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# RELATIONSHIP BETWEEN KNOWLEDGE MANAGEMENT PRACTICES AND PERFORMANCE IN PUBLIC UNIVERSITY LIBRARIES IN NAIROBI COUNTY, KENYA

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# ABSTRACT

This study sought to find out the relationship between knowledge management practices and performance in public university libraries in Nairobi County, Kenya. The specific objectives of the study were; to assess the relationship between knowledge acquisition and performance in public university libraries in Nairobi County, Kenya; and to find out the relationship between knowledge sharing and performance in public university libraries in Nairobi County, Kenya. The study adopted descriptive survey design. The target population was 350 librarians working in public university libraries in Nairobi County, Kenya. The study adopted a purposive sampling technique to choose five public university libraries from the 15 public University libraries in Nairobi County. The five public university libraries are the only libraries with their main libraries situated in Nairobi County. A total of 130 librarians was then targeted. They were selected using purposive sampling targeting the top and middle level management staff in the libraries. The data collection instrument was questionnaires containing both open ended and close-ended questions. Data collection was screened, coded and entered into SPSS and Microsoft Excel for data analysis. Appropriate descriptive statistics such as Frequencies, Central tendencies (mean, median, mode), Measures of dispersion (Std. deviation, range, and variance) and linear regression was used in analysis. The analyzed data was then presented in form of tables, charts, and graphs for ease of understanding and interpretation. The researcher carried out a multiple regression analysis so as to determine the relationship between the dependent and independent variables. The study found that knowledge acquisition positively and significantly relates with performance in public university libraries in Nairobi County, Kenya. In addition, knowledge sharing positively and significantly relates with performance in public university libraries in Nairobi County, Kenya. The study therefore recommends libraries of public universities to improve their knowledge management practices.

**Key Words:** Knowledge Management Practices, Public University Libraries, Knowledge Acquisition, Knowledge Sharing

## **Background of the study**

Academic libraries globally are aware of the ever-changing environments and challenges with regards to acquiring, diffusing and circulation of information. The advent of the internet and related technological developments has transformed the nature of academic libraries. In addition, the roles of academic librarians have changed fundamentally. Open access, knowledge management, digital scholarship, institutional repositories are owned by libraries and librarians. Further, users have become more independent learners and often use electronic technology to connect to the library while simultaneously requiring that academic libraries provide quick responses and assurances. Corona Virus Disease (Covid-19) has left academic libraries scrambling to support a swift and unprecedented switch to digital teaching and learning. In addition, in the global economy, which is knowledge based, economic activities have shifted from people working with their hands to people working with their heads, from tangible resources like steel to intangible resources such as knowledge (Pimentel, 2009).

There continues to be a growing appreciation of the importance of university education in Kenya for socio-economic and technological development. This change has resulted in the influx of those seeking enrollment in universities to pursue higher education. The growth witnessed in these institutions has affected the entities that support higher education, particularly libraries.

Hussan and Nazim (2015) describes Knowledge management as the process of storing, creating, applying and re-using organizational knowledge from different disciplines through sound practices that enables an organization to achieve its goals and objectives. According to Al-Ti (2016), KM is a set of processes and activities that support the organization to generate, acquire and subsequently discover, organize, use and disseminate knowledge in the organization among working individuals. It transforms the information and experiences that the organization possesses and employ them in its administrative activities such as decision making, work procedures and strategic planning. Shujahat et al. (2019) also defines knowledge management as the process of knowledge acquisition, which will be discussed in this study. On the other hand, Jirard (2017) described KM as the creation and subsequent management of an environment which encourages knowledge to be created, shared, learnt, improved, organized and applied for the benefit of the firm and its clients. In his definition, John assumes that knowledge cannot be managed in the traditional sense but that an organization can optimize the value of its knowledge through an appropriate blend of leadership, culture, values, processes, skills and tools to support knowledge access and use. He farther states that managing this stock of Intellectual capital in an organization as it flows and grows is the domain of knowledge management. KM comprises the deliberate and logical management of an organization's people, technology, processes, and organizational structure so as to add value through reuse and innovation. This is achieved through the promotion of creating, sharing, and utilizing knowledge as well as through the feeding of valuable lessons learned and best practices into corporate memory in order to foster continued organizational learning (Dalkir, 2017).

#### **Statement of the Problem**

Despite the growth of libraries that has been witnessed in response to the demand by the population that seeks library services 80% of in libraries in Kenya are underdeveloped (Umhima, 2018). Further, 65% of the library employees are incompetent and 70% of students do not know how to use the libraries (Lederman, 2016). In the midst of these realities, knowledge management (KM) has emerged as a further significant influence on library practice. It is a viable means through which academic libraries could improve their services in the current knowledge era (Rajurkar, 2016). In South Africa, 6% of the national knowledge loss and skills deficiency has created a necessity to adopt knowledge management strategies in order to sustain and mitigate the constant

exodus of highly skilled and competent workforce (Govender, Perumal & Perumal, 2018). Due to poor knowledge sharing culture among staff and lack of clearly defined policies on KM implementation, academic libraries face the challenge of lack of ability to share and retain the critical knowledge embedded in the individual staff minds. Inadequate or lack of KM training for staff and limited requisite budget are other barriers to the implementation of KM in academic libraries. As a result, failure to access employees' tacit knowledge hinders the creation of new knowledge for growth and innovation. Unfortunately, this fact has not been embraced by academic libraries leading to the failure to provide current awareness services and targeted selective dissemination of information to its clientele.

A number of studies have been conducted on KM. For example, Ogendi (2015) conducted a study on the implementation of KM as a tool for sustainable competitive advantage at the University of Nairobi Library, Kenya. Similarly, Njiraine (2019) examined the Enabling Knowledge Sharing Practices for Academic and Research in Higher Education Institutions in Kenya. Wanangeye and George (2016) researched on the KM Practices and performance of Academic libraries: A Case of Mount Kenya University, Kigali Campus Library. This study was conducted in Rwanda and limited to only one university. The fact that these previous recent studies have been conducted in only a few universities, particularly the university of Nairobi and not covered performance, it is of interest to examine the relationship between KM practices and performance in libraries because both conceptual and contextual gaps are discerned from these studies. In particular, this study responds to the gaps identified by Umhima (2018) who asserts that 80% of libraries in Kenya are underdeveloped in terms of the readiness to respond to the needs of users. It has also been found that 65% of the library employees are incompetent with regard to the level of service expected to be delivered by them; while 70% of students do not know how to use the libraries (Lederman, 2016). These gaps suggest the priority need to examine performance Specifically, while there is scarce literature on status of implementation of KM practices in libraries, the performance of these libraries is little known (see e.g., Umhima, 2018). In addition, the relationship between the KM practices and performance of libraries (including that of its employees) is even less documented in literature. It is against this backdrop that this study seeks to investigate the relationship between knowledge management practices on performance in public university libraries in Nairobi County, Kenya.

#### **Research** objective

The general objective of this study was to find out the relationship between knowledge management practices and performance in public university libraries in Nairobi County, Kenya.

#### **Specific objectives**

- a) To assess the relationship between knowledge acquisition and performance in public university libraries in Nairobi County, Kenya.
- b) To find out the relationship between knowledge sharing and performance in public university libraries in Nairobi County, Kenya.

# LITERATURE REVIEW

#### **Theoretical review**

#### Knowledge based theory

The knowledge-based theory is relatively modern, drawing reference from classical theories of management such as the organizational theory, resource-based theory and theory of the firm. KBT stems from theorization of why firms differ in performance. This theory argues that heterogeneous knowledge centers among organizations and their ability to create and apply knowledge are the main determinants of performance difference (Decarolis & Deeds, 1999). According to Amin and

Cohendet (2004), knowledge is an established theoretical construct that has been established as a heterogeneous resource that firms value as a basis of competitive advantage. The ability of an organization to defend, capitalize and apply knowledge that it creates is what leads to superior performance, (Cameli & Tishler, 2004) which is enhanced by other resources and competence of the organization such as related factors and in agreement with its strategic direction (Prieto & Revilla, 2006).

Knowledge, unlike other traditional economic factors of production is considered as a strategic resource that does not depreciate and can be used to generate increasing returns. Salina and Fadzillah, (2010) postulates that knowledge can be distinguished from other traditional factors of production like land, labour and entrepreneurship in that knowledge is governed by the law of increasing returns. Malhorta (2001) admits that in contrast to traditional factors of production that are governed by diminishing returns, every additional unit of knowledge applied efficiently results in marginal increase in performance. Curado (2008) observes that the nature of most knowledge-based resources is predominantly intangible and dynamic, allowing for distinctive development through path dependency and causal ambiguity which cannot be easily imitated hence leading to sustainable competitive advantage.

The basic proposition of KBT is that firms are heterogeneous entities full of knowledge (Hoskisson, Eden, Chung & Wright, 2000). This understanding considers a firm to be 'a distributive knowledge system' that has knowledge workers, and the role of the firm is to coordinate the work of the knowledge workers so as to create value for the firm (Grant 1996). Further, Wiklund and Shepherd (2003) share a similar view that knowledge resources are hard to imitate hence the basis for sustainable differentiation. An organization exists to create, acquire and transform knowledge into organizational performance.

#### Social exchange theory

Social Exchange Theory will be used in this study to assess the relationship between knowledge sharing and organization performance in university libraries in Kenya. The theory holds that individuals are perceived to engage in an interaction with others, expecting some rewards such as respect, reputation and tangible incentives.

Thibault and Kelly (1952) developed the Social Exchange Theory (SET), which is founded on the exchange of rewards and costs that quantify the values in different situations for individuals. Benefits/costs have been perceived to be one of the most studied antecedents of knowledge sharing. Asderaki and Joanna (2015) argue that in the Social Exchange theory individuals are perceived to engage in an interaction with others, expecting some rewards such as respect, reputation and tangible incentives. Maponya (2014) proclaim that people seek to maximize their benefits and minimize their costs through building social relationships with others by sharing their knowledge. The Social Exchange Theory was developed to explain how people interact and communicate, as well as the factors that govern people's interactions. Social Exchange Theory posits that people strive to interact and share knowledge when they know that they can get something in return and that they are likely to develop a relationship with one another.

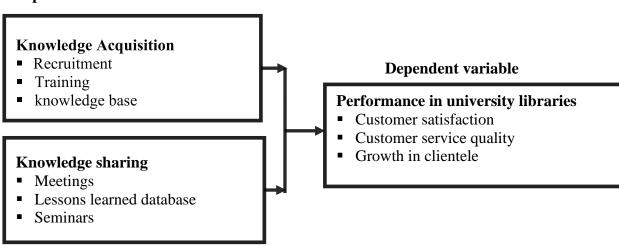
Chigbu, Idoko and Anthonia (2013) used the social exchange theory to understand the behaviour of individuals in distributed web communities in their investigation of factors that impede and facilitate knowledge sharing. They found that social factors such as trust, status, job security and tangible rewards were important predictors of knowledge sharing behaviors. Plockey, Appiah and Ofori (2019) feel that people strive to interact and share knowledge with one another with the expectation that this will give them some rewards such as support, status, job security and respect. Ayoku and Okafor (2015) state that employees should share their best practices because of their

desire to be recognized by experts and peers. Gichuhi (2014) found that employees with high technical knowledge seem to have better status in the workplace. Cheng, Jessica and Lau (2016) points out that, in a social exchange relationship, an individual willingly makes a contribution to an organization or another individual based on a trust that his/her job will be secured and that one can be rewarded for the contribution made. Individuals base their action decisions on the expectation that their decisions will lead to tangible benefits (Parirokh, Daneshgar and Fattahi, 2018). Motivational factors, such as an exchange relationship that involves both economic resources (e.g. money, goods and services) and socio-emotional resources have been found to reduce the initiative to share knowledge, with the belief that knowledge sharing is an activity based on intrinsic rewards (Akparobore, 2015).

## **Conceptual framework**

Neuman (2014) describes a conceptual framework as a set of interconnected concepts or theories and how a particular phenomenon functions or is related to its parts. It serves as a basis for understanding the correlational patterns of interconnections across events, understandings, observations, concepts, knowledge and other components of experience. Consequently, a conceptual framework can be described as a schematic representation of the hypothesized relationship between study variables.

Figure 1 below shows the diagrammatic representation of the relationship between the independent variables and the dependent variable. The independent variables will be knowledge acquisition, knowledge sharing while the dependent variable will be organizational performance.



#### **Independent variables**

**Figure 1: Conceptual Framework** 

#### **Knowledge Acquisition**

Knowledge acquisition is a common practice in libraries and other organizations. This practice is considered as the starting point of knowledge management practice. Acquisition of knowledge and utilizing it effectively enable the personnel of the organization improve self-development and provide good quality services. Grand, (2016) describes knowledge acquisition as the improved use of existing knowledge and efficiently producing new knowledge through active conversion and externalized and distributed as new knowledge. Alavi and Leidner (2017) observed that knowledge acquisition in most organizations involves knowledge acquisition, knowledge transfer and application of knowledge in creating internal knowledge, acquiring external knowledge and storing knowledge. One of the key strategic organizational resources for enhancing organizational performance is effective knowledge acquisition. However, the methods of acquiring knowledge in

industries and other organizations are quite different from research institutes and libraries. Mubuyaeta, (2016) posited that knowledge is acquired through conducting external surveys, sending employees to external training, purchasing a data set, hiring employees, monitoring technological advances, acquiring a knowledge-rich firm, acquiring a patented procedure and gathering knowledge through competitive intelligence.

### **Knowledge sharing**

Knowledge sharing is another basic practice in knowledge management which involves the exchange of knowledge through interactions (meetings), research collaboration, mentorship, seminars/conference and professional forums among others (Cyprian, 2016). Akparobore (2015), Describes knowledge sharing as a process through which information is exchanged among people, he says it is a knowledge management tool which relies on the willingness of the knowledge worker to seek out or be receptive of knowledge. Knowledge sharing is a human attribute that is deemed critical to the success of an organization. Some of the platforms that support knowledge sharing are seminars, meetings and lessons learned databases. Knowledge sharing activities are generally supported by knowledge systems, however, regarding technology, management support and organizational behavior are key significant drivers that constitutes sharing of knowledge within an organization (Dave Snowden, 2016). According to Nonaka and Tekeuchi (2015), lack of trust and behavioral change are the key barriers to knowledge sharing.

## **Performance in University Libraries**

University Libraries' services have changed drastically in the last decade. Currently electronic resources, networks and the World Wide Web represent a large percentage of the library and information services. University libraries must also be able to demonstrate the value of what they are doing and provide evidence of the impact they are making. Parent organizations require proof that the activities of their library and organizational expenses incurred are worth the investment in that they contribute towards achieving organizational performance (Gashaw 2020). Gashaw posits that in order to justify their worth, university libraries are required to prove that they are performing a useful, relevant and valuable function. Thus, the library has to prove that they are useful for the organization and for the purpose for which they were established.

Luiza Baptista (2012) proposed several criteria and indicators to evaluate performance in academic libraries. Some of the performance measures that he suggested were Customer perspective, which comprises the performance indicators: library visits per capita, loans per capita, user satisfaction, staff satisfaction and levels of absenteeism and sickness. The second most important criterion he suggested is the Impact on society, with its performance indicators as: the rate of students' success and the rate of professors and researchers' publications. Leadership is the third most important criterion he suggested with the most important indicator as development and the formulation of the vision of the library. He also suggested Process and change management as one of the criteria, the indicators are: the median time of document acquisition, median time of document retrieval from open access area and the market penetration of electronic services.

# **Empirical review**

# Knowledge acquisition and Organizational Performance

In his study, Muhammad (2014) examined the linkage between knowledge management practices and library users' satisfaction at Malaysian university libraries. The study indicated that adoption of knowledge management practices at the six (6) Malaysian university libraries are in the high level. The findings also revealed that knowledge acquisition and creation are not supported as knowledge management practices in the Malaysian university libraries compared to knowledge recording, sharing and preserving.

Nnabuife and Ojukwu (2015) set out to determine extent to which knowledge management improves performance of selected banks in Awka, Nigeria. He specifically wanted to find out if there was significant relationship between knowledge identification and organizational performance. It also set out to examine the extent to which knowledge acquisition affects the performance of an organization. The study employed a descriptive research design; the primary source of data was the primary instrument used for the study. Pearson's product moment correlation was used in data analysis. The findings indicated that knowledge identification had a positive and significant influence on the performance of an organization. Consequently, Asderaki and Joanna (2015) conducted a study on the acquisition of knowledge in public organizations in Poland. The paper reviewed the state of research evidence in the field. The main study question was how important it is for employees in public sector to acquire the knowledge and use their full potential in the workplace and whether these firms create an environment for acquiring knowledge and using employee potentials. The main source of empirical data was carried out by the authors of the study in public sector organizations. Questionnaire survey was used to conduct the study. The research showed high expectations related to knowledge acquisition opportunities in the workplace and partial fulfillment of these expectations by the subject organizations.

Finally, Sherwood and Covin (2018) while studying knowledge acquisition in University–Industry Alliances, carried out a survey on 104 industry managers to explore the effects of various organizational knowledge interface factors on knowledge acquisition success in university–industry alliances. The organizational knowledge interface factors postulated to affect knowledge acquisition success comprised partner trust, partner familiarity, technology familiarity, alliance experience, formal collaboration teams, and technology experts' infrastructures. Results indicated that partner trust predicts the successful acquisition of tacit knowledge but not explicit knowledge and that both tacit and explicit knowledge were predicted by partner familiarity and communications between the partners' technology experts.

# **Knowledge Sharing and Organizational Performance**

A study conducted by Cheng, Jessica and Lau (2016) on knowledge sharing in Multimedia University in Malaysia revealed that knowledge sharing is envisaged as a natural activity of the academic institutions. This was because the number of seminars, conferences and publications by academics was far exceeding any other profession, signifying the enthusiasm of academics to share knowledge. However, the study further showed that instead of knowledge sharing, knowledge hoarding could be more prevalent in academic institutions. The study also examined knowledge sharing behavior among academics in the university and broadly classified the factors affecting the willingness to share knowledge, as organizational, individual and technology factors. The overall findings revealed that incentive systems and personal expectation were the two key factors in driving academics to engage in knowledge sharing activity. However, "forced" participation was not an effective policy in nurturing sharing behavior among academics.

Parirokh, Daneshgar and Fattahi (2018) also conducted a study on the influence of knowledgesharing on competency development in academic libraries. The study adopted cross-sectional survey design. Primary data was used in the study. The study adopted electronic questionnaires to collect primary data. Results revealed that the majority of libraries investigated were quite friendly towards knowledge sharing, and the majority of librarians valued the importance of knowledge sharing. Results also confirmed that the knowledge that they mostly used was mainly intangible knowledge.

Study findings from a study carried out by Akparobore (2015) on Knowledge Sharing among librarians in university libraries in Nigeria revealed that librarians shared knowledge in the university libraries. However, the librarians were no contented at which knowledge sharing was

done and therefore they opted to share knowledge in the areas/subjects of networking. The study recommendation was that seminars for both old and new librarians should be vigorously carried out to create further awareness of knowledge sharing among librarians. On the other hand, Trivellas *et al.* (2015) conducted a study on the influence of knowledge sharing culture on job satisfaction in accounting firms in Greece. The empirical findings from a survey of 84 employees in accounting offices in Central Greece confirmed that general competencies exert a intervening effect on the relationship between knowledge sharing and job satisfaction. The key implication of the findings for the accounting managers was that employees in a knowledge sharing environment were more likely to achieve higher job satisfaction and subsequently efficiency, as a result of strengthened general competencies.

In addition Kuruppuge and Gregar, (2017) studied the influence of knowledge sharing and job performance in knowledge-based industries in Sri Lanka. Technological competence, knowledge sharing and job performance were measured in a sample of 141 managers employed in the profession of Database Administration and Development, Systems and Network Administration, Web Development and Programming and Software Engineering. The results of the study revealed that tacit and explicit knowledge sharing positively contributed to job performance while tacit and explicit knowledge sharing correlated together. Furthermore, the study revealed that technological competency demonstrated a partial mediation effect and thus weakening the strength of relationship between tacit knowledge sharing and job performance.

Khattak, Shah and Hammad (2020) also sought to find out the impact of knowledge sharing and teamwork on team performance with the moderating role of supervisor Support in Pakistan. The study was conducted using a cross-sectional survey among employees of selected organizations of Rawalpindi and Islamabad cities respectively. The sample included 224 employees and data was collected using structured questionnaires through convenience sampling technique. Analytical tools such as reliability, correlation and regression analysis were used in statistical analysis to draw conclusions the. The study findings revealed that knowledge sharing influence team performance. The study results found that meetings seminars and job rotation influence team performance.

Study findings from research carried out by Razmerita, Kirchner and Nielsen (2016) on the influence of knowledge sharing on organization performance revealed that knowledge sharing influence organizational performance. The study derived a unified research model based on literature review that incorporated demographic, individual, organizational and technological factors influencing the motivation of employees to share knowledge. In addition, the study findings pinpointed towards the general drivers towards knowledge sharing which include enjoy helping others, monetary rewards, management support, change of knowledge sharing behavior and recognition. The study identified significant barriers to knowledge sharing as: change of behavior, lack of trust and lack of time.

# **RESEARCH METHOLOGY**

The research problem was diagnosed through the use of descriptive research design which entails either pointing out the characteristics of a phenomenon or sourcing for possible correlations between two or more phenomena. According to Laurel (2003), descriptive survey design also comprises observation studies, correlation studies, developmental plans, and survey research. These approaches produce quantitative information that can be simplified using statistical analyses. The research design was ideal for this study since it allows for the description of a situation or scenario, hence making it suitable for describing the relationship between knowledge management practices and performance in the selected university libraries. For this study, the target population was 350 librarians working in public university libraries in Nairobi County, Kenya. It targeted those universities that have their main campus in Nairobi County since they have a good number of librarians to carry out the study. There are a total of five (5) public Universities that have their main campuses in Nairobi County, Kenya. Purposive sampling technique was applied for this study.

The technique was very appropriate because as Statistic Canada (2013) notes, purposive sampling was used when a sample is taken based on certain judgments about the overall population. The study adopted a purposive sampling technique to choose five public university libraries from the 15 public University libraries in Nairobi County. The five public university libraries are the only libraries with their main libraries situated in Nairobi County hence having a good number of librarians for the study. After picking the five university libraries, purposive sampling was applied in determining the number of respondents from each university library. A total of 130 librarians was then targeted in the study

The librarians were selected from a total of 350 librarians working in selected public university libraries in Nairobi County. They were selected using purposive sampling targeting the top and middle level management staff in the libraries. The sample of Library professionals bears the critical information required for the research because they are directly involved in policy formulation and library management. According to Williman (2011), purposive sampling involves selecting a sample that provides reliable information for the study, hence the choice of this category of librarians by the researcher.

For this study, the data collection instrument was questionnaires containing both open ended and close-ended questions. In this study, primary data was collected from the field using structured questionnaires containing both open and close ended questions. According to Bhandari (2020), conducting a pilot test is important before the main test because it enables the researcher to gauge if the instruments of data collection will work properly as expected. A pilot study was conducted before the final questionnaires by randomly selecting a sample size of 7 respondents of staffs from Multimedia University and distributing questionnaires to them. The selection of the pilot staff was done using purposive sampling. This enabled the researcher to conduct a reliability and validity test of research instruments used in the study and to familiarize with the research environment as well.

Data collection was screened, coded and entered into SPSS and Microsoft Excel for data analysis. The analyzed data was then presented in form of tables, charts, and graphs for ease of understanding and interpretation. The researcher carried out a multiple regression analysis so as to determine the relationship between the dependent and independent variables.

# **RESEARCH FINDINGS AND DISCUSSION**

The study targeted director, deputy director, senior librarian, librarian, senior library assistant, library assistant and library attendant from public university libraries in Nairobi County Kenya. In total, 130 respondents were targeted and thus, the same number of questionnaires was administered. The response rate was 82.3% to mean that 107 questionnaires were duly filled while the remaining 23 were not filled. This demonstrates that the response rate is high enough based on the comments by Mugenda and Mugenda (2003) that a response rate of 60% is rated good while above 70% is very good.

# Descriptive Statistics Knowledge Acquisition

The first objective of the study was to assess the relationship between knowledge acquisition and performance in public university libraries in Nairobi County, Kenya. Respondents were asked to

give their level of agreement with various statements pertaining knowledge acquisition in their library. Table 1 presents the findings obtained.

Statements	1	2	3	4	5	Mean	S. D
The library has procedures for acquiring	7.40%	1.50%	35.3%	33.80%	22.10%	3.62	1.079
knowledge.							
The library recruit's highly competitive staff.	2.90%	4.40%	36.8%	30.90%	25.00%	3.71	0.993
The library organizes trainings for staff regularly.	7.40%	2.90%	23.5%	27.90%	38.20%	3.87	1.183
The library has an expert system for capturing knowledge.	10.3%	1.50%	22.1%	44.10%	22.10%	3.66	1.154
The firm has procedures for organizing (store/file) knowledge.	5.90%	2.90%	36.8%	29.40%	25.00%	3.65	1.076
Average						3.702	1.097

 Table 1: Descriptive Statistics of Knowledge Acquisition

The findings show that the average mean value for the statements on knowledge acquisition was 3.702 an indication that the respondents agreed on average with the statements. The findings specifically show that the respondents agreed that the library organizes trainings for staff regularly (M= 3.87, SD= 1.183); the library recruit's highly competitive staff (M= 3.71, SD= 0.993); the library has an expert system for capturing knowledge (M= 3.66, SD= 1.154). Respondents also agreed that the firm has procedures for organizing (store/file) knowledge (M= 3.65, SD= 1.076); and that the library has procedures for acquiring knowledge (M= 3.62, SD= 1.079). The mean responses for majority of statements were found to be above 3.5, this means that knowledge acquisition practice was taken seriously in most of the institution studied.

The findings of the study are in agreement with Grand, (2016) who describes knowledge acquisition as the improved use of existing knowledge and efficiently producing new knowledge through active conversion and externalized and distributed as new knowledge. It also agrees with Mubuyaeta, (2016) that knowledge is acquired through conducting external surveys, sending employees to external training, purchasing a data set, hiring employees, monitoring technological advances, acquiring a knowledge-rich firm, acquiring a patented procedure and gathering knowledge through competitive intelligence.

# **Knowledge Sharing**

The second objective of the study was to find out the relationship between knowledge sharing and performance in public university libraries in Nairobi County, Kenya. Respondents gave their level of agreement with various statements about knowledge sharing. Table 2 presents the findings obtained.

 Table 2: Descriptive Statistics of Knowledge Sharing

Statements	1	2	3	4	5	Mean	S. D
Knowledge sharing is encouraged within the							
library to create a learning organization.	4.40%	4.40%	25.0%	32.40%	33.80%	3.87	1.078
Knowledge sharing is done through seminars and							
meetings in the library.	7.40%	2.90%	23.5%	27.90%	38.20%	3.87	1.183
The library has a best practice database where							
staff share their experiences.	10.3%	1.50%	22.1%	44.10%	22.10%	3.66	1.154
Knowledge sharing contributes to organizational							
performance within the library.	5.90%	2.90%	36.8%	29.40%	25.00%	3.65	1.076
Average						3.763	1.123

From the findings in Table 2, the aggregate mean value for the statements about knowledge sharing was 3.763 an indication that on average, the respondents agreed with the statements. The findings specifically show that the respondents agreed that knowledge sharing is encouraged within the library to create a learning organization (M= 3.87, SD= 1.078); and that knowledge sharing is done through seminars and meetings in the library (M= 3.87, SD= 1.183). Respondents further agreed that the library has a best practice database where staff share their experiences (M= 3.66, SD= 1.154); and that knowledge sharing contributes to organizational performance within the library (M= 3.65, SD= 1.076). This is exemplified further by mean responses of above 3.5 simplifying great measure of knowledge sharing within the sectors.

The findings agrees with those of Parirokh, Daneshgar and Fattahi (2018) that majority of libraries investigated were quite friendly towards knowledge sharing, and the majority of librarians valued the importance of knowledge sharing. It also agrees with Akparobore (2015) that knowledge sharing is done and is opted to share knowledge in the areas/subjects of networking.

## **Performance of Public University Libraries**

The general objective of this study was to find out the relationship between knowledge management practices and performance in public university libraries in Nairobi County, Kenya. Respondents were requested to indicate their level of agreement with various statements on performance of their library. Table 3 presents the summary of findings obtained.

Statements	1	2	3	4	5	Mean	S. D
Effective use of knowledge in the							
library leads to customer							
satisfaction.	0.00%	2.3%	3.80%	46.60%	47.40%	4.39	0.672
Implementation of KM in the							
library leads to growth in clientele.	0.00%	0.0%	0.00%	48.90%	51.10%	4.11	0.502
Effective use of knowledge in the							
library leads to customer service							
quality.	5.90%	2.90%	29.40%	35.30%	26.50%	3.74	1.074
Proper implementation of KM in							
the library leads to better							
performance.	7.40%	2.90%	23.5%	27.90%	38.20%	3.87	1.183
Average						4.128	0.858

Table 3: Descriptive Statistics of Performance in Public University Library

The findings in Table 3 show that the aggregate mean for performance measures were 4.128 which suggests that the respondents agreed on average with the statements. Specifically, the respondent's agreed that effective use of knowledge in the library leads to customer satisfaction (M= 4.39, SD= 0.672); and that implementation of KM in the library leads to growth in clientele (M= 4.11, SD= 0.502); Further respondents agreed that proper implementation of KM in the library leads to better performance (M= 3.87, SD= 1.183); and that effective use of knowledge in the library leads to customer service quality (M= 3.74, SD= 1.074).

# **Inferential Analysis**

In this section, the study sought to determine how the independent variable influences the dependent variable. It sought to establish the influence of knowledge acquisition, knowledge sharing on performance in public university libraries in Nairobi County, Kenya.

		Performance	Knowledge acquisition	Knowledge sharing
Performance	Pearson Correlation Sig. (2-Tailed)	1		
	N	107		
Knowledge	Pearson Correlation	.786**	1	
acquisition	Sig. (2-Tailed)	.000		
•	N	107	107	
Knowledge sharing	Pearson Correlation	.698**	.325	1
- •	Sig. (2-Tailed)	.002	.168	
	N	107	107	107

#### **Correlation Analysis Table 3: Correlation Matrix for the Study Variables**

Correlation analysis results in Table 3 shows that knowledge acquisition has a strong relationship with performance in public university libraries in Nairobi County, Kenya (r=0.786, p=0.000); this relationship was significant since the p-value was less than the selected level of significance (0.05).

Regarding knowledge sharing, and performance in public university libraries in Nairobi County, Kenya, the study established that these variables were strongly and positively related (0.698); the relationship was significant (p-value<0.05).

#### **Regression Analysis**

The regression analysis in this case was used in assessing the effect of knowledge acquisition, knowledge sharing, on performance in public university libraries. This regression analysis is a statistical process for estimating the causal effect and relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables (or 'predictors'). There are various assumptions for multiple linear regressions. First, it needs the relationship between the independent and dependent variables to be linear. Secondly, the multiple linear regression analysis requires all variables to be normal. Thirdly, multiple linear regression assumes that there is little or no multicollinearity in the data.

#### **Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.861ª	.741	.739	.09275

a. Predictors: (Constant), knowledge acquisition, knowledge sharing,

The study used model summary to establish the amount of variation in performance in public university libraries as a result of changes in knowledge acquisition, and knowledge sharing. From the findings presented in Table 5, the value of R-square was .741. This suggests that 74.1% variation in performance can be explained by changes in knowledge acquisition, knowledge sharing. The remaining 25.9% of the variation in the performance in public university library being explained by other factors not discussed in this study. The findings further show that the variables were strongly related as indicated by correlation coefficient (R) value of 0.861.

Table 3	5: A	Analysis	of V	Variances
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		-	Sig.
4	0.351	72.956	.000 <sup>b</sup>
102	0.005		
106			
ty librari	es		
	106 ty librari	102 0.005	102 0.005 106 ty libraries

b. Predictors: (Constant), knowledge acquisition, and knowledge sharing

Analysis of variance was used to determine whether the model developed was significant. The significance of the model was tested at 95% confidence interval. From the analysis of variance (ANOVA), the study found out that the regression model was significant at p<0.05 which is less than the selected level of significance. Therefore, the data was ideal for making a conclusion on the population parameters. The F calculated value was greater than the F critical value (72.956> 2.461), an indication that knowledge acquisition, knowledge sharing significantly influences performance in public university libraries in Kenya. The significance value was less than 0.05 indicating that the model was significant in predicting performance in public university libraries in Nairobi County, Kenya.

Μ	lodel	Unstand Coefficie		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	1.535	0.123		12.480	.000
	Knowledge acquisition	0.545	0.082	0.540	6.646	.001
	Knowledge sharing	0.646	0.104	0.722	6.212	.004

## **Table 6: Beta Coefficients of Independent Variables**

Table 6 above shows the coefficients of independent variables (knowledge acquisition, knowledge sharing). Replacing the unstandardized beta coefficients on the regression model; the following regression equation was obtained;

# Performance of public university libraries in Nairobi County, = 1.535 + .545 Knowledge acquisition + .646 Knowledge sharing

The regression equation above has established that holding all factors constant at zero virtual performance in public university libraries in Nairobi County, Kenya was 1.535 with a corresponding p-value <0.05. Thus, a unit increase in any of the variable would lead to a corresponding beta value increase in the performance in public university libraries in Nairobi County, Kenya.

There exists positive and significant relationship between knowledge acquisition and performance in public university libraries in Kenya (t= 6.646, p<0.05). In addition, there exist positive and significant relationship between knowledge sharing and performance in public university libraries in Kenya (t= 6.212, p<0.05). In addition, the regression findings found that knowledge sharing had the highest significance influence on performance in public university libraries followed by knowledge acquisition.

#### Conclusions

The first conclusion of this study was that an increase in knowledge acquisition within public university libraries in Kenya would result to an increase in performance. This was based on the finding that knowledge acquisition is statistically significant in explaining performance in public university libraries in Nairobi County, Kenya. This indicates that knowledge acquisition positively and significantly relates with performance in public university libraries in Nairobi County, Kenya.

The study also concluded that an increase in knowledge sharing would result to an increase in performance in public university libraries. This is because the study found that knowledge sharing is statistically significant in explaining performance in public university libraries in Nairobi County, Kenya. This indicates that knowledge sharing positively and significantly relates with performance in public university libraries in Nairobi County, Kenya.

#### Recommendations

The study found that improving knowledge acquisition would result to an increase in performance of public university libraries. The study therefore recommends libraries of public universities to improve their knowledge acquisition strategies. They need to consider ways they can acquire new knowledge through recruitment, training and improve their knowledge base.

The study also established that knowledge sharing can improve performance of libraries. The study recommends management of libraries to implement strategies that can facilitate knowledge sharing among its employees. This includes organizing for meetings and seminars and developing a lessons learned database. It is important to ensure that during the seminars, both old and new librarians should be vigorously carried out to create further awareness of knowledge sharing among librarians.

## **Suggestions for Further Studies**

The main focus of this study was to find out the relationship between knowledge management practices and performance in public university libraries in Nairobi County, Kenya. The study was able to explain 74.3% variation in performance; the study therefore recommends a research to be conducted on other factors that can explain the remaining performance of libraries. The study was limited to public university libraries in Nairobi County; it is important to replicate the study in other public universities to facilitate generalization of research findings.

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