INTERNAL CONTROL PRACTICES OF SENIOR HIGH SCHOOLS IN CENTRAL REGION, GHANA

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Abstract

An ex post facto research design using the paired sample test of differences in means was conducted to ascertain if there is a significant difference in the descriptive and prescriptive internal control practices of senior high schools in Central Region, Ghana. The study population consisted of senior high schools in the Central region. An observation checklist was used to collect data from a defined sample size consisting of all the elements of the population using census sampling technique. Data collected were analyzed using percentages to show adherence to internal controls by schools and gap analysis that utilized paired sample *t* test procedure.

Major findings reported in the study showed that there was statistically significant difference between the preventive descriptive and prescriptive internal control practices of schools. Schools are not complying fully with prescribed internal controls. A key recommendation was that the district directorates of education should consider organizing continuous professional development and capacity building programmes in financial administration to hone the skills of school heads.

Key words: internal controls, financial management, assets, accountability

1.0 Introduction

The administrative system of educational institutions is set up to facilitate the attainment of educational goals. The administrative system consists of interrelated and interdependent sub-systems of key operational areas. Institutional success is contingent upon the sub-systems effectively functioning. One such key operational sub-system is financial management in the school. Ghorman and Amakyi (2016) describe financial management as the act of planning and controlling the generation of funds into an institution and how such funds so generated are disbursed to yield optimum results. According to Mestry and Bisschoff (2009), financial management in schools focus on the specific actions of school administrators that are linked with the utilization of school finances to provide quality education. Amos, Ephrahem, and Bhoke-Africanus (2021) reflecting on the seminar work of Mosha presented at a conference in 2018 at Dar es Salaam note that financial management in schools is essential for the provision of quality education. The authors point out that quality education can be achieved by providing the required financial resources to meet various needs, such as, acquiring and adopting modern teaching and learning technology, conducting teacher professional development, acquiring new school facilities and classroom supplies and laboratory apparatus, school buildings and facilities maintenance, academic field practice costs, and extra-curriculum activities.

Bilkisu (2018) states that the success of any school plans depends highly on the efficient management of financial resources, which comprises the planning and implementation of a financial plan, accounting, reporting and the protection of assets from loss, damage and fraud (Brigham & Houston, 2015). In other words, the overall performance in a school hinges on how financial inputs are managed. According to Amakyi (2017), key decisions in educational administration have financial implications, and so even erroneous financial decisions considered to be minor could hamper educational operations in a major way. Amos, Ephrahem, and Bhoke-Africanus (2021) opine that schools can regulate their financial management with internal rules to provide assurance for institutions to meet established standards of operation to effectively function. If the school does not have the internal rules to guide financial operations, there is a risk that internal controls are not set. Barth and Schipper (2008) note that funds are allocated to an institution for the benefit of some area of significance and directives are given to guide how the funds will be expended and how records will be kept on the expenses made. Barth and Schipper are of the view that an internal control system provides the means to assure the relationship between efficient use of funds and the intended purpose of the appropriation, and at the same time providing financial transparency and accountability.

An internal control procedure is a system of standards of operation established by the institution to carry on its business or activities in an orderly and efficient manner; to promote operational efficiency; to safeguard its assets; and to secure completeness and accuracy of its records (Ghorman & Amakyi, 2016). Internal control procedures are designed to prevent or detect or minimize possible deviations from operational standards. Internal control procedures address the recommended ways in which functions in the institution are related to resources utilization. Internal controls provide reasonable assurance regarding the achievement of institutional goals in three key areas of (a) compliance with applicable laws and regulations, (b) effectiveness and efficiency of operations, and (c) reliability of financial reporting (Amakyi, 2017). Internal control activities play significant role in ensuring the institution's assets are properly safeguarded and accounted for.

Hightower (2008) is of the view that in managing fiscal resources in an institution, internal control procedures address proper authorization mechanisms in every stage of contractual obligation. The internal control procedures provide for proper recording of all transactions with supporting documents, proper safe custody procedures for assets and records, and adequate supervisory and management controls to ensure compliance with policies and procedures. In other words, internal controls enable an institution to assess how well operations are working to improve financial performance.

Yogendrarajah (2011) identified internal controls as significant performance control tools that are used by managers and concluded from her study that effective controls lead to better organizational performance. Yogendrarajah (2011) suggested that institutions should utilize internal controls, particularly, budgetary control, to efficiently manage activities.

When internal controls are in place, an institution is expected to conduct its affairs in strict adherence to laid down standards of operation. According to Doxey (2019), internal controls establish if financial activities are being organized and carried out according to the established norms, principles, or rules in the institution. Internal controls identify relationships between activities and financial processes in the institution and provide the scope and financial limits for activities and related consequences.

In general, institutions develop internal control systems to assure (a) reliability of financial reporting, (b) safeguarding of assets, (c) complying with laws and regulations, and (d) promoting effectiveness and efficiency of operations (Amakyi, 2017).

Biegelman and Bartow (2012) classify internal control activities into three types of preventive, detective, and corrective controls. The preventive internal controls entail proactive activities designed to discourage errors or irregularities from occurring (e.g., dual-signature requirements on all cheques, segregation of duties). The detective controls seek to identify errors and irregularities, particularly in relation to the safeguarding of assets (e.g., bank reconciliations, physical inventory counts, reconciliation of the general ledgers to the detailed subsidiary ledgers). The corrective controls are intended to fix errors or irregularities that detective control activities may have identified (e.g., management variance reports, data validity tests that require users to confirm data inputs). Authors, such as, Biegelman and Bartow (2012) and Ghorman and Amakyi (2016) have highlighted four institutional control methods, that is, organizational controls, operational controls, personnel controls, and periodic reviews, that lead to the assurance of effective internal control system in an institution. First, Organizational controls establish the framework within which the institution conducts its various activities delineating lines of decision authority and job descriptions, and segregation of duties adhering to the principle that an individual or small group of individuals should not be in a position to initiate, approve, undertake, and review the same action. Second, operational controls address the manner in which the institution performs major institutional activities of policy formulation, financial planning (budgeting), and accounting and documentation of transactions. Third, personnel controls help ensure employee performance through due diligence in hiring, orienting, training and developing suitable persons and providing assurance of delivery of results through supervision, monitoring and evaluation. Fourth, periodic reviews enable the institution to assess the “fit for purpose” of the progress and performance of employees, operations, and programmes through the conduct of scheduled review of individual employees, internal review of operations and programmes, and external reviews.

Internal controls constitute principal safeguards against irregularities in an institution. However, certain prevailing conditions or practices in the institution may affect the effectiveness of these controls. Such conditions or practices are referred to as threats to internal controls. Korvin, Shipley, and Omer (2004) describe threats to internal controls as situations that weaken the structures that facilitate the attainment of institutional goals. Threats to internal controls include management override of controls, collusion, poor supervision of staff, poor control environment **(**Barr & McClellan, 2011).

Internal controls serve as the first line of defense in preventing fraud and ensuring the viability of an institution. Albrecht and Albrecht (2004) opine that fraud is a serious drain on an institution’s financial resources. They see fraud as an act of deceitful and unlawful behaviour for the purpose of gain. Fraud in institutions can be perpetuated in the areas of revenue, expenditure, and purchases and stores (Ghorman & Amakyi, 2016). Revenue fraud in schools is generally found in receipt book manipulations, unreceipted revenue, cash and ledger accounts entries, and banking related activities. Expenditure fraud usually occurs through fraudulent payment of funds through cheque alterations and signing of blank cheques, fictitious invoices, and presentation of false claims for payment. Purchases and stores fraud take place through fictitious suppliers, unsupplied items, over-invoicing of goods, and manipulation of stores issue vouchers.

2.0 Statement of the Problem

The adoption of internal controls in institutions has the purpose to prevent, to find, and to remove eventual shortcomings, deviations or deficiencies from institutional financial operations. The absence of internal controls creates conditions that are susceptible to the perpetuation of fraud in financial management in schools. Ghorman (2011) postulates that strengthening of internal controls in schools has a reciprocal relationship with incidents of fraud in the schools. Section 52 of the Public Financial Management Act, 2016 (Act 921), which regulates the financial management of the public sector and prescribes the responsibilities of persons entrusted with financial management in government ensuring the efficient management of state revenue, expenditure, assets, and liabilities, addresses the responsibilities of school heads with regard to internal controls. A Principal Spending Officer shall ensure that proper control systems exist for the custody and management of the assets. The control system shall be capable of ensuring that preventive mechanisms are in place to eliminate theft, loss, wastage and misuse (Act 921, S52).

Schools seem not be following the precepts of the Act as captured in a section of the Report of the Auditor-General on the Public Accounts of Ghana - Pre-University Educational Institutions for the year ended 31st December 2020, “the irregularities resulted, generally, from lack of commitment on the part of the Heads of the institutions to ensure compliance with established internal controls and regulations governing the management of financial resources.” For example, the Auditor General

has indicted authorities of Senior High Schools in the Central region for cash management misappropriation to the tune of GH¢2,285,396.63. This figure is among the highest in the country.
School heads in Ghana are periodically invited to appear before the Public Accounts Committee (PAC) of the Parliament of Ghana to render accounts of their fiduciary responsibilities based on the Report of the Auditor General to Parliament. Evidence from the PAC points to breach of financial discipline in the schools. There are infractions that suggest financial controls breakdown. A member of the PAC noted that "institutions recorded the same violations in financial management year after year and that punitive measures should be strengthened to help enforce rights." Another member of the committee observed that "financial leakages in public institutions remained so high, the least effort to seal them would save the nation a significant amount of resources." More specifically, a school head was cited for breach of financial discipline for misappropriating an amount of GH¢580,836.20. Another school head was found culpable of breach of financial discipline by bloating the school's payroll with "ghost" names. Also, a school head was cited for embezzling funds and was asked to refund the amount of GH¢9,200. *Are these instances of breach of financial discipline isolated cases of school heads not observing legislative intent in following internal controls or is the breach prevalent among school heads*? There is dearth of data to enable one to satisfactorily address this question.
The absence of data to address this question is arguably problematic in ascertaining whether school heads are following laid down procedures in financial management. This study sought to investigate the internal control practices of senior high schools in South West Ghana.
The study is guided by an overarching question: *Is there a significant difference in the descriptive and prescriptive internal control practices of senior high schools in Central Region, Ghana?* The findings and conclusions reported in this study will provide data to inform financial management policy decisions in senior high schools.

3. Research Method

An ex post facto research design using the paired sample test of differences in means was adopted for this study. In this study, no treatment was administered to any variable. The ex post facto design is appropriate when measurements are taken without interference or intervention from the researcher. The study population consisted of senior high schools (N= 76) in the Central region. A census sampling technique of defined sample size consisting of all the elements of the population (N= 76) was used for the study. The results obtained through census method have high accuracy as each member is surveyed and it is a more appropriate method for studies seeking to establish prevalence of a phenomenon (Gall, Gall, & Borg, 2007). An observation checklist was used to collect data from the respondents. The observation checklist was to ascertain the level of adoption of the internal control system and the state of utilization of the value books. The checklist was in two parts. The first part of the checklist covered internal control practices that belonged to one of three broad areas of preventive, detective, and corrective controls. Each control practice was checked according to level of compliance: *not observed, somewhat observed,* and *always observed*. The levels were ranked 0, 1, and 2 respectively.

The second part of the checklist was focused on critical success areas (n = 12) dealing with handling of value books used in the authorization and approval, receipt of cash, payment of cash, and procurement and stores. The checklist indicated the number of schools that utilized the books.
Data collected were first analyzed using frequency counts computed to percentages to show adherence to internal controls by schools. Also, gap analysis that utilized paired sample *t* test was conducted to ascertain if a significant difference exists between the internal control practices of the schools (i.e., the descriptive practices of schools) and internal control practices stipulated in the financial regulations that should be practiced (the prescriptive).

4. Findings and Discussion

Data were analyzed based on information senior high schools (n = 61) that offered to participate in the study. To address the research question, frequency counts computed to percentages (rounded off to nearest positive integer) to show compliance of schools to internal controls were conducted. Data from the observation checklist were used to show frequency of use of designated value books for transactions. The results are depicted in Table 1.

Table 1 Use of value books by schools

Internal Control	Seldom (%)	Often (%)	Always (%)	Restricted Access to Value Book	
				NO (%)	YES (%)
Cheque Stub	0	47	53	0	100
Receipt Books	14	16	70	33	67
Invoice Book	2	31	67	35	65
Asset Register	18	48	34	10	90
Requisition Forms	0	12	88	38	62
Store Invoice Voucher	6	16	78	38	62
General Ledger	0	0	100	10	90
Expenditure Guide Book	15	45	40	25	75
Expenditure Variances Analysis Reports	20	20	60	0	100
Main Receipt Cash Book	0	0	100	10	90
Main Payment Cash Book	0	0	100	10	90
Audited Financial Report	0	25	75	0	100

The findings show that in general, value books are in use in majority of the schools. All the schools use the general ledger, main receipt cash book, and the main payment cash book. Of particular concern is how cheque stub, asset register, expenditure guide book, and the expenditure variances analysis reports are not being used as they should. The small number of schools making use of these vehicles to assure quality financial practices is problematic. Various authors, such as Arwinge (2013), Ghorman (2011), and Ghorman and Amakyi (2016) have stressed the importance of institutions paying attention to the use of cheque stub, asset register, expenditure guide book, and the expenditure variances analysis reports. According to Ghorman (2011), the check stub provides for easy tracking of financial transactions as it provides at a glance details of transactions such as invoice number, check number, date, and amount paid.

Also, the asset register enables the school to have an accurate audit trail of all the assets of the school and information on the status, procurement date, location, price, depreciation, and current value of each asset. Arwinge (2013) sees the keeping of asset register as *sine qua non* as it facilitates the preparation of the school's annual financial statements by correctly disclosing the assets of the school. In the opinion of Ghorman and Amakyi (2016), the expenditure guide book and the expenditure variance analysis report are intended to assist the school to stay within the budget. The expenditure guide book serves as a means to track expenses incurred under various items in order to prevent overspending or spending outside the budget. The expenditure variance analysis report gives details of the difference between the actual and expected amount of an expense.

The findings also show that majority of the schools take steps to protect the value books. The schools have restricted access to the books. Ghorman and Amakyi (2016) recommend that value books should be properly safeguarded and accounted for and that schools should have physical locks on inventory warehouses.

A paired sample *t* test was conducted to test if there is a significant difference in the descriptive and prescriptive adherence of internal control systems of senior high schools in the Central region of Ghana. The results of the paired sample *t* tests are depicted in Table 2.

Table 2 Paired sample t test

Internal Control	Pair	Mean Difference	Standard Deviation	t	df	Sig
Preventive	Descriptive Prescriptive	2.61	.721	4.430	61	.008
Detective	Descriptive Prescriptive	1.46	.660	1.727	61	.125
Corrective	Descriptive Prescriptive	1.22	.355	1.361	61	.061

The findings show that there was a statistically significant difference, $t\ (61) = 4.430$, $p < .05$, between the descriptive compliance to internal controls and the prescriptive compliance to internal controls with regard to preventive internal controls. This finding points to the situation where the operating conditions for schools are different and fall short of what the operating conditions should be. The finding is consistent with the conclusions of Biegelman and Bartow (2012) and Ghorman and Amakyi (2016) who opine that it is highly probable that breach of financial discipline in institutions is indicative of non-adherence or lax approach towards internal controls. The authors conclude that in such situations, schools are taking recommended procedures for granted or in a worst case scenario, schools are complicit in perpetuating fraud. Arwinge (2013) says that internal control has a fairly direct relationship to financial reporting quality. Lapses in preventive controls are bound to result in loss of assets.

This finding of significant difference in the descriptive compliance and the prescriptive compliance to preventive internal controls suggests that schools are not engaging in proactive activities designed to discourage errors or irregularities from occurring. Ghorman (2011) posits that a key factor that undermines preventive controls is failure to observe segregation of duties, that is, recording, authorization, and custody that are handled by separate individuals. Kowalski (2010) points out that the difficulty in upholding segregation of duties in schools has to do with how the management structure of a school is set up. In schools, power is vested in the school head who has direct responsibilities towards initiating, authorizing, and verifying transactions.

Doxey (2019) notes that successful compliance to internal controls is contingent on management commitment to operationalizing policies that support segregation of duties, systems access, and delegation of authority.

Also, the findings show that there is no statistically significant difference, $t(60) = 1.727$, $p > .05$ and $t(60) = 1.361$, $p > .05$, between the descriptive detective and corrective internal control practices of schools and the prescriptive detective and corrective internal control practices. Doxey (2019) highlights four major activities that institutions are to carry out: bank reconciliations, physical inventory counts, reconciliation of the general ledgers to the detailed subsidiary ledgers, and surprise counts of cash on hand. The finding suggests that the schools are carrying out these activities. According to Ghorman and Amakyi (2016), efforts by schools to engage in detective and corrective internal controls mitigate the circumstances of large scale breach of financial discipline in schools.

5. Conclusion and Recommendations

Internal controls play significant role in ensuring the institution's assets are properly safeguarded and accounted for. Institutions develop internal control systems to assure reliability of financial transactions promoting effectiveness and efficiency of operations. Based on the findings, the study concludes that the internal control practices of senior high schools in the Central Region, Ghana fall short in preventing the loss of assets in the school and to discourage errors or irregularities from occurring. The schools are not rigorously observing the prescribed internal controls.

Based on findings and conclusions reported in this study, the following recommendations for policy and future research are offered. A continuous professional development and capacity building programmes in financial administration should be organized by the district directorates of education to hone the skills of school heads. Also, this study should be replicated in other regions to ascertain the extent of compliance to internal controls by school heads in the other regions.

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