



SUPPLIER SOURCING AND PERFORMANCE OF PUBLIC LEVEL 5 HOSPITALS IN NAIROBI CITY COUNTY, KENYA

¹Muuki Agneta Kalekye, ²Dr. Nderui Duncan Ndung'u

¹ Masters of Science Degree in Procurement and Contract Management of Jomo Kenyatta
University of Agriculture and Technology

² Lecturer, Jomo Kenyatta University of Agriculture and Technology

ABSTRACT

The healthcare system in Kenya continues to grapple with significant challenges related to procurement and supply chain management, which have far-reaching consequences for patient care, financial sustainability, and overall hospital performance. The general objective of the study was to evaluate the relationship between Supplier sourcing and performance of Public Level 5 Hospitals in Nairobi City County, Kenya. Specifically, the study sought to evaluate the relationship between material acquisition and the performance of Public Level 5 Hospitals in Nairobi City County, Kenya and to identify the relationship between contract management practices and the performance of Public Level 5 Hospitals in Nairobi City County, Kenya. This study was anchored on: Supply Chain Management (SCM) Theory, and Principal-Agent Theory. For this study, descriptive research design was utilized. The unit of analysis was the 5 public level 5 hospitals in Nairobi City County while the unit of observation was management employees of procurement, supply chain management, finance, administration, and clinical services working with the 4 public level 5 hospitals. The total population was therefore 150 respondents. The study's sample size was reached at using Krejcie and Morgan sample size determination formula. The 108 respondents were chosen with the help of stratified random sampling technique Primary data was obtained using structured questionnaire. Seventeen respondents from target population were used to pilot the questionnaire. Data collected was analyzed using SPSS version 28. Descriptive statistics such as frequency, percentages, means, and standard deviation was used to summarize findings the research variables. Pearson R correlation was used to measure strength and the direction of linear relationship between variables. The study results were presented through use of tables and figures. Regression analysis revealed that variables significantly contribute to hospital performance, with contract management having the highest impact ($\beta = 0.321$, $p = 0.000$), followed by material acquisition ($\beta = 0.311$, $p = 0.000$). The study concludes that Robust contract management, strategic material acquisition significantly enhance hospital operations, reduce risks, and improve overall service delivery. To improve performance, Public Level 5 Hospitals should invest in enhancing their contract management practices by implementing digital management systems and standardized oversight protocols. Hospitals should also adopt advanced supply chain technologies to streamline material acquisition to ensure quality and reliability.

Key Words: Supplier sourcing, Material Acquisition, Contract Management Practices, Performance, Public Level 5 Hospitals

Background of the Study

The healthcare sector is under increasing pressure to enhance operational efficiency, reduce costs, and improve patient outcomes. Sourcing, a vital component of supply chain management, has emerged as a critical practice in achieving these objectives (Smith & Brown, 2021). Supplier sourcing involves a systematic process of evaluating and engaging suppliers, optimizing procurement processes, and leveraging organizational buying power to achieve the best value (Johnson, 2020).

In recent years, the importance of Supplier sourcing in healthcare has been accentuated by the COVID-19 pandemic, which exposed vulnerabilities in supply chains worldwide (Lee et al., 2022). Hospitals, which offer comprehensive care and specialized treatments, faced unprecedented challenges in managing their supply chains efficiently (Miller & Thompson, 2023). Consequently, there has been a growing emphasis on adopting Supplier sourcing to ensure resilience, sustainability, and performance in these critical healthcare facilities.

Empirical evidence suggests that effective Supplier sourcing can lead to significant improvements in hospital performance, including cost savings, enhanced service quality, and better patient satisfaction (Garcia et al., 2023). For instance, integrating advanced technologies such as data analytics and artificial intelligence in Supplier sourcing has enabled hospitals to forecast demand accurately, streamline procurement processes, and mitigate risks associated with supply shortages (Davis & Nguyen, 2021).

Despite these advancements, there remains a gap in understanding how Supplier sourcing specifically influence the performance of hospitals. According to Garba (2020), hospital performance is based on the quality standards set by the World Health Organization. These standards include services provided, patients' health improvement and expectations, and fairness in the provision of medical care, regardless of payment methods and social contributions. According to Selina Ionete-Toplicianu et al. (2019), hospital performance reflects the quality of medical action and the ability to manage resources effectively to ensure patient satisfaction.

The Balanced Scorecard (BSC) is a tool developed by Kariuki and Wabala (2021) to assess organizational performance, incorporating both financial and non-financial measures to achieve desired goals (Kariuki & Paul, 2022). BSC evaluates performance through four perspectives: Customer, Internal Process, Training and Development of Employees, and Finance (King'ori & Lambiano, 2023). Quality, as defined by the International Organization for Standardization, is a relative concept. If the inherent characteristic of a service meets customer requirements, it can be rated as high quality (Reinartz, 2019). In healthcare, patient experience plays a crucial role in quality assessment, encompassing technology, effective medication, staff ratios, affordability, and efficiency (Tam, 2019).

Material acquisition involves obtaining physical resources needed for operations. Supplier sourcing emphasizes optimizing material acquisition to achieve cost savings, minimize risks, and enhance supply chain efficiency. This may include leveraging economies of scale and just-in-time inventory management. Effective management of material acquisition enhances operational performance and reduces costs (Muvunyi & Mulyungi, 2022).

Contract management involves the administration and optimization of contracts, including creation, review, negotiation, and ongoing management. Effective contract management ensures adherence to terms, value delivery, and risk mitigation. This includes establishing performance metrics and managing disputes (Mutua & Juma, 2020).

By incorporating Sourcing Practices, hospitals can significantly enhance their performance. These practices ensure efficient procurement processes, cost-effectiveness, and alignment with strategic goals, ultimately leading to improved service delivery, patient satisfaction, and operational efficiency (Maina & Paul, 2023). Despite the recognized benefits, there remains a gap in understanding how Supplier sourcing specifically influence the performance of

hospitals. This study aims to fill this gap by exploring the relationship between Supplier sourcing and the performance outcomes of Level 5 hospitals.

The health sector in Kenya includes public entities such as the Ministry of Health and parastatals, as well as the private sector, which consists of for-profit organizations, NGOs, and Faith-Based Organizations (RoK, 2019). Service quality in healthcare is essential for patient satisfaction, loyalty, and financial profitability. Quality dimensions in healthcare are divided into technical accuracy and the manner of service delivery (Dean & Lang, 2008; Mwangi, 2020). By investigating the impact of Sourcing Practices, this study sought to provide valuable insights for healthcare administrators, policymakers, and practitioners striving to enhance hospital efficiency and patient care.

Statement of the Problem

The healthcare system in Kenya continues to grapple with significant challenges that are particularly acute in Level 5 hospitals in Nairobi, the country's highest-level healthcare facilities responsible for providing specialized medical services to a large population. A critical issue identified is the lack of Supplier sourcing in these hospitals, which significantly contributes to the procurement and supply chain difficulties. Recent studies indicate a concerning gap in the adoption of essential Supplier sourcing such as supplier evaluation, contract management, and supplier relationship management. For example, a 2018 World Bank report revealed that only 37% of public healthcare facilities in Kenya had implemented these practices, despite their potential to yield cost savings of up to 20% and improve the availability of medical supplies (World Bank, 2018).

The financial implications of inefficient procurement and supply chain management practices are substantial. The Kenya Medical Supplies Authority (KEMSA), the government's central medical logistics provider, reported a deficit of KES 2.9 billion (approximately USD 25.7 million) in the 2018/2019 fiscal year, partly attributed to high procurement costs and inefficient distribution systems (KEMSA Annual Report, 2019). Additionally, a 2020 survey by the Kenya Healthcare Federation (KHF) revealed that 72% of private hospitals in Nairobi cited procurement challenges as a significant barrier to their operational performance and financial sustainability. The survey also found that private hospitals in Nairobi spent an average of 28% of their total operating costs on procurement, with some hospitals spending up to 40% (KHF Survey, 2020).

The impact of these procurement and supply chain challenges is particularly severe in Level 5 hospitals, which serve as referral centers and provide specialized medical services to a large population. According to the Ministry of Health's Kenya Health Sector Strategic Plan 2018-2023, Level 5 hospitals in Nairobi reported an average bed occupancy rate of 92%, indicating high demand for their services (MoH Strategic Plan, 2018-2023). However, these hospitals often struggle to meet this demand due to shortages of medical supplies, equipment, and personnel. A study conducted by the African Population and Health Research Center (APHRC) in 2021 found that 64% of Level 5 hospitals in Nairobi experienced frequent stock-outs of essential medical supplies, leading to delays in surgery and other critical procedures. The study also revealed that these hospitals spent an average of 32% of their annual budgets on procurement, with some hospitals spending up to 45% (APHRC, 2021).

Kenya's healthcare sector is plagued by chronic shortages of essential medicines and medical supplies. According to the Kenya Service Provision Assessment (KSPA) Survey 2018, only 34% of public health facilities had adequate stocks of essential drugs, while 66% experienced stock-outs of critical medicines in the three months preceding the survey (KSPA, 2018). These stock-outs can lead to treatment delays, compromised patient outcomes, and increased healthcare costs due to prolonged hospital stays or readmissions. The absence of Supplier sourcing strategies has severe implications for patient care, financial sustainability, and the overall performance of these critical healthcare facilities. By investigating the relationship between Supplier sourcing and the performance of Public Level 5 Hospitals in Nairobi City

County, this research aims to provide valuable insights and recommendations to address these pressing issues. Identifying best practices in Supplier sourcing and developing tailored strategies can potentially lead to cost savings, improved availability of medical supplies, enhanced operational efficiency, and ultimately, better healthcare outcomes for patients in Kenya's most advanced healthcare facilities.

Despite several empirical studies exploring Supplier sourcing in healthcare, none have focused specifically on Level 5 hospitals in Nairobi. For instance, Johnson and Anderson (2019) examined Supplier sourcing in public hospitals in South Africa, revealing significant cost savings and improved supply chain efficiency. Similarly, a study by Martinez et al. (2020) investigated strategic procurement practices in private hospitals in Brazil, demonstrating enhanced supplier performance and reduced procurement cycle times. Additionally, Singh and Gupta (2021) analyzed the impact of Supplier sourcing on operational efficiency in Indian healthcare facilities, highlighting substantial improvements in service delivery and patient satisfaction. However, these studies do not address the unique challenges and contexts of Level 5 hospitals in Nairobi. This study, therefore, sought to fill this gap by examining how Supplier sourcing influence the performance of these high-level healthcare institutions and proposing actionable recommendations for improvement.

Objectives of the Study

The general objective of the study was to evaluate the relationship between supplier sourcing and performance of Public Level 5 Hospitals in Nairobi City County, Kenya.

The research follows the following objectives:

- i. To evaluate the relationship between material acquisition and the performance of Public Level 5 Hospitals in Nairobi City County, Kenya.
- ii. To identify the relationship between contract management practices and the the performance of Public Level 5 Hospitals in Nairobi City County, Kenya.

LITERATURE REVIEW

Theoretical Review

Supply Chain Management Theory

Supply Chain Management (SCM) theory developed by Keith Oliver in 1982 involves the strategic coordination and integration of activities across the entire supply chain to enhance efficiency, effectiveness, and competitive advantage. It encompasses the planning and management of all activities involved in sourcing, procurement, conversion, and logistics management. Crucially, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. SCM theory posits that by managing the supply chain as a cohesive system rather than as separate functions, organizations can achieve substantial improvements in performance, cost reductions, and value creation for all stakeholders involved. A core aspect of SCM theory is the integration of supply chain processes across organizational boundaries. This means that suppliers, manufacturers, warehouses, and retailers work in a synchronized manner to ensure that goods are produced and distributed in the right quantities, to the right locations, and at the right time. Effective integration reduces redundancies and delays, allowing for more agile and responsive supply chains. It also involves aligning supply chain strategies with business strategies to ensure that the supply chain supports overall business goals. Information technology plays a crucial role in enabling this integration by providing tools for communication, data sharing, and real-time decision-making. SCM theory emphasizes the importance of effective inventory management. Proper inventory management ensures that the right amount of inventory is maintained to meet demand without incurring excess holding costs. Techniques such as Just-In-Time (JIT) inventory, where materials are ordered and received only as they are needed in the production process, help minimize waste and reduce storage costs. Additionally, supply

chain managers use demand forecasting and planning tools to predict customer demand and adjust inventory levels accordingly. Efficient inventory management leads to better utilization of resources, lower operational costs, and improved service levels (Younus, Zaidan & Mahmood, 2022).

Building and maintaining strong relationships with suppliers is a fundamental principle of SCM theory. Effective supplier relationship management involves selecting the right suppliers, negotiating favorable terms, and fostering long-term partnerships based on trust and mutual benefit. Strong relationships with suppliers can lead to better quality materials, more reliable deliveries, and cost savings through economies of scale and collaborative initiatives. SCM theory advocates for transparent communication and collaboration with suppliers to improve supply chain performance and create value for all parties involved. Information flow is a critical component of SCM theory. Accurate and timely information about demand, inventory levels, production schedules, and delivery status is essential for making informed decisions. Advanced information systems, such as Enterprise Resource Planning (ERP) and Supply Chain Management Software (SCMS), facilitate the seamless flow of information across the supply chain. These technologies enable real-time tracking, data analysis, and improved visibility, allowing organizations to respond quickly to changes in demand and supply conditions. Effective information flow enhances coordination, reduces uncertainties, and supports proactive supply chain management. SCM theory also addresses the importance of risk management and sustainability in supply chain operations. Supply chain risks, such as supply disruptions, quality issues, and geopolitical uncertainties, can significantly impact organizational performance. SCM involves identifying potential risks, developing mitigation strategies, and building resilient supply chains that can withstand disruptions. Additionally, SCM theory increasingly emphasizes the need for sustainable practices, including reducing carbon footprints, managing waste, and ensuring ethical sourcing. Sustainable supply chain practices not only protect the environment but also enhance brand reputation and meet regulatory and consumer expectations (Garba, 2020).

Supply Chain Management (SCM) theory is built on several key assumptions that aim to streamline operations, enhance efficiency, and maximize value across the entire supply chain. One central assumption is the integration of all supply chain activities from procurement, production, and distribution to retail. This integration is believed to create a seamless flow of information and goods, reducing redundancies and minimizing costs. Additionally, SCM assumes that collaboration and communication among supply chain partners are critical for optimizing performance and responding agilely to market demands. The theory also often presupposes that technological advancements, such as ERP systems and IoT, can effectively facilitate this integration and collaboration, thereby driving efficiencies and enabling real-time decision-making (Keitany, Wanyoike & Richu, 2023).

However, these assumptions face several critiques. Firstly, the ideal of full integration and seamless communication is often challenged by the complexity and fragmentation of modern global supply chains. Different entities within the supply chain may have varying priorities, levels of technological adoption, and degrees of willingness to share sensitive information, which can hinder true integration. Furthermore, the assumption that technological solutions can resolve most inefficiencies overlooks the human and cultural factors that significantly impact supply chain operations. Resistance to change, lack of trust, and differing organizational cultures can impede the effective implementation of SCM practices. Another critique lies in the assumption that supply chain optimization always leads to cost reduction and efficiency. While this is often true in theory, in practice, the focus on efficiency can sometimes lead to vulnerabilities, such as reduced inventory buffers that make the supply chain more susceptible to disruptions. The COVID-19 pandemic starkly highlighted this issue, where highly optimized supply chains struggled to adapt to sudden and massive disruptions. Critics argue that SCM theory needs to better account for resilience and flexibility, rather than just efficiency and cost reduction. Finally, SCM theory is critiqued for its sometimes overly deterministic view of

technology. The rapid pace of technological change means that what is considered cutting-edge today can become obsolete quickly, leading to significant sunk costs and the need for continuous reinvestment (Korir & Kagiri, 2022). This theory was relevant in evaluating the relationship between material acquisition and the performance of Public Level 5 Hospitals in Nairobi City County, Kenya.

Principal-Agent Theory

Principal-Agent Theory, founded by Jensen and Meckling (1976), Mirrlees (1976), Ross (1973), and Stiglitz (1975) is a fundamental concept in economics and organizational theory, delves into the dynamics between principals (such as owners, shareholders, or managers) and agents (such as employees, contractors, or suppliers) within an organization or economic transaction. At its core, Principal-Agent Theory aims to address the challenges that arise when the interests of principals and agents may not be perfectly aligned. It recognizes that principals delegate authority to agents to carry out tasks or make decisions on their behalf, but agents may have their own objectives or incentives that differ from those of the principals. Consequently, the theory focuses on understanding how to structure relationships and incentives to ensure that agents act in the best interests of the principals. One key element of Principal-Agent Theory is the concept of incentive alignment. It suggests that effective governance mechanisms, such as contracts or compensation structures, should be designed to align the interests of agents with those of principals. In other words, agents should be motivated to act in a manner that maximizes the principals' objectives, whether it's maximizing profits, achieving specific performance targets, or delivering high-quality services. Achieving this alignment often involves designing incentives that reward desirable behavior and penalize undesirable behavior (Muhwezi & Ahimbisibwe, 2021).

Another important aspect of Principal-Agent Theory is the acknowledgment of information asymmetry between principals and agents. Principals typically have less information about the specifics of tasks or transactions than the agents executing them. This information asymmetry can create opportunities for agents to act opportunistically, pursuing their own interests at the expense of the principals. To mitigate this risk, effective governance mechanisms, such as monitoring systems or performance metrics, are put in place to provide principals with visibility into agents' actions and outcomes. Principal-Agent Theory also addresses the issue of agency costs, which encompass the costs associated with monitoring and controlling agents, as well as the costs of mitigating conflicts of interest or opportunistic behavior. These costs can arise from the need for additional supervision, auditing, or enforcement measures to ensure that agents comply with the principals' objectives. Minimizing agency costs is crucial for improving organizational efficiency and maximizing value creation. Additionally, Principal-Agent Theory emphasizes the importance of governance mechanisms, such as contracts or organizational structures, in regulating the principal-agent relationship. Contracts serve as formal agreements that outline the rights, responsibilities, and expectations of both parties, providing a framework for managing incentives, risks, and accountability. Effective governance mechanisms help establish clear rules and guidelines, facilitate communication and cooperation, and mitigate conflicts or disputes that may arise between principals and agents (Kyarisiima, 2022).

Principal-Agent Theory operates on several foundational assumptions that shape its analysis of organizational relationships and transactions. One central assumption is that agents are self-interested individuals who may prioritize their own objectives over those of the principals they represent. This assumption underscores the need for mechanisms to align the interests of principals and agents and to mitigate the risks of opportunistic behavior. Another key assumption is that principals and agents may have asymmetric information, with agents possessing more knowledge about specific tasks or transactions than principals. This information asymmetry can create challenges for principals in monitoring and controlling agents' actions, leading to the need for effective governance mechanisms to address this imbalance. Furthermore, Principal-Agent Theory assumes that individuals are rational

decision-makers who seek to maximize their utility or economic interests. Principals are assumed to make decisions based on their preferences and objectives, while agents are assumed to respond to incentives and constraints in ways that optimize their own outcomes. This rationality assumption forms the basis for designing incentive structures and governance mechanisms that encourage desired behavior from agents and ensure alignment with the principals' goals. Additionally, the theory assumes that transaction costs associated with monitoring and controlling agents are significant factors that influence the design of governance mechanisms and contractual arrangements (Tanui & Moronge, 2021).

Despite its widespread application and influence, Principal-Agent Theory has faced several critiques from scholars and practitioners. One common critique is that the theory oversimplifies the complexity of human behavior and organizational dynamics. Critics argue that individuals may not always act purely out of self-interest or with perfect rationality, and that social, psychological, and cultural factors may influence behavior in ways that the theory does not adequately account for. This critique suggests that the theory's focus on incentive alignment and monitoring mechanisms may overlook other important aspects of organizational relationships, such as trust, collaboration, and shared values. Additionally, Principal-Agent Theory has been criticized for its static view of relationships and transactions, which may not fully capture their dynamic and evolving nature. Relationships between principals and agents may change over time in response to shifting circumstances, goals, and incentives. The theory's emphasis on designing static governance mechanisms and contractual arrangements may therefore be insufficient for managing the complexities of real-world organizational interactions. Moreover, some critics argue that the theory's reliance on formal contracts and monitoring mechanisms may lead to bureaucratic inefficiencies and undermine the potential for creativity, innovation, and trust within organizations. Furthermore, Principal-Agent Theory has been criticized for its focus on individual decision-making and neglect of broader social and institutional contexts. The theory often assumes a binary relationship between principals and agents, overlooking the influence of external stakeholders, power dynamics, and institutional norms on organizational behavior. This critique suggests that a more holistic understanding of organizational relationships requires consideration of the broader social, cultural, and institutional contexts in which they are embedded (Kariuki & Paul, 2022). This theory was relevant in identifying the relationship between contract management practices and the performance of Public Level 5 Hospitals in Nairobi City County, Kenya.

Conceptual Framework

A conceptual framework is a research tool that is used to communicate as well as developing a clear understanding of the topic under study (Maaka, 2016). It shows the expected relationship between the dependent and the independent variables.

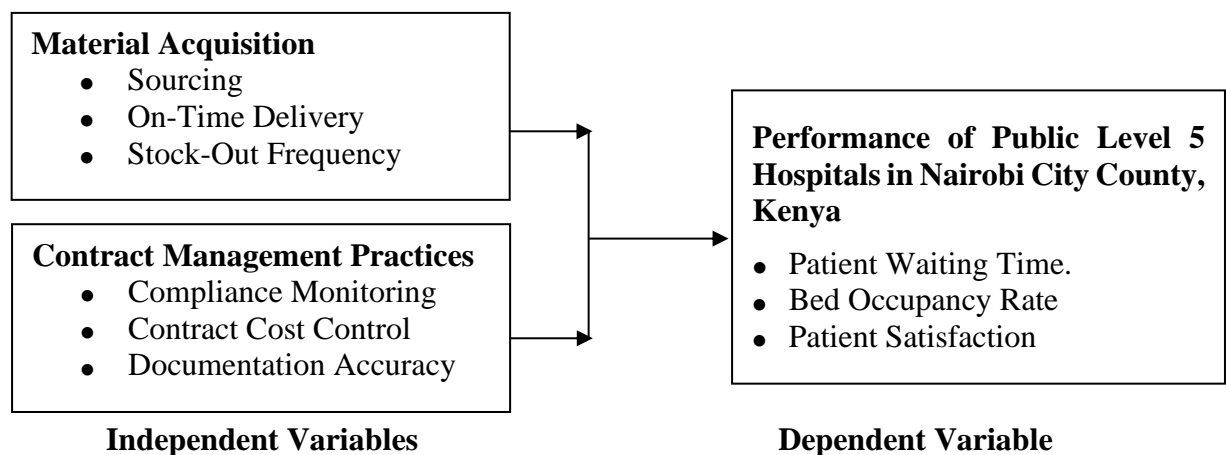


Figure 2. 1: Conceptual Framework

Source: Author (2024)

Material Acquisition

Material acquisition refers to the process of obtaining raw materials, components, or finished goods necessary for the production or operation of a business (Sigat & Chege, 2020). It involves sourcing, purchasing, and receiving materials from suppliers or vendors to fulfill the organization's needs. Material acquisition is a critical aspect of supply chain management and plays a vital role in ensuring the smooth and uninterrupted flow of materials throughout the production process (Younus, Zaidan & Mahmood, 2022).

Sourcing is the initial step in material acquisition, focusing on identifying and selecting suppliers who can provide the required materials. This process begins with a thorough market analysis to understand the supply landscape, including the availability of materials, supplier capabilities, and market conditions. Sourcing involves evaluating potential suppliers based on various criteria such as quality, reliability, cost, and compliance with regulatory standards. Establishing strong relationships with suppliers is essential to ensure a steady and reliable supply of materials. Negotiating favorable terms and conditions, including price, delivery schedules, and payment terms, is also a crucial part of the sourcing process. Effective sourcing strategies can lead to cost savings, improved quality, and reduced supply chain risks (Younus, Zaidan & Mahmood, 2022).

Transportation is the next critical phase in material acquisition, involving the movement of materials from the suppliers to the organization's facilities. Efficient transportation is essential to ensure timely delivery and minimize disruptions in the supply chain. This phase involves selecting the appropriate mode of transportation (e.g., air, sea, rail, or road) based on factors such as cost, speed, and the nature of the materials being transported (Keitany, Wanyoike & Richu, 2023). Coordination with logistics providers and ensuring compliance with regulations related to transportation are key aspects of this process. Effective transportation management includes tracking shipments, managing risks such as delays or damages, and optimizing routes to reduce costs and transit times. Advanced technologies, such as GPS tracking and supply chain management software, can enhance visibility and control over the transportation process (Garba, 2020).

Cost management is a fundamental aspect that spans across all stages of material acquisition. It involves controlling and reducing costs associated with sourcing and transportation without compromising on quality and reliability. In sourcing, cost management includes negotiating better prices, bulk purchasing, and developing long-term contracts with suppliers to lock in favorable rates. During transportation, cost management focuses on optimizing logistics operations to reduce expenses related to fuel, storage, handling, and transit. This can be achieved through strategies such as consolidating shipments, using cost-effective transportation modes, and leveraging technology for efficient route planning. Additionally, cost management requires continuous monitoring and analysis of expenditures to identify opportunities for cost savings and improve overall procurement efficiency. Implementing cost-effective practices while maintaining high standards of quality and reliability is crucial for enhancing the organization's profitability and competitiveness (Korir & Kagiri, 2022).

Contract Management Practices

Contract management practices refer to the systematic processes and activities employed by organizations to effectively administer and oversee contracts throughout their lifecycle (Mwangi, 2020). Contracts play a crucial role in governing relationships between parties involved in business transactions, including suppliers, vendors, customers, and partners. Effective contract management practices encompass a range of activities, from contract drafting and negotiation to monitoring compliance, managing risks, and resolving disputes. By implementing robust contract management practices, organizations can maximize the value of their contracts, mitigate risks, and ensure that contractual obligations are fulfilled in a timely and cost-effective manner (Muhwezi & Ahimbisibwe, 2021).

Compliance in contract management involves ensuring that all parties adhere to the terms and conditions specified in the contract. This includes monitoring performance metrics, delivery schedules, quality standards, and legal requirements. Effective compliance management requires establishing clear criteria and benchmarks at the outset of the contract. Regular audits, performance reviews, and compliance checks are necessary to verify that the supplier or service provider is meeting their obligations. Non-compliance can lead to various issues, including legal disputes, financial losses, and damage to business relationships. Therefore, a proactive approach to compliance, involving continuous monitoring and prompt resolution of any issues, is essential for the smooth execution of contracts (Chebichii, Namusonge & Makokha, 2023).

Contract cost management is another critical aspect of contract management. It involves monitoring and controlling all costs associated with the contract to ensure they stay within the agreed budget. This includes not only the direct costs specified in the contract but also any additional expenses that may arise during the contract's lifecycle, such as extra charges for expedited delivery or penalties for late performance. Effective cost management requires detailed tracking of expenditures, regular financial reporting, and variance analysis to identify any deviations from the budget. Implementing cost-control measures and negotiating amendments or adjustments to the contract terms as needed can help manage and mitigate cost overruns. By keeping a close eye on contract costs, organizations can ensure financial predictability and avoid unexpected expenses (Maina & Paul, 2023).

Contract documentation is the process of recording all relevant information and communications related to the contract. This includes the initial contract agreement, any amendments or modifications, performance reports, compliance records, and correspondence between the parties (Higiro, 2021). Comprehensive documentation is vital for several reasons: it provides a clear record of the agreement and any changes, supports compliance and performance monitoring, and serves as evidence in case of disputes or audits. Effective contract documentation practices involve maintaining organized and accessible records, using standardized templates, and ensuring that all documentation is up-to-date and accurately reflects the current status of the contract. Digital contract management systems can enhance documentation practices by providing centralized storage, easy retrieval, and secure access to all contract-related documents (Muhwezi & Ahimbisibwe, 2021).

Empirical Review

Material Acquisition and Organization Performance

Younus, Zaidan and Mahmood (2022) assessed on the effects of material acquisition on organizational performance in Malaysian small and medium sized enterprises (SMEs). The study used a quantitative research design because it supplied quantitative data. Analysis of the primary data collected using statistical techniques. The survey elicited responses from 260 respondents representing all SMEs firms. There were 235 respondents that completed the questionnaire successfully. The study found that material acquisition was significantly strong and positive. The study concluded that material acquisition had a positive effect on organizational performance in SMEs.

Garba (2020) examined on the effect of material acquisition on the performance of Benue Brewery Industry, Nigeria. Survey research design was used with a population of 242 respondents and a sample of 151. The study found that material acquisition has a positive and significant effect on organizational performance. The study concluded that material acquisition have significant effect on the performance of the manufacturing sector in Nigeria.

Keitany, Wanyoike and Richu (2023) researched on the assessment of the role of material acquisition on organizational performance case of new Kenya Cooperative Creameries Limited, Eldoret Kenya. The study relied on primary data, collected through structured questionnaire from a case study of New KCC Ltd. Eldoret. The target population of the study was 56 employees of New KCC Ltd. Eldoret. A sample of 49 respondents was selected from

this population using the stratified random sampling technique. The study found that there was a strong positive relationship between material acquisition and organizational performance of New KCC Ltd. Eldoret. The study concluded that there was a positive relationship between material acquisition and organizational performance.

Korir and Kagiri (2022) conducted a study on the effect of material acquisition on organizational performance: a case of James Finlay (Kenya) Limited. The study used descriptive research design through a cross-section survey within James Finlay (Kenya). The study targets three departments in the organization and the combined three departments have a population of 450 employees. Furthermore, the research used stratified sampling to narrow down from the 450 target population to 45 sample population. The study found a positive relationship between material acquisition and organization performance. The study concluded that material acquisition has a positive effect on organization performance.

Sigat and Chege (2020) assessed on the effect of material acquisition on financial performance of the Kenya Meat Commission in Kenya. Descriptive Research Design was used. The study population comprised of Kenya Meat Commission headquarters in Athi River, Ladhies branch in Nairobi, Mombasa deport and the user department in Athi River. The study found that material acquisition positively and significantly affects financial performance. The study concluded that the relationship between material acquisition and financial performance of meat commission was positive and significant.

Contract Management Practices and Organization Performance

Muhwezi and Ahimbisibwe (2021) examined on contract management, inter functional coordination, trust and contract performance of works contracts in Ugandan public procuring and disposing entities. This study is cross-sectional and correlational. It also takes the descriptive and analytical design. Data were collected from a representative sample of 108 completed and fully documented works contracts in the central government procuring and disposing entities in Uganda. The study found a significant positive relationship between contract managements and trust, contract management and inter-functional coordination, contract management and contract performance, inter-functional coordination and trust, trust and contract performance and inter-functional coordination and contract performance. The study concluded that contract management, inter-functional coordination and trust are significantly associated with contract performance.

Kyarisiima (2022) researched on the effect of contract management practices on procurement performance a case of Nyarugenge District. This study adopted a descriptive survey design. The target population for this study was 127 comprising both staff of Nyarugenge District head office and contractors. The study used a sample size of 105 and applied stratified and simple random sampling methods in generating the sample. The study found that contract and procurement performance depend on each other and shows a positive relationship. The study concluded that procurement performance of Nyarugenge District was affected by contract management practices.

Tanui and Moronge (2021) conducted a study on the influence of contract management practices on operational performance of state corporations in Kenya. The study adopted descriptive research design to establish influence of contract management practices on operational performance of state corporations in Kenya. The target population comprised of head of departments in state corporations in Kenya which totals to 162. The study found that contract evaluation influences operational performance most followed by dispute resolution, contract administration, and contract planning. The study concluded that contract planning, contract administration, contract evaluation and dispute resolution has a positive effect on operational performance.

Kariuki and Paul (2022) investigated on the influence of contract management practices on procurement performance of county government in Kenya. This study targeted staff of Garissa

County and composed of senior staff management, middle level staff management and operational staff. The study employed descriptive survey design. The researcher used questionnaires as research instruments to collect data to the study. The study found that contract monitoring, managerial capacity, contract relationship and contract planning had a significant and positive effect on the procurement performance of County Government in Kenya. The study concluded that contract monitoring, managerial capacity, contract relationship and contract planning significantly and positively influenced procurement performance of County Government in Kenya.

Mwangi (2020) assessed on contract management practices and performance of county governments in Kenya. The study adopted descriptive survey design and draw on a quantitative inquiry. This study picked a sample of 96 respondents. The study found that contract relationship management and contract cost management have positive significant effect on performance of Kiambu County. The study concluded that contract relationship management and contract cost management positively and significantly affect performance.

RESEARCH METHODOLOGY

For this study, descriptive research design was utilized. In this study, the target population was the public Level 5 hospitals in Nairobi County, Kenya. According to the Ministry of Health (MOE, 2023), there are four public Level 5 hospitals in Nairobi County. The unit of analysis was the four public Level 5 hospitals, while the unit of observation focused on staff members directly involved in Sourcing Practices, including those in the Procurement, Supply Chain Management, Finance, Administration, and Clinical Services departments. The total target population for this study consisted of 150 respondents. Given the relatively small size of the population in this study, a census approach was employed, meaning that the entire study population included as the sample. Therefore, the study sample consisted of all 150 respondents. This study used semi-structured questionnaires to collect the primary data for the study. Data from questionnaires were coded and analyzed using the latest Statistical Package for Social Sciences (SPSS version 28) computer software. The study employed mixed methods data analysis by applying the use of descriptive and inferential statistics.

RESEARCH FINDINGS AND DISCUSSIONS

For this study, 135 questionnaires were distributed to employees involved in procurement and supplier sourcing within Public Level 5 Hospitals in Nairobi City County, Kenya, excluding those in the pilot test. Out of these, 119 questionnaires were returned, yielding a response rate of 87.9%. This high response rate enhances the generalizability of the study findings, indicating that the data collected is representative of the target population.

Descriptive Analysis

Descriptive statistics summarize respondents' levels of agreement with statements related to each sourcing practice. The statistics summarize the level of agreement with statements related to each sourcing practice, using mean values and standard deviations. A 5-point Likert scale was used, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. The tables below present the results for each section. A mean value of 1-1.4 was strongly disagree, 1.5-2.4 disagree, 2.5-3.4 neutral, 3.5-4.4 agree and 4.5-5 strongly agree. On the other hand, a standard deviation greater than 1.5, suggests that the responses were more diverse, with a wider range of scores across the participants.

Material Acquisition

The first objective of the study was to evaluate the relationship between material acquisition and the performance of Public Level 5 Hospitals in Nairobi City County, Kenya. The descriptive statistics for material acquisition practices are presented in Table 1.

Table 1: Descriptive Analysis for Material Acquisition

Statements	Mean	Standard Deviation
The efficiency of material acquisition processes directly influences performance metrics.	3.840	0.636
Effective material acquisition strategies enhance operational effectiveness.	3.912	0.598
Alignment of material acquisition with strategic goals is pivotal for performance.	3.890	0.627
Challenges in material acquisition, such as supply chain disruptions, affect performance outcomes.	3.758	0.683
The quality and reliability of acquired materials are crucial for healthcare service standards.	3.883	0.615
Material acquisition practices are integral to performance evaluation frameworks.	3.907	0.609
Aggregate Mean	3.865	0.628

Based on the finding in Table 1, respondents generally agreed that the efficiency of material acquisition processes directly influences performance metrics (M= 3.840, SD= 0.636); effective material acquisition strategies enhance operational effectiveness (M= 3.912, SD= 0.598); and that alignment of material acquisition with strategic goals is pivotal for performance (M= 3.890, SD= 0.627). Respondents also agreed that challenges in material acquisition, such as supply chain disruptions, affect performance outcomes (M= 3.758, SD= 0.683); the quality and reliability of acquired materials are crucial for healthcare service standards (M= 3.883, SD= 0.615); and that material acquisition practices are integral to performance evaluation frameworks (M= 3.907, SD= 0.609). The aggregate mean of 3.865 suggests that respondents generally agree on the importance of efficient material acquisition in influencing hospital performance. The responses highlight that well-structured material acquisition processes are vital for maintaining operational effectiveness and service quality in healthcare.

Generally, material acquisition practices demonstrated a positive influence on performance, with an aggregate mean of 3.865. This finding aligns with Younus, Zaidan, and Mahmood (2022), who found that material acquisition significantly and positively affects organizational performance in Malaysian SMEs. The study highlighted that efficient material sourcing ensures the timely availability of essential resources, which is crucial for maintaining operational continuity and enhancing service delivery. Similarly, Garba (2020) found that material acquisition has a positive and significant effect on the performance of the manufacturing sector in Nigeria, emphasizing the importance of well-managed acquisition processes in driving organizational success. These studies reinforce the finding that material acquisition is a key determinant of performance, particularly in contexts where timely access to quality materials is essential for service delivery.

Contract Management Practices

The second objective of the study was to identify the relationship between contract management practices and the performance of Public Level 5 Hospitals in Nairobi City County, Kenya. The descriptive statistics for contract management practices are shown in Table 4.7.

Table 2: Descriptive Analysis for Contract Management Practices

Statements	Mean	Standard Deviation
The efficiency of contract management correlates with performance metrics.	3.902	0.620
Well-executed contract management improves operations and service delivery.	4.017	0.610
Challenges in contract management, such as delays, can impede performance.	3.874	0.654
The quality of contract management influences the availability of resources.	3.915	0.630
Successful contract management fosters cost-efficiency and resource optimization.	4.012	0.598
Contract management practices are integral to performance evaluation frameworks.	4.065	0.589
Aggregate Mean	3.964	0.617

The results presented in Table 2 show that the respondents were in agreement that the efficiency of contract management correlates with performance metrics (M= 3.902, SD= 0.620); that well-executed contract management improves operations and service delivery (M= 4.017, SD= 0.610); and that challenges in contract management, such as delays, can impede performance (M= 3.874, SD= 0.654). They also agreed that the quality of contract management influences the availability of resources (M= 3.915, SD= 0.630); that successful contract management fosters cost-efficiency and resource optimization (M= 4.012, SD= 0.598); and that contract management practices are integral to performance evaluation frameworks (M= 4.065, SD= 0.589). The aggregate mean of 3.964 demonstrates that respondents agree on the critical role of contract management in enhancing performance. Effective contract management practices are seen as essential for ensuring cost-efficiency, optimizing resources, and improving service delivery in hospitals.

Contract management practices generally showed a positive impact on performance, with an aggregate mean of 3.964, indicating strong agreement on their importance. This finding is echoed in the study by Muhwezi and Ahimbisibwe (2021), which found a significant positive relationship between contract management and contract performance in Ugandan public procuring entities. The study highlighted that effective contract management, coupled with inter-functional coordination and trust, enhances contract outcomes and overall organizational performance. Similarly, Tanui and Moronge (2021) found that contract management practices, including contract evaluation and dispute resolution, positively influence the operational performance of state corporations in Kenya. These studies support the finding that well-structured contract management practices are essential for ensuring compliance, optimizing resource use, and enhancing service delivery outcomes in public sector organizations.

Organization Performance

The primary focus of the study was to assess the relationship between supplier sourcing (material acquisition, and contract management) and the performance of Public Level 5 Hospitals in Nairobi City County, Kenya. The descriptive statistics for organizational performance are presented in Table 3.

Table 3: Descriptive Analysis for Performance of Public Level 5 Hospitals in Nairobi City County, Kenya

Statements	Mean	Standard Deviation
The organization consistently meets its service delivery timelines.	3.958	0.647
Staff members are always available and responsive to patient needs.	3.902	0.615
The organization effectively manages patient appointments and schedules.	3.835	0.628
The waiting times for services are reasonable and acceptable.	3.773	0.663
The organization provides services in a timely manner.	3.912	0.602
Emergency services are readily available and efficiently managed.	3.975	0.588
Aggregate Mean	3.892	0.624

Based on the findings in Table 3, the respondents agreed on average that the organization consistently meets its service delivery timelines (M= 3.958, SD= 0.647); staff members are always available and responsive to patient needs (M= 3.902, SD= 0.615); and that the organization effectively manages patient appointments and schedules (M= 3.835, SD= 0.628). They were also in agreement that the waiting times for services are reasonable and acceptable (M= 3.773, SD= 0.663); that the organization provides services in a timely manner (M= 3.912, SD= 0.602); and that emergency services are readily available and efficiently managed (M= 3.975, SD= 0.588). The aggregate mean of 3.892 indicates that respondents generally perceive the performance of Public Level 5 Hospitals as positive, though with room for improvement, particularly in managing patient appointments and reducing waiting times. The results reflect that while hospitals are generally meeting their performance metrics, ongoing enhancements in responsiveness and service efficiency could further optimize patient care.

The findings show that organizational performance, had an aggregate mean of 3.892, indicating that respondents generally perceive the performance of Public Level 5 Hospitals in Nairobi City County as moderately positive, with room for improvement, particularly in areas such as managing patient appointments and reducing waiting times. This finding aligns with the literature that underscores the impact of procurement practices on overall performance. For example, Salim and Kitheka (2023) found that effective procurement planning, including need identification, specification measures, and budgeting, significantly improves procurement performance in state corporations, which directly correlates with overall organizational performance. Their study emphasizes that well-structured procurement processes can enhance operational efficiency, service delivery, and organizational outcomes, similar to the perceptions of respondents in this study.

Correlation Analysis

Correlation analysis was conducted to examine the relationships between the independent variables (material acquisition, and contract management practices) and the dependent variable (organization performance) of Public Level 5 Hospitals in Nairobi City County, Kenya. The correlation coefficients provide insights into the strength and direction of these relationships, where values range from -1 to +1, with positive values indicating positive relationships and negative values indicating inverse relationships. The correlation was considered small if $\pm 0.1 < r < \pm 0.29$, medium if $\pm 0.3 < r < \pm 0.49$, and strong if $r > \pm 0.5$. The results of the correlation analysis are presented in Table 4.

Table 4: Correlation Analysis

Variable		Organization Performance	Material Acquisition	Contract Management
Organization Performance	Pearson Correlation	1.000		
	Sig. (2-tailed)			
	N	119		
Material Acquisition	Pearson Correlation	0.712**	1.000	
	Sig. (2-tailed)	0.000		
	N	119	119	
Contract Management	Pearson Correlation	0.735**	0.513	1.000
	Sig. (2-tailed)	0.000	0.115	
	N	119	119	119

Correlation is significant at the 0.05 level (2-tailed).

Material acquisition demonstrated a robust positive correlation with organization performance ($r = 0.712$, $p = 0.000$), indicating a statistically significant relationship. This strong correlation suggests that efficient material acquisition practices are crucial in boosting the performance of hospitals, ensuring that they have the necessary supplies to maintain high-quality service delivery. This finding aligns with the research by Keitany, Wanyoike, and Richu (2023), which found a strong positive relationship between material acquisition and organizational performance at New Kenya Cooperative Creameries Limited, emphasizing that strategic acquisition of materials ensures operational demands are met, thereby enhancing performance. Similarly, Korir and Kagiri (2022) found that material acquisition positively impacts organizational performance by ensuring the availability of critical supplies, preventing disruptions in service delivery, and maintaining operational efficiency. The statistically significant p-value reinforces the importance of material acquisition in enhancing performance, particularly in sectors where timely access to quality materials is essential.

Contract management practices exhibited the strongest correlation with organization performance ($r = 0.735$, $p = 0.000$), indicating a statistically significant and positive relationship. This finding underscores the critical role of effective contract management in achieving high performance levels, suggesting that well-structured contract management processes, including planning, monitoring, and evaluation, are essential for optimizing resource use and ensuring contractual obligations are met. This is consistent with Kyarisiima (2022), who concluded that contract management practices positively influence procurement performance in Nyarugenge District, emphasizing that effective contract management enhances compliance, reduces risks, and boosts accountability. Similarly, Kariuki and Paul (2022) found that contract monitoring, managerial capacity, and relationship management significantly and positively affect procurement performance in Kenyan county governments. These studies affirm the significant impact of contract management on organizational success, particularly in ensuring efficient execution of procurement activities. The significant p-value further emphasizes the importance of these practices in maintaining high standards of performance in public sector organizations.

Regression Analysis

The coefficients table 5 provides detailed information on the contribution of each independent variable to the dependent variable, including the unstandardized and standardized coefficients (beta values) and their respective p-values.

Table 5: Beta Coefficients of Study Variables

Variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	0.821	0.112		7.330	0.000
Material Acquisition	0.311	0.065	0.304	4.785	0.000
Contract Management	0.321	0.060	0.318	5.350	0.000

Dependent Variable: Performance of Public Level 5 Hospitals in Nairobi City County, Kenya

From the coefficients in Table 5, the following regression model was fitted;

Performance of Public Level 5 Hospitals in Nairobi City County, Kenya = 0.821 + 0.311 Material Acquisition + 0.321 Contract Management

Material acquisition showed a beta value of 0.311 with a p-value of 0.000, indicating that it significantly and positively influences the performance of Public Level 5 Hospitals. This result suggests that a one-unit improvement in material acquisition practices increases hospital performance by 0.311 units. This finding echoes the research by Garba (2020), who found that material acquisition significantly affects the performance of Benue Brewery Industry in Nigeria, highlighting that timely and efficient acquisition of materials is crucial for maintaining operational continuity and enhancing output quality. In the context of hospitals, efficient material acquisition ensures that essential medical supplies and equipment are available when needed, directly impacting the quality of patient care and overall hospital performance.

Contract management practices had the highest beta value of 0.321 with a p-value of 0.000, indicating it is the most influential factor affecting the performance of Public Level 5 Hospitals in Nairobi City County. This suggests that enhancing contract management practices by one unit leads to an increase in hospital performance by 0.321 units. This finding is supported by Mwangi (2020), who found that effective contract management practices, such as contract monitoring and relationship management, significantly improve performance in county governments. Mwangi's study emphasized that well-executed contract management ensures that contractual obligations are met, enhances compliance, and optimizes resource use, thereby driving better organizational outcomes. For hospitals, effective contract management helps in maintaining smooth operations, reducing procurement-related risks, and ensuring the timely availability of essential resources, all of which are crucial for high-quality healthcare delivery.

Conclusions

Material acquisition was also found to play a crucial role in the performance of Public Level 5 Hospitals. The study concludes that efficient acquisition of materials ensures the timely availability of essential supplies, directly impacting the quality of healthcare services. Hospitals that implement robust material acquisition strategies can better manage supply chain disruptions and maintain high standards of care. The results highlight the need for hospitals to streamline their acquisition processes to enhance overall operational effectiveness.

Contract management practices were found to be the most influential factor affecting hospital performance. The study concludes that effective contract management, including clear oversight, risk management, and adherence to contractual obligations, significantly enhances service delivery and operational efficiency. Hospitals that invest in strengthening their contract management practices can reduce risks, optimize resource use, and ensure the timely availability of critical services. The study highlights the need for continuous improvement in contract management to sustain high levels of performance in public healthcare.

Recommendations

Hospitals should improve material acquisition processes by adopting advanced supply chain management technologies, such as automated procurement systems and inventory management tools, to enhance accuracy and efficiency. Establishing strategic partnerships with key suppliers can help mitigate supply chain disruptions and ensure consistent access to high-quality materials. Hospitals should also implement regular reviews of acquisition processes to identify areas for improvement and adjust strategies in response to market changes. Investing in staff training on best practices in material acquisition and supply chain management will further support the efficient procurement of essential medical supplies.

Hospitals should enhance contract management practices by implementing digital contract management systems that enable real-time tracking, monitoring, and compliance checks. These systems can help streamline contract execution and provide alerts for potential risks or deviations from contractual terms. Training procurement and legal teams in contract negotiation, dispute resolution, and risk management will further strengthen contract oversight. Hospitals should also establish standardized protocols for contract reviews and audits to ensure that all agreements are effectively managed and that any issues are promptly addressed. By enhancing contract management practices, hospitals can optimize resource use, reduce risks, and improve overall service delivery.

Suggestions for Further Studies

Future research could explore the impact of emerging technologies, such as artificial intelligence and blockchain, on procurement and contract management practices in public healthcare. Specifically, studies could examine how these technologies can enhance transparency, efficiency, and accountability in hospital procurement processes. Additionally, comparative studies between different public healthcare levels, such as district and national referral hospitals, could provide insights into the unique challenges and best practices associated with sourcing and procurement across various healthcare settings.

REFERENCES

- Assam, E. G, Hrry, O. O, Chinnedu, E. A & Igwe, S. (2023). Supplier sourcing and logistics performance in Nigeria. *International Journal of Marketing and Communication Studies*, 7(1), 38-55.
- Chebichii, B. D, Namusonge, G. S & Makokha, E. N. (2023). Influence of supplier selection on organizational performance in food and beverage manufacturing companies in Kenya. *African Journals of Emerging Issues*, 5(3), 64-80.
- Cooper, D. R. & Schindler, P. S. (2018). *Qualitative research: business research methods*, Boston, MA: McGraw-Hill.
- Cooper, D. R., & Schindler, P. S. (2018). *Business Research Methods (Twelfth ed.)*. Boston: Irwin McGraw Hill International.
- Creswell, R. (2018). *Research design: qualitative, quantitative, and mixed methods approaches*. USA: Sage Publications.
- Cronbach, L. J. (2018). *My Current Thoughts on Coefficient Alpha and Successor Procedures*. Washington, D: Educational and Psychological Measurement.
- Cronbach, L. J. (2019). *Test Validation*. In R. L. Thorndike (Ed). *Educational Measurement (2nd Ed.)* Washington, DC: American Council on Education.
- Crowther, D. & Lancaster, G. (2018). *Research Methods: A Concise Introduction to Research in Management and Business Consultancy*. New York: Butterworth-Heinemann.
- Davis, J., & Nguyen, P. (2021). Leveraging AI in Healthcare Supply Chain Management. *Journal of Health Informatics*, 34(2), 102-115.
- Garba, A. (2020). Effect of material acquisition on the performance of Benue Brewery Industry, Nigeria. *International Journal of Research – GRANTHAALAYAH*, 8(2), 228-234.

- Garcia, M., Johnson, K., & Patel, R. (2023). Supplier sourcing in Healthcare: Impacts on Performance and Cost Efficiency. *Health Services Research*, 58(1), 45-67.
- Keitany, P. J, Wanyoike, D. M & Richu, S. (2023). Assessment of the role of material acquisition on organizational performance case of new Kenya Cooperative Creameries Limited, Eldoret Kenya. *European Journal of Material Sciences*, 1(1), 1-10.
- King'ori, S. T & Lambiano, N. (2023). Effect of Supplier sourcing on supply chain performance of retail supermarkets in Nairobi City County, Kenya. *International Journal of Social Sciences Management and Entrepreneurship*, 7(1), 302-314.
- Kinuthia, J. K & Amuhaya, J. (2023). Sourcing strategies and organizational performance of Muranga Co-Operative Creameries Kenya. *Journal of Business and Strategic Management*, 8(5), 92-115.
- Korir, P. K & Kagiri, A. (2022). Effect of material acquisition on organizational performance: a case of James Finlay (Kenya) Limited. *International Journal of Supply Chain Management*, 2(3), 1-17.
- Kothari, C. R. (2019). Research methodology: Methods and techniques. New Age International
- Kyariisima, J. (2022). Effect of contract management practices on procurement performance a case of Nyarugenge District. *International Journal of Scientific Research and Management*, 10(12), 4293-2302.
- Lee, A., Smith, R., & Brown, H. (2022). Supply Chain Resilience in Healthcare: Lessons from the COVID-19 Pandemic. *Global Health Journal*, 56(4), 210-225.
- Lütfi, S., (2020) Validity and reliability in quantitative research. *Business and management studies. An International Journal, European Leadership University*
- Mutua, C. N & Juma, D. (2020). Influence of Supplier sourcing on procurement performance of Kenyan Commercial Banks. *The Strategic Journal of Business & Change Management*, 5(2), 1415-1445.
- Mutuku, S. M, Ochieng, V. O & Sanga, W. (2021). Influence of supplier selection criteria on performance of public corporations in Kenya: a case of water resources authority. *The Strategic Journal of Business & Change Management*, 8(4), 372-387.
- Muvunyi, G & Mulyungi, P. (2022). The effect of Supplier sourcing on procurement performance of manufacturing sector in Rwanda: A Case Study of Bralirwa Ltd. *International Journal of Research in Management, Economics and Commerce*, 8(5), 152-158.
- Mwangi, K. J. (2020) Contract management practices and performance of county governments in Kenya. *International Journal of Social Sciences Management and Entrepreneurship*, 4(1), 58-71.
- Younus, A. M, Zaidan, M. N & Mahmood, D. S. (2022). *The effects of material acquisition on organizational performance in Malaysian small and medium sized enterprises (SMEs)*. Retrieved from, <file:///C:/Users/user/Downloads/>.
- Zafar, T, Chughtai, M. A, Ihsan, F & Ahsan, Q. (2023). The moderating role of ethical leadership between the factors influencing procurement performance: a case of home textile industry of Pakistan. *Research Journal for Societal Issues*, 5(1), 27-53.
- Zakaria, H, Kamarudin, D, Azizul, F, Yuden, M. M & Abdullah, A. (2023). Examined on the how significant are supplier selection criteria to the performance of a company? reviewing Kuantan, Pahang Textile Industry. *Global Business and Management Research: An International Journal*, 15(2), 87-100.