

KNOWLEDGE SHARING PRACTICES IN UNIVERSITY LIBRARIES IN KATSINA STATE, NIGERIA: CHALLENGES AND PROSPECTS

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Abstract

Knowledge sharing is vital for human and organizational existence and development. Despite its importance, knowledge sharing is greatly undermined by many situational factors in university libraries worldwide, university libraries in Katsina State are not exceptional either. This study, therefore, aimed at investigating the knowledge sharing practices among university libraries in Katsina State from the perspective of a developing country, Nigeria. It examined the strategies employed in knowledge sharing, investigated the technological tools used in knowledge sharing, and identified the challenges of knowledge sharing among the university libraries. Descriptive survey design was adopted and data for the study were collected from 171 respondents using a dichotomous structured questionnaire. The findings showed that explicit knowledge (such as e-journals, databases, and e-books) and tacit knowledge (like observation, knowhow, and working experience) are not considerably shared in the university libraries studied. Further, the study demonstrates that strategies such as: seminars, workshops, meetings, job rotation, training programme, community of practice, social networks, among others were not commonly used for knowledge sharing in the libraries. The study also revealed that knowledge sharing exists in the libraries but low; due to poor interaction, ignorance, nonchalant attitude and awareness, technology and postal service issues, lack of cooperation, poor funding and telecommunication networks. Therefore, the study proffered some suggestions for improvement.

Keywords: Knowledge Sharing, Prospects, Challenges, University Libraries

Introduction

The role of university libraries in promoting learning, research and knowledge sharing cannot be over stated. Knowledge sharing being a border crossing phenomenon is characterized by many challenges. The literature has established the numerous challenges upsetting effective knowledge sharing efforts. Accordingly, knowledge sharing challenges refer to the discretionary attributions (Eslami, Achtenhagen, Bertsch & Lehmann, 2023), cultural barriers (Thongprasert & Cross, 2018), and human, financial and technological resources concerns of individuals or organizations (Xu, Gong, Qu & Sun, 2023; Noor & Salim, 2021). Scientific inquiry on the factors affecting knowledge sharing from firm and inter-organizational perspective has been on the increase in recent years. Notably, studies on technology adoption factors (Eslami et al., 2023), cultural factors (Ford & Chan, 2021; Neo, 2022), work groups and structural diversity (Cummings, 2019), management issues, and organizational issues (Cabrera & Cabrera, 2005) have attempted to

provide thoughtful and insightful understanding of the dilemma of knowledge sharing among individuals and in organizations. Like Bharosa, Lee and Janssen (2010), this study also asks the question “*why is it so difficult to share knowledge and to collaborate*”?

Furthermore, various scholars have conducted several studies to validate different knowledge sharing models (e.g. Xu, Gong, Qu, & Sun, 2023; Kerins, Madden & Fulton, 2022; Neo, 2022; Tsai, 2022; Noor & Salim, 2021; Mc Dermott & O’Dell, 2018; Murgatroyd & Calvert, 2013) to mention but a few. These studies have supported the Social Information Processing (SIP) Theory (Salancik & Pfeffer, 1978), the Knowledge Sharing Capability Model (Kim & Lee, 2006) and the Information Seeking Professional Model (Leckie, Pettigrew, & Sylvain, 1996). The models posit that organizational culture, organizational structure, information technology and awareness of information sources are important determinants on knowledge sharing and information seeking activities. The theoretical insights of this current study will be limited to the Knowledge Sharing Capability Model. Therefore, the purpose of this study is to draw insights from the Kim and Lee (2006) model to examine the challenges and prospects of knowledge sharing in the context of university libraries in Nigeria as a developing nation. Improvement in this area is critically important as access to core knowledge would enhance efficiency and effectiveness of the university libraries engaged in knowledge sharing activities.

Problem Context

Knowledge has nowadays become a considerable resource that ensures the survival and growth of organizations (Nonaka, Toyama & Konno, 2000). In relation to this undisputed importance of knowledge, various organizations have embraced the practice of knowledge sharing. An understanding of the concept of *knowledge sharing*, which is defined more by the provision of activity or piece of information and know-how to help others work together to solve problems, develop new ideas, or implement policies or procedures (Meickmann, 2023; Cummings, 2019; Pulakos, Dorsey & Borman, 2019), is vital to this paper. University libraries being centers of academic excellence (sustaining teaching, learning and research) are expected to engage in knowledge sharing.

However, the literature has reported that knowledge sharing activities in university libraries are low (Sarrafzadeh, Martin & Hazeri, 2020; Akparbore, 2015). While studies on knowledge sharing in library context and other disciplines have proliferated in recent years, they have not yet been scientifically and empirically explained and revealed in university libraries in Katsina State. Further, it is erroneous to conclude that the existing studies elsewhere are comprehensive enough to be applicable to all university libraries considering their divergent situational settings.

Personal experience and observation have revealed that knowledge sharing activities in university libraries in Katsina State (that is, Federal University Dutsin-ma, Umaru Musa Yar’adua University, Katsina, and Al-Qalam University, Katsina) is not as common as observed in many university libraries in Nigeria. Currently, there is little knowledge and understanding of the characteristics and causes of this phenomenon. Therefore, there is the need for an empirical investigation to determine the status of knowledge sharing in these university libraries.

Objectives of the Study

Reflecting on the knowledge sharing practices challenges and prospects in University Libraries in Katsina State, specifically, this study sought to answer the following questions:

1. What types of knowledge is shared in university libraries in Katsina State?
2. What technological tools are used in knowledge sharing activities?

3. What strategies do the university libraries in the State use in knowledge sharing?
4. What are the challenges affecting knowledge sharing in the university libraries?

Literature Review

Theoretical Foundation

Knowledge Sharing Capability Model is broadly concerned with the employee knowledge sharing capabilities that include work-related experience, expertise, know-how, contextual information, strategies, and facilities (Kim & Lee, 2006). The model suggests that knowledge sharing is determined by organizational culture, organizational structure and information technology. Organizational culture is defined as the shared values, beliefs and practices of the people in the organization, reflected in its mission, vision and shared goals (McDermott & O'Dell, 2018). Kim and Lee (2006) describe organizational vision, goals, social network, and trust as components of organizational culture that are related to knowledge sharing. Trust as a willingness to share knowledge, is driven by intention and concerns, openness and honesty (Noor & Salim, 2021). Organizational structure is the set of arrangements among resources of the organisation which may be people, facilities, information, and technological infrastructure (Holsapple, 2019). On the other hand, Information technology is the applications that support the creation, capture, storage, and facilitate the dissemination of knowledge among employees (Shanhong, 2019).

The three factors of the Knowledge Sharing Capability Model – Organizational Culture, Organizational Structure and Informational Technology that influence employees' knowledge sharing capabilities have not been used as a framework for understanding inter-organizational and extra-organizational knowledge sharing, although they are well suited for this purpose. For the present study, insights are drawn from these factors to analyze knowledge sharing among university libraries, thereby moving the model from its original locus, which is the firm level, to an inter-organizational and extra-organizational environment, which are universities libraries.

The reasons for finding the Knowledge Sharing Capability Model insightful for this study are based on the following facts. First knowledge sharing is people dependent; this is whether at firm level or among organizations such as university libraries. Therefore, an employee at whatever level is central to knowledge sharing activities. Employees' knowledge sharing capabilities such as work-related experience, expertise, know-how, and strategies (Kim & Lee, 2006) are not limited to firm level alone. Sial, Paul, Rafiq and Abid (2023) have affirmed that interaction outside the organization facilitates sharing of more and more tacit knowledge that helps employees to find timely solution to workplace problems. Furthermore, Sail et al. report that the extra-organizational knowledge sharing facilitates collaboration with experts belonging to different organizations and placed in different geographical locations can expand employees' knowledge and increase their efficiency. In this study, the employees refer to the librarians, who are central to knowledge sharing among university libraries.

Second, the organizational culture dimension of the KSC model leads to employees' knowledge sharing through vision and goals, trust among employees and social networks in an organization (Kim & Lee, 2006). Today, the organizational culture dimension is no longer limited to firm level only. At the inter-organizational and extra-organizational levels, a community of practice is now being created, where experts from different organizations having different specializations do interact with each other (Sial et al., 2023). This activity results in building a social network, where knowledge is shared by sharing their experiences and personal knowledge. Therefore, through social network university libraries would be able to share knowledge among themselves.

Finally, the Information Technology construct underscores IT application usage and end-user focus (Kim & Lee, 2006), which improves employees' knowledge sharing capabilities and assist in managing knowledge assets owned by the organization. However, in today's world, advancement in Information and Communication Technology (ICT) has move knowledge sharing beyond the traditional boundaries of a single firm, where employees share knowledge among one another. The significance of the ICT tools such as mobile technology to enhance the capacity of employees to share knowledge with other individuals, groups, organizations has now been established (Sial et al., 2023). Mobile technology has now made access and flow of knowledge from different locations easy and eliminated the limitations related to time and place. It has also made interaction with the outside world, which all contribute to knowledge sharing. In this regard, the use of the ICT is not limited to firm level but also inter-organizational and extra-organizational levels as in the case of this study. Therefore, the IT construct in the KSC model is insightful for the present study in understanding the impact of the ICT tools in facilitating knowledge sharing among university libraries.

Knowledge Sharing and Types of Knowledge Shared among University Libraries

Appraisal of existing models and literature suggests that knowledge sharing has been defined from different points of view. For example, Moller and Svahn (2020) view knowledge sharing as the act of codifying information, management beliefs, images, experiences, and contextualize practices. For Ipe (2019), knowledge sharing refers to the process of transforming knowledge into a meaningful and absorbable form to be used by individuals. It is also seen as the provision of know-how and task information for supporting collaboration, developing new ideas, solving problems and implementing policies and procedures (Cummings, 2019; Pulokos, Dorsey & Bormann, 2018). From the above conceptualization of knowledge sharing, it safe to say that knowledge exists in different form and type. Nonaka (1994) has categorised knowledge into two main types - explicit and tacit knowledge.

In discussing knowledge sharing in organizational context, delineation between explicit and tacit is fundamental (Eslami et al., 2023). Explicit knowledge is often seen as codified knowledge (Skyrme, 2001) that is found in documents and databases. For Sunassee and Sewry (2018), explicit knowledge is a systematic and formal knowledge that is easy to articulate, captured and shared. Further, Dellion (2017) attributed explicit knowledge to a knowledge that exists in printed form such as the information resources found in libraries. Specifically, explicit knowledge is associated with knowledge in digital format (Capurro, 2016). Additionally, expressions like spoken and written words, drawings and art have been classified as explicit knowledge as well (Nonaka & Toyama, 2003; Grover & Davenport, 2001). In general, explicit knowledge is argued to be universal in nature (Nonaka & Von Krogh, 2009; Chow & Chan, 2008; Davenport & Cronin, 2000). These exceeding features of the explicit type of knowledge distinctively differentiate it from tacit knowledge.

Tacit knowledge is historically linked to Michael Polanyi (1891-1976), a Hungarian – British Physicist and Philosopher (Wagner-Dobler, 2014). To him, knowledge can exist outside the well-known conventional forms of definitions, observations, and logical conclusions. Rather, knowledge could be situated on unapproved assumptions and internalized practices that are unformulated, not explicit and occasionally unconscious, but of crucial importance for gaining scientific knowledge. The development of tacit knowledge was further enhanced in the Mid-nineties by Nonaka and Takeuchi (1995). While scholars hold different views of what tacit knowledge is, common search on various literature provides the following definitions. Kucharska

and Erickson (2023), for example, define tacit knowledge as knowledge that is opaque, informal and unstructured. By this, tacit knowledge connotes a knowledge that is not clearly and explicitly defined and whose meaning is hard to explain. According to Skyrme (2001), tacit knowledge entails an undocumented knowledge that is intrinsically buried in people's minds that include experience, technical know-how among others. According to Abell and Oxborow (2001), it is a knowledge that encompasses experience and knowledge and expertise of an individual for meaningful contribution to organizational success. In sum, tacit knowledge underlies a knowledge that is tied to the senses, tactile experience, and movement skills, physical experiences, intuition, unarticulated mental models, or implicit rule of thumb'' (Nonaka & VonKrogh, 2009).

Information Technology as tools for knowledge sharing

As knowledge sharing has evolved from being focused on a single organization between employees and management, to a complex inter-organizational and extra-organizational network of people, organizations and nations need to deploy the IT to enable knowledge sharing. Papoutsakis (2007) brings to light the support of certain IT functions to organization and inter-organizational knowledge sharing. Information Technology (IT) tools as in this case information and communication technologies (ICT) are often discussed as systems, designed to support the flow and sharing of knowledge within and outside organizations. According to Papoutsakis (2007), effective use of the IT/ICT allows the sharing of knowledge via electronically mediated channels. Such IT/ICT tools used for knowledge sharing which include Industry 4.0 technologies (e.g. cyber-physical systems, the Internet of Things, cloud computing and big data) (Eslami, et al., 2023), mobile technology and social media (e.g. Facebook, LinkedIn, Twitter, WhatsApp, Viber, Skype and TeamViewer) (Sial et al., 2023; Mosha, 2014; Hosseini & Hashempou, 2012), and the internet, groupware, and extranet (Papoutsakis, 2007). These technologies have capacity for sharing tacit and explicit knowledge at both intra-organizational and inter-organizational contexts including university libraries.

In university library context, providing ICT enables knowledge sharing to greatly improve cooperation and collaboration among libraries. Different researchers have highlighted the significance of the ICT tools for knowledge sharing among university libraries. Anasi, Akpan and Adedokun (2014) present a study that shows that capacity building and the availability of the ICT tools as strategies for encouraging knowledge sharing among academic libraries. This view is also upheld by Muchaonyerwa and Mutula (2017). In the view point of Akparbore (2015), provision of Internet access would enable university libraries to share knowledge more effectively. Parirokh, Daneshgar and Fattah (2018) also advocate the need for the provision of communication channels. These ICT tools are therefore important consideration when engaging in knowledge sharing in inter-organizational context among the university libraries.

Knowledge sharing strategies among university libraries

Over the years, several strategies have been developed to facilitate knowledge sharing activities in firms, inter and extra organizational context, such as the university libraries. Knowledge sharing strategy in university libraries is often discussed as approaches and deliberate plans adopted to facilitate and support knowledge sharing (Ali & Khan, 2017). These strategies evolve around various tools, factors, and policies (Shannak et al., 2013). Taxonomy of knowledge sharing strategies is often narrowed to two types of strategies. These are codification and personalisation strategies (Parirokh, Daneshgar & Fattahi, 2018; Ali & Khan, 2017; Nazim & Mukherjee, 2012). Codification strategy is described as a means of using technology applications to facilitate

knowledge sharing and storage (Johansson et al., 2013). Personalisation strategy is associated with direct contact or face-face interaction in knowledge sharing (Nazim & Mukherjee, 2012). Nevertheless, both strategies are commonly used to influence knowledge sharing among university libraries.

From the context of codification strategy, development and implementation of sophisticated and relevant ICT tools and infrastructures, such as the internet, intranet, and web 2.0 tools to support knowledge sharing among employees in university libraries is emphasised (Ali & Khan, 2017; Montcalm, 2013; Nazim & Mukherjee, 2012). Dewah and Mutula (2016) argue that codification strategy is mostly associated with explicit knowledge but it can be used for sharing tacit knowledge as well. In the case of the personalization strategy, reliance on employees' individual relationships and networks is underlined (Montcalm, 2013). Common channels used for knowledge sharing in the personalisation strategy in university libraries include meetings, community of practice, dialogue and group discussion, mentorship, job rotation, coaching, storytelling and apprenticeship (Muchaonyerwa & Mutula, 2017; Dewah & Mutula, 2016; Kim & Lee, 2006). Various scholars have underlined the impacts of organisational/management leaders support (Xu et al., 2023; Muchaonyerwa, 2015) to encourage knowledge sharing. However, the debate on which type of strategy is commonly used for knowledge sharing in university libraries is not settled.

According to Nazim and Mukherjee (2012), the types of strategies employed by university libraries are codification and personalization strategies, with a slight dominance of the codification strategy. To Muchaonyerwa and Mutula (2017), the usage of personalisation strategy has dominance over codification strategy in university libraries. Justifying this assertion, Montcalm (2013) asserts that the complexity of technological systems required to share knowledge in the personalization strategy is less than that required for the codification strategy. Nevertheless, elements of the codification and personalisation strategies have been combined within university libraries for knowledge sharing among staff (Anasi, Akpan, & Adedokun, 2014). Given the ongoing debate, Ajie (2019) and Anna and Puspitasari (2013) suggest that library's goals and conditions should determine the kind of strategy to be used. To this end, understanding the knowledge sharing practices in university libraries in Katsina State is pertinent to this study.

Challenges of Knowledge Sharing Practices among University Libraries

Research has demonstrated that knowledge sharing practice in organizations, including university libraries is associated with many challenges. The key challenges identified in most underdeveloped countries include individual (e.g. lack of skills, cultural differences, and trust), organisational (e.g. human and infrastructural resources, accessibility and physical environment), and technological (reluctance to use) (Sarrafzadeen, Martin & Hazeri, 2020; Thongprasert & Cross, 2018; Riege, 2015). Akparbore (2015) reported that lack of Internet access significantly impedes knowledge sharing among librarians. Furthermore, lack of knowledge management strategies and policies (Parirokh, Daneshgar & Fattihi, 2018; Mayekiso, 2013), lack of knowledge and familiarity in the use of web 2.0 tools (Husseini & Hashempou, 2012), inadequate staff training, budgetary constraints, and lack of knowledge sharing culture (Jain, 2012) have all been reported as challenges confronting knowledge sharing. Hence, these are issues to look into in understanding the prospects and challenges of knowledge sharing in university libraries in Katsina State.

Methodology and Data Collection

Research Paradigm

Grounded on the positivist's school of thought, this study argues that studies need maintain minimal interaction with the librarians to avoid influencing their responses on the type of knowledge they share, the technological tools used, the strategies they use and the challenges they face in the knowledge sharing activities. This approach allows the researchers to objectively discover absolute knowledge about reality using quantifiable observations (Scotland, 2012).

Research Design

The sampling frame for this study includes 412 library staff in three university libraries in Katsina State, Nigeria; namely, Federal University Dutsin-ma, Umaru Musa Yar'adua University, Katsina, and Al-Qalam University, Katsina. A total of 171 librarians responded to the questionnaire in this study. Descriptive survey design was used to collect empirical data from a representative sample of the research population. This approach allowed the researchers to observe and obtain data on the dominant behaviours, perceptions, beliefs and attitudes of the respondents on the challenges and prospects of knowledge sharing. Dichotomous nominal scales were also employed to measure the responses of the respondents.

Instrumentation

A structured questionnaire was used to elicit responses for the study. The instrument was personally developed after intensive review of different theoretical models and several empirical studies. This instrument in line with Creswell and Vicki (2011) was designed in a simple, clear, unbiased, and unambiguous language for easy understanding and quick response. The instruments were administered personally by the researchers with the assistance of two trained research assistants.

Sampling

Probability sampling technique, using the stratified random sampling techniques was employed in the study. The required sample size of the study was determined using the Research Advisor (2006). A sample of 196 feedbacks was drawn from the population. To ensure equal representation, a proportionate stratified random sampling technique was adopted and the sample size for each university was determined using Krejcie & Morgan (1970) Table.

Data Analysis

The questionnaire was designed to measure a range of dichotomous nominal variables, including educational qualifications, types of knowledge shared, technological tools used, strategies and challenges of knowledge sharing of the respondents. The data collected was analyzed using descriptive statistics, where simple frequency table, percentages, means and standard deviations were used for decision. The data was subjected to statistical analysis using Statistical Package for Social Science (SPSS IBM Version 23).

Results and Interpretation

Response Rate

One hundred and ninety-six questionnaires were administered to the identified respondents and one hundred and seventy-one were completed and returned, giving a response rate of 87.2%. In line with Baruch & Holton (2008) this response rate is critical in assessing the value of the study.

Table I below shows that a total of 2.3% of the respondents have doctorate degree as their highest academic qualification while most (48.3%) of the respondents have Diploma certificates and other (16.4%) qualifications. This implies that majority of the respondents are not professional librarians. Therefore, these results established that low educational qualifications can negatively affect knowledge sharing activities.

Table I. Characteristics of Respondents

Measure	Level of education	Frequency	Percentage
Educational Qualifications	Doctorate	4	2.3%
	Masters	8	4.7%
	First Degree	48	28.1%
	Diploma	83	48.3%
	Other	28	16.4%

1. Survey Results

The study targeted professional and paraprofessional librarians working in three university libraries in Katsina State.

Table II. Types of Knowledge Shared among University Libraries

Measures	Yes		No		Mean	STD
	F	%	F	%		
Explicit knowledge						
Our libraries do share e-references resources	105	61.4	66	38.6	1.39	.49
Our libraries usually share e-books	115	67.3	56	32.7	1.33	.47
e-journals are shared among our libraries	114	66.7	57	33.3	1.33	.47
Our libraries frequently our databases with sister libraries	117	68.4	54	31.6	1.32	.47
Tacit knowledge						
Our libraries usually involve in observation practice	95	55.6	76	44.4	1.44	.49
Technical know-how is frequently shared among our libraries	85	49.7	86	50.3	1.50	.50
Working experience is commonly shared among our libraries	100	58.5	71	41.5	1.41	.49
Intuition	33	19.3	138	80.7	1.81	.40

Table II above presents the types of explicit and tacit knowledge shared among the university libraries. Majority of the responses indicate that various types of knowledge are shared among the three university libraries. The most common types of knowledge shared include databases, e-journals, e-books and e-reference resources. However, intuition is not commonly used

for Knowledge sharing according to 80.7% of the respondents recorded. What is unique from the finding is that explicit knowledge is most commonly shared among the libraries than tacit knowledge. Therefore, these results further confirm what is available in theory and in the literature that explicit knowledge is more formal and structured which facilitates it's sharing with ease.

Table III: Technological Tools for knowledge Sharing (N=171)

Technological Tools	Yes		No		Mean	STD
	F	%	F	%		
Mobile technology	137	80.1	34	19.9	1.20	.40
Computer technology	118	69.0	53	31.0	1.31	.46
Social media	132	77.2	39	22.8	1.23	.42
CD-ROM	70	40.9	101	59.1	1.59	.49
Wikis	55	32.2	116	67.8	1.68	.47
Electronic mail	92	53.8	79	46.2	1.46	.50
Digital Cameras	62	36.3	109	63.7	1.64	.48
Reprographic technology	125	73.1	46	26.9	1.27	.44
Scanners	102	59.6	69	40.4	1.30	.46
Internet facilities	119	69.6	52	30.4	1.32	.47

Results in Table III above indicates that mobile technology and social media are identified as the most popular technological tools for knowledge sharing among the university libraries. The next most popular tools are reprographic technology, internet facilities and computer technology. However, digital cameras are thought to be least popular by 36.3% of respondents, and only 32.2% of the respondents thought Wiki to be at least somewhat useless.

Table IV. Knowledge Sharing Strategies used among University Libraries

Measures	Yes		No		Mean	STD
	F	%	F	%		
Face-to-face interaction	118	69.0	53	31.0	1.31	.46
Social networks	33	19.3	138	80.7	1.81	.40
Community of practice	62	36.3	109	63.7	1.64	.48
Meetings	92	53.8	79	46.2	1.46	.50
Mentorship	132	77.2	39	22.8	1.23	.42
Group discussion	132	77.2	39	22.8	1.23	.42
Training programs	92	53.8	79	46.2	1.46	.50
Published reports	100	58.5	71	41.5	1.41	.49
Seminars	62	36.3	109	63.7	1.64	.48
Workshop	79	46.2	92	53.8	1.54	.50

In Table IV above, the results reveal that several important strategies are not used for knowledge sharing activities among the university libraries. Key knowledge sharing strategic determinants like seminars, workshops, training programs, meetings, community of practice and social networks are poorly used as reported by more than 50.3% to 80.7% of the respondents. However, mentorship and group discussion are identified as the most commonly used strategies

for knowledge sharing. The next mostly used strategies are face-to-face interaction and published reports. One possible explanation to this result is that mere friendly interface may not make people to share knowledge, but mutual cooperation, collaboration and policy formulations may affect librarians and libraries attitude to share knowledge among them.

Table V. Knowledge Sharing Challenges among University Libraries

Statements	Yes		No		Mean	STD
	F	%	F	%		
Lack of awareness	74	43.3	97	56.7	1.57	.50
Poor interaction/collaboration	101	59.1	70	40.9	1.41	.49
Poor telecommunication networks	93	54.4	78	45.6	1.46	.49
Nonchalant attitude	62	36.3	109	63.7	1.64	.48
Lack of cooperation	88	51.5	83	48.5	1.47	.49
Ignorance	78	45.6	93	54.4	1.54	.50
Poor postal services	88	51.5	83	48.5	1.47	.49
Poor financial capability	89	52.0	82	48.0	1.48	.48
Poor technology facilities	92	53.8	79	46.2	1.46	.50

The results from Table V above established that knowledge sharing among university libraries in Katsina State is impeded by various challenges. More prominent are issues of financial resources, ignorance, poor postal services, poor interaction and poor technology facilities, as reported by the respondents. Comparatively, results for awareness, ignorance and nonchalant attitude are more positive. Restated, the importance of the effect of sufficient funding of university libraries should be considered in encouraging libraries and librarians to engage in knowledge sharing activities.

Discussion:

Types of Knowledge Shared

In this fast-changing digital world, where knowledge sharing is increasingly becoming a norm among individuals and organizations, knowledge sharing practices among the university libraries is also being promoted. The findings of this study show that various types of knowledge are shared among university libraries in Katsina State. However, the knowledge sharing activity is low and not as much desired or anticipated. The low knowledge sharing is more pronounced in tacit knowledge as evident in Table II above. The results of this study are similar to the findings of Akparbore (2015) and Moponya (2018) that indicated that generally knowledge sharing in libraries is low. This uncommon attribute tends to re-echo's Xu, Gong, Qu, & Sun (2023) assertion of employee's unwillingness to knowledge sharing.

Additionally, explicit knowledge is the most common knowledge shared than the tacit knowledge. These findings have been established by previous theoretical and empirical studies of Kucharska & Erickson (2023), Dewah & Mutula (2016), Wamundila and Ngulube (2018), Kim & Lee (2006), and Nonaka and Takeuchi (1995), which affirmed that explicit knowledge is mostly shared because it is more organized/structured, systematic and formal in nature in slim contrast to tacit knowledge which is opaque, informal and unstructured. Thus, the findings of this study suggest that the university libraries under study do not benefit considerably from the tacit

knowledge available. It also implies that the libraries do not have clear inter-organizational vision and goals for knowledge sharing. The findings further indicate lack of awareness of different sources/types of knowledge in the libraries. Kim & Lee (2006) are of the opinion that knowledge sharing in organizations is determined by organizational culture of shared values, beliefs, practices, mission and vision of an organization. In addition, Leckie et al. (1996) believe that awareness of information sources is central to information seeking approach. To this end, Kerins, Madden & Fulton (2022) pointed out that awareness and usefulness of information sources are relevant to effective use of the type of knowledge shared by librarians.

Technological Tools for Knowledge Sharing

Various technological tools are now being adopted and used for knowledge sharing activities by university libraries. According to the findings of this study, mobile technology and social media are the most preferred technologies used for knowledge sharing among the university libraries in Katsina State, based on the 80.1% and 77.2% of the responses respectively. These findings have been supported by Sail's et al. (2023) study, which reported that 85% of respondents use Facebook, Twitter, Skype, and LinkedIn to connect and share knowledge at inter-organizational level. There is also low use of many technological tools for knowledge sharing, which is evident from the 80.7% of the responses and the 68% that indicated digital camera and Wiki as the least technological tools used in the university libraries studied.

Knowledge Sharing Strategies

The empirical results indicate that face-to-face interactions, meetings, mentorship, group discussions, and training programmes are the most common strategies used in knowledge sharing among university libraries in Katsina State. Previous studies by Abubakar & Kabir (2022) and Canadian International Development Agency (2003) have revealed similar results. More importantly, this study has found that strategies like social networks, community of practice, job rotation, seminars, and workshop are not commonly employed in knowledge sharing activities among the libraries. Although the findings of George (2018) are in line with the current findings, however, studies by Abinah & Subaveerapandiyan (2021) in South Asia and Chipeta (2018) in Malawi have reported that seminars and workshops are the most common knowledge sharing strategies among university libraries. The uncommon use of social networks, community of practice, seminars and workshops in knowledge sharing in the study area suggest that the libraries do not have effective knowledge sharing strategies. From a theoretical foundation, Kim & Lee (2006) have argued that social networks allow communication, dialogue and individual or group interactions that support and encourage knowledge-related employee activities. Furthermore, previous studies by Mayekiso (2013) and Jain (2012) have established lack of policies and strategies for knowledge management and sharing as challenges in university libraries. One way to improve on this situation is designing knowledge sharing policy that will involve the coordination and facilitation of inter-university libraries.

Knowledge Sharing Challenges

Several barriers appear to pose a challenge to effective knowledge sharing among the university libraries in Katsina State. A significant number of respondents (59.1%) indicated poor interaction to have an adverse effect on knowledge sharing in the libraries, indicative of the influence of personality traits on knowledge sharing (Aharony, 2011). Insufficient telecommunication network is also a barrier to knowledge sharing, based on the response rate of 54.4%. This finding tends to reinforce the findings of Sarrfzadeh, Martin & Hazeri (2020), Parirokh, Daneshgar & Fattahi (2018), Akparbore (2015) and Jain (2012) that have reported the lack of ICT infrastructures, lack

of internet access and insufficient technology as some of the challenges of knowledge sharing in university libraries in most developing countries.

These findings significantly imply that knowledge sharing practice among university libraries in Katsina State is seriously faced with formidable challenges that require necessary solutions.

Conclusion

In the light of the increasing importance of knowledge sharing on advancing human and organizational development, this study has examined knowledge sharing practices, challenges and prospects in three university libraries in Katsina State. It is difficult to conclude that there is a significant prospect for knowledge sharing among the libraries. Further, drawing insights from the Knowledge Sharing Capability Model (Kim & Lee, 2006), the findings of the study also suggest that knowledge sharing among the university libraries is bedeviled by numerous challenges, such as individual, organizational, environmental, technological factors, among others. Thus, it is only by overcoming these obvious challenges that knowledge sharing practice in the university libraries will greatly improve; hence the following recommendations are proffered.

Recommendations

1. It is essential to encourage individual employees (librarians) to share knowledge and collaborate among the libraries. This will exert a significant influence on the various university libraries to share knowledge and make the activities more effective.
2. Effective inter-university library cooperation and collaboration should be established among the three university libraries.
3. Individual university libraries should strengthen and improve on the intra-university library knowledge sharing activities by incorporating it into their mission, vision and policy strategies.
4. Environmental and technological challenges need to be improved in the university libraries. Almost all human activities are currently being driven by technology and knowledge sharing is not exceptional. Therefore, investing in these technological tools and infrastructures by government and individual university libraries can significantly improve the knowledge sharing activities.

Limitations

Like most survey studies, this study has some limitations which are listed below.

1. The findings of the study cannot be generalized to all university libraries in Nigeria. Therefore, a wider and comprehensive study should be conducted to include all university libraries in the country. A mixed method approach could also provide a more insightful view of the issues associated with knowledge sharing practice in university libraries.
2. Due to theoretical challenges of studying knowledge sharing at inter-organizational level, it is suggested that researchers should work assiduously to produce compatible model of knowledge sharing in the university libraries studied.

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