

Relationship between Principals' Competencies in Procurement and Performance of Financial Management Roles in Public Secondary Schools in Kajiado County, Kenya

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ABSTRACT: *This study investigated the relationship between principals' procurement competencies and effective performance of financial management roles in public secondary schools in Kajiado County, Kenya. Various education stakeholders had complained about principal's ineffective performance of procurement roles in public secondary schools in Kajiado County, Kenya as shown through the literature reviewed. Frederick Taylor's Scientific Management theory guided the study. The study adopted correlational research design. Data collection from principals and bursars was through administration of questionnaires and an interview schedule for school auditors. The target and accessible population was all 160 public secondary school principals, their bursars and 3 school auditors. The study used multi-stage sampling technique to sample 115 public secondary school principals and bursars and all the 3 school auditors. Stratified simple random sampling was used to get proportionate sample from each data stratum. The findings indicated that there was a positive and statistically significant relationship between procurement competencies and principals' performance of financial management roles ($r=0.876^{**}$; $p<0.01$). The study concluded that some principals lacked the necessary procurement competencies to regularly carry out procurement risk management; ensure procurement rules are followed; carry out procurement contract management; enhance supply sustainability and continue use and re-use of vendors; improve supplier relationships; lead in identifying the best products in the market and in deploying technology in performance of procurement role. The study also concluded that some principals were not effective in timely preparation of procurement plans; in following laid down procurement rules and in regularly carrying out procurement risk management; in regularly managing procurement contracts; ensuring supply sustainability and in identifying the best products in the market. The study recommended training, mentoring and coaching of principals to improve their performance on the various identified procurement competency and skills gaps.*

KEY WORDS: procurement, procurement competencies, financial management roles

INTRODUCTION

Procurement is a critical financial management and governance issue in public secondary schools. It forms part of the foundations of a school that underpins provision and improvement of quality education services. This study sought to establish the relationship between the principal's fiscal competencies in procurement and effective performance of financial management roles in public secondary schools in Kajiado County, Kenya. Procurement supports school resource provision and financial accountability to school stakeholders.

Procurement is defined as “public institutions ‘acquisition by buying, hire, license, rental, lease, franchise, tenancy, or by any other contractual means of any type of goods, works or services using public resources or disposal of public assets,” (Kenya Anti-Corruption Commission (KACC) & Public Procurement Oversight Authority (PPOA, 2009). Public secondary schools in Kenya mainly spend its financial resources through procurement of goods, services or works.

However, various education stakeholders had complained about the principal's ineffective performance of the selected financial management functions in public secondary schools in Kajiado County, Kenya as was shown literature reviewed. Continued principals' ineffective performance of procurement roles could lead the affected schools in Kajiado County, Kenya to continue suffering from financial loss that could lead to operational and financial management inefficiency. Consequently, this research sought to find out whether the problem of principals' ineffectiveness in execution of financial management roles was related to their competencies in procurement and make recommendations and suggestions to resolve the problem of principals' ineffectiveness in performance of financial management.

LITERATURE

Principals' competence in procurement

Public secondary school Principals need critical thinking skills for analysis of procurement and financial data to establish action to be taken during procurement of goods, services and works. Angokho, Juma and Musienga (2014) and Embeli, et al (2014) identified interpretation, observation, reflection, problem solving, evaluation and decision making as important skills and competencies that can be used to analyze a wealth of financial facts and data to facilitate selection of the best-fit suppliers. These financial management skills and competencies are vital not only for new procurement initiatives but also to help principals to step back and correct the procurement course if the planned activities are not unfolding as planned.

Public secondary school principals need project management skills and competencies, which is invaluable in performance of procurement in their schools. These skills and competencies are important in management of procurement during the project cycles. These can be used in initiation,

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planning, execution, controlling, and closing the project task as assigned by the school infrastructure committee (SIC) and the Board of Management. This skill focuses on achieving specified goals within a specified time during the project live cycle. Akinfolarin (2017) emphasized that developing project management competency is essential for performance of financial management.

While public secondary school principals previously focused on simply managing cost, the emphasis now should be creation of sustainability in supply chain systems. John, Gurumurthy, and Manteen (2022) stated that sustainability in procurement ensures stable suppliers with consistent and steady supplies to the institution. Principals need skills and competencies that lead to cost management and continuous use and re-use of vendors which is very important for effectiveness and also for school efficiency. They need interpersonal skills for performance of procurement functions in their schools (Komakech & Machyo, 2015). This day-to-day life skill is used during communication and interaction with various procurement stakeholders. Public secondary school principals need to develop strong interpersonal skill. This facilitates principals to be more successful in carrying out procurement.

Public secondary school principals need negotiation skills for procurement. As buyers, principals negotiate with suppliers and vendors during various procurement engagements. Shkurina (2018) suggested that the objective of negotiation in procurement of goods, works or services is to secure attainments of five rights. These are the right goods, works or services at the right price, time, location and quantities. They need result focused skills and competencies while performing procurement functions (Robina, Bernard & Jack 2018). Result focused principal has more targets on an outcome rather than processes used to deliver products or services. This will make them focused on actions that will yield successful procurement for their schools which is the desired outcome. Nyakanyanga (2019) reckoned that principals need financial acumen. Principals should have a comprehensive knowledge of the market environment and dynamics. Financial acumen can help principals to understand and negotiate the right cost and price that is consistent with the projected school budget.

Principals as project procurement managers ought to develop cost management skills and competencies, optimize, evaluate, and regulate all facets of cost of the procurement projects (Robert, Charles & Aisha, 2021). This tracking is in management of procurement contract creation, execution and analysis. This is aimed at maximization of procurement operations and financial performance in their schools, as they reduce financial risks.

Gray, Purchas and Fenton, (2021) explains that contract management skills and competencies need to be developed in procurement managers to enable procuring entities to be effective. It will also ensure better supplier and vendor relationship. Contract management skills may further help principals to effectively be compliant to Public Procurement and Asset Disposal Act 2015, its regulations and guidelines to mitigate procurement risks.

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Public secondary school principals need skills in category management. Category management is defined as the practice of segregating the core functional areas of the school-spend on goods, services and works into distinct sets of products, works or services. These is aligned with the function of those goods, works or services and most significantly, to reflect the structure and organization of the market. Akinfolarin (2017) asserted that developing category management competencies and skills will enable principals adopt the best procurement strategies to find suppliers offering highest value for money.

Competencies and skills in strategic sourcing by the public secondary school principals are important in performance of procurement functions. Strategic sourcing involves finding the optimum combination of goods, works or services that aid the institution's procurement objectives and procurement plan (Dubey; et al, 2018). Principals can develop and use this skill to acquire goods, services and works in the market when prices are low due to low demand or increased supply.

Public secondary school principals require technological competencies and skills for performance of procurement functions. E-procurement is an option that public secondary school principals can explore. According to Neupane; et al (2022) adoption of Information Communication Technology (ICT) can help management to drive value, be efficient and effective in procurement while making responsibilities manageable. Developing e-procurement proficiencies and adoption and deployment of ICT can facilitate public secondary school principals to monitor, manage, and maintain procurement tasks using tools, devices and relevant procurement software.

Public secondary school principals need analytical competencies and skills in performance of procurement functions. They solve both complex and uncomplicated procurement problems in performance of procurement roles in their schools. Neupane; et al (2022) stressed that having analytical competencies can help government officials make informed decisions. Principals can use their presentation competencies and skills to perform procurement functions (Musa et al., 2014). Principals should be able to make presentations professionally, clearly and confidently to various procurement stakeholders. This can be done to all stakeholders in the procurement and supply chain to secure buy-in using presentation competencies and skills.

Dubey; et al, (2019) advanced that supply chain mangers need risk management skills to carry out procurement tasks. Risk management skills can help principals to identify, mitigate and implement risk management strategies in every day procurement activities as a result of continuous risk assessments. This is done with the primary aim of mitigating procurement vulnerabilities and ensures success in procurement processes in their schools.

Performance of Procurement Functions

The Ministry of education in Kenya, introduced measures to entrench provisions of the public procurement and asset disposal Act 2015, procurement regulations and guidelines in basic education institutions to improve efficiency in performance of procurement role. Public secondary

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schools' performance of procurement is guided Kenya's constitution 2010, the Basic Education Act 2013 and Basic Education regulation 2015 sets out a legal framework for financial management in Kenya's basic education institutions.

In addition to this the Public Finance Management (PFM) Act, Public Procurement and Asset Disposal Act 2015 and its regulations; Public Officer Ethics Act 2003; The Anti-Corruption and Economic Crimes Act 2003 and the Public Audit Act 2015, Teachers Service Commission (TSC) Act 2012; a hand book on financial management and Ministerial circulars on financial management issued to public secondary school principals from time to time. These legal and policy instruments provide public secondary school principals with legislative and policy frameworks and guide performance of procurement roles. Principals have been directed to use these legal instruments to make procurement activities and procedures efficient and judiciously use public funds (Embeli, Iravo, Biraori and Wamalwa, 2014).

Public secondary schools, through their Board of Management (BoM) in Kenya have autonomy to decide what to spend in the budget, what and how procurement of goods, works or services will be done (Wanjala, Wamocha and Sang, 2020). Principals have to establish measures that will help them succeed in procurement. These measures include establishment and training of tender committees and equipping head of procurement on the right competencies (Kavula, Kalai & Migosi, 2014).

A principal as head of procurement entity is expected to establish various committees. These committees facilitate acquisition of goods, works or services in public entities (Kavula, Kalai & Migosi., 2014:13 and Republic of Kenya, 2010). Principals of public secondary schools should ensure these committees accomplish roles given in sub-section 2 (a) to 2(o) of the Public Procurement and Asset Disposal Act, 2015 (PPADA, 2015) such as review and verification. Principals must align all school procurement and disposal activities within the provisions of the act and regulations (Republic of Kenya, 2015:2; Republic of Kenya 2010). Some of the committees to be established by the principal include school tender committees, ad-hoc tender evaluation committees and inspection and acceptance committees.

According to Republic of Kenya (2017), public secondary school principals are required to develop school procurement plan. The user department in the school prepares the plan to minimize and avoid urgent procurements, achieve the set objectives and actualize school budgets. Furthermore, section 26 (3) of the PPADA, (2015) and sections 20 & 21 of the procurement regulations 2020, and sections 6.1 & 6.2 of the procurement manuals for schools and colleges makes procurement planning mandatory for procuring entities. Procurement plans enables all departments in the school to identify their requirements, presents user-department procurement budget, identify procurement methods and schedule of procurement activities and timelines.

Angokho et al (2014) argued that monitoring of procurement activities is an important management exercise for principals of public secondary schools. Evidence of existence of

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procurement plan anchored on an approved budget forms the basis for monitoring procurement activities in the school. Procurement processes need quarterly reviews. Through this monitoring, heads of department in the school will make and submit management reports on quarterly basis to the principal and consequently the BoM through the school bursar. The bursar as head of procuring unit should maintain records to be used during monitoring and giving of updates to management on the status of procurement activities.

Preparation of annual disposal plan for unserviceable, obsolete or surplus equipment or goods should be done expeditiously (Republic of Kenya, 2015). The principals as the head of procuring entity should develop annual disposal plan for disposal and subsequent replacement of old, technologically obsolete and expensive-to-run equipment. Section 176(1) of the Public Procurement and Asset Disposal Act 2015 requires procuring entities accounting officers to prepare an annual asset disposal plan for unserviceable, surplus or obsolete items or equipment. Section 53(4) of the act sets out how obsolete equipment or assets should be disposed.

Procurement managers perform project management roles, which are invaluable for performance of procurement in their institutions (Wankmuller & Reiner, 2021). These roles in the school include initiation, planning, execution, control, and closing the assignment of procurement of school projects through the school infrastructure committee (SIC) and the Board of Management. Moreover, being a strategic activity, project management will enable principals to tie procurement results to their schools' goals.

Saikouk, et al (2021) suggested that organization management need to enhance sustainability of procurement and vendor relationship. While principal's previous primary focus was on management of cost, they now need to create sustainability in the supply chain. Sustainable procurement ensures stable suppliers with consistent and steady supplies to the school. Continuous use and re-use of vendors is not only vital for cost saving but also for school wide economic benefits. They negotiate during the process of procurement. As buyers, principals relate with vendors for various business deals. The outcome of the procurement deal depends on how effective principals negotiate with vendors. Principals negotiate with suppliers who have conflicting requirements in order to reach an agreement of mutual interest

Principals need to be result focused while performing procurement functions. Mutebi et al (2021) stressed that management need to focus on outcomes rather than processes of procuring products or delivering services. As they perform procurement functions, they need to focus on results. This enables them to focus on activities that produce efficient, effective and successful procurement outcomes in their schools.

Principals as procurement managers perform cost management. They carry out evaluation, optimization, and controlling of all cost aspects of procurement of goods, services or works. Mutebi et al (2021) argued that procurement cost management aids financial managers to monitor and align costs to the budget. Management of costs involves alignment of procurement cost with

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the management of the contracts, implementation and analysis for maximization of operational, financial performance and financial risk mitigation in their schools.

Principals carry out contract management during procurement. PPOA (2015) observed that contract management enables effectiveness in performance of procurement functions. This leads to improved client - supplier and vendor relationship. Contract management helps in effective enforcement of compliance with the Public Procurement and asset Disposal Act 2015, the regulations, 2020 and guidelines thereby mitigating procurement risks.

Category management is an aspect of procurement that is very important to principals in public secondary schools. Lamenza, Fontana & Leira, (2019) explained category management to include segmentation of the institution's procurement into discrete groups of products, works and services. Category management can be done in relation to the use of the goods, works or services and reflect market organization.

Principals carry out strategic procurement of works, services and goods in their respective institutions. This includes identification of the optimum mix of goods, works and services that supports the school's procurement aims. According to Paciaoroti, Piottrowicz & Fenton (2021) managers carry out analysis of high-volume procurements and develop long-term partnerships with suppliers who provide low-cost quality goods, works and services.

Principals can integrate ICT in performance of procurement function in their schools in order to drive efficiency, effectiveness and value for money. Lamenza, Fontana & Leira, (2019) argued that deployment of technology during performance of procurement may enable organizations to monitor, maintain and manage procurement tasks using relevant technological devices and software. Neupane et al (2022) concluded that institutions will reap benefits accruing through the use of technological software in the procurement process.

Schools can adopt e-procurement for efficient utilization of public financial resources. Adoption and use of e-procurement, may broaden choices to access quality goods, works and services; and facilitate institutions to make savings on procurement costs (Dubey et al (2018). The benefits of transitioning to e-procurement include lowered cost of advertising, vendor access, and bids document distribution and improve bidder's access to tendering opportunities. E-procurement may increase competitiveness of quotations and improve commercial relationships between vendors and procuring institutions Wango and Gatere (2016) and Dubey et al (2019)

Principals need analytical skills in performance of procurement roles in their schools need to resolve complex and non-complicated procurement problems through analysis of all procurement activities. They can do this by analyzing various procurement scenarios and make decisions based on the available information (PPOA, 2009). These helps principals make informed and the right decisions by getting and using the right information, articulating and solving complex procurement problems that could otherwise inhibit successful execution of procurement activities.

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Principals communicate procurement information to various stakeholders. Principals need to be confident, clear, and professionally conduct themselves to influence those above, below, and beside them to gain buy-in using their communication and presentation skills. Aryatwijuka et al (2022) contended that good presentation and communication skills will allow procurement managers to influence and ensure their teams navigate through departmental collaborations bringing success in procurement processes.

Management of risks is a vital procurement role for public secondary school principals. The principal's need procurement risk management competencies to identify mitigate and implement risk management strategies in every day procurement activities based on continuous risk assessments. KACC and PPOA (2009) emphasized that heads of procurement entities can put in place plans that manage daily procurement risks. This is geared towards reduction of procurement vulnerabilities and secure success in the procurement processes.

There are very few studies done to establish competence of public-school principals to implement and effectively perform procurement functions in their schools. Kosgei, (2018) emphasized that there was poor procurement practices in acquisition of teaching and learning resources. Equally scanty was well documented success stories on implementation of legislative and policy procurement frameworks in schools. The few studies that have been done focused mainly on factors that determined or inhibited procurement reform implementation in secondary schools (Kavula et al., 2014; Embeli et al., 2014; Angokho et al., 2014). Even scantier, is literature on the relationship between principals' competency in procurement and performance of procurement function in public secondary schools in Kajiado, Kenya. This study sought to fill this gap.

Theoretical Framework

This research was underpinned by Frederick Taylor's scientific management theory. The strength of scientific management theory in this study is that methods based on scientific tasks would replace rule-of thumb work methods by principals. Principals can use procurement skills and competencies to accomplish carefully planned activities as advanced by Taylor to aid principals to be more efficient and effective. Principals could be trained, provided with ICT infrastructure and competent accounts personnel to improve their performance of financial management roles as advocated by Taylor's principle of equipping the worker with the right tools.

Principals could enhance efficient and effective performance of financial management, as they concentrate on steady improvements in financial management in their schools by using scientific management theory principle of implementing steady improvements. This can be attained by ensuring that each principal and accounts personnel are scientifically selected, trained and developed instead of leaving them to train themselves and grope in the dark individually as they perform financial management functions.

Through cooperation, another principle in scientific management theory, accounts clerks and bursars can identify, develop and efficiently deploy ICT and accounting related technologies in

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performance of their financial management duties. Division of work, the fourth principle in SMT theory can be deployed by the principal, BoM, bursar and accounts clerks to improve principals' productivity in performance of the selected financial management functions

METHODOLOGY

Research Design

This study adopted a correlational research design. This involved measurement of principal's competencies in procurement and their effectiveness in performance of financial management roles and an evaluation of their relationship. The goal in this type of research is to find out existence of a systematic relationship between the variables under study (Bingham & Witkowsky, 2022). Adoption of correlational research design enabled the researcher to find out the direction and strength of the relationship between the independent and dependent variables. This involves measurement of the independent and dependent variables and evaluation of their correlation without manipulation of the variables (Barton & Hyhoe (2023).

The design was appropriate since it accorded the investigator opportunity for an in-depth study of procurement competencies and performance of financial management roles with minimal expenditure of effort, time and financial resources. Correlation design can be adopted to define current conditions, or relationships concerning a problem under study (Cohen, Manion & Morrison 2018). Later qualitative data collection method was used to facilitate methodological, site and data analysis triangulation.

Research population

The accessible population of this study was 160 principals and their bursars. From Krejcie and Morgan table of sample size 113 principals and bursars were sampled from a population of all the 160 principals and 160 bursars. Esser and Vliegthart (2017) defined target population as a sum of persons to whom the research aims to generalize the findings of the study. These are individuals with similar characteristics in a given research. They are participants with specific and relevant qualities of interests. The study targeted all the 160 public secondary school principals, their bursars and 3 school auditors all who were involved in performance of the selected financial management roles. This studies targeted principals because they perform procurement functions; all of which could be affected by their competencies in procurement and had the right experiences and were knowledgeable in the subject under study. County school auditors were targeted since they supervised performance of financial management roles by principals in Kajiado County, Kenya.

The study's accessible population were all the 160 principals' teaching in public secondary schools in Kajiado County (TSC records, January, 2023) and their 160 bursars (County Education Board (CEB) records, January, 2023). These were informants who could be accessed by the researcher, were on duty, willing and available to participate at the time of the study. According to Eugenie

Publication of the European Centre for Research Training and Development-UK and Eman (2023) researchers must ensure that their informants have relevant experience and the best possible knowledge in the topic under study. According to Gall, Gall and Borg (2017) researchers may set certain inclusion criteria in order to have informants who have knowledge on the concept under study. This may help in validating inferences resulting from multiple data sources.

Sampling Procedure

Silverman, (2023) defines sampling as a process of selecting a limited number of research participants to represent the targeted group. Kajiado County was purposively sampled from the 47 Counties in Kenya. This was done because of homogeneity of performance of financial management function in Kenya which also was not as effective as required and exemplified in the literature review. Ketokivi, (2019) explain that purposive sampling is time-effective and cost-effective sampling method.

This research adopted multi-staged sampling technique to identify principals and bursars who were performing financial management roles in Kajiado County, Kenya. There was stratification of principals into male or female. Further, stratification of schools into girls, boys and mixed boarding, mixed day and finally mixed day and boarding schools was done. The study adopted proportionate sampling to establish proportionate samples of principals for each data stratum.

Simple random sample is defined by Schubert, Rademaker and Henseler (2020) as a sample established from the study's population so that a similar size statistics has an equal chance of being selected. This sampling method was adopted to find principal informants from the proportionate samples.

Sample Size

Krejcie and Morgan (1970) table of sample size as cited by Cohen, Manion and Morrison (2018) was adopted with a confidence level of 95 per cent and a sampling error of 5 per cent. This was done to get a sample of 113 principals and their bursars to participate in the research. Census was used to identify the three school auditors who performed supervisory roles to the principals and school bursars.

Research Instruments

A research study requires a research instrument to collect data. The type of data to be captured determines the tool to be adopted by the researcher (Wallen & Fraenkel, 2019). Primary data was obtained through questionnaires filled by principals and bursars as important informants. A semi-structured interview schedule was used in the study to get essential data to achieve the study's specific objectives from the three school auditors based at the office of the county director of education, Kajiado. Secondary data was sourced through a review of publications, journals, books, internal records and websites among others.

Validity of Research Instruments

The process of validation evaluates the ability of the data collection tool to rate what it ought to measure (De Vellis, 2016). This test evaluates the appropriateness of the data capture instrument in rating what it aims to measure. Validity occurs if the data collection tool used achieves the intended results (Nobble & Smith 2015). The investigator in this study sought to establish content, internal, external, face, and construct validity of the questionnaires and interview schedules.

These data capture instruments were constructed based on research objectives to establish content validity. Variables of interest in the study which were principal's budgeting competencies and effective in performance of the financial management roles were operationalized in order to establish construct validity.

External validity is established by making careful attempt to assure a representative sample. Hair, et al (2016) argued that "external validity explains the extent to which the findings of one study can be generalized to other research circumstances". Target population was clearly defined to further realize external validity. In order to address internal validity, randomization in selection of respondents was adopted to ensure respondents were as representative of the target population as possible. Content validity was achieved by submitting questionnaires and interview schedule to the supervisor who was a senior academic who was experienced in research who carried out a critical evaluation of the items in it the instruments to establish content validity. Face validity was enhanced by improving on the general layout and formatting of the data collection tools so as to make them user friendly.

Further, triangulation was used to establish validity. Triangulation is defined as using several sources of information or procedure in a study to continually find out indefinable patterns (Nobble & Smith, 2015:34). Multiple forms of triangulation were used in this study. These were data, site, methodological and investigator triangulation. Hair, et al (2021) defined data triangulation as a qualitative research adoption of multiple data sources in order to have a comprehensive understanding of a phenomenon. Data triangulation is a quantitative study's approach to establish validity by getting convergence of data from various sources of data (Silverman, 2023). Site triangulation was adopted in this study. To achieve this, principals and bursars from various schools were used as respondents. Site triangulation can be attained by using respondents from several institutions to reduce the effect on the study of local factors peculiar to one institution (Saunders, Lewis & Thornhill, 2022).

Furthermore, this study adopted methodological triangulation. Here, the researcher used more than one method of collecting or analyzing data (Silverman, 2023). In this study the methods of data capture tools were principals, school bursars' questionnaires and school auditors' interview schedule. Similarly, data analysis was done using several analysis methods. Descriptive and inferential statistics analysis was adopted. Percentages and means and standard deviation were computed. Descriptive statistics analysis such as T- Test, Anova, f-statistics and regression analysis were adopted to analyze inferential statics. Regression analysis was done to identify significant difference and relationships.

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In order to facilitate theory triangulation, the study adopted Scientific Management Theory as propounded by Fredrick Tylor as the primary theory and system theory as advanced by Ludwig Von Bertalanfy to address the weakness that were observed in the use of scientific management theory. Hair, et al (2021) explained that theory triangulation involves the use of various theoretical frameworks in a research study instead of approaching the study from just one theoretical perspective. In this study, testing of competing hypothesis was one of the ways of performing theory triangulation.

Reliability of Research Instrument

Reliability is explained as the research data collection instrument extent of consistency in measuring a given concept (Dikko, 2016). Reliability measures variance of the respondents scores (De Vellis, 2016). Reliability establishes if the data collection tool will give similar results if it is applied to research subjects in comparable conditions (Dikko, 2016). To achieve reliability, public secondary school principals and bursars were sampled as respondents. Their general reactions and responses were sought and examined and later used during pilot study and pre-testing of data collection instruments. Test-re-test method was adopted to investigate external reliability of data collection tools. To achieve this, piloting of data collection tools was done and after two weeks they were applied to the same informants in the pilot schools to establish if similar results would appear.

Data Collection Procedure

To get authority to enable collection of data, the researcher sought ethical clearance from College of Education Research Ethics Clearance Committee (CEDU-RC) at the University of South Africa and subsequently a research permit from National Commission for Science, Technology and Innovation (Kenya). The researcher later visited the offices County Director of Education and the County Commissioner Kajiado, to get consent to gather data from the targeted schools in the county. The principal's consent to gather data was sought orally at the school. Participating school visits were made by the researcher.

The researcher described to the subjects the purpose and procedure of the study after which they were issued with a letter requesting them to take part. Later, the researcher went to the office of the County Director of Education in Kajiado to administer the school's auditor's interview schedule to the county school auditors. Primary data was collected for analysis from principals and bursars from the sampled schools using their questionnaires. County school auditors' data was collected using the interview schedule.

RESULTS

Data analysis on Principals' Competencies in Procurement

Descriptive statistics were used to analyze principals' competencies in procurement. In this section, percentages were used to rate the level of competencies. Tables 1 and 2 show the results of the findings.

Table 1: Principals' Competencies in Procurement According to Principals

Statement	Principal (N= 106)			
	SD	D	A	SA
I have the necessary procurement competencies to timely Prepare Procurement Plan	18%	25%	25%	31%
I have the necessary procurement competencies to regularly carry out procurement risk management	21%	34%	32%	13%
I have the necessary procurement competencies to regularly ensure procurement rules are followed	16%	32%	20%	32%
I have the necessary procurement competencies to regularly carry out procurement contract management	20%	25%	35%	21%
I have the necessary procurement competencies to regularly enhance supply sustainability –stable supplies	15%	39%	21%	25%
I have the necessary procurement competencies to regularly continues use and re-use of vendors	16%	28%	32%	24%
I have the necessary procurement competencies to regularly improve supplier relationships	19%	23%	35%	24%
I have the necessary procurement competencies to regularly establish good relationship with vendors	25%	23%	28%	25%
I have the necessary procurement competencies to regularly lead in identifying the best products in the market	24%	29%	25%	23%
I have the necessary procurement competencies to regularly deploy technology in procurement	25%	27%	32%	15%
I have the necessary procurement competencies to timely appoint school procurement inspection and acceptance committee after delivery of the goods, works or services	23%	27%	28%	22%
I have the necessary procurement competencies to regularly update school procurement records for monitoring procurement	22%	28%	29%	21%

Table 2: Principals’ Competencies in Procurement According to Bursars

My principal has necessary procurement competencies to: -	Bursars (N=100)			
	SD	D	A	SA
Timely Prepare Procurement Plan	13%	34%	24%	29%
Regularly carry out procurement risk management	17%	30%	38%	15%
Regularly ensure procurement rules are followed	20%	30%	18%	32%
Regularly carry out procurement contract management	21%	19%	34%	26%
Regularly enhance supply sustainability –stable supplies	18%	33%	25%	24%
Regularly continues use and re-use of vendors	21%	21%	40%	18%
Regularly improve supplier relationships	15%	31%	29%	25%
Regularly establish good relationship with vendors	20%	19%	34%	27%
Regularly lead in identifying the best products in the market	17%	31%	32%	20%
Regularly deploy technology in procurement	25%	30%	33%	12%
Timely appoint school procurement inspection and acceptance committee after delivery of the goods, works or services	14%	34%	32%	20%
Regularly update school procurement records for monitoring procurement	16%	24%	39%	21%

In this study, 56% and 53% of principals and bursars averred that principals have the necessary procurement competencies to timely prepare procurement plans. However, 44% of principals and 47% of bursars disagreed with the observation. This viewpoint is consistent with Akinfolarin’s (2017) assertion that performance of project financial management was hampered by inadequate procurement skills, yet their performance was dependent upon the development of project management expertise.

The results from interviewed auditors affirmed the findings by asserting that:

“Some principals who prepare procurement plans may not follow through laid down procedures. Similarly, variations in market prices as well as poor qualifications of suppliers could affect effective procurement plan development.”

In addition, the interviewed auditors further argued that:

“Some school administrators could face challenges in procurement planning because of irregular funding from government and parents. Most importantly, inadequate skills in procurement planning on principals, bursars, and some B.O.M members can hamper procurement functions.”

The study established that 45% of principals and 53% of bursars indicated that principals have the necessary procurement competencies to regularly carry out procurement risk management. However, 55% of principals and 47% of bursars disagreed with the observation. These findings support those of Wankmuller and Reiner (2021), who suggested that for managers to carry out their procurement mandate, they must possess risk management abilities.

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The research found that 52% of principals and 50% of bursars affirmed that principals had the necessary procurement competencies to regularly ensure procurement rules are followed. However, 48% of principals and 50% of bursars disagreed with the statement. These results concurred with Saikouk, et al (2021) who found out that organizations can save costs and guarantee delivery of high-quality goods, services or works by using well-designed and run procurement procedures. In a similar vein, 55% of principals and 60% of bursars also held that principals did not have the necessary procurement competencies to regularly carry out procurement contract management. This outcome is similar to Rebs et al (2018) assertion that sustainable procurement practices guarantee reliable vendors who provide the school with regular and uninterrupted supplies.

In this study, 46% of the principals and 49% of the bursars asserted that principals have the necessary procurement competencies to regularly enhance supply sustainability. However, 54% of the principals and 51% of bursars disagreed respectively. This finding is similar to Khan, Lee, and Bae's (2019) finding which established that sustainable procurement guarantees stable suppliers with regular supplies. One of the most important metrics for assessing an organization's effectiveness is sustainable procurement (Lamenza, Fontana & Leira, 2019).

Similar findings were propounded by 44% of the principals and 42% of the bursars maintained that principals did not have the necessary procurement competencies to regularly continue use and re-use of vendors. The findings are consistent with those of Musa, Success, and Nwaorgu (2014) and Neupane et al (2022) who emphasized that interpretation, observation, reflection, problem-solving, evaluation, and decision-making as skill sets and competencies that can be applied to the analysis of a multitude of financial facts and data to aid in the selection of the most suitable suppliers.

A good working relationship between the organization and suppliers rests on the competencies of management. In this research, it was established that 59% of principals and 54% of the bursars indicated that principals had the necessary procurement competencies to regularly improve supplier relationships. Conversely, 41% of the principals and 46% of the bursars disagreed with the statement. Comparably, 48% of the principals and 39% of the bursars stated that principals did not have the necessary procurement competencies to regularly establish a good relationship with vendors. These findings are congruent to Mutebi et al (2021) who stated that to carry out procurement duties in their institutions; procurement managers must possess interpersonal skills to facilitate management-vendor relationship.

The study established that up to 53% of principals and 48 % of bursars avowed that principals did not have the necessary procurement competencies to regularly lead in identifying the best products in the market. This outcome concurs with Liu et al (2021) that identifying viable and sustainable product mix can enable organizations to get value for money.

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Similarly, 52% of principals and 55% of bursars stated that principals did not have the necessary procurement competencies to regularly deploy technology in procurement. The findings align with Wango and Gatere's (2012) and Dubey et al (2019) findings who suggested that adoption and implementation of information communication technology can assist principals and schools to enhance value, improve procurement efficiency, and reduce workloads.

The school auditors contend that:

“Principals seldom use e-procurement in the management of procurement functions. In addition, some principal's bid invitations were average. Furthermore, most do not carry out inspections and acceptance of goods and services rendered.”

In this research, it was established that 50% and 52% of participants indicated that principals have the necessary procurement competencies to timely appoint school procurement inspection and acceptance committees after the delivery of the goods, works or services.

Auditors asserted that:

“When it comes to evaluation of vendors, some principals keep very good records. Nevertheless, some principals lack criteria for evaluating vendors which could affect procurement functions. Most need a lot of support to evaluate submitted bids for proper action.”

Similar findings were put forward by 50% of the principals and 60% of the bursars who specified that principals have the necessary procurement competencies to regularly update school procurement records for monitoring procurement. Principals are better able to make judgments when they possess analytical competencies, as noted by Moshtari, et al, (2021)

Conversely, the auditors noted that: The interviewed auditors asserted that:

“Principals in secondary schools are faced with frequent changes in student enrollment, poor record keeping of stores and balance stocks, inadequate and irregular funding which hinder bulk purchases and increased creditors hampering credit worthiness of some schools.”

Data Analysis on Performance of Procurement Functions

Descriptive statistics were used to analyze performance of procurement functions. In this section, percentages were used to evaluate the level of effectiveness. Tables 3 and 4 show the results of the finding.

Table 3: Performance of Procurement Functions According to Principals

Kindly rate your effectiveness in performance of the following Procurement roles: Statement:	Principal (N= 106)			
	NE	LE	E	VE
Timely preparation of procurement plan	20%	24%	32%	25%
Regularly carry out procurement risk management	12%	39%	30%	19%
Regularly ensure procurement rules are followed	28%	21%	28%	23%
Regularly carry out procurement contract management	13%	36%	35%	16%
Regularly enhance supply sustainability –stable supplies	18%	24%	31%	27%
Regularly continues use and re-use of vendors	16%	33%	35%	16%
Regularly improve supplier relationships	22%	26%	25%	26%
Regularly establish good relationship with vendors	20%	25%	36%	20%
Regularly lead in identifying the best products in the market	18%	30%	28%	24%
Regularly deploy technology in procurement	16%	29%	40%	15%
Timely appoint school procurement inspection and acceptance committee after delivery of the goods, works or services	20%	30%	29%	21%
Regularly update school procurement records for monitoring procurement	16%	30%	30%	24%

Table 4: Performance of Procurement Functions According to Bursars

Kindly rate your principal's effectiveness in performance of the following Procurement roles: Statement:	Bursars (N=100)			
	NE	LE	E	VE
Timely preparation of procurement plan	23%	21%	27%	29%
Regularly carry out procurement risk management	17%	33%	35%	15%
Regularly ensure procurement rules are followed	23%	24%	29%	24%
Regularly carry out procurement contract management	23%	30%	33%	14%
Regularly enhance supply sustainability –stable supplies	21%	24%	30%	25%
Regularly continues use and re-use of vendors	16%	30%	37%	17%
Regularly improve supplier relationships	21%	23%	30%	26%
Regularly establish good relationship with vendors	16%	33%	24%	27%
Regularly lead in identifying the best products in the market	19%	26%	33%	22%
Regularly deploy technology in procurement	16%	29%	36%	19%
Timely appoint school procurement inspection and acceptance committee after delivery of the goods, works or services	18%	27%	36%	19%
Regularly update school procurement records for monitoring procurement	16%	28%	34%	22%

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Procurement functions require timely preparation of a procurement plans. The study established that 44% and 44% (principals and bursars respectively) affirmed that principals were not effective in timely preparation of procurement plans. This finding is similar to Wanjala, Wamocha and Sang (2020) finding that timely preparation of procurement ensures that initiation, planning, execution, control, and closing the procurement task will be.

Similarly, 49% of principals and 47% of bursars observed that principals were ineffective in following laid down procurement rules. This result concurs with John et al (2022) who established that all procurements, regardless of their estimated cost, must adhere to the prescribed course of action outlined in the legal guidelines in public.

In this study, it was established that 51% of the principals and 50% of the bursars said that principals were ineffective in carrying out procurement risk management. The findings of KACC and PPOA (2019), and Kavula, Kalai, and Migosi (2014) highlights the possibility of heads of procurement entities to implement strategies to control daily risks to minimize vulnerabilities in procurement and.

In a similar vein, 53% and 49% of bursars and principals respectively averred that principals were ineffective in regularly managing procurement contracts. The findings are similar to Frenneson, et al (2021) who established that management of procurement contracts enables public institutors to track all costs to ensure that they are aligned with the projected budget as shown in the institution's procurement plan.

The results of the study established that 42% of principals and 45% of bursars affirmed that principals were ineffective in supply sustainability. This finding is akin to Gray, Purchas and Fenton (2021) who concluded that sustainable supply chains enables organizations to secure services and assure it of improved service provision.

This study found out that 48% of principals and 45% of bursar respondents asserted that principals were ineffective in identifying the best products in the market. This finding agrees with Flynn, Pagel and Fugate (2018) finding that organizations need to source for quality products by carefully carrying out market survey.

In a similar observation, 49% of principals and 46% bursars maintained that principals were ineffective in constant use and re-use of vendors. The present enquiry corroborates the findings of Embeli et al. (2014), and Angokho, Juma, and Musienga (2014) which revealed that the execution of procurement reforms in public secondary schools was impacted by poor interpersonal relationships with vendors.

It was found that 48 % of principals and 44% of bursars' participants avowed that principals were ineffective in regularly improving supplier relationships. Furthermore, 45 % of principals and 49% of bursars indicated that principals were ineffective in establishing good relationship with vendors. This finding support Aryatwijuka et al (2022) who stated that organizations' managers examine

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 purchases made in large quantities and establish long-term relationships with a limited number of suppliers who can offer high-quality goods, services, and products at competitive prices.

Technology innovation is needed to increase school procurement's efficacy and efficiency while keeping tasks simple. In this study, 45% of principals and bursars said principals were not effective in regular deployment of technology in procurement. This find corroborates Neupane et al, (2022), PPOA; (2015) and (Faga, 2019) who advanced that using technology software in the procurement procedure will benefit institutions.

In this study, 50% of principals and 45% of the bursars reported that principals were not or less effective in timely appointment of school procurement inspection and acceptance committee after delivery of the goods, works or services. This finding is similar to Wanjala, Wamocha and Sang (2020) finding that principals in some public schools rarely constituted inspection and acceptance committees in its procurement processes. This could delay the process and payment of vendors and can lead to audit queries if completely not done.

Similarly, 46% of principals and 44% of bursars opined that updating school procurement records for monitoring procurement was not effectively done by principals. These findings support Ahsan and Kumar (2018) assertion that the use of e-procurement may increase the frequency and quality of procurement reports enabling selection of high-quality products and services available to organizations.

Hypothesis Testing

The null hypothesis tested was H_{01} : The hypothesis stated that “There is no statistically significant relationship between principals’ competencies in procurement and effective performance of the selected financial management roles in public secondary schools in Kajiado County, Kenya”. This study’s judgment to either reject or fail to reject the null hypothesis was set at 0.05 alpha levels; that is reject H_0 : if $p < 0.05$, otherwise fail to reject the H_0 : if $p > 0.05$. To facilitate testing of this hypothesis, a correlation test between principals’ competencies in procurement and effective performance of the selected financial management roles in Kajiado County, Kenya was done. Correlation test results are presented in Table 5.

Table 5: Relationship between Principals Competencies in Procurement and Their Performance of Financial Management Roles

			Principals’ Performance of Financial management roles
Principals	Competencies	in Pearson Correlation	.876**
Procurement		Sig. (2-tailed)	.000
		N	106

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

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Pearson Product Moment Correlation Coefficient test yielded $r=0.876^*$; $p<0.05$ at alpha 0.05 level as shown in Table 5. Consequently, the null hypothesis was rejected since the p value (0.000) is less than 0.05 alpha levels. Therefore, a decision was made that there was a positive and statistically significant relationship between principal competencies in procurement and their performance of financial management roles. This finding was also advanced by Wasiche, Mwebi and Ajowi, (2018) who established that principals faced a myriad of challenges that included inadequate financial management skills in sourcing required instructional resources, food items, services and works.

This finding demonstrates that effective performance of the identified financial management roles could improve when principals possess necessary skills in procurement. This is because they are necessary for them to be able to manage procurement at their institutions; these financial management skills are vital for management of public secondary schools. Such skills are in procurement contract management, supply chain sustainability and continuous use and re-use of vendors. In addition; principals require interpersonal skills to improve client-supplier relationships and identification and adoption of information technology in procurement to be efficient in performance of the selected financial management roles.

DISCUSSION OF THE FINDINGS

The objective of this study was to investigate the relationship between principals' competencies in procurement and effective performance of the selected financial management roles in public secondary schools in Kajiado, Kenya. Subsequently, the results of this research were that there was a positive and statistically significant relationship between principal's competencies in procurement and their performance of the selected financial management roles. This finding was also advanced by Wasiche, Mwebi and Ajowi, (2018) who established that principals faced a myriad of challenges that included inadequate financial management skills in sourcing required instructional resources, food items, services or works.

In this study, majority of principals agreed that they have necessary procurement competencies to timely prepare procurement plans. However, a significant proportion of principals disagreed with the observation.

The results from interviewed auditors affirmed the findings by asserting that:

“Some of those who prepare procurement plans may not follow through laid down procedures. Similarly, variations in market prices as well as poor qualifications of suppliers could affect effective procurement plan development.”

The interviewed auditors further argued that:

“Some school administrators could face challenges in procurement planning because of irregular funding from government and parents. Most importantly, inadequate skills on procurement planning on principals, bursars and some B.O.M members can hamper procurement functions.”

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The study established that a large number of the respondents indicated that some principals lacked the necessary procurement competencies to regularly: carry out procurement risk management, ensure procurement rules are followed, carry out procurement contract management and enhance supply sustainability. A significant proportion of respondents also propounded that principals did not have necessary procurement competencies to regularly continue use and re-use of vendors, have necessary procurement competencies to regularly improve supplier relationships and lead in identifying the best products in the market. They also did not have competencies to deploy technology in procurement with all auditors reporting that principals seldom used of e-procurement in management of procurement functions.

In this research some respondents asserted that some principals did not have necessary procurement competencies to timely appoint school procurement inspection and acceptance committees once goods, works or services are rendered with others lacking necessary procurement competencies to regularly update school procurement records.

On the other hand the auditors noted that:

“When it comes to evaluation of vendors, some principals keep very good records. Nevertheless, some principals lack criteria of evaluating vendors which could affect procurement functions. Most need a lot of support to evaluate submitted bids for proper action.”

The study established that some respondents affirmed that principals were not effective in timely preparation of procurement plans. Similarly, some of the respondents observed that some principals were ineffective in following laid down procurement rules. Furthermore, it was established that majority of the principals were ineffective in regularly carrying out procurement risk management. An effective procurement risk management strategy aids institutions in understanding financial implications of various risks and making informed decisions. In a similar vein, majority of respondents asserted that some principals were ineffective in regularly managing procurement contracts.

The study showed that a significant number of principals were ineffective in ensuring supply sustainability. Some respondents said that some principals were ineffective in identifying the best products in the market, were ineffective in regularly improving supplier relationships and in establishing good relationship with vendors. In this study, a significant number of principals were not effective in regularly deploying technology in procurement within their schools, were ineffective in timely appointment of school procurement inspection and acceptance committees after delivery of the goods, works or services and

This finding demonstrates that effective performance of the identified financial management roles could improve when principals possess necessary skills in procurement. These include skills in procurement contract management, supply chain sustainability and continuous use and re-use of vendors. In addition; principals require interpersonal skills to improve client-supplier relationships

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and identification and adoption of information technology in procurement to be efficient in
performance of their financial management roles.

CONCLUSIONS

The major conclusion in this research was that there was a positive and statistically significant relationship between principal's competencies in procurement and effective performance of the selected financial management roles. Similarly, a conclusion was made that a significant number of principals did not have the necessary procurement competencies to timely prepare procurement plans, to regularly carry out procurement risk management and to regularly ensure procurement rules were followed.

In a similar vein, it was concluded that a sizable proportion of principals did not have the necessary procurement competencies to regularly carry out procurement contract management, to regularly enhance supplies sustainability and to regularly continue use and re-use their vendors. Furthermore, it was concluded that some principals did not have the necessary procurement competencies to regularly improve supplier relationships, to regularly lead in identifying the best products in the market, and to regularly adopt and deploy technology in procurement.

Moreover, it was concluded that a few of the principals did not have the necessary procurement competencies to timely appoint school procurement inspection and acceptance committees members upon delivery of the goods, works or services. It was further concluded that some principals lacked competencies to regularly update school procurement records for purposes of monitoring procurement.

The study concluded that some principals were not effective in timely preparation of procurement plans, in following laid down procurement rules and in regularly carrying out procurement risk management. In a similar vein, it was concluded that majority of principals were ineffective in regularly managing procurement contracts, in ensuring supply sustainability in their docket and in identifying the best products in the market. Likewise it was concluded that numerous principals were ineffective in continuous use and re-use of vendors; in regularly improving supplier relationships; in establishing good relationship with vendors and in regularly adopting and deploying ICT in procurement within their schools

A conclusion was also made that a proportion of principals were either not or less effective in timely appointment of school procurement inspection and acceptance committees after delivery of goods, works or services with a significant number of principals being ineffective in updating school procurement records for monitoring procurement. More financial management courses in procurement should be infused to pre-service and in-service teacher training programs at college and university levels to expose teacher trainees and trained teachers respectively on procurement management

Implication to Research and Practice

Further training by ministry of education, Teachers Service Commission (TSC), Kenya Education Management Institute (KEMI), and Kenya Secondary Schools Heads Association) KESSHA was recommended for principals on preparation of procurement plans, procurement risk and contract management, to regularly ensure procurement rules are followed, enhance supply sustainability and to regularly continue use and re-use of vendors and improve supplier relationships. Principals can be trained, mentored and coached on how to identify the best products in the market, adopt and deploy technology in procurement as well as improve monitoring of procurement processes.

The study recommended proper monitoring and evaluation mechanisms to support principals to comply with various procurement management requirements. This study recommended stringent policy and administrative actions and sanctions by Ministry of Education and Teachers Service Commission against principals who do not comply with procurement requirements. Through this study, principals could gain more theoretical insights on efficient and effective performance of procurement roles in their institutions.

Recommendations on effective performance of financial management functions could mitigate complaints by some education stakeholders on ineffectiveness in performance of financial management functions by principals in Kajiado County, Kenya. School Auditors, TSC staff and Education officers can use the findings to identify principals' procurement competency and skills gaps. The study presents best practices and identifies sustainable procurement strategies to improve effectiveness and efficiency in delivery of public secondary school education services in Kenya. This research can theoretically deepen understanding of public secondary schools' financial management and specifically procurement practice.

Further Research

- i. Further research can be done to establish other financial management aspects not focused by this study that contribute to principals' effectiveness in performance of financial management roles.
- ii. More study on principal's effectiveness in performance of financial management roles need to be done across the country since this study had limitation of time, financial resources and scope.
- iii. Other related studies can be done either in primary or junior schools.

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