack resources. They offer a wide range of medical services, ranging from basic care to specialized treatments, and often possess advanced medical technologies that are not commonly available in public health facilities [2]. However, the profit-driven nature of private healthcare institutions has raised concerns about rising healthcare expenses, unequal accessibility to services, and compromised quality of care for marginalized communities [3].

Internal control refers to a system involving an organization's board of directors, management, and stakeholders, designed to ensure the attainment of specific objectives. These objectives include operational efficiency, accurate financial reporting, and compliance with relevant laws and regulations [4]. It represents an integration of an organization's plans, policies, actions, and endeavors, all aimed at reasonably ensuring the accomplishment of the entity's mission and goals [4, 5]. The internal control system encompasses a comprehensive range of controls, including financial controls, established by management to facilitate business operations, protect assets, and ensure accurate and complete record-keeping [6]. This system comprises measures to promote and safeguard sound management practices, both financial and general in nature [4, 7]. A well-established internal control system incorporates specific procedures for task execution, issue reporting and decision-making [5].

Ali [8] delineates that performance pertains to the outcomes resulting from individual or collective contributions in any endeavor, irrespective of their positivity or negativity. The internal control function holds a pivotal status for stakeholders such as financial statement users, regulators, directors, and managers, given its influence on an organization's corporate governance and, subsequently, its financial performance [9]. Performance efficiency is the measure of the relationship between exerted effort and actual outcomes, while the performance improvement zone refers to the gap between present performance and the theoretical performance limit [9]. Therefore, performance encompasses an actor, be it an individual or a collective entity.

The effective management of financial records involves practices such as internal auditing, robust procurement policies, and oversight of budgetary expenditures. When executed proficiently, these practices lead to improved performance, including better service and product delivery, increased transparency, precise record-keeping, compliance with regulations, prudent fund utilization, dependable financial information, and accurate financial reporting. Nonetheless, factors like education, political support, and ethical behavior can moderately impact the implementation of internal controls, with political interference potentially causing unexpected shifts that affect organizational performance [10]. For an institution's sustenance, optimal utilization of both financial and non-financial resources is indispensable [11]. To achieve this, management employs various forms of control, including internal control and internal audit. Internal control refers to the controls established by management to ensure systematic task execution, adherence to policies, protection of assets, and accurate record maintenance [11].

Mawanda [12] defines internal control as the measures and processes implemented by organizational management to reasonably ensure the attainment of objectives, notably operational efficiency, effectiveness, and compliance with laws and regulations. Amudo and Inanga [13] argue that a robust internal control system aids in preventing fraud and errors, minimizing wastage, enhancing asset management, instilling confidence in the reliability of accounting data, and promoting accurate accounting record upkeep. Internal control systems are crucial for the survival and growth of organizations. They also enhance financial reporting, operational efficiency, effectiveness, and compliance with regulations [14]. The COSO framework identifies three main categories of internal control objectives: operational, reporting, and compliance [15]. Operational objectives focus on enhancing the efficiency and effectiveness of entity operations, reporting objectives concern internal and external financial and non-financial reporting, and compliance objectives revolve around adhering to laws and regulations. However, inherent limitations in internal control systems can affect the achievement of objectives and might not provide complete protection [12]. The absence of such systems can lead to inadequate record-keeping, delayed accounting preparations, misappropriation of funds, illicit transactions, misuse of assets, and challenges in assessing actual assets and stock, potentially leading to theft [16].

Despite the presence of internal control systems, financial misconduct persists due to weak implementations [17, 18]. Numerous studies explore the relationship between internal control and the performance of private health institutions, including Dribareo [19], Abiodun [20], and Ayneshet [21]. However, a gap remains in understanding employee awareness of the impact of internal controls on financial performance and their overall effectiveness within private health institutions.

Therefore, this research seeks to evaluate the effectiveness of internal control systems within private health institutions in Morogoro municipality, Tanzania. Specifically, the study aims to examine the impact of internal controls on financial performance and analyze their influence on the overall performance of private health institutions. Consequently, the study underscores the importance of internal controls in financial performance and emphasizes the need for their effective implementation in private health institutions

1.2. THEORETICAL BACKGROUND

Our research draws its foundation from Kate Lark's influential concept of internal control, initially introduced in 1999. Lark's theory underscores that internal control represents a systematic procedure integrated within organizations to mitigate risks and achieve objectives [22]. According to Lark's perspective, internal control entails a process overseen by an organization's board of directors, management, and other personnel, with the goal of reasonably ensuring the attainment of objectives in areas such as operational efficiency, reliable financial reporting, and compliance with relevant laws and regulations [22].

Internal control serves as a fundamental element within an organization's governance structure and its ability to manage risks. It assumes a crucial role in advancing an organization's objectives and in nurturing, amplifying, and safeguarding the value for stakeholders [5, 8, 12, 23]. In the wake of visible breakdowns within organizations, there is often a surge in the imposition of additional regulations and requirements. However, effective internal controls can yield savings in terms of time and resources, foster value creation and preservation, and confer a competitive advantage [5, 24].

To establish a robust internal control system, organizations need to adopt an appropriate and well-functioning combination of preventive, detective, and corrective control mechanisms [25]. Preventive controls, represented by practices like segregating responsibilities, proper authorization, meticulous documentation, and oversight of physical assets, are designed to prevent unintentional incidents such as errors, omissions, irregularities, fraud, suboptimal business decisions, and noncompliance with regulations.

Detective controls, including actions like obtaining pre-approvals for actions or transactions before processing, employing document control numbers to track all transactions, and reconciling documents from various sources for assurance of accuracy, aid in identifying or revealing unfavorable events that have already occurred. Meanwhile, corrective controls involve measures taken to address gaps or shortcomings that led to unintended events. Among these types of controls, preventive measures stand out as the most potent. Lark's theory advocates for several internal control measures that organizations should adopt, including well-documented policies and procedures, effective segregation of duties, an ethical and integrity-centered culture, comprehensive transaction and record documentation, strong transaction and activity authorization, rigorous physical and logical record and asset controls, and diligent supervisory oversight [25].

In essence, Lark's theory of internal control equips organizations with guidance to establish effective internal controls, mitigate risks, achieve objectives, and generate value. Organizations are encouraged to implement a blend of preventive, detective, and corrective control mechanisms, along with internal control measures such as clearly defined policies, division of responsibilities, a culture rooted in ethics and integrity, thorough documentation, precise authorization, robust physical and logical controls, and vigilant supervisory scrutiny. This approach empowers organizations to assess the efficacy of existing control measures and their influence on the organization's performance [25].

As a result, this theory holds significance in our study, as organizations bear the responsibility of setting up a dependable internal control system. This system should facilitate the organization's smooth and efficient functioning, thereby enhancing its overall performance. By adhering to this approach, the importance of internal

control in private healthcare institutions becomes evident, enabling organizations to evaluate the effectiveness of current control measures and their broader impact on the organization's overall well-being.

2. MATERIAL AND METHODS

2.1 Research Design and Approach

The research design holds immense significance within any research investigation, serving as a structured blueprint for the systematic acquisition and examination of data. Its primary aim is to harmonize with the research objectives while ensuring procedural efficiency [26]. It encompasses the organization of prerequisites and methodologies that must be adhered to to realize the research goals. In the words of Bryman [27], research design can be understood as an intricate roadmap that outlines the tasks necessary to accomplish the research objectives. For the present study, a research design centered on a case study approach was employed, embracing a blend of both quantitative and qualitative techniques. This amalgamated strategy, as Yin [28] elucidates, is particularly suitable when the research queries delve into the "how" and "why," with a focus on contemporary occurrences within authentic settings. The rationale behind adopting a mixed research approach is to facilitate the comprehensive exploration of the research phenomenon through both numerical data and descriptive insights [29]. Given that no solitary method of data collection can be deemed flawless on its own, the utilization of mixed research was embraced to fortify the trustworthiness and validity of the research conclusions [30].

2.2 Targeted population, unity of analysis and sample size
The study's population encompassed staff members hailing from various private health institutions in Morogoro municipality, Tanzania. To ensure a sample that accurately represents this population, a list comprising potential candidates for sampling was utilized. This particular populace offered valuable insights that catered to the research questions and objectives. The study's primary focus was on the organizational level, concentrating on private health institutions, to examine the phenomenon within this context. This research didn't delve into the individual or group level. Consequently, the study centered its investigation on staff members employed within the chosen private health institutions in Morogoro municipality. This decision to adopt the organizational level as the analytical unit was in line with prior research on organizational behavior, which indicates that scrutinizing organizational-level variables can yield comprehensive comprehension of overall organizational operations [31]. Furthermore, this approach, as the analytical unit, facilitated the identification of factors impacting the internal control system's effectiveness and its influence on the financial performance of private health institutions [32].

A total of 100 employees from 10 private health institutions participated in the study. The data collection process involved a two-stage multistage sampling strategy. In the initial stage, a purposive sampling method was employed to carefully choose 10 private health institutions out of the 34 present in the Morogoro municipality. The selection was based on the custodians of their internal control systems. The purpose of using purposive sampling was to guarantee the inclusion of private health institutions that actively employ internal control systems.

2.3 Data collection methods
We have employed a blend of primary and secondary data resources to amass information. The primary data set was derived from interviews with 100 participants, utilizing a well-structured questionnaire. In contrast, secondary data was acquired by conducting comprehensive literature reviews across various sources such as books, scholarly journals, governmental reports, and databases housing previously disseminated information relevant to the research subject. As posited by Voss et al. [33], the amalgamation of primary and secondary data enhances the research's caliber and authenticity. The primary data introduced novel insights and viewpoints, whereas the secondary data corroborated or supplemented the conclusions drawn from primary origins.

2.4 Data analysis
The collected data went through several stages to enable meaningful analysis using Statistical Package for Social Sciences (SPSS) version 25. Initially, the gathered data underwent cleaning, coding and was subsequently input into the SPSS software for analysis. Following that, descriptive statistics were generated to illustrate score distribution, encompassing frequency and percentages. Additionally, beyond the use of descriptive statistics, a regression analysis was executed to explore how dependent constructs influenced independent dimensions. Specifically, a multiple linear regression model was employed to gauge the impact of the control environment, monitoring, and control activities, along with two covariate variables: employees' education level and age, on the financial

performance (financial accountability and financial reporting) of private health institutions in Morogoro municipality. This analysis was conducted at a 95% confidence level using the SPSS software.

3. RESULTS AND DISCUSSION

Our study sought to determine the impact of internal controls on financial performance in private health institutions in Morogoro municipality as internal controls play a crucial role in enhancing financial performance in organizations, including private health institutions. According to Aier and Kolapo [34], internal controls provide reasonable assurance that organizational objectives will be achieved. Internal controls help organizations to manage risks, prevent fraud and errors, and ensure compliance with laws and regulations. Thus, effective internal controls can enhance financial performance by reducing financial losses, improving financial reporting accuracy, and increasing operational efficiency. Moreover, private health institutions face unique challenges in managing financial resources due to the complexity of healthcare operations, the need for quality patient care, and the pressure to reduce costs [35]. Therefore, internal controls play a critical role in enhancing financial performance in private health institutions by ensuring efficient resource allocation, reducing wastage, and improving financial reporting accuracy.

3.1 The status of financial performance
To achieve this objective the study asked employees about the status of financial performance whether improved or not after implementing the internal control. The employees were required to indicate the degree of improvement they believe has occurred since the implementation of internal controls by agreeing or disagreeing. Table 1 presents the study results.

Table 1: Financial performance improvement

Variables	Frequency	Percent	Valid Percent	Cumulative Percent
Agreed	86	86.0%	86.0%	86.0%
Disagreed	14	14.0%	14.0%	100.0%
Total	**100**	**100.0%**	**100.0%**	

Source: (Field Data, 2023)

Based on the data presented in Table 1 above, it can be observed that 86% of the employees agreed that the implementation of internal controls has resulted in an improvement in the financial performance of their health institution. On the other hand, 14% of the employees disagreed with this statement. This study finding indicates that the majority of the employees perceive that internal controls have a positive impact on their organization's financial performance. This result is consistent with the conclusions of several related studies. For instance, Ali [8] found that internal controls play a vital role in enhancing the financial performance of organizations. Kalemeera [5] also noted that implementing effective internal control systems is essential for improving the financial performance of healthcare institutions. Similarly, Mawanda [12] discovered that internal controls can help prevent financial irregularities and improve financial reporting, leading to improved financial performance. Furthermore, Donati [24] emphasized that effective internal controls can ensure accountability and transparency, leading to improved financial performance. The same information was presented in the pie chart as shown in Figure 1.
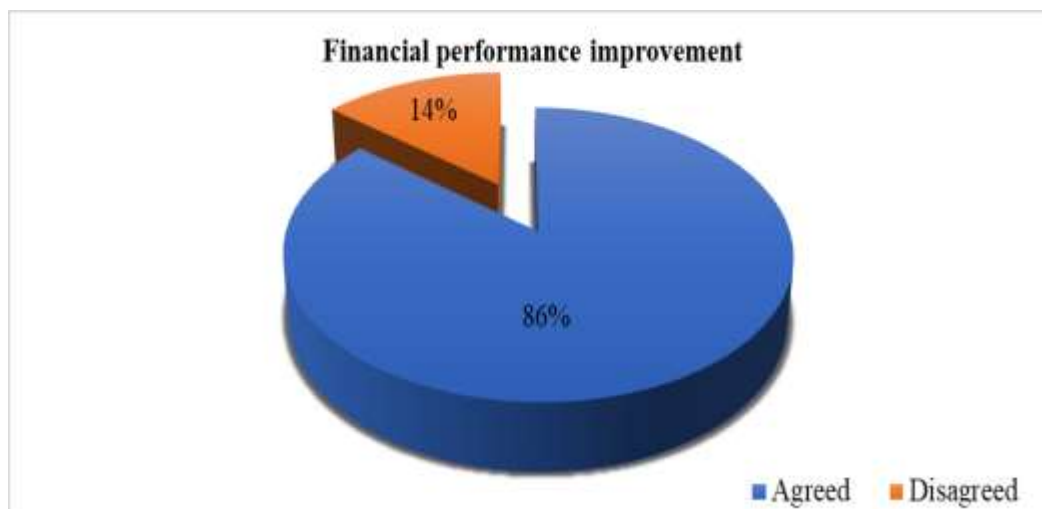
Figure 1 Financial performance improvement (n=100)
Source: (Field Data, 2023)

Overall, the findings of this study reveal that internal controls are a crucial tool for enhancing financial performance in selected institutions. Therefore, private health institutions should continue to invest in implementing effective internal control systems to improve their financial performance. Also, the study sought to know the improved indicators of financial performance and influences of internal control on the financial performance of private health institutions. The study required employees to identify the extent of improvement they observed in financial performance indicators following the implementation of internal controls. Internal controls are an essential aspect of organizational management, designed to safeguard assets, ensure accurate financial reporting, and promote compliance with laws and regulations. The implementation of internal controls can help organizations mitigate risks and achieve their objectives effectively. To evaluate the effectiveness of internal controls, it is important to assess their impact on financial performance indicators such as profitability, liquidity, and return on investment. Table 3 provides a comprehensive overview of the study's findings, highlighting the improvements made as reported by the employees.

Table 2: Financial performance indicators

Indicators	Frequency (n)	Percent (%)
Revenue	30	30%
Profitability (Profit margin)	26	26%
Cashflow (Liquidity)	32	32%
Return on Investment (ROI)	12	12%
Total	**100**	**100%**

Source: (Field Data, 2023)

The study findings, as presented in Table 2 above, show that a significant percentage of employees reported improvements in financial performance indicators following the implementation of internal controls. Specifically, 30% of the employees reported an improvement in revenue, 26% reported an improvement in profitability (profit margin), 32% reported an improvement in cash flow (liquidity), and 12% reported an improvement in return on investment (ROI). These results indicate that the implementation of internal controls has a positive impact on financial performance indicators, which help private health institutions mitigate risks and achieve their objectives effectively. The study result is in line with the findings of various related studies [5, 8, 12, and 24] that have shown a positive relationship between internal controls and financial performance indicators. The same information was presented in the pie chart as shown in Figure 2.
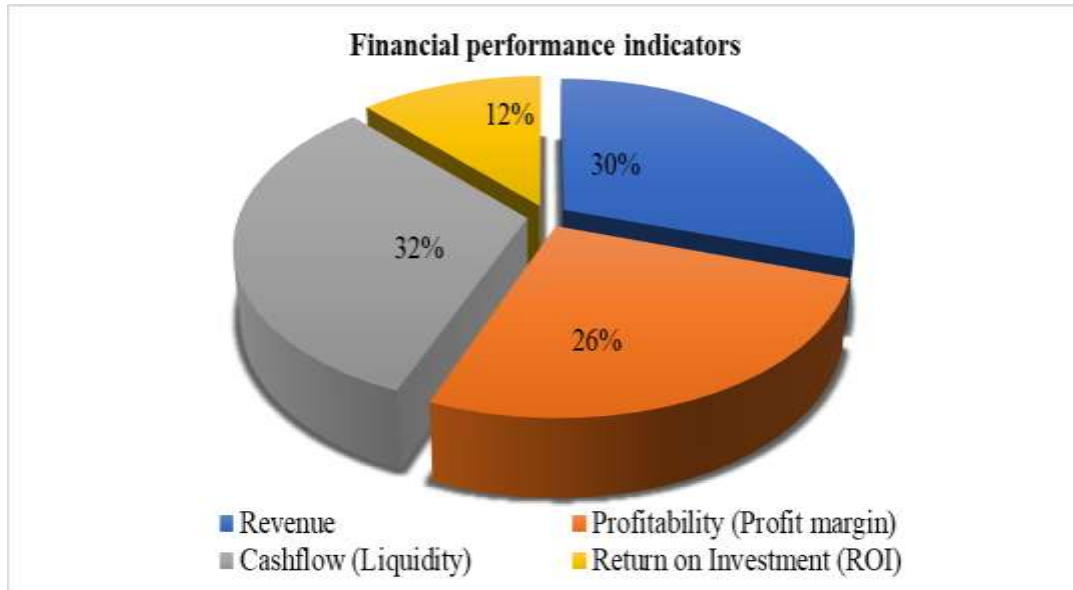
Figure 2 Financial performance indicators (n=100)
Source: (Field Data, 2023)

Overall, the findings of this study reveal that internal controls have a positive impact on financial performance indicators. Private health institutions should, therefore, consider implementing effective internal controls to safeguard assets, ensure accurate financial reporting, and promote compliance with laws and regulations, which can ultimately lead to improved financial performance.

3.2 Multiple linear regressions

Multiple linear regressions (MLR) is a statistical technique commonly used in social science research to analyze the relationship between a dependent variable and two or more independent variables (5, 12, 36]. A multiple regression model was adopted to check the form of relationship between the dependent (Y) and the independent variables (X_i). The regression analysis conducted established that the independent variables have a positive strong correlation with the dependent variable [24]. Each of the independent variables namely, the control environment (CE), monitoring activities (MA), control activities (CA), education level of employee (years of schooling), and age of employee (in years) contribute positively to the financial performance of selected private health institutions in Morogoro municipality.

The researcher used MLR to determine a mathematical relationship among these variables. Thus, the MLR was mathematically estimated as: -

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_n X_n + \mu \quad \text{.................................. (1)}$$

Where Y = Dependent variable (financial performance)

β = Coefficients to be estimated

X_i = Independent variables (i =1, 2, 3)

X_1 = Control Environment (CE)

X_2 = Monitoring Activities (MA)

X_3 = Control Activities (CA)

X_4 = Education of employee (years of schooling) (EDUC)

X_5 = Age of the employee in years (AGE)

$\mu =$ Error term

After including specific independent variables, equation (1) was modified to equation (2)

$$Y = \beta_0 + \beta_1 CE + \beta_2 MA + \beta_3 CA + \beta_4 EDUC + \beta_5 CA + \mu \quad \text{.......................... (2)}$$

The regression model was used to determine the extent to which the predictors (i.e., the control environment, monitoring activities, and control activities) can explain the dependent variable i.e., financial performance.

Table 3: Model summary of internal control and the financial performance

Model	R	R Square	Adjusted R Square	R	Std. The error in the Estimate
1	0.838[a]	0.703	0.687		0.08123

Source: (Field Data, 2023)

Table 3 presents the summary of a statistical model that examines the relationship between internal control and financial performance in private health institutions. The model includes five predictor variables: control environment, monitoring activities, control activities, education level of employees (years of schooling), and age of employees (in years). The R-squared value of the model is 0.703, indicating that the predictor variables explain 70.3% of the variation in financial performance in the sample of private health institutions. However, the adjusted R-squared value of 0.687 suggests that only 68.7% of the variation in financial performance is explained by the predictor variables when taking into account the number of predictors in the model. The standard error of the estimate is 0.08123, which is a measure of the accuracy of the model's predictions. Overall, the model suggests that internal control factors, such as the control environment and monitoring activities, may have a significant impact on the financial performance of private health institutions.

Analysis of variance (ANOVA) is a statistical method used to analyze the variability within a regression model, which is used to test the significance of the model. ANOVA results provide information on how much of the total variation in the response variable can be explained by the independent variables included in the model [36]. In other words, ANOVA allows us to determine whether the observed differences in the response variable can be attributed to the independent variables or whether they are simply due to random variation. The significance of ANOVA results is typically assessed using a p-value, which indicates the probability of observing the results if the null hypothesis (i.e., the model has no effect) were true. A p-value less than the chosen level of significance (usually 0.05) indicates that the model is significant and that the independent variables are contributing to the variation in the response variable. Table 5 presents the study results.

Table 4: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.468	5	0.294	44.489	0.000[b]
	Residual	0.620	94	0.007		
	Total	**2.088**	**99**			

a. Dependent Variable: Financial performance
b. Predictors: (Constant), Age, Education, Monitoring activities, Control activities, Control environment.

Table 4 is divided into three parts: the regression model, the residual error, and the total. The regression model is broken down into the sum of squares, degrees of freedom (df), and mean square for each independent variable. The sum of squares represents the variability explained by each independent variable, the degrees of freedom represent the number of independent variables, and the mean square is the sum of squares divided by the degrees of freedom.

The F-ratio, which is calculated as the mean square of the regression model divided by the mean square of the residual error, is used to determine the significance of the regression model. A high F-ratio indicates that the model explains a significant amount of variability in the dependent variable. In this ANOVA table, the regression model explains a significant amount of the variability in financial performance, as indicated by the high F-ratio of 44.489 and a p-value of 0.000. This implies that the independent variables, including age, education, monitoring activities,

control activities, and control environment, have a joint effect on financial performance, and the model is a good fit for the data. The residual error, which represents the variability that is not explained by the model, is relatively small compared to the regression sum of squares, indicating that the model accounts for most of the variability in the dependent variable.

Table 5: Multiple linear regression results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.058	0.023***		-2.473	0.015
Control environment	0.107	0.057*	0.108	1.867	0.065
Control activities	0.117	0.054**	0.122	2.155	0.034
Monitoring activities	0.113	0.051**	0.126	2.219	0.029
Education level	0.115	0.056**	0.118	2.044	0.044
Age of the employee	0.830	0.060***	0.800	13.894	0.000
Number of Observation = 100					
Note: ***, **, and * Significance at 1%, 5% and 10% Respectively					
F = 44.489 at P = 0.000					
R square = 0.703, Adjusted R square = 0.687					
Dependent Variable: Financial performance					

Source: (Field Data, 2023)

Table 5 above displays the results of a multiple regression analysis where financial performance is the dependent variable, and control environment, control activities, monitoring activities, education, and age are the independent variables. The table presents both unstandardized and standardized coefficients, t-values, and significance levels. The unstandardized coefficients show the effect of each independent variable on the dependent variable in the original units of measurement, while the standardized coefficients provide a measure of the relative importance of each independent variable in explaining the variance of the dependent variable. Moreover, the study results show that control environment, control activities, monitoring activities, education, and age are positively associated with financial performance. In other words, private health institutions that have better control and monitoring activities, educated employees, and older employees tend to have better financial performance.

The given multiple linear equation represents a model to predict the financial performance of a private health institution based on five predictor variables: control environment (CE), monitoring activities (MA), control activities (CA), education of employees (EDUC), and age of employee in years (AGE). The equation can be written as: -

$$Y = -0.058 + 0.107X_1 + 0.117X_2 + 0.113X_3 + 0.115X_4 + 0.830X_5 \quad .. \quad (3)$$
$$se \quad (0.023) \quad (0.057) \quad (0.054) \quad (0.051) \quad (0.056) \quad (0.060)$$
$$t \quad (-2.473) \quad (1.867) \quad (2.155) \quad (2.219) \quad (2.044) \quad (13.894)$$

Where Y is the predicted financial performance of the private health institution, and the coefficients represent the strength and direction of the relationship between each predictor variable and the outcome variable.

3.2.1 Control environment
The study sought to establish the measures that are taken by private health institutions to control its external environment, including government regulations, market competition, and technological changes. The study revealed that the control environment had a statistically significant positive impact on financial performance, with a significance level of 10% $(p = 0.065)$. Specifically, a one-unit increase in the control environment resulted in a 10.7% rise in financial performance. Hence, the control environment exerted a considerable influence on financial performance. This finding corroborates the results of several prior studies, [5, 8, 24] which have shown that the control environment is the foundation for all other elements of internal control and is connected to liquidity,

financial responsibility, and reporting. The significance of the control environment in organizational performance is well-documented in the literature. Mawanda [12] posited that the control environment serves as the bedrock for all other components of internal control, facilitating effective risk management, and ensuring financial accountability. Similarly, Kalemeera [5] found that the control environment is critical in mitigating internal control weaknesses and ensuring compliance with regulatory requirements. Donati [24] reported that the control environment is essential for enhancing financial reporting quality, which, in turn, can enhance financial performance.

3.2.2 Control activities

The study control activities as a variable in the financial performance of private health institutions. Control activities refer to a set of procedures and policies designed to ensure that organizational objectives are achieved efficiently and effectively [24]. This study identified four main components of control activities, namely performance reviews, information processing, physical controls, and segregation of duties. Performance reviews involve comparing actual performance with budgets, forecasts, and prior period performance, while information processing ensures the accuracy, completeness, and authorization of transactions [37, 38]. Physical controls provide security over both records and other assets, and the segregation of duties ensures that no one person handles all aspects of a transaction from beginning to end [5, 24]. The study found that control activities were statistically significant at 5% $(p = 0.034)$ and positively related to the financial performance of private health institutions. This study's findings indicate that effective management of policies and procedures from selected private health institutions was applied to achieve their objectives and improve financial performance. The results of this study are consistent with findings from other related studies [5, 8, 12, 24, 37, 38], which have shown that control activities are positively related to accountability, reliability of financial reporting and performance, effectiveness, efficiency, and overall organizational objectives.

3.2.3 Monitoring activities

According to the study results, monitoring activities such as tracking financial data, conducting audits, and regularly assessing operations had a positive correlation with financial performance in private health institutions. The study found a statistically significant relationship between monitoring activities and financial performance at a 5% level of significance, with a p-value of 0.029. This implies that private health institutions that regularly monitor their activities are more likely to experience better financial performance. The study also revealed that a unit increase in monitoring activities resulted in an increase in financial performance by 11.3%, holding other factors constant. This finding is consistent with the results of various related studies [5, 12, 24] which have also shown that monitoring activities have a positive impact on financial performance. The study findings suggest that implementing monitoring activities, such as regularly monitoring operations and financial data, can help private health institutions identify potential issues and take corrective action before they negatively impact the bottom line. This can lead to improved financial performance in the long run.

3.2.4 Education level

The study found that education has a positive relationship with the financial performance of private health institutions, as indicated by a coefficient of 0.115. Moreover, the standardized coefficient or beta value of 0.118 suggests that education has a moderate effect on financial performance compared to other variables in the model. However, it is important to note that the education level of employees was statistically significant at the 5% level of significance $(p = 0.044)$. This means that as the level of education among employees in selected private health institutions increases by one unit, financial performance tends to increase by 11.5% holding other factors constant. It is worth considering the importance of education in the performance of private health institutions as previous research has shown that education has a significant impact on the quality of healthcare delivery [8, 24]. Improved quality of healthcare can lead to better financial outcomes for private health institutions, as patients are more likely to seek out high-quality care and may be willing to pay more for it. In addition, educated employees may be more efficient and productive, leading to cost savings and increased revenue for the institution.

3.2.5 Age of the employees

According to a study, age is positively related to the financial performance of private health institutions. Age was found to be highly statistically significant at 1% with a p-value of 0.000 $(p < 0.01)$ level of significance, which implies that there is a positive association between age and financial performance. Specifically, the coefficient of 0.830 indicates that with every one-unit increase in age, financial performance is expected to increase by 0.830 units, assuming all other factors remain constant. Moreover, the standardized coefficient (beta) of 0.800 indicates

that age is a highly significant predictor of financial performance, as it explains a substantial portion of the variance in the dependent variable. However, the results of this analysis are correlational in nature and do not necessarily imply a causal relationship between age and financial performance. There are several potential explanations for why age may be positively related to financial performance in private health institutions. *Firstly,* older health professionals may possess more experience and expertise, resulting in better patient outcomes and higher revenues. *Secondly,* older professionals may have established reputations and networks within the industry, leading to more referrals and partnerships. *Thirdly,* older professionals may have a greater sense of job security and less inclination to take on risky or unethical practices, resulting in better financial outcomes over time.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

Our study highlights the significant implications of internal controls on the financial outcomes of private healthcare institutions. The control environment, control activities, and monitoring practices emerged as factors that positively impact financial performance, backed by statistically significant evidence. These findings align with the idea that effective internal controls play a pivotal role in bolstering financial performance by minimizing losses, ensuring accuracy in financial reporting, and improving operational efficiency. Furthermore, the research brings to the forefront the crucial roles played by employee education levels and age in shaping financial performance. Educated and experienced employees were identified as contributors to positive financial outcomes, suggesting that investing in employee education and retaining seasoned staff can lead to better financial results.

In a broader context, this investigation enriches the existing body of knowledge by offering profound insights into the determinants of financial performance within the realm of private healthcare institutions. The results underscore the paramount importance of robust internal control implementations and the promotion of employee education and retention as key factors in achieving enhanced financial performance. Given the unique challenges that private healthcare institutions face in managing financial resources, the implications of this study hold pragmatic value for managers and policymakers seeking to improve financial performance in this sector. Future research endeavors could delve deeper into the specific mechanisms through which internal controls, education, and employee age intricately influence financial performance. This would unveil additional dimensions of this complex relationship and contribute to a more comprehensive understanding of the subject.

4.2 RECOMMENDATIONS

The findings of this study have significant policy implications for private healthcare institutions, regulatory bodies, and policymakers. Here are some key policy implications based on the study's results:

    i.   *Strengthening internal controls:* The study emphasizes the importance of robust internal controls within private healthcare institutions. Regulatory bodies should encourage and enforce the implementation of effective control environments, control activities, and monitoring activities. Institutions should develop and maintain comprehensive internal control frameworks that address risks, ensure accurate financial reporting, and enhance operational efficiency.

    ii.   *Employee education and retention:* Given the positive correlation between employee education levels and financial performance, policymakers and healthcare institutions should invest in ongoing education and training for their staff. Developing programs that enhance employees' skills and knowledge can lead to improved healthcare delivery quality, operational efficiency, and ultimately better financial outcomes.

    iii.   *Performance reviews and information processing:* As control activities were found to positively impact financial performance, healthcare institutions should focus on implementing robust performance review mechanisms and accurate information processing procedures. Regulatory bodies can set guidelines for these activities to ensure that financial data is regularly reviewed and processed accurately.

    iv.   *Continuous monitoring and evaluation:* Policymakers should emphasize the importance of continuous performance monitoring and evaluation. Encouraging healthcare institutions to regularly assess the effectiveness of their internal controls, employee education initiatives, and other interventions will ensure ongoing improvements in financial performance.

Overall, the study's findings underscore the critical role of internal controls, employee education, and age diversity in enhancing the financial performance of private healthcare institutions. Policymakers and healthcare leaders should consider these implications to formulate strategies that promote sustainable financial success while also maintaining high-quality patient care.

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