KNOWLEDGE SHARING AMONG STAFF AT DELTA STATE UNIVERSITY LIBRARY ABRAKA FOR IMPROVED SERVICE PROVISION.

BY

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DECLARATION

I Lydia Osarugue Izu, with student number 61275786 declare that "**Knowledge Sharing Among Staff at Delta State University Library Abraka For Improved Service Provision**" is my work. It has not been submitted previously to the University of South Africa (UNISA) or any other institution as a requirement for any degree.

I also declare that all sources used and quoted have been duly acknowledged in the form of in-text citations and a complete list of sources.

I further declare that I submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality.

27 October 2020

SIGNATURE	**DATE**

DEDICATION

This work is dedicated to my husband Dr BO Izu, our daughter Oghenemaro Kayla Osasere Izu and to my mother Mrs HI Odaro-Osagiede. I am extremely grateful for my husband's support, contributions, understanding and for being my muse throughout this journey. Thank you to my mother for laying a good educational foundation for me and following through with her immense support until this day.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACRL----------- Association of College and Research Libraries

ALA------------- American Library Association

APA------------- American Psychological Association

ASTD----------- American Society for Training Development

CAPAL--------- Canadian Association of Professional Academic Librarians

CoP-------------- Community of Practice

DD--------------- Document Delivery

DDA------------- Demand-Driven Acquisitions

DELSU---------- Delta State University

DIKW----------- Data, Information, Knowledge and Wisdom

DRS------------- Digital Reference Services

HTML---------- Hyper Text Markup Language

ICT-------------- Information and Communication Technology

MARC---------- Machine Readable Catalogue

MMCSR-------- Mixed Method Case Study Research

OA--------------- Open Access

OCPE------------ Office of the Commission for Public Employment

OPAC------------ Online Public Access Catalogue

RSS--------------- Really Simple Syndication

SDI--------------- Sellective Dissemination of Information

SECI------------- Socialisation, Externalisation, Combination and Iinternalisation

SET-------------- Social Exchnage Theory

SPSS------------- Statical Package for Social Science

SSCE------------- Senior Secondary Certificate Examination

UNISA----------- University of South Africa

VR--------------- Virtual Reference

WYSIWYG----- What You See Is What You Get

ABSTRACT

Academic libraries are an integral part of higher educational institutions in Nigeria in order for them to achieve their mission of national development. Knowledge sharing has become a survival kit for academic libraries to improve service provision and remain relevant in today's information world. This study explores the roles of knowledge sharing among staff at the Delta State University (DELSU) library, Abraka for improved service provision and also suggests strategies to enhance knowledge sharing among staff for improved service provision. The theory of organisational knowledge creation (SECI) and the Social Exchange Theory (SET) underpinned this study. The study adopted a mixed method research approach and case study research design. While questionnaires were the main data collection instruments, interviews were the supplementary instruments. The entire staff at the DELSU library, Abraka was the target population for this study. A census was taken on the entire staff of the library to collect data using the questionnaires while the heads of the different library sections were purposively sampled for the collection of data through interviews. The quantitative data collected using questionnaires was analysed with the Statistical Package for Social Science (SPSS) software and the results were presented in tables and simple descriptive statistics. The interview data was analysed and interpreted using thematic analysis and was presented in predetermined themes according to the research objectives. A total of 60 out of the 63 copies of the questionnaire administered were retrieved and interviews were conducted on all seven participants sampled. The study revealed that knowledge sharing among staff members play an important role in improving service provision in the library in terms of the provision of accurate and in time services, learning best library practices, avoidance of mistake repetition and solving problems encountered on the job. However, knowledge sharing is not formalised in the library. Therefore, effective knowledge sharing for service provision has not been achieved. The greatest barriers to knowledge sharing for improved service provision in the library are the lack of a knowledge sharing culture, information and communication technological tools and infrastructures and motivation as well as the inferiority and superiority complex among staff. The greatest motivation for the library staff to share knowledge is to improve service provision. The study suggests strategies to encourage knowledge sharing among the staff members in order to improve service provision. These strategies include an adequate reward system, as well as a continuous awareness and appraisal of knowledge sharing.

Keywords: knowledge; knowledge management; knowledge sharing; service provision; academic library services; academic library staff; library users; academic libraries.

CHAPTER ONE: INTRODUCTION AND BACKGROUND

1. 1 INTRODUCTION

Knowledge sharing has become an important tool in the hands of academic librarians to improve service provision in the library (Ajie 2019a; Ajegbomogun & Diyaolu 2018:16; Anna & Puspitasari 2013:6; Okonedo & Popoola 2012:6). Bessick and Naicker (2013:1) emphasise that institutions who realise the importance of knowledge sharing and its subsequent implementation are more likely to function better compared to those who do not. As a part of knowledge management, knowledge sharing is key to the creation of knowledge, and is also an essential practice to upsurge innovation, improve productivity and strengthen understanding among information professionals such as the academic library staff (Islam & Tsuji 2016:43). To this end, Anna and Puspitasari (2013:2) and Ajegbomogun and Diyaolu (2018:17) suggest practising knowledge sharing in academic libraries so that the creation and reuse of knowledge, for the provision of improved library products and services to users, are enhanced. They also add that academic library employees, as the knowledge assets of the library, can share knowledge among themselves in order to reform library products and services. Academic library service providers, engaged in the practice of knowledge sharing, can boost the productivity of library services through the exploitation of their collective intellectual resources (Ajie 2019a; Dube & Ngulube 2012:69).

Knowledge is a key resource and a necessity of any organisation in the digital era, which is dynamic and competitive, and therefore, an asset to be valued and shared (Ajie 2019a; Asrar-Ul-Haq & Anwar 2016:2; Rajurkar 2011:5). It is an understanding of descriptions, facts, information, as well as attained skills through experience (Quadri & Garaba 2019:39). It represents a crucial drive in achieving organisational success and competitive advantage (Farnese, Barbieri, Chirimbolo & Patriotta 2019:2). The value of knowledge increases when it is shared, however, when it is not well managed and shared it corrodes easily, especially knowledge that is accumulated overtime (Asrar-Ul-Haq & Anwar 2016:2; Dube & Ngulube 2012:68; Skyrme 2011). Knowledge sharing is a crucial process of knowledge management through which knowledge in the form of information, skills, or expertise, is exchanged among individuals, communities and organisations and new knowledge is jointly created (Ajie 2019a;

Asrar-Ul-Haq & Anwar 2016:2; Charband & Navimipour 2016:1131; Isa, Jemal & Nordin 2016:217; Navimipour & Charband 2016:730).

Knowledge management is the process of identifying, capturing, developing, sharing and utilising available knowledge resourcefully (Navimipour & Charband 2016:730). Basically, knowledge management creates easily accessible platforms, with efficient knowledge sources, which can be used by knowledge seekers or employees of an organisation, through the processes of identification, creation, application, storage, recovery, and sharing (Abualoush, Masa'deh, Bataineh & Alrowwad 2018:281; Dikotla 2016:1; Ramadan, Dahiyat, Bontis & Al-Dalahmeh 2017:441). Knowledge sharing is an important process in the success of knowledge management, which is also vital for the proper exploitation and use of knowledge resources (Abualoush et al. 2018:284). Knowledge sharing is a building block to an organisation's success and is adopted as a survival strategy since it allows the transfer of knowledge from the more knowledgeable to the less knowledgeable (Asrar-Ul-Haq & Anwar 2016:2; Tahleho 2016:3). Effective knowledge sharing is fundamental to every organisations' success (Boateng, Dzandu & Agyemang 2015:218). Therefore, employees need to continuously share knowledge in order for positive gains to take place in any given organisation where excellent performance and efficient services are the ultimate goals (Ajegbomogun & Diyaolu 2018:3; Asrar-Ul-Haq & Anwar 2016:2; Hadjipavlis 2012:5).

Academic libraries are service-oriented organisations established within higher institutions of learning. They, by virtue of their roles, provide significant resources and quality services in order to meet the teaching, learning, and research needs of their parent institutions (Adeniran 2011:210; Bawack 2019:2). These libraries are also supportive of their parent institutions' mission in generating knowledge and equipping clients with the required knowledge to serve and function better in the society (Akinola 2019:2; Rajurkar 2011:5). Academic libraries have been referred to as both the nerve centres or hubs of academic activities in higher learning institutions, and the hearts of the universities (Akinola 2019:2; Abubakar 2011; Bawack 2019:2). They are expected to be leaders in providing information services to their user communities (Abubakar 2011; Bawack 2019:2). The academic library user community is made up of students, faculty members, lecturers, researchers, administrative staff, and other staff of the parent institution (Bawack 2019:2; Singh 2010:1). However, the user community of

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academic libraries is expanding, and its roles are extending to accommodate scholarly researchers in various fields from other institutions (Raju & Schoombee 2014:27-29; Rajurkar 2011:5).

Academic libraries are considered valuable to their parent institutions through their roles of providing services to support the research, teaching, and learning of their user communities (Akinola 2019:3; Tenopir, Fleming-May & Chrzastowski 2011:370). Academic library roles generally include the gathering, processing, storing, retrieving, circulation and use of information and its sources to render services to the user public. The advent of information technology, commonly referred to as the digital age, has brought with it an expansion in, and a redefinition of, the traditional roles of academic libraries (Bawack 2019:2). This is because technological advancement has caused a change in the teaching and learning context of higher academic institutions, as well as in users' quest for information (Bawack 2019:2). It is therefore no longer enough for academic libraries to support teaching, learning and research. They also need to foster and drive teaching, learning, and research in higher institutions of learning, and become partners in doing so (Delaney & Bates 2014:34; Raju & Schoombee 2014:29). Academic libraries are also expected, in this digital age, to perform roles which are essential in satisfying the users' incessant quest for information and knowledge through its services (Patel 2019:23).

Academic library services describe the various ways in which academic library staff provides, classifies, stocks, retrieves, and disseminates information to users (Bitagi & Garba 2014:122). The services offered by academic libraries include reference services, bibliographic services, user education services, referral services, resource sharing services, indexing and abstracting services, collection development services, inter library loan services, and reprographic services (Ikolo 2018:885; Singh 2010:4-10; Sidorko & Yang 2009:9-11). In recent times, due to the changing tertiary education pedagogy, information technological advancement, and the change in user demands, academic libraries have developed and expanded their services (Bawack 2019:1-4; Raju & Schoombee 2014:27). These services now include virtual reference services, collection and digitisation of archival material services, creation of supportive metadata services, development and maintenance of digital repositories services, literature search services, and open access to scholarly communications services (Bawack 2019:3-4; Raju &

Schoombee 2014:27). Virtual reference services stand at the frontline of academic library services in the digital era. This is because it enables research support by providing academic researchers remote access to relevant scholarly articles, books and other information materials to assist in their research work (Tenopir, Volentine & King 2012:130).

Academic librarians and other staff members at academic libraries are responsible for fulfilling the proper roles of academic libraries through the provision of effective library services to users (Ajegbomogun & Diyaolu 2018:2; Patel 2019:23). Information explosion, resulting from information technological advancement in the digital era and the changing needs of academic library users, is propelling a change in the roles and approach taken by academic library staff members when providing services to users (Akporhonor & Olise 2015:2; Bawack 2019:3; Igun 2010:18). In today's academic library, the staff must perform multidimensional roles, which are critical and fundamentally required for information resource management, both in the physical and virtual domain (Patel 2019:23). The challenge is for the academic library staff to continuously redesign and redefine academic library services, develop new ways of providing these services in order to meet the sophisticated and swiftly varying needs of users during the digital era, and to remain relevant (Bryson 2017:9; Patel 2019:23). To achieve this, they need to build on old skills, acquire the new skills and expertise needed to stay up to date with all the efficient ways to redesign and redefine library services, and learn new approaches to service provision (Bawack 2019:7-8).

Consequently, redefining and redesigning academic library services, and the ways in which to provide these services, will result in better service provision to users (Anna & Puspitasari 2013:2-3). This requires that academic library staff members become innovative and creative, provide valued services, acquire digital literacy skills, adequately manage digital information, acquire adequate negotiating and marketing skills, acquire adequate social media skills, be good collaborators and networkers, and acquire blended and embedded librarianship skills (Bawack 2019:8-9). They must therefore invest in meaningful continuous training and professional development in order to efficiently keep track of the changing user needs during the digital era (Ajie 2019a). In this regard, knowledge sharing is considered an essential tool, when in the hands of academic library staff members, to strengthen old, and develop new, knowledge on relevant library operations and practices (Anna & Puspitasari 2013:6; Okonedo

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& Popoola 2012:6). Knowledge sharing among academic library staff can assist in filling up the knowledge vacuum that exists within them and bring themselves up to date with the best modern day library service provision best practices (Ajegbomogun & Diyaolu 2018:4).

Knowledge sharing is a viable means of improving the provision of an academic library's services since the library's success depends on their ability to effectively exploit the knowledge of employees to assist the user community (Ajie 2019a; Aswath & Gupta 2009:187; Marouf 2017:137). Knowledge sharing enables librarians to adequately update and disseminate library policies and procedures among themselves, document best practices within the library for operational references, and retain employees' accumulated knowledge and expertise when they leave the library for reuse (Bartlett 2016:1). For example, the library staff tasked with the responsibility of planning and acquiring library resources, benefit greatly from the knowledge sharing practices, where academic librarians must carefully analyse the needs of users and seek cooperative acquisition plans in order to meet them (Aswath & Gupta 2009:187-188).

Knowledge sharing in academic libraries allows librarians to gather and share knowledge on the needs of academic library users, equipping themselves with ample amenities to satisfy these incessantly changing needs of users by providing the users with appropriate and dependable services (Jain 2012:140). Corroborating this view, Okonedo and Popoola (2012:6) highlighted the implications of knowledge sharing within academic libraries to include dependable, effectual, and efficient library services to users because it allows librarians to share their insight and experiences. In the same vein, library staff, especially those in the reference and circulation sections, could reduce the risk of task duplication and the repetition of operational mistakes by effectively sharing knowledge among themselves (Jain 2012:141). This will in turn save the cost and time of providing library services. This happens in a library environment where the staff members on duty repeat similar errors as those on a previous shift. Knowledge sharing among staff members can improve service provision by enabling user-centred solutions, eliminating redundant procedures, and reducing response time (Islam, Agarwal & Ikeda 2015:4). Hence, this study seeks to establish the role of knowledge sharing among academic library staff in the provision of improved services, in one of the academic libraries in Nigeria.

There are 170 universities across the 36 states in Nigeria, including 43 federal universities, 48 state universities and 79 private universities (National University Commission 2020:12-13). The core mission and vision of these universities, as stipulated by the National policy on Education (2004), is to train and produce highly skilled manpower for the labour-intensive Nigerian economy with its low human development index. There are also a number of polytechnics and colleges (Abubakar 2011). These higher academic institutions are all individually attached with academic libraries in order to support their mission and vision (Abubakar 2011). DELSU, Abraka is one of the state public universities in Nigeria and is the only public university established in the Delta state. Because of this, there is a great influx of prospective students and researchers into the institution. The DELSU library, which is the heart of the university, was established to support its mission. It therefore has to cater for a wider range of users, including the students, lecturers, and researchers within its parent institution (Ikolo 2018). The library is required to provide adequate and efficient services to these users. However, the library is faced with difficulties in this regard. Ikolo (2018:889) described the service provision in the library as "inadequate and below average". This is either due to poor staffing, unskilled personnel, poorly trained staff members, or a loss of knowledge (Chegwe & Anaehobi 2015:1; Iwhiwhu, Ruteyan & Eghwubare, 2010:5-6; Ikolo 2018; Onifade 2015:91). The challenge in rendering efficient library services in the library is further amplified by changing user needs and information environment in the digital era. Anuradha (2017:46) opined that the pressure on academic libraries to enhance their service delivery to users has become more intense due to digitisation and information explosion during the digital era.

The digital era requires academic library staff to upskill and continue to acquire new knowledge regarding the provision of services, in order to meet the sophisticated needs of academic library users (Bawack 2019:7-9; Patel 2019:23). Consequently, staff working in the DELSU library, Abraka must acquire relevant and new competencies and skills in order to adequately provide efficient services and remain relevant in the new information era (Onifade 2015:91). The staff at DELSU library, Abraka must consider ways to become and remain proficient in order to adequately satisfy the needs of the library's user community. In this regard, the studies of Ajegbogun and Diyaolu (2018), Anna and Puspitasari (2013) and Tahleho (2016) reported and emphasised the importance of knowledge sharing among academic library staff.

Furthermore, for the academic library to become successful in achieving its objectives in today's world, and be considered relevant, it must value and harness the skills and experience of its staff through effective knowledge sharing. The reason for this is that knowledge sharing helps to circulate isolated knowledge to those who may require it for effective service delivery (Ajegbomogun and Diyaolu 2018:3). Academic library staff continuously generate and acquire new knowledge through interactions with users. This knowledge is relevant to innovative solutions to poor service provision and approach (Islam et al. 2015:6). In the same vein, the DELSU library , Abraka staff working in various sections, are equipped with unique knowledge on library practices, gained over the years while working, through individual interactions with colleagues, and through the digital space (Ajie 2019a). This knowledge, if shared, could enhance the provision of library services by eliminating the challenges of poor staff training and unskilled personnel. On the other hand, it could be lost if it is not shared. Therefore, it is necessary that academic library staff members, through knowledge sharing, collaborate by sharing knowledge relevant to the provision of services among colleagues, especially within the same working environment, to enhance their individual skills, and to improve service provision in the library (Onifade 2015:91).

Library employees in academic libraries in Nigeria, have been reported as often unenthusiastic to engage in knowledge sharing among colleagues to share their expertise and so when they leave the profession or workplace, they often times leave with their knowledge which is highly useful for service provision (Ajie 2019a; Onifade 2015:91). Agarwal and Islam (2015) and Martins and Martins (2011:61) opined that loss of knowledge due to employees quitting or retiring may pose a threat to mentoring of new staff and results in efficiency lost. According to Agarwal and Islam (2015:151) the experience and knowledge of past and current academic library staff is relevant to the new staff in order to be readily efficient in carrying out library tasks and consequently lost if not duly transferred. For Tahleho (2016:19), the consequences of this knowledge loss are the inability of the library to learn from past mistakes, duplication of tasks, and also lost of potential mentorship for training and retraining of library personnel which eventually negatively affect service provision.

Against this backdrop, knowledge sharing at the DELSU library, Abraka for improved service provision, is investigated, and strategies, to enhance knowledge sharing among the library's staff for better service provision, is suggested.

1.2 CONTEXTUAL SETTINGS

The Delta State Government is responsible for the DELSU's funding, which is established to serve prospective undergraduates, postgraduates and researchers in the state and environment (Delta State University 2012; Ikolo 2018:889). The university is equipped to carry out training and award necessary degrees to qualified graduates. DELSU is spread across the state's three regions, with the main campus being in Abraka and the other two in Anwai and Uleh respectively. Each campus is equipped with a library (Iwhiwhu et al. 2010:1-2).

The DELSU library, Abraka started off as a college library, attached to the defunct College of Education, Abraka in February 1969. The college library evolved into a university library along with the college itself in April 1992, with library collections of over 23 700, which grew into well over 65 000 in 2007, and up to 99 845 in 2018 (Akporhonor & Iwhiwhu 2007:2-3; Ikolo 2018:882). The DELSU library, Abraka offers direct services to its users, such as reference services, user education services, document delivery services, Selective Dissemination of Information (SDI) services, inter-library loan services, current awareness services, renewal services and reprographic services (Arumuru 2015:47). The library also offers indirect services, such as cataloguing and classification services, circulation services, bibliographic services and indexing and abstracting services (Arumuru 2015:47; Iwhiwhu et al. 2010:5). These services are provided by various divisions and sub-divisions in the library, including collection development, special collection, reference, serials, readers' service, technical services, and administrative divisions (Ikolo 2018:882). The library is located on site 2, one of the sites on the Abraka campus (Ikolo 2018:882; Iwhiwhu et al. 2010:2). The library is expected to serve, as the main library, the staff members, and students at the DELSU, Abraka campus, as well as those from the other two campuses, when necessary.

1.3 STATEMENT OF THE PROBLEM

The efficiency and relevance of academic libraries is measured largely by the library services rendered through the availability of library material and skilled human resources (Akinola 2019:2). The relevance of knowledge sharing towards the provision of these library services cannot be overstated (Jain 2012:146). The goals of knowledge sharing in academic libraries are to share top library practices, library policies, and lessons learned while performing library services (Awodoyin, Osisanwo, Adetoro, & Adeyemo 2016:16; Anna & Puspitasari 2013:1). Librarians also share their knowledge about daily tasks, how to solve problems and ideas for library development (Awodoyin et al 2016:17; Anna & Puspitasari 2013:1). This unarguably leads to improved service provision in academic libraries (Chipeta 2018; Muchaonyerwa 2015; Tahleho 2016). Knowledge sharing also enables academic library workers to share knowledge about user behaviour and needs among colleagues, so as to better serve their users (Awodoyin et al. 2016:13; Jain 2012:141). The knowledge on user needs and behaviour is paramount to quality service delivery and achieving high user satisfaction (Awodoyin et al. 2016:13; Jain 2012:141). The consideration and harnessing of the academic library staff members' knowledge become necessary, as it would help to deepen the understanding applied in the course of library operations (Lekay 2012:18; Tahleho 2016:7-8).

The DELSU library Abraka, is unable to provide adequate and sufficient services to its user community (Arumuru 2015:47-48; Ikolo 2018:886). The service provision in the library is ineffective in meeting the goals of the library and, by extension, the mission of the parent institution (Akparobore 2007:4). This is as a result of some its staff being unskilled, inexperienced, or poorly trained and knowledge loss, resulting from staff retirement and resignation. Ikolo (2018:889) reported that the services rendered at the library are considered poor and inadequate due to inefficient or poorly trained personnel. Most concerning is that the library has been judged by students and faculties as weak and unable to support learning and research efficiently due to its inability to provide adequate, in-time and quality library services (Arumuru 2015:48). This inability is often a result of unskilled personnel, especially in the reference, circulation and technical service divisions of the library and the insufficient knowledge of user needs and demands by the library staff (Arumuru 2015:48; Akparobore 2007:3-4). Ikolo (2018:886-888) reports the dissatisfaction of users, particularly with the library's collection size and arrangement, the catalogue, as well as the provision of reference

and reserve services. According to Bitagi and Garba (2014:122), quality service delivery within the academic library depends highly on the experience of the library staff. Hence, knowledge sharing among staff is vital to enhance the provision of services in the library, as suggested in the background of the study.

Also, researchers have carried out studies in this library and made suggestions on how to better its service delivery through the marketing of library services, ICT and even the use of mobile phones. However, nothing has been done, in the knowledge sharing field, to improve the library's service provision. Examples of such studies include "Marketing of academic library services for effective service delivery in Delta State University library" which was carried out by Arumuru in 2015 and also "Mobile phones for library services: prospects of Delta State University library, Abraka" by Iwhiwhu, Ruteyan & Eghwubare in 2010. This study therefore investigates knowledge sharing among staff for improved service provision at the DELSU library, Abraka, Delta state, Nigeria.

1.4 AIM OF THE STUDY

The aim of the study is to establish the role of knowledge sharing among staff at the DELSU library, Abraka on improved service provision.

1.5 OBJECTIVES OF THE STUDY

The objectives of the study are to:

- Identify the various services rendered by the DELSU library, Abraka.
- Establish the practice of knowledge sharing among staff at the DELSU library, Abraka for improved service provision.
- Determine the role of knowledge sharing among the DELSU library, Abraka staff on service provision in the library
- Explore tools for knowledge sharing among the DELSU library, Abraka staff for improved service provision in the library.
- Identify the factors of knowledge sharing among the DELSU library, Abraka staff for improved service provision in the library.

- Determine the barriers to knowledge sharing among the DELSU library staff for improved service provision in the library.
- Suggest strategies to enhance knowledge sharing among the DELSU library , Abraka staff for improved service provision in the library.

1.6 RESEARCH QUESTIONS

To achieve the above research objectives, the following research questions guided the study.

- What library services are provided at the DELSU library, Abraka?
- Is knowledge sharing practiced among the staff at the DELSU library, Abraka for improved service provision in the library?
- What is the role of knowledge sharing among the DELSU library staff on service provision in the library?
- What are the tools for knowledge sharing among the DELSU library staff for improved service provision in the library?
- What are the factors of knowledge sharing among the DELSU library staff for improved service provision in the library?
- What are the barriers to knowledge sharing among the DELSU library staff for improved service provision in the library?
- What are the strategies to enhance knowledge sharing among the DELSU library staff for improved service provision in the library?

1.7 SIGNIFICANCE OF THE STUDY

Significance of the study is where researchers explain the relevance of the research by stating how and who may benefit from such a study, as well as their anticipated results at the completion of the study (Creswell 2014:163). Hence, this study is significant to the DELSU library, Abraka because it brings to light the importance of knowledge sharing among its employees in order to improve service provision in the library, since no study has been done in this regard.

This study is also significant to academic librarians in that it presents an alternative means of improving library service provision in academic libraries through the sharing of readily available assets (their knowledge). This study in general is significant to the field of knowledge

management because it will inform further studies about improving service delivery in academic libraries, through knowledge sharing.

1.8 JUSTIFICATION OF THE STUDY

Research justification provides the basis for, or the why of, a research study, and an explanation of the adopted research methodology (Ballinger 2008:780). This study is justified on the basis that academic libraries, in this information and knowledge era, are striving to stay relevant and are burdened with the problems of unskilled personnel, knowledge loss, budget reduction, as well as an amplified demand from faculties and students (Arumuru 2015:48; Akparobore 2007:3-4; Ikolo 2018:886-888; Rajurkur 2011:7). These problems place the academic libraries under pressure and ultimately lead to inefficient service provision. The DELSU library, Abraka as one of these academic libraries, stand a chance at resolving the challenge of inefficient service provision to its user community with the implementation of effective knowledge sharing among its staff.

The expectation is that this research study will help the DELSU library, Abraka staff to identify with, and appreciate the importance of knowledge sharing for better service provision, as already evident in past literatures. According to Ajegbomogun and Diyaolu 2018:3 and Raja, Ahmad and Sinha (2009:703), effective integration and implementation of knowledge sharing in academic libraries can enhance the traditional functions of these libraries and improve their service delivery to meet the increased library demands of this information era. Furthermore, when library employees within an academic library share knowledge among themselves, they equally learn from one another on how to adequately perform services and satisfy user needs (Tahleho 2016:11).

1.9 SCOPE OF THE STUDY

This study focuses on knowledge sharing among staff at the DELSU Library, Abraka for improved service provision. The geographical scope of this study covers the entire staff at the main library of the DELSU, located on the Abraka campus. The DELSU library, Abraka was chosen for this study because it is the main library of the university and is situated on the main campus. The library serves a larger proportion of the university compared to its sister

libraries on the Anwai and Oleh campuses. The staff at the DELSU library, Abraka make up the target population for this study. Hence, data were collected from staff at the DELSU library, Abraka with the help of questionnaires and interviews as the data collection instruments.

The content scope of this study focuses on the subject of knowledge sharing among academic library staff for improved service provision. Knowledge sharing is one of the processes of knowledge management and, in order to discuss this subject adequately, knowledge management and knowledge management processes are discussed. The study content scope also encompasses related concepts such as knowledge, knowledge sharing tools, knowledge sharing factors, knowledge sharing barriers and knowledge sharing strategies, in general and within the academic library. The study content scope also covers discussions on the academic library, including its roles, services, and staff.

1.10 LIMITATIONS OF THE STUDY

The study is limited to the staff at the DELSU library, Abraka. Due to limitations, such as the terrestrial location of the three libraries attached to the three campuses of the DELSU, the study could not cover a wider research scope, consisting of all three libraries on the Abraka, Anwai and Oleh campuses. Time and financial constraints also contributed to the decision of concentrating the study scope only on the main library. The study encountered other limitations which were considered as minor and insignificant to the overall research outcome. One of these was the unavailability of three respondents out of the target population (63) during the period of administering the research questionnaires. Another one of these challenges was retrieving all of the administered questionnaires over a lengthy period of time. However, while an excellent percentage (96%) of the target population effectively participated in the quantitative phase of the research by filling in the questionnaires, a 100% participated in the qualitative research phase by participating in the interviews.

1.11 DEFINITION OF TERMS

This section provides definitions to the key terms used in this research study for clarity, with regards to the study context.

Academic libraries: Academic libraries are libraries established in tertiary institutions of higher learning in support of the teaching, learning and research needs of the students, researchers, and staff members of its parent institution, in order to realise the mission of the institution (Akinola 2019:2; Ramasodi 2009:11).

Academic library staff: Academic library staff refers to all the employees or workers within the academic library environment who are primarily tasked with the provision of services to the library users. They are categorised as professionals, paraprofessionals and non-professionals.

Knowledge: Knowledge refers to information that is combined with the ability, expertise, insights or experience of users', and is used to provide solutions to problems or to generate new knowledge (Rajurkar, 2011:6).

Knowledge management: Knowledge management refers to the various processes involved in the transformation of tacit knowledge to explicit knowledge, and sharing it, that is, the capturing and documentation of experiences and insights for reuse within the organisation (Uriarte 2008:13). It is the process of identifying and searching for the intellectual know-hows and resources owned by library employees, and conveying them through documents or the supplementary systems for conveying knowledge, with the idea of distributing knowledge and improving performance (Alshboul, Al-Diabat, Abu-A'ra & Aldiabat 2012:18).

Knowledge sharing: Knowledge sharing is the communication of both explicit and tacit knowledge, which are either documented or captured as information and in the form of expertise or capabilities among people of common interest (Abdul Rahman, 2011:212).

1.12 ORGANISATION OF STUDY

This study is presented in five chapters, as listed bellow;

Chapter one: This chapter discusses the background of the study, the statement of the problem, the contextual setting, the aim and objectives of the research, the research questions, as well as the scope and delimitation.

Chapter two: This chapter provides and discusses extant literatures related to the research topic to better situate the research study within a specific field. This chapter also discuss the theoretical framework for the study.

Chapter three: This chapter examines and discusses the research methodology, including the research approach, research design, data collection instruments, research population, as well as the data analysis and interpretation procedures employed for the research study. It also provides relevant justifications for the choice of research methodology.

Chapter four: This chapter discusses the findings of the study by analysing and interpreting the quantitative and qualitative data collected through the data collection instruments adopted.

Chapter five: This chapter summarises the study outcomes by providing the research conclusions and recommendations, according to the research findings and literature review.

1.13. SUMMARY OF THE CHAPTER

This chapter provided an overview of the study. It began by introducing the research study through the discussion of related literatues to provide a detailed background on the research. Other concepts explained in the chapter included contextual settings, statement of the problem, aim of the study, research objectives, research questions, significance of the study, justification of the study, scope of the study, limitation of the study, definition of terms and organisation of the research chapeters. The next chapter discussed the review of related literature in line with the research objectives.

CHAPTER TWO: LITERATURE REVIEW
2.1 INTRODUCTION

The previous chapter introduced the study, stating the contextual setting, the aims, the objectives, the significance, the justification, as well as the scope. It also outlined the different chapters and provided definitions to terms used in the study. This chapter discusses the review of related literature regarding the study of knowledge sharing in organisations, in general, and, in particular, in academic libraries, for the purpose of improving service provision. The literature review is an important part of the research, where the connection between the existing literatures consulted, the position of the researcher, and the research itself are made (Creswell & Creswell 2018:23; Leedy & Ormrod 2020:82; Ridley 2012:2). Pickard (2013:26) defined a literature review as a critical discussion of noteworthy openly available literatures that contribute to the understanding of a subject. The essence of conducting a literature review is first to clarify what previous research has been done to provide answers to the research problems and secondly, to establish the usefulness of the research, and to choose relevant research methodologies to carry out the study (Creswell & Creswell 2018:25-26; Leedy & Ormrod 2020:82; Patten & Newhart 2018:41). The extent to which literatures are identified and reviewed is determined by the nature of the research problem, and the research study itself (Pickard 2013:26).

The literature review for this study is carried out in order to reflect its objectives, in an effort to answer the research questions. The concepts that will be reviewed and discussed are presented under the following main headings:

- The academic library and its roles.
- Academic library services.
- Knowledge concept.
- Knowledge management.
- Knowledge sharing.
- Knowledge sharing tools.
- Factors influencing knowledge sharing.
- Knowledge sharing barriers.
- Knowledge sharing in academic libraries for the provision of library services.
- Theoretical framework for the study.

Figure 2.1 below is a literature review map showing the virtual representation of concepts reviewed for the study.

```
┌─────────────────────────────────┐
│ Knowledge sharing among          │
│ staff at DELSU library,          │
│ Abraka for improved service      │
│ provision.                       │
└─────────────────────────────────┘
```

Knowledge sharing among staff at DELSU library, Abraka for improved service provision.

Find out library services provided at DELSU library, Abraka

Research objectives

Suggest strategies to encourage knowledge sharing among staff at DELSU library, Abraka for improved service

Establish knowledge Sharing practices among staff at DELSU library, Abraka for improved service

Determine the role of knowledge sharing for improved service provision in DELSU library, Abraka.

Explore Knowledge Sharing tools for improved service provision in DELSU library, Abraka

Identify Knowledge Sharing factors for the improved service in DELSU library, Abraka

Determine the barriers of Knowledge Sharing for improved service provision in DELSU library, Abraka

Knowledge concept

Knowledge management concept

Knowledge sharing

Knowledge Sharing tools

Factors of Knowledge Sharing

Knowledge Sharing barriers

Knowledge Sharing in academic libraries for improved service

- Academic library and its roles
- Academic library services
- Academic library staff

Theoretical Framework

Strategies to encourage knowledge sharing among academic staff for improved service provision

Figure 2.1. Literature review map

2.2 THE ACADEMIC LIBRARY AND ITS ROLES

Academic libraries are libraries that are attached to educational institutions, such as universities, polytechnics and colleges, in support of the academic and research needs of staff members, researchers and students, in their respective institutions, through the provision of adequate resources and services (Ajegbomogun & Diyaolu 2018:2; Ramasodi 2009:11). These libraries are at the forefront of supporting the mission of their parent institutions by providing

information services to their respective user communities, comprising of students, lecturers, and researchers, for their learning, teaching and research needs (Abubakar 2011; Okoroma 2018:518). Traditionally, the main resources of the academic library, besides its staff, are books and other printed materials (Chanesta 2014:26). However, with the advent of Information and Communication Technology (ICT), electronic and online information materials were integrated into the collections of academic libraries (Bailin & Grafstein 2005:317; Chanesta 2014:26; Dube 2017:16).

Primarily, the roles of academic libraries are to develop, organise and maintain a collection of information resources, in varied forms, and make them readily accessible and available to their user communities (Anyanwu, Adebayo, Esse, Itsekor & Asaolu 2016:272). However, in this digital era, these roles have been redefined, as the provision of services geared towards the research and scholarship needs of the parent institution's staff members and students, in order to support academic activities (Akeriwa, Penzhorn & Holmner 2015:5). In the context of the university learning template, academic libraries play a vital role in supporting the university programs, and the entire university community, through the provision of a conducive environment in which to carry out research studies in order to obtain novel knowledge, and to complement and boost learning programs (Jagannathan 2010:33). They provide research and knowledge support for students, faculty members and researchers to advance their learning, teaching and research tasks (Eze & Uzoigwe 2013:432; Yusuf & Iwu 2010:5). Other than providing information services, academic libraries also have the role of preserving information resources relevant to its users (Salihu 2018:85). Hence, researchers have underscored the importance of academic libraries towards research studies and regard these libraries as the nerve centres of higher learning institutions, upon which all academic activities revolve (Abubakar 2011; Bawack 2019:2).

The roles of academic libraries are the framework that guides the provision of services in academic libraries. Schonfeld (2018) developed a more valid and recent framework for academic libraries which signifies their roles within their academic learning institutions during this digital age. These roles include to:

- Provide spaces and facilitate programs for the university community for academic engagement and outreach.
- Aid academic success by supporting, teaching, facilitating learning, advancing information literacy, and maximising retention, development, graduation as well as future life accomplishment.
- Ease access to information by enabling the discovery and usage of information resources in print and non-print formats, and also by conserving and preserving these resources.
- Facilitate research and innovation through the provision of expert assistance, tools and services that support scholarly research and innovation.
- Support distance learning or off-campus users by providing equal access to library resources for distance, or online, learners and other remote users.
- Encourage and preserve exclusive collections by ensuring a long-term holding of special collections and rare resources. Ensure the long-term stewardship of rare materials and special collections, and maximize their usage
- Provide study space and technologically enhanced teaching and learning platforms to their user communities.
- Showcase scholarly expertise and work through mediums such as the research repositories for open access to users.

According to Schonfeld (2018), to fulfil their roles towards their user communities, and to achieve their goals of meeting the demands of these communities, academic libraries constantly planned and delivered varied services. These services are discussed in the next section.

2.3 ACADEMIC LIBRARY SERVICES

Academic libraries develop their services using their roles as the guideline (Schonfeld 2018). Academic library services describe the various ways academic library staff provide, classify, stock, retrieve and disseminate information to its users (Ajegbomogun & Diyaolu 2018:2;

Bitagi & Garba, 2014:122). The services provided by academic libraries include circulation services such as user education, borrowing and renewing of library resources, reservation services and interlibrary loan services, Technical services or collection development services such as the acquisition of library resources, processing of library resources and cataloguing and classification of resources, and Reference services such as information literacy service, research support, selective dissemination of information (SDI), current awareness service and referral service, reprographic services, bibliographic service and indexing and abstracting service. (Ikolo 2018:885; Singh 2010:4-10; Wilkinson 1986:9).

Today's academic library has witnessed a significant change in its operationality due to technological advancements, a change in the higher education model, and a rapid change in user needs and demands during the digital era (Bawack 2019:1-4; Reid 2019:262). Although the mission of academic libraries remains the same, the means of sustaining and fulfilling it has changed during the digital era (Marouf 2017:137; Mullins, Murray-Rust, Ogburn, Crow, Ivins, Mower, Nesdill, Newton, Speer &Watkinson 2012:1). The services of academic libraries have expanded as well as witnessed tremendous changes in the model of provision from the 20th century (Chawner & Oliver 2013:30; Reid 2019:262). However, the traditional services have remained relevant with changes only in their provision (Bawack 2019:2-4). The main drivers of these are the changes in higher education models, the current technological expansions, the continuous change in user needs, and the expectation of academic library services (Association of College and Research Libraries (ACRL) 2018a; Bawack 2019:4-5; Emezie & Nwaohiri 2013:30). This shift has seen the academic library redefining its services and reforming the ways and channels in which these services are delivered in order to retain its spot in the world of information and knowledge provision and mangement (ACRL 2018a; Emezie & Nwaohiri 2013:30). And so, the traditional concept of users coming to the library for services is drastically changing to the library taking its services to users (Bawack 2019:1-2; Raju & Schoombee 2014:28; Thachill 2008:2).

The next sections distinctively discuss the services provided by academic libraries using the blanket names for these various services as the headings. The discussions encompass what services are provided, who provides what services and how these services are provided.

2.3.1 Collection development services

The mainstay of the academic library is its collections (Omoniyi & Abdulraheem 2018:28). Effective acquisition and development of the academic library's collections assist the library in providing services that satisfy users' needs (Akinola 2019:2). Academic libraries acquire, process and organise print and non-print resources for use by its user community through effective and systematic planning decisions (Akinola 2019:2). Collection development is the blanket name given to these processes (Akinola 2019:2; Omoniyi & Abdulraheem 2018:26; Patel 2016:62). The collection development service is one the foremost services of the academic library, providing library users with updated books, journals, and other information materials and also offers researchers up-to-date information in their areas of specialisation (Akinola 2019:2; Olurayi 2013:6). This service ultimately involves the acquisition and processing of both the print and electronic forms of information resources, in appropriate quantity and quality, for varied use in the library (Omoniyi & Abdulraheem 2018:26).

According to ACRL (2018a), Kaur and Gaur (2017:107) and Thachill (2008:3), the current technological age, which resulted in a change in scholarly communications and the diversity of digital resources, has seen the academic library focusing more on developing its electronic collections to serve its remote library users. And so, in addition to holding print resources and publications such as journals, academic libraries now also procure electronic subscriptions to these publications, either by simply paying the cost or entering into a form of cooperative arrangements with other libraries or publishers (Ajegbomogun & Diyaolu 2018:2; Thachill 2008:4). The academic library collection, in this digital age, captures all forms of information resources that are of scholarly interest to the academic library users (Ajegbomogun & Diyaolu 2018:2). However, in order to meet user demands during the digital age, there is a significant shift from the collection development of print resources (book forms) towards that of electronic or digital resources (Emezie & Nwaohiri 2013:31-32; Kaur & Gaur 2017:108).

The collection development service of an academic library occurs continuously behind the scenes and is not directly provided to users (Kaur & Gaur 2017:108). This service entails processes such as the selection of library resources, the acquisition of selected resources, the cataloguing and classification of acquired resources, the maintenance of acquired resources, the consistent weeding and evaluation of library resources, as well as the development of a

resource sharing plan between libraries (Omoniyi & Abdulraheem 2018:28; Patel 2016:62-63). The process begins with the determination and coordination of a selection policy, the identification of user needs and user studies before the actual selection occurs, and the acquisition and organisation of the resources, all the way through to the weeding of worn-out or outdated resources (Kaur & Gaur 2017:108-109; Patel 2016:66). The selection of the quality and adequate quantity of library resources is a crucial and challenging activity taken on by the academic library (Kaur & Gaur 2017:108; Patel 2016:62).

The acquisition of academic library collections or resources is the responsibility of the library's collection development librarians, also referred to as the acquisition librarians or collection managers (Kaur & Gaur 2017:108; Mullen 2011). The process of acquisition of academic library resources requires the joint efforts of the acquisition librarians or collection manager and library staff members responsible for the provision of reference and circulation services (ACRL 2018b:290; Kaur and Gaur 2017:108). Decisions are made on what resources need to be acquired, while considering the library users' needs and demands, and orders are placed for their acquisitions from established library vendors (Kaur & Gaur 2017:108). ACRL (2018b:290) suggests that the acquisition librarians and academic libraries prioritise a Demand-Driven Acquisitions (DDA) of library resources. DDA ensures that the academic library maintains a rich collection of unique and relevant resources.

The cataloguing and classification of library resources is a collection development service of the academic library that takes place after the acquisition of resources (Patel 2016:65). This service is described as a core academic library service concerned with the comprehensive bibliographic description of the library's resources, using certain schemes for easy retrieval from the traditional shelve catalogues, and the digital catalogue (David-West & Angrey 2018:94; Ihekwoaba & Okwor 2019:1; Lekay 2012:43; Patel 2016:65). The cataloguing and classification of library resources involve three major steps, namely assigning access points, subject headings and classification numbers (David-West & Angrey 2018:95). Profoundly, the academic library's cataloguing and classification service makes the library's collection attractive to users, and at the same time easily accessible and retrievable (David-West & Angrey 2018:95)

The digital age and information explosion saw the academic library's cataloguing and classification function evolving overtime, resulting in the automation of these functions (Kaur & Gaur 2017:108). This means there was a shift from traditional cataloguing to digital cataloguing, which involves the application of computers and other relevant technologies (David-West & Angrey 2018:94). The library's cataloguing and classification services no longer deal solely with the shelve catalogues, but also with their electronic form, referred to as the online catalogues (Schonfeld 2019:3). David-West and Angrey (2018:96) and Lekay (2012:43-44) stated that, for an academic library to deliver efficient and prompt services in this era of information explosion, it must maintain a comprehensive and easy-to-use shelve catalogue, as well as the Online Public Access Catalogue (OPAC).

It is the responsibility of the trained academic library staff members, known as cataloguers, to classify and catalogue library resources of any format, using specified schemes (David-West & Angrey 2018:94; Ihekwoaba & Okwor 2019:1). The duty of the academic library cataloguer is to ensure that all library resources in the digital catalogue are well organised for easy accessibility, with appropriate links and tags given to the items available (Ihekwoaba & Okwor 2019:1-2; Thachill 2008). Academic library cataloguers make use of library of congress subject headings as well as classification schemes and schedules to catalogue library resources manually, by describing the bibliographic features of the resources on a 3x5 inch card, which are then shelved. Meanwhile, within the digital environment, the academic library cataloguer employs the use of a Machine-Readable Catalogue (MARC), which automatically describes the bibliographic features of online resources (David-West & Angrey 2018:96). The end goal of the cataloguer is to ensure uniformity and consistency in the description of library resources, both manually and electronically, for the purpose of easy retrieval by users, and consequently, better service provision (David-West & Angrey 2018:96; Patel 2016:65).

The academic library's collection development services, in the digital era, also include the development and maintenance of Open Access (OA) digital resource databases, such as repositories. Open access denotes both electronic repositories and scholarly journals, and are not restricted to institutional repositories, but can be prepared by topic, subject disciplines, and collaboration (American Library Association (ALA) 2007). Academic libraries develop and maintain institutional repositories (IR) with free and unrestricted access to the use of digital

scholarly publications in a bid to maintain an attractive collection during this digital era, and consequently provide relevant and convenient services to users (ACRL RPRC 2012; Schonfeld 2019:5). Some academic libraries also provide OA to their users by becoming publishers of scholarly publications, or subscribing to other publishers' scholarly publications in order to obtain unrestricted access (Asch 2013:448; Engeszer & Sarli 2014:405-407; Mullins et al., 2012:1-5). Academic libraries adopted OA to scholarly communications as a tool for sustainable library collections with seamless access to users (ACRL RPRC 2012).

Weeding of library resources is also an aspect of the academic library's collection development service (Kaur & Gaur 2017:108-109; Patel 2016:65). Weeding is a form of continuous evaluation of library resources, where worn-out, outdated and unserviceable resources are removed from the library's collection (Kaur & Gaur 2017:109; Patel 2016:65). According to Patel (2016:65-66) it is mainly carried out to create space in the library catalogue for new and relevant resources. It also helps to keep the academic library's collection organised and more relevant, since outdated and non-useful resources are continuously removed. In order to ensure that relevant and useful resources are not lost within mutilated, outdated and obsolete resources, the academic library collection development librarian should ensure a continuous and periodical weeding of library resources (Patel 2016:67).

In conclusion, the aim of the academic library's collection development service is to ensure the easy identification, accessibility and retrieval of library resources by the library user. According to David-West and Angrey (2018:95), the collection development service distinguishes the academic library from the publisher's warehouses of books and other information resource databases, where little or no resource organisation and evaluation exists. This implies the importance of the academic library's collection development service, as well as the competence of the collection development librarians providing this service (David-West & Angrey 2018:95; Patel 2016:63).

2.3.2 . Reference services

The reference services of the academic library play an essential role in bridging the gap between the library patrons and library resources (Okoroma 2018:519). Basically, the reference services encompass a process where a reference librarian provides responses and assistance to library patrons in person, through mails (including electronic mails), or over the phone (Khan

2013:47-48; Okoroma 2018:519). Traditional reference service provision models require the library user to walk into the academic library space, typically a reference desk, to make enquiries, submit queries and seek responses from the reference librarian to satisfy their information needs (Kennedy 2011:319; Musangi 2015:377; Okoroma 2018:519). However, the model of providing reference services in academic libraries has changed significantly from the 20th century (Chawner & Oliver 2013:30; Okoroma 2018:519). Current trends in new technologies, changes in user demands, and models of universities' teaching and learning resulted in the decline of the applicability of the traditional reference service models in academic libraries (Buss 2016:265; Gibson & Mandernach 2013:491-492; Okoroma 2018:519).

In today's academic library, reference librarians provide services to users at the point of need, entrenching research assistance in an online environment and also regarding the users' preference for a transparent and not mediated experience (Okoroma 2018:518-519). According to Gibson and Mandernach (2013:491) and Okoroma (2018:519) academic libraries are recurrently making attempts at remodelling, retooling and repositioning their reference services, evident in their various virtual reference services, their redesign of the library space into information or learning commons, and their outreach and research support initiatives. These changes are crucial to ensuring that the academic library reference services continue to be relevant to library patrons through the provision of interesting, user-friendly and efficient services (Chawner & Oliver 2013:30; Okoroma 2018:519).

Reference librarians in the academic library are responsible for the provision of reference services (Khan 2013:48; Musangi 2015:375; Ward & Barbier 2009:53). They grant access to reference sources, conduct reference interviews with library users through various channels, and provide information literacy training to users (Chawner & Oliver 2013:29). They are saddled with the task of achieving the reference service goals of the academic library. The goals are instructing users, answering information questions, and promoting library services (Musangi 2015:376; Tyckoson 2011:259). Although the goal of academic reference services has remained the same, the role of librarians in meeting these goals have been drastically redefined and redesigned during this digital era to efficiently serve users (Chawner & Oliver 2013:37; Okoroma 2018:519; Tyckoson 2011). This redesigning and redefining are due to technological expansion and changes in user information seeking behaviour and demands (Musangi 2015:376; Okoroma 2018:519). The reference services offered by academic

librarians have become more vibrant and complex in attending to the advanced users' needs by advising on appropriate resources to consult, in what way to access the resources and how to query search systems (Abram 2008; Musangi 2015:380; Okoroma 2018:519). This is due to the availability of more complex electronic information resources in this digital age, which also triggered an increase in the demand for help with accessing these resources (Du & Evans 2011:106).

The digital age changed the way in which the academic library's reference services are provided (Dempsey 2011:4; Musangi 2015:381; Okoroma 2018:519-520). This change birthed, among others, the library's Virtual Reference (VR) services, also known as the Digital Reference services (DRS) (Gibson & Mandernach 2013:491; Musangi 2015:381; Okoroma 2018:519-520). The Virtual Reference (VR) services are provided through the Internet, usually with the use of chat software, but alternatively through email, or other virtual means (Musangi 2015:381-382; Weak & Luo 2013:81). The origin of email, chat, and instant messaging (IM) engendered the virtual reference services, just like the origin of telephones/mobile phones stimulated telephone reference services (Weak & Luo 2013:81). VR services allow alliances to occur between two or more individual librarians and the library users (Musangi 2015:382). The multiple face-to-face reference desks can become a single online virtual reference point. Referral and other services are delivered instantly since queries are sent directly to a specialised reference librarian by sifting software or forms (Weak & Luo 2013:81).

The academic library's virtual reference services are constantly growing, especially in the area of Web 2.0 tools, such as Facebook, Twitter, WhatsApp, Email, and other available Instant Messaging platforms that provide chat reference services (Musangi 2015:382-383; Okoroma 2018:520). Chat reference services describe the provision of usually a 24hour reference service to users through the exchange of real time text messages on an Instant Messaging (IM) or chat platform (Francoeur 2006; Musangi 2015:382). Several tools have been adopted by reference librarians to provide virtual reference services, such as the commonly known "Ask-a-Librarian" virtual reference tool at the Strathmore University library, Kenya (Musangi 2015:383). The "Ask-A-librarian" virtual reference tool is a chat reference service of the academic library, adopted to receive and respond to information or research queries from library users through live chat and instant text messaging (Musangi 2015:382-384; Sachs 2008:49; Ward & Barbier 2009:53).

Academic library reference services also entail research support initiatives for users undergoing research, as well as other scholars. These research support initiatives have been significantly impacted by the digital era, with regard to how and what service is provided. According to Du and Evans (2011:106), Gibson and Mandernach (2013:493) and Haglund and Olsson, (2008:56-57) academic libraries have improved on its reference services of providing research support, giving attention to the information seeking behaviours and patterns of researchers, and providing services to satisfy their information and research needs during the digital era. These services include the maintenance of research repositories, research data services, research workflow support, research space, copyright and publishing assistance, focus on scholarly communications, open access, research grant support, digital scholarship and user experience (Gibson & Mandernach 2013: 493; Raju & Schoombee 2014:28). Reference librarians, in the academic library, now offer assistance, in specific subject areas, to the scholars within their user community. These sets of reference librarians are sometimes referred to as subject librarians (Zhong & Alexander 2007:143-146). They provide access to a compendium of online databases with a wide-ranging exposure to scholarly publications, especially journals for various subject areas.

The academic reference librarians develop and maintain systems called Library Guides (LibGuides) to assist users in locating required library services and resources easily (Chawner & Oliver 2013:32). LibGuides give the description of where and how a specific library resource can be found and utilised. According to Griffin and Lewis (2011:1) LibGuides provide an instinctive interface for entrenching online resource pathways, such as Really Simple Syndication (RSS) feeds, audio-visual links and tags to online catalogue resources. They also provide integral support for user polls, reviews and remarks (Griffin & Lewis 2011:1; Leibiger & Aldrich 2013:431). The literatures on LibGuides are increasingly optimistic, accentuating the ease of its formation and the numerous use of LibGuides past merely subject, course, and task directors (Bangani & Tshetsha 2018; Chiware 2015; Conn & Turner 2010; Griffins & Lewis 2011; Gonzalez & Westbrock 2010; Harris, Garrison & Frigo 2009; Leibiger & Aldrich 2013; Lewis & Griffin 2011). The benefit of tools, such as LibGuides, is also reflected in the ability to use it at any time, as well as the assistance it can provide for users, even in the absence of reference librarians, or outside library operational hours (Musangi 2015:380). LibGuides are also adopted as marketing tools by academic reference librarians to create awareness for users on the current library services and resources available to them (Leibiger & Aldrich 2013:431). Marketing of library resources, as well as providing current awareness to

the user community, are important reference services in the academic library today (Gibson & Mandernach 2013: 493-497; Tyckoson 2011:259). Therefore, it is compulsory for academic libraries to keep these LibGuides organised, up to date, and well-maintained.

Researchers and other library users are also supported with information literacy training by reference librarians as a reference service to help in the discovery, accessibility and utilisation of the scholarly resources required for their research (Gibson & Mandernach 2013: 493). The information literacy training is a reference service, rendered to academic library users, to improve their information search skills, as well as assist them with finding and utilising information resources, both offline and online using contemporary technologies and other mediums, such as symposiums (Sidorko & Yang 2009:6-7). This training is usually undertaken by researchers or scholars undergoing research within the institution, or by students completing assignments (Gibson & Mandernach 2013: 493).

Reprographic services, such as printing, photocopying, and binding, are also categorised as reference services which are rendered to researchers and other users of the academic library (Khan 2013:53-54). Reprographic services are ways in which the library provides access to resources. They do this by simply reproducing the material needed, either through photocopying, printing, or any other form of duplication per the intellectual copyright (Khan 2013:190-192). These services are provided to the academic library users within the library, as well as the remote users requesting information resources or reference materials which cannot be borrowed from the library catalogues.

Academic library reference services also include a bibliographic description service, where the bibliographic details of any information resources are provided to a demanding user. The comprehensive compilation of bibliographies, reading lists, indexing and abstracting are particularly important services provided by the academic library (Khan 2013:59). These bibliographic descriptions are presented in electronic format, which makes them easy to retrieve. This service is essential because browsing or looking through the manual indexes and abstracts is monotonous, time consuming, and sometimes not up to date (Khan 2013:59).

There is also the provision of library spaces that could enhance consultations and other research or information collaborations between library users and librarians. As mentioned earlier, these spaces are referred to as research or information commons. Within these spaces users are often

offered free internet access and other forms of interactive platforms, in order to aid research activities and learning collaborations (Khan 2013:61).

In conclusion, the reference services in the academic library consist of several initiatives and practices that are aimed at aiding the library users in locating accurate information and information resources required, in due time. These services provide personalised assistance to library users in accessing suitable information resources through face-to-face settings or digital platforms in order to meet their needs. They are therefore considered an integral part of the modern academic library, which seeks to fulfil the growing needs of library users, timeously as required in this digital age (Okoroma 2018:518-519; Musangi 2015).

2.3.3 Circulation services

Circulation services are central to, and a traditional part of, the academic library (Kang, Wang & Wang 2017:1). This is because these services ensure the easy circulation of library resources (Adebowale, Okiki & Yakubu 2013:24). Circulation services is the blanket term used to refer to several services, such as SDI, current awareness, user education, borrowing services, renewal services and library cooperation (inter-library loan) (Idakwo, Shehu, Saba & Dankwalba 2018:36). The issuing, record keeping procedures and weeding of library resources are all part of the circulation services provided by academic libraries. They also entail the renewal of borrowed library resources for users, either in person or online (Adebowale et al. 2013:28).

Circulation services of the academic library are among the first to be positively affected by the birth of technologies and library automation (Adebowale et al. 2013:29). In addition to enhanced borrowing, electronic forms of user education, the provision of current awareness services through more convenient channels, and automated circulation, systems can track library resources, monitor borrowing limits, detect borrowing offenders, print out statements of fines for defaulters, and facilitate multiple branch library network supports (Adebowale et al. 2013:29). Technological advancement offered circulation librarians, who are tasked with the responsibility of providing circulation services, the opportunity to utilise digital tools in providing adequate and dependent time services. The shift from the traditional mode of borrowing to the renewal and reservation of library resources ensure that library users can

borrow, renew and reserve library resources without necessarily visiting the physical library (Kang et al. 2017:6).

The Interlibrary loan (ILL), or library cooperation, is a circulation service of the academic library that helps to facilitate information resource sourcing and borrowing outside the library. Interlibrary loan is the cooperative prearrangement among libraries that permits information resources from one library to be lent out to a patron from another library (Frederiksen 2016). This loaning cooperation is often supplemented with a form of online union catalogues among libraries, built to enhance loaning efficiency. With the ILL service, the requesting academic library requests to borrow resource materials, which are not available to it on demand, from another cooperating library (the fulfilling library). The fulfilling library then grants the request based on availability (Khan 2013:52). Subsequently, various types of library systems have been designed to bring interlibrary loan services to the digital environment, in order to ease the process of effective collaboration between unaffiliated libraries, for the sole purpose of satisfying library users (Schonfeld 2019:3).

Circulation services of the academic library also include the provision of user education to library users, which helps to aid proper use of the library and its resources. These user education services provide the library users an orientation on how to access, use or borrow library services and resources (Zhong & Alexander 2007:144). This library orientation is often given to new students and sometimes returning students, when new library resources or services are developed. Olurayi (2013:3) states that user education can take place in any form, as considered suitable by individual academic libraries. However, the study mentioned the adoption of library orientation and library tours, as a way of educating users on library services, resources and operations, have yielded positive outcomes for academic libraries. These tours and orientations can either happen face-to-face or via electronic mediums (Idakwo et al. 2018:36).

The borrowing, renewing and reserving of library resources are also essential circulation services provided by the academic library (Kang et al. 2017:1; Khan 2013:55). The renewal of library materials offers users the opportunity to keep borrowed resources for longer, if the initial borrowing period have been renewed and extended. Reservations of library resources require that circulation librarians or staff members reserve library items for users, on request and for a short period of time (Khan 2013:54-55). Reserved collections are kept separately in

a reserve room or behind the circulation desk, away from other library collections. Khan (2013:54-55) also states that reserved materials could be in any form or any kind of collection, or in a special collection for teaching and learning.

In conclusion, the academic library's circulation services entail the application of available current technologies and other channels to provide awareness on library services and materials, and to make information available to library users (Idakwo et al. 2018:36; Khan 2013:52-53). This service is fundamentally concerned with the processes involved in efficiently circulating the resources of the academic library from the library to its users.

2.4 ACADEMIC LIBRARY STAFF

The performance of the academic library depends on how effective the staff members perform their assigned roles in the provision of services to the user community (Rajan & Dhawan 2017:56).

The staff of academic libraries handle the coordination, facilitation, and evaluation of all the academic library services (Rajan & Dhawan 2017:56). They are the custodians of all these services (Idakwo et al. 2018:36). The academic library staff refer to the human resources responsible for the provision of library services to users. They are categorised into three categories, namely Professionals, Paraprofessionals, and Non-professionals (Rajan & Dhawan 2017:56). This categorisation is based on the staff members' academic qualifications, as well as their experience in the field of librarianship. Librarianship is a term that describes the profession of Library and Information Science, which is people focused, and requires individuals to manage library resources while bearing in mind the needs of users (Diyaolu 2019:2).

The Professionals are those who have acquired skills and training in librarianship, and hold at least a first degree, or its equivalent, in Library and Information Science (Rajan & Dhawan 2017:56). This set of the academic library staff members are ranked as librarians in the career cadre, including the reference librarian, the cataloguing and classification librarian, the subject librarian, the collection development librarian, and the acquisition librarian (Rajan & Dhawan 2017:56). The professionals perform more complex and intellectually rigorous tasks, which

involves supervision, sophisticated judgement calls, and complex library operations (Rajan & Dhawan 2017:56).

The Paraprofessionals are qualified library staff members with a Diploma or Certificate in Library and Information Science, or its equivalent (James, Shamchuk, Koch & Laplante 2015; Rajan & Dhawan 2017:56). They assist the librarians in their tasks and are ranked as Assistant Librarians, Library Assistants, Library Oficers or Library Technicians (James et al 2015; Rajan & Dhawan 2017:56). Unlike the Professionals, the Paraprofessionals are involved in less complex tasks, which often involves the day-to-day routine of the library, including the circulation duties, acquisition duties, technical duties, and assisting users in locating information resources (James et al 2015; Rajan & Dhawan 2017:69).

The Non-professionals include all academic library attendants who willingly assist the professionals and paraprofessionals, when needed, and who attend to all the library patrons to ensure the smooth running of the library (Rajan & Dhawan 2017:75). They usually have academic qualifications of different levels not relevant to the field of librarianship. The Non-professionals in the academic library usually include the administrative staff, clerical staff, cleaning staff, messengers, and other office staff responsible for performing administrative and clerical duties (Rajan & Dhawan 2017:56). However, notwithstanding the categorisation, all the academic library staff members are collectively central to the success of the library, which involves the provision of efficient service delivery to its user community (James et al. 2015).

The academic library staff are tasked with responsibilities which entail looking for, and gaining access to, pools of information and sources and, in the same vein, making such information and sources available to library users, in support of the activities of the parent institution (Ajegbomogun & Diyaolu 2018:2). Staff members are required to carry out specified roles in order to provide services which will satisfy the demands of the academic library user community (Rajan & Dhawan 2017:59). Traditionally, these roles include acquiring, organising, managing and disseminating library resources, and ensuring that library service provisions satisfy the needs of the user community (Diyaolu 2019:2). However, as mentioned in the earlier discussions on academic library services, the digital age resulted in a change in the provision of services in the academic library, especially in the mode of providing these services. Consequently, this resulted in an expansion and change in the roles of the academic library staff in meeting the ever changing and sophisticated needs of users (Ajie 2019b; Reid

2019:262; Rajan & Dhawan 2017:64; Saleh & Tsagem 2017:227; Sewell & Kingsley 2017:148). The academic library staff members are expected to play versatile roles in the different areas of the library in order to meet user expectations and needs in this present day (Ajie 2019b). According to Diyaolu (2019:2-3) and Rajan and Dhawan (2017:59-60) the academic library staff during this digital age, are expected to perform the following comprehensive roles in order to satisfy the objectives of the academic library they serve:

- Outline the mission, vision, aims and comprehensive policies of the library, in liaison with the management and staff members of the academic institution.
- Formulate and implement deliberate policies and plans on library services and projects.
- Select, develop, catalogue, and classify library resources.
- Answer users' queries.
- Use library systems and specialised computer applications to provide relevant services to users.
- Liaise with departmental academic staff, external organisations, and suppliers to provide efficient services.
- Ensure that library services satisfy the needs of specific groups of users, such as staff members, Postgraduate students, disabled students, and researchers.
- Manage budgets and resources.
- Support independent research and learning.
- Develop Information Technological (IT) facilities.
- Educate, guide, instruct, and assist users to effectively use digital equipment and conduct literature searches.
- Promote the library's resources to users.

To perform the above listed roles to the expectations of the library users, and maintain relevance, the academic library staff require certain sets of skills and competencies that are relevant to the specific roles they play in the library (Rajan & Dhawan 2017:68). According to Diyaolu (2019:4), Rajan and Dhawan (2017:64) and Zhu (2012) the following skills are required by academic library staff in today's academic library:

- Organisational and interpersonal skills.
- Robust IT skills and knowledge on the use of the internet and other digital platforms.

- Management and team working skills.
- Strong skills required to evaluate information resources and users' needs.
- Presentation and communication skills.
- Subject-specific knowledge or expertise in a specific subject area.
- Resource selection or resource ordering skills.
- Knowledge of trends and best practices in library operations.
- Ability to implement and manage technological change.

The high expectations of academic library users in this digital and information era requires that the academic library staff continuously update, expand, and develop their skills in order to carry out their roles efficiently, and remain relevant (Ugocha, Igwe & Ibenne 2018:82). The pressure is on these staff members in this information era to facilitate and provide efficient and adequate services to users in order to meet their varied and ever evolving information and knowledge needs (Abrizah, Noorhidawati & Kiran 2017:55; Bryson 2017:9; Mayekiso 2013:1). Bryson (2017:9) expressed the urgent need for librarians to reform the academic library products and services as essential in satisfying the changing needs of the user community. To be able to do this, the staff of academic libraries must constantly equip themselves with the adequate skills and knowledge on user needs and expectations, as well as the best library practices to meet these needs and expectations (Awodoyin et al. 2016:13; Rajurkar 2011:7; Sarrafzadeh, Martin, & Hazeri 2010:199).

Additionally, it is vital for academic library staff members to acquire and equip themselves with new knowledge on library practices and policies in order to remain at the forefront of providing relevant library services to users (Anna & Puspitasari 2013:1). According to Arif and Alsuraihi (2012:538), academic library staff continuously gain experience, and acquire relevant knowledge, through frequent engagements and interactions with information resources, colleagues and library users during the course of their job. This knowledge is regarded as an essential intellectual tool in the hands of the library staff, as well as an important asset and a competitive edge of the academic library which, when valued and shared, could enhance the provision of services (Asogwa 2012; Lee 2005; Tahleho 2016:7-8).

In conclusion, academic library staff are regarded as people who hold vital knowledge and, at the same time, constantly require knowledge that is relevant to the provision of academic

library services (Ugocha et al. 2018:79). Hence, continuous interaction and collaboration should be encouraged among academic library staff members through effective knowledge sharing (Islam et al. 2015:21). The primary goal of knowledge sharing within the academic library is to utilise the available knowledge that can assist library workers in performing their tasks more effectively by distributing individual knowledge among the entire workforce (Islam et al 2015:4; Agarwal & Islam 2014:339-340).

In view of the above, and to better understand the relevance of academic library staff members' knowledge, as well as the gains of knowledge sharing among these staff members in the provision of services within the academic library environment, there is need to discuss and understand the concept of knowledge. Therefore, the subsequent sections are set out to discuss literatures on knowledge as an intellectual capital and competitive edge. This will further lead to the discussion of knowledge categories, knowledge management and processes, knowledge sharing, knowledge sharing theories, tools and factors, as well as knowledge sharing barriers. Additionally, these discussions are carried out to better situate knowledge sharing among academic library staff for improved service provision, which is the focus of this study in the broad field of knowledge management and the specific field of knowledge sharing.

2.5 KNOWLEDGE CONCEPT

In order to discuss the concept of knowledge, one has to first clarify the relationship between data, information and knowledge. Hence, scholars have defined knowledge by first differentiating it from data and information (Namondwe 2011:18). The data, information, knowledge and wisdom (DIKW) hierarchy is often used to depict the relationship between data, information and knowledge, with data at the bottom, followed by information and then knowledge at the top (Dikotla 2016:79; Namondwe 2011:18). Data is unexamined or raw facts which may not be meaningful or relevant in their original form, unless manipulated, organised or processed (Alshboul et al. 2012:19; Dikotla 2016:79; Namondwe 2011:18). Information is data that is processed to provide meaning and enable individuals or groups to benefit from it (Alshboul et al. 2012:19; Namondwe 2011:18). Benefit in this regard could mean solving problems, gaining knowledge, or generating new knowledge. Knowledge, therefore, is information that has been understood by the human mind and applied to situations (Namondwe 2011:18). According to Dikotla (2016:18) Davenport and Prusak posits that the human mind is vital towards the transformation and processing of information into knowledge, and refers

to the understanding gained through experience, individual learning, and a familiarity with certain information. Therefore, knowledge is information in action and until information is applied, it is not knowledge (O'Dell & Hubert 2011:315).

Knowledge is central to organisational growth, development, and is perhaps the lone source of organisational competitive advantage (Mohajan 2019:52; Tahleho 2016:27; Ugocha et al 2018:78). Knowledge, which is a critical resource for organisations, provides a basis for performance and competitive edge, (Nesheim & Gressgard 2014:29) and is referred to as a product of human experience (Caruso 2017:51; Raja et al. 2009:701). It is the combination of information with personal expertise and experience that can be utilised when resolving a problem or creating new knowledge (Rajurkar 2011:6). Also, Patel (2012:308) describe knowledge as intellectual capital, which could be created, categorised and reformed. Knowledge is categorised as unseen, but relevant to action and decision, divergent in thought once processed, identifiable to prevailing situations, exchangeable through learning, and non-duplicable (Rajurkar 2011:6). For Jasimuddin, Connell and Klein (2012:196) knowledge is characterised as 'action-oriented', which is the understood organisational information that helps members of an organisation take focused actions to accomplish an assigned task appropriately.

The critical role of knowledge in organisations have been discussed and described in different terms by several researchers hence, organisations have become more knowledge-conscious, advocating the need to create, share and use knowledge (Amarakoon, Weerawardena & Verreynne, 2016; Mohajan 2019:52). Some of the findings of these researchers are that; knowledge is a strategic driver of the global economy (Mkhize 2015; Mannie, Niekerk & Adendorff 2013; Pandey & Dutta, 2013). It is a critical factor for achieving competitive advantage (Andreeva & Kianto 2012; Amir & Parvar, 2014; Mohajan 2019:52). For Al-Hakim and Hassan (2013) and Ekionea, Fillion, Plaisent and Bernard (2011:2), knowledge is the basis for an organisation to effectively transform and respond to the growing needs of clients with innovation and creativity. Equally, a study by Caruso (2017:51) posits that organisations now consider s important, the knowledge residing in their employees towards creating Economic control and value. The study explains that employees acquire skills and knowledge during the

course of their career, predominantly through informal learning experiences. This knowledge is what defines an organisation's competitiveness.

Knowledge has been classified and disseminated in different forms but is commonly classified as tacit and explicit knowledge (Nonaka, Umemoto & Senoo 1996:205; Nonaka 1994:16; Rajurkar 2011:6). There are assumptions that, when the types of knowledge are understood, it is therefore possible to strategise and exploit its full potential (Enakrire & Ocholla 2017:2; Tahleho 2016:24). Acknowledging the importance of knowledge, the relationship between tacit and explicit knowledge, and knowledge sharing in general, will result in long term performance improvement and competitive advantage (Dalkir 2011).

Tacit knowledge refers to the knowledge which exists in the minds of an organisation's employees and is the most critical and significant influence on the success of an organisation. Explicit knowledge, on the other hand, exists freely in various literatures within an organisation, both print and electronic, and can be accessed by the employees at any time (Kumaresan & Swrooprani 2013:56). Similarly, Dikotla (2016:8-9) opined that while tacit knowledge is a form of experience and organisational values that resides in the minds of employees and consultants, which is difficult to codify or share, explicit knowledge refers to knowledge which can be codified or is already codified. It is found in the documents, databases, manuals and procedures of an organisation, and is easily shared or leaked.

Tacit knowledge is entrenched in the human skill and is shared through social exchanges and interactions (Alyoubi, Hoque, Alharbi, Alyoubi & Almazmomi 2018:15; Nonaka 1994:15). It exists in the forms of informal and personal skills, insights, experiences or crafts, commonly known as know-how and know-why, as well as beliefs and values deeply engraved in the human mind, which are often neglected (Rajurkar 2011:5-6; Skyrme 2011). Explicit knowledge comes in the forms of documents, policies, rules, formulas, reports, diagrams, specifications, manuals and records, (Chipeta 2018:223; O'Dell & Hubert 2011:337; Rajurkar 2011:6). They are easily shareable, and so it is regarded as permeable and itinerant (Dewah 2012:57). In conclusion, explicit knowledge is tacit knowledge that has been codified into formal, structured

and systematic mediums, and can be shared, communicated with ease and made easily accessible to others.

Knowledge, of any kind, is regarded as a key profitable economic asset, and is considered a critical asset in the maintenance of competitive advantage (Mohajan 2019:52; Abdul-Jalal, Toulson & Tweed 2013:151). Therefore, it is imperative for organisations to engage in effective knowledge management processes in order to succeed in today's world (Alyoubi et al. 2018:14; Anantatmula & Kanungo 2010:100). Also, a paradigm shift from the old times, where employees lived their entire careers at an organisation, has changed the way organisations view knowledge (Jones & Leonard 2009:27). Now, employees switch jobs several times during their careers, and leave an organisation through retirement, retrenchment or resignation, when they do so, they take with them the knowledge they possess (Dewah 2014:8; Jones & Leonard 2009:27; Sumbal, Tsui, Cheong & See-to 2018). Today, successful organisations are organisations which manage knowledge, and carry out knowledge management processes, in order to create novel knowledge in the form of innovative or better-quality products and services (Mohajan 2019:52; Omerzel, Biloslavo & Trnavčevič 2011:113).

Knowledge sharing, which is the focus of this study, is one of the crucial processes of knowledge management, and has been regarded as the pathway to knowledge creation and innovations within an organisation (Anna & Puspitari 2013:3; Mohajan 2019:52; Nnadozie & Nwosu 2018:117). Thus, to distinctly discuss and understand knowledge sharing, it is important to discuss knowledge management and management processes. The next two sections will review literatures on knowledge management, through the perspectives of various researchers, as well as the management processes.

2.6 KNOWLEDGE MANAGEMENT

Knowledge management has become significant in organisations to assist in enhancing organisational performance and obtain a competitive edge in this era of information and

knowledge upsurge (Isa et al. 2016:217; Mayekiso 2013:48). However, there is no definite definition of knowledge management due to the complexity, multidisciplinary, and philosophical nature of it as a concept (Girard & Girard 2015:2; Mcinerney & Koenig 2011:38; Ugwu & Idoko 2014; Uriarte 2008:13). Knowledge management identifies and harnesses intellectual capital, as well as the skills of personnel in an organisation, for the purpose of making it readily available for the entire organisational staff through organisational documents, with the idea of enhancing organisational performance (Alshboul, et al. 2012:18). For Hadagali, Krishnamurthy, Pattar and Kumbar (2012:34), knowledge management deals with the creation, acquisition, capture, coordination, integration, retrieval, and distribution of knowledge, with the intention of creating a knowledge sharing atmosphere where knowledge owners are always willing and ready to share knowledge.

Basically, knowledge management creates easily accessible platforms, with efficient knowledge sources, for use by knowledge seekers or an organisation's employees (Dikotla 2016:1). The activities of knowledge management are processes dedicated to developing an unrestricted-access document warehouse or database in order to enhance the digital identification, storing, recovery, and distribution of explicit knowledge resources in an organisation (Menolli, Cunha, Reinehr, & Malucelli 2015:291). According to Alyoubi et al. (2018:14), the goal of knowledge management within an organisation is to foster knowledge creation and use, by all the employees, for quality products, services and competitive innovations. Knowledge management is positively linked to job satisfaction, improved job performance, productivity, and innovations through its processes (Alyoubi et al. 2018:21-22). The discipline is fundamentally concerned with the creation and management of processes that enable the precise knowledge to reach the exact individuals at the right time by helping them share and apply information for improved organisational performance (O'Dell & Hubert 2011:317-318).

2.7 KNOWLEDGE MANAGEMENT PROCESSES

Knowledge management constitutes well planned processes that create positive environments for knowledge owners to use, and where they can share their knowledge and generate new

knowledge (Alyoubi et al. 2018:14). However, there is no unanimity in the discussions on these knowledge management processes in literatures (Allameh, Zare & Davoodi 2011:1212). It is imperative to note that the lack of consensus on in this regard is based on the choice of terms and views attached to these processes by various researchers, and not on what they represent (Schiuma, Carlucci, & Lerro 2012:8). According to Omerzel et al. (2011:113) and Rajurkar (2011:5-6), the knowledge management processes encompass the identification of vital knowledge, the creation of new required knowledge, and the sharing of knowledge between and among employees. Similarly, Ramadan et al. (2017:441) identified them as knowledge generation and acquisition, storage, sharing and application. Gupta, (2008) and Kude, Nalhe, and Mankar (2012) posits that they are comprised of knowledge sharing, knowledge transfer, knowledge creation, knowledge acquisition, and knowledge application.

For Tubigi and Alshawi (2015:182), the knowledge management processes are knowledge generation and acquisition, reform, usage, archiving, transmission, codification, access to knowledge, as well as knowledge disposal. Abualoush et al. (2018:283-284) simply categorised them into the four processes of knowledge generation, knowledge storage, knowledge sharing, and knowledge application. Notwithstanding the varied terms used in describing the knowledge management processes, they are usually dependent on one another. According to Ramadan et al. (2017:441-448) Knowledge management processes are interrelated and clearly dependent processes that assist in the systematic creation, application, sharing, and storage of knowledge within an organisation, in order to enhance performance and productivity.

Knowledge sharing, which is the focus of this study, is one of the knowledge management processes that are crucial in ensuring the growth of knowledge (Mohajan 2019:52; Nnadozie & Nwosu 2018:117; Raja et al. 2009:701). Therefore, further discussions are carried out on the knowledge management processes, with focus on knowledge sharing and its relevant components. This is done to better situate this study in the broad field of knowledge management, and in a more specialised field of knowledge sharing.

2.7.1 Knowledge creation and acquisition

Knowledge creation constitutes both the internal and external atmosphere of an organisation. According to Saleh and Tsagem (2017:227), knowledge creation and knowledge sharing

function "hand in hand". This is because knowledge is created via practices, learning, interactions, and collaboration, as different kinds of knowledge are exchanged, shared and transformed (Saleh & Tsagem 2017:227). Knowledge creation happens in a cyclical process where new knowledge is created through the application of existing knowledge and continuous interactions of tacit and explicit knowledge among people (Cong, Li-Hua & Stonehouse 2007:256; Kasasbeh 2015:270). It begins with the identification of essential knowledge, required for achieving organisational goals, then the identification of readily available knowledge, the determination of a knowledge gap, and the development of the knowledge gathered, based on the required knowledge and available knowledge (Omerzel et al. 2011:115). According to Abualoush et al. (2018:283), knowledge creation, which is used interchangeably as knowledge generation, encompasses the development of novel knowledge, or the replacement of the current content of organisational tacit and explicit knowledge. For Mbugua (2018:40) knowledge creation is the development and expansion of new knowledge in the organisation, to be used by employees or other individuals. In addition, the creation of knowledge is also facilitated by the availability of relevant data and information, which can advance decisions and form the background for creating new knowledge (Saleh & Tsagem 2017:227).

Conversely, knowledge acquisition involves the actions of obtaining knowledge from peripheral sources, and understanding, contextualising and developing it so that it becomes a valuable asset for the organisation (Ayoub, Abdallah & Suifan 2017:597; Shongwe 2016:146). Knowledge acquisition is simply a process whereby insights, skills, and collaborations are obtained from internal or external sources (Frost 2014). Therefore, knowledge creation and acquisition basically refer to the generating and sourcing of new knowledge, internally (employees' minds) and externally (knowledge databases). The organisation should therefore strive to ensure that all employees participate in the generation of knowledge in order to attain the full cycle (Omerzel et al. 2011:115).

2.7.2 Knowledge application

Knowledge management processes are ever recurring. As new knowledge is being generated or acquired through the application of existing knowledge, one continually repeats the first initial stages of knowledge management, that is, knowledge creation and acquisition, which is

followed by knowledge transfer and knowledge storage (Omerzel et al. 2011:117). The application of knowledge results in the diversification and development of intellectual capital (Abualoush 2018:295; Ramadan et al. 2017). Knowledge application refers to the actual usage of the knowledge that has been identified, captured and stored, either in documents and databases, or in people's minds (Shongwe 2016:146). Knowledge is applied to and embedded in the day-to-day activities of an organisation (Agarwal & Islam 2015:151). The use and reuse of knowledge guarantees the creation of new knowledge (Chilton & Bloodgood 2013:111). Employees' individual knowledge can be applied to organisational daily activities in order to encourage innovations, decision-making, policy-making, problem solving, and production (Ayoub et al. 2017:597; Shongwe 2016:146). Hence, knowledge application is aimed at managing organisational knowledge, which means investing in knowledge, because the storing and sharing of knowledge is not enough to transform knowledge into practical actions and benefits (Abualoush et al. 2018:284).

2.7.3 Knowledge storage

New knowledge that is created or acquired in the initial knowledge management processes requires storage for future use, and as an organisational memory. According to Abualoush et al. (2018:283), the creation and acquisition of new knowledge is not enough for decision making purposes. Mechanisms are required to store and retrieve generated and acquired knowledge whenever the need arises. Knowledge storage allows for the formation of a worthy organisational knowledge repository, which contains an organisation's overall applied knowledge (Omerzel et al. 2011:116). Knowledge storage is the process of storing generated knowledge of an organisation in an existing or new repository, through documentation, or through any other means for preservation and retrieval purposes (Kiessling, Richey, Meng & Dabic 2009:427; Shongwe 2016:146). Knowledge storage involves activities aimed at maintaining and managing knowledge continuously in organisational repositories and knowledge databases. Organisations must therefore store and assemble knowledge. In doing so, it becomes more accessible and easily sharable (Abualoush et al. 2018:284).

Organisational knowledge repositories should be made easily accessible to all employees within the organisation who require access (Omerzel 2011:116). For knowledge to be easily accessible, its storage has to be well organised and structured in order to meet the main purpose

for storing knowledge, which is for future use (Shongwe 2016:146). According to Omerzel et al (2011:116) and Shongwe (2016:146), knowledge can be stored electronically, in electronic repositories, or manually in books, manuals, documents, reports, minutes from meetings, policies, and plans.

2.7.4 Knowledge sharing

The most significant feature of knowledge management is not the management of knowledge per-se, but objectively making knowledge more accessible and visible through the use of diverse tools or techniques, and the establishment of a knowledge sharing culture within and between organisations (Kumaresan 2010:4). Knowledge sharing, which is the focus of this study, is a critical process of knowledge management since other knowledge management processes rely on it (Dikotla 2016:1; Wang & Noe 2010:115). Mohajan (2019:52) and Ugocha et al. (2018:78) considers knowledge sharing the most fundamental processes of knowledge management in the present dynamic and competitive era for organisational growth, development, and overall success. It is an important component of successful knowledge management, which is also central in the proper exploitation and use of knowledge resources (Abualoush et al. 2018:284).

Knowledge sharing refers to the communication of tacit knowledge, which is expertise and experience, and explicit knowledge documented as information (Abdul Rahman 2011:212). It can be defined as the specific process of an organisation used to distribute, exchange and transfer knowledge among its employees (Abualoush et al. 2018:284). Knowledge sharing is also seen as a social interaction culture of exchanging knowledge, experiences, and expertise among employees of an organisation, and provides organisations the chance to access resident knowledge and the knowledge of their competitors (Karemente, Aduwo, Mugejjera & Lubega 2009:55; Khan 2014:90). Knowledge sharing is the flow of knowledge from a knowledge owner to the one who requires it (Ugocha et al. 2018:81). Similarly, Cheng, Ho and Lau (2009:314) explained that knowledge sharing involves the transfer of what is learnt and known by individuals to those who may be interested and who may find the knowledge relevant. They added that knowledge generally becomes more valuable when it is shared.

Subsequently, Dikotla (2016:8) and Jones and Leonard (2009:27) opined that knowledge, which is a leading source of competitive edge in organisations, cannot exist without an owner, and dies with the owner if not shared. The employees of any organisation that possesses knowledge, which can be useful to the organisation, are referred to as knowledge workers who are required to engage in continuous knowledge sharing in order to preserve the organisation's knowledge, and to generate novel knowledge for improved productivity (Anna & Puspitari 2013:3). Knowledge is constantly created in an organisation by staff members, and so to succeed and stay competitive, organisations must ensure that the knowledge is harnessed and managed in the most effective way (Anduvare 2015:130-132; Chigada 2014:184; Siadat, Hoveida, Abbaszadeh, & Moghtadaie 2012:846; Sandhu, Jain & Ahmad 2011:207). However, in every organisation, there exist persons who are opened to knowledge sharing, and are always willing to share their knowledge and also those individuals who are unwilling (Sandhu et al. 2011:207). The unwillingness to share knowledge is attributed to the lack of a conducive atmosphere to share knowledge in the organisation (Sandhu et al. 2011:221).

Researchers and authors have continued to investigate, highlight, and prove the importance of knowledge sharing in the delivery system, and in organisational performance, in order to encourage positive knowledge sharing engagement in organisations. Sandhu et al. (2011:212-213), in their study on knowledge sharing among public sector employees in Malaysia, reported that knowledge sharing is a key factor in an organisation's delivery system, and is also a success factor regarding the competitive advantage of that organisation. Dalkir (2011) also stated that adopting the knowledge management processes, such as knowledge sharing in organisations, will help to boost teamwork, upturn output, and will inspire innovation, thereby improving service delivery altogether. For Smith & Lumba (2008:171), effectively sharing knowledge increases the growth of an organisation's intellectual capital (knowledge), which is unarguably one of the most significant resources of any organisation. Knowledge sharing helps to convert individual knowledge into organisational knowledge, and vice versa, all for the benefit of the organisation (Nonaka, Krogh, & Voelpel 2006: 1179). Corroborating this view, Marouf and Khalil (2015:2) opined that knowledge sharing guarantees the retention, accessibility, and adequate dissemination of the available vital knowledge and expertise among all the employees in an organisation. This happens as, employees willingly engage in knowledge sharing in order to share with colleagues their work-related knowledge, as well as knowledge outside the scope of their jobs (Sandhu et al. 2011:214).

In view of the above, Dewah (2012:238), Martins and Martins (2011:49) and Islam et al (2015) prescribed knowledge sharing as the only means of combating knowledge loss and achieving knowledge retention in an organisation. Islam Ahmed, Hasan and Ahmed (2011:5902-5903) and Wang and Wang (2012:8902) indicated that knowledge sharing helps organisations to produce more knowledge, transfer knowledge, and provide solutions to organisational problems, such as the cost of Trial-and-error. Wang and Wang (2012:8904-8905) further noted that knowledge sharing is positively related to an organisation's innovation speed, team performance, innovation capabilities, innovation quality, operational performance and reductions in operational costs, especially in developing and accomplishing new projects. Mohajan (2019:57) and Muqadas, Ilyas, Aslam and Rehman (2016:667) summarised the benefit of knowledge sharing among employees within a given organisation as the promotion of employees' creativity, the improvement of work performance and the overall improvement of organisational productivity.

According to Boateng et al. (2015:218), effective knowledge sharing is essential to the success of all organisation. Therefore, fostering a collaborative and effortless knowledge sharing culture is undoubtedly an earnest goal for any organisation (Forcier 2013:12). To ensure effortless and continuous knowledge sharing within and outside an organisation, certain tools and techniques are needed. Knowledge sharing flourishes with the use of appropriate and reliable tools (AlRashdi & Srinivas 2016:32). There are several tools and techniques which are employed to share knowledge (Nnadozie & Nwosu 2018:111). Therefore, organisations must make an effort to identify and adequately learn about some of the tools that employees can employ in order to ease knowledge sharing within the entire organisation (Caruso 2017:51). The next section presents and discusses some of the knowledge sharing tools that have been employed, as shown by previous studies.

2.8 KNOWLEDGE SHARING TOOLS

The tools for knowledge sharing are systems and methods that enable the sharing of knowledge (Akpan, Akpaetor & Uwa, 2013:45). These tools are the vehicles through which knowledge is transmitted among individuals who are engaged in knowledge sharing (Jasimuddin et al. 2012:197). For Jackson and Williamson (2011:57) the tools for knowledge sharing are the techniques applied in the navigation of knowledge in an organised system of searching,

retrieving, and replicating knowledge, and can either be technological resource based or human resource based. Knowledge sharing tools have been classified into human-based tools and technological-based tools, which allows for the flow of knowledge within and outside any organisation (Aramburu & Saenz 2013:43; Jackson & Williamson 2011:57; Tahleho 2016:38). Hence, for clarity and simplicity, the tools for knowledge sharing are discussed according to these classifications.

2.8.1 Human-based tools for knowledge sharing

Human-based knowledge sharing tools talk to the means used for knowledge sharing, which involves face-to-face or personal interaction (Aramburu & Saenz 2013:41; Tahleho 2016:39). This also describes organisational situations that nurture the growth of diverse people-focused knowledge sharing initiatives (Aramburu & Saenz 2013:41). The human-based techniques include mentorship, Communities of Practice (CoP), job rotation, storytelling, seminars, meetings, job trainings, and job shadowing (Tahleho 2016:38-39). According to Aramburu and Saenz (2013:43), these mechanisms are particularly viable for sharing knowledge that is grounded in human experience, which is tacit knowledge. Thus, some of the human-based tools for knowledge sharing such as mentorship, job rotation, job shadowing, and Communities of Practice (CoP) are discussed in the following sections.

2.8.1.1 Mentorship for knowledge sharing

Mentorship is one way by which employees within an organisation share knowledge among themselves in order to improve performance and achieve career development (David-West & Nmecha 2019; Peariasamy & Mansor 2008:91). DeGrandpre (2010) defined mentorship as a process involving a clear one-on-one learning rapport between a person who requires improvement on job specifications or career skills, and one who can assist in this regard. According to Abbajay (2013:1) and DeGrandpre (2010), mentorship is one of the oldest and effective means of knowledge sharing. Several approaches can be employed for mentorship, such as teaching, training, tutoring, coaching, advocacy, counselling, and deliberations, all for the purpose of sharing expertise or skills (Peariasamy & Mansor 2008:91; Sucuoğlu 2018:294-295; Tahleho 2016:39). Studies done by Al-Alawi, Al-Marzooqi and Mohammed (2007:29) and David-West and Nmecha (2019) show that training done through the mentoring of an

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organisation's new and existing staff members is very efficient in knowledge sharing, across all levels, for better service output.

Mentoring is also designed to curb the call-backs of retired employees, who are knowledge experts, at an overpriced salary in order to share their knowledge, since this will be done before their exit through mentoring (David-West & Nmecha 2019; Mavuso 2007:19). While the mentor is usually an experienced staff member of an organisation, the mentee could be a new employee, or an employee who needs to acquire new skills or expertise (David-West & Nmecha 2019). Mentorship is continuous, changing with the increasing experience of the mentor or mentee and the confidence of the mentee (DeGrandpre 2010; Sucuoğlu 2018:294; Tahleho 2016:39). Mentorship occurs spontaneously, based on mutual respect and rapport between the mentor and the mentee (David-West & Nmecha 2019; Sucuoğlu 2018:294). Therefore, the process of mentorship is more of an encouraging process, where skilled and experienced staff members share their expertise with those who are less experienced, prompting them to develop further (David-West & Nmecha 2019; Peariasamy & Mansor 2008:91).

2.8.1.2 Job rotation for knowledge sharing

According to Lu and Yang (2015:34), there are various tools for sharing organisational knowledge, especially tacit knowledge, and job rotation is one of the effective tools for knowledge sharing among employees. It describes a situation where employees are unilaterally transferred to different departments, or assigned different tasks, for a specified timeframe, for the purpose of equipping the employee with relevant new knowledge or expertise (Kaymaz 2010:69; Lu & Yang 2015:37-38). Job rotation has been described as an important facilitator of complex levels of knowledge sharing, as personnel from different units and sections pool their shared knowledge and expertise together in the course of rotating tasks within the organisation (Al-Saifi, Dillon & McQueen 2016:302). Job rotation, which is a systematic programme of employees from one job task to another within the organisation, occurs in different forms and is handy in many circumstances (Lu & Yang 2015:35-38; Malinski 2002:673). According to Earney and Martins (2009:224) and Lu and Yang (2015:37), job rotation is a suitable mechanism for employees to gain wider knowledge of their organisation's operations. The more integrated an employee becomes in the organisation's departments,

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through job rotations, the more diverse and richer are the knowledge they gain (Al-Saifi et al. 2016).

Furthermore, personnel share and gain vast competence and skills in the course of rotating jobs within the organisation, which could aid in multi-tasking and filling up their work capacity gaps (Earney & Martins 2009:224; Lu & Yang 2015:37; Wamundila & Ngulube 2011). Organisations now require its employees to multi-task, this is based on the shear believe that multi-tasking is beneficial to organisational growth and development (Peariasamy & Mansor 2008:93). Multi-tasking in this context refers to the effective handling of multiple tasks by an employee, simultaneously or at different times. An employee who can multi-task is a great asset to the organisation, as he or she can effectively carry out any task assigned to him or her, and so can stand in the gap for absent employees, and also sometimes reduce the need for more workforce (Peariasamy 2008:93; Tahleho 2016:42).

Job rotation occurs in three stages, namely the identification of the knowledge sharing subjects, the actual sharing process, and the evaluation of knowledge sharing performances (Lu & Yang 2015:40). The organisation identifies the knowledge gap in a target job and the appropriate knowledge holder, initiates a job rotation programme by rotating employees accordingly, and then check whether they gained the required knowledge through subsequent placements and work performances (Lu & Yang 2015:39). However, for Lu and Yang (2015:40) and Malinski (2002:673), job rotation comes in many forms and is useful in many situations as a knowledge sharing mechanism. The form in which this systematic programme is accomplished typically depends on the purpose it sets out to achieve (Lu & Yang 2015:35-40).

2.8.1.3 Job shadowing for knowledge sharing

Job shadowing is a great mechanism to share knowledge from one individual to another. It provides an employee with the prospect of learning how other colleagues work and what tasks they execute (Heathfield 2020). It develops a greater knowledge and understanding of the roles and functions of others within the organisation (Hackert 2013:21). Knowledge is shared in dealing with day-to-day challenges in the process of job shadowing, which is very useful in situations where experienced employees are leaving the organisation. According to Heathfield

(2020) and Hackert (2013:21) job shadowing is a process of pairing an inexperienced employee with one who is already experienced, and who is capable of sharing such experience. Similar to mentoring, job shadowing requires the personnel requiring knowledge to shadow those personnels who possess the required knowledge (Maestro 2020). This is an observation-based method that allows individuals to experience the roles and actions of a job and, study the tasks through observation (Maestro 2020).

Job shadowing is effective for obtaining knowledge in general and in specific areas. A specialist may shadow another one, or a more senior one, for the purpose of gaining expertise in certain aspects, or for general upgrading (Bragg 2014:10; Heathfield 2020). Job shadowing usually has a short duration, which is determined by the amount of time needed to gain the required knowledge. Job shadowing is considerably beneficial to employees aspiring to higher positions, as it enables them to learn more about the job specifications and expectations before hand, and within a short period of time, instead of waiting to learn on the job (Bragg 2014:10). According to the report by the Office of the Commissioner for Public Employment (OCPE) (2020), job shadowing also provides new employees the opportunity to develop a rapport with colleagues and, most importantly, gain knowledge on work practices in due time. Thus, job shadowing is ideal for sharing organisational knowledge, especially those that reside in the minds of the organisation's employees (OCPE 2020).

2.8.1.4. Communities of Practice (CoP) for knowledge sharing

Community of Practice (CoP) is a term that was first used by theorists Jean Lave and Etienne Wenger in 1991 when they discussed genuine peripheral contribution (Dei & Walt 2020:2; Dei 2017:61). CoP refers to a group of individuals or team members who have maintained a work relationship over a period of time, and through extensive interaction, have established a common interest and desire to share their tacit knowledge (Maestro 2020). It consists of a group of people, in an organisation, who forms an interactive group in order to share their expertise, learn from each other, with regard to certain aspects of their tasks, and provide a social framework for those tasks (Dei 2017:62; Nickols 2012a). According to Maestro (2020), CoP also cuts across traditional organisational boundaries in order to include individuals who do not have the same job functions, but who have a similar specific area of interest. Individuals with shared interests, such as librarians and other information/knowledge workers, inside or

outside their work environment, can establish CoPs with the primary purpose of achieving definite objectives (Dei 2017:62). This collaborative knowledge group allows individuals to share knowledge over an extended period of time, and to exchange information with one another. Traditionally, members of CoPs interact face-to-face, but now several are digitised, using social media platforms like Facebook, WhatsApp, Twitter, and other interactive digital tools, as their meeting points (Johnson, Bledsoe, Pilgrim & Lowery-Moore 2019:69-70; Maestro 2020).

CoPs are ideally set up by employees for the sole purpose of sharing and developing their expertise, all within a supportive and safe environment (McDonald & Star 2008; Schultz & O'Brien 2017:509). The motivation behind the membership into CoPs include professional development through the sharing of information and expertise, as well as sustaining mutual relations (Johnson et al. 2019:70). According to Nickols (2012b), the resolve of, and expected results from, all CoPs are mainly hinged on the subject or course upon which it is focused, and the practice area around which it is structured. Consequently, the general desired results for all CoPs are the stimulation of interaction, the fostering of learning, the creation of novel knowledge, the socialisation among new members, the identification of knowledge, the validation of knowledge assets, as well as the acceleration of knowledge sharing and flow (Dei & Walt 2020:8; Venkatraman and Venkatraman 2018:4; Nickols 2012b). Dewah (2012:69) opined that in order to achieve effective knowledge sharing and knowledge retention, organisations bank on communities of practice for the purposes of recognising, documenting, and distributing knowledge. Echoing this view, Dei (2017:61) indicates that CoPs are a very important means of facilitating and fostering knowledge sharing among library employees. Dewah (2012:90-93) revealed that communities of practice are very essential towards the capturing and sharing of knowledge, especially the tacit knowledge of experienced employees within the organisation. Dei & Walt (2020:8) argued that, since CoPs facilitate the sharing of skills, expertise, and experiences in free-flowing and creative ways in order to develop novel approaches of solving organisational problems, organisational managements must appreciate and prioritise CoPs for knowledge sharing among employees.

2.8.2 Technological-based tools for knowledge sharing

The technological-based tools for knowledge sharing describe the Information and communication technologies (ICTs) (Tahleho 2016:44). ICTs are viewed as one of the key enablers of knowledge sharing in this digital era (Anna & Puspitasari 2013:7; Panahi, Watson & Partridge 2013:391). According to Carlsson (2008: 82), in order to effectively acquire and share knowledge, the use of ICTs is crucial. ICTs describe a collection of telecommunication technologies, computer technologies, and other media communication technologies which offer ease of access to information resources (Walmiki & Ramakrishnegodwa 2009:236). ICTs, in relation to knowledge sharing techniques, are the technical infrastructures with the capacity to uphold the design of knowledge management (Allameh et al. 2011:1216). ICTs, for knowledge sharing, include intranet, email, internet, and social media networks (Anna & Puspitasari 2013:6-7; Mushi 2009:25). Information Technology (IT) provides a platform of interaction among employees within an organisation, and accessibility to accurate information, at the exact time and for the precise purpose (Mushi 2009:61). Thus, a balance between knowledge sharing and the application of information technological tools and set-ups is recommended in order to fully exploit the gains of knowledge management initiatives, such as knowledge sharing (Sirorei 2017:57). Some of the commonly used technological tools for knowledge sharing such as the intranet, internet, and other web 2.0 tools are therefore discussed in the subsequent sections.

2.8.2.1 Intranet for knowledge sharing

The intranet embodies the application of web-based keys, occasionally integrating the dynamic social features of wikis, blogs, or social networks for internal organisational knowledge sharing process (Forcier 2013:137). Averweg (2009:179) defines the intranet as a local version of the web browser, and a reserved network intended to serve the in-house knowledge needs of organisations, or a team within organisations. It is a domestic and private communication network. The intranet is a prominent knowledge sharing medium of communication and group effort in and among institutions. The intranet has become a common feature in many organisations (Averweg 2008:1). This is because it carries out data and information presentation, and also generates and distributes knowledge in a simple and handy form (Sayed, Jabeur & Aref 2009:228). According to Averweg (2008:1) the intranet is well suited as a

strategic knowledge sharing tool because it supports the dissemination, connectivity, and reproduction of data and information.

The intranet provides employees with the capacity to centrally discover and locate organisational knowledge, which encourages them to share knowledge (Averweg 2012:1). Sayed et al. (2009:229) again opined that knowledge sharing can be meaningfully amplified by using the intranet, with regard to organisational communication, such as email transactions, chats, video conferencing, and official memos. Progressively, intranets are being used for several collaborations within an organisation in order to expedite teamwork and facilitate teleconferencing for sharing knowledge or sophisticated corporate directories, or to manage customer rapport and sales in order to advance organisational output (Mphindiwa 2010:3).

The intranet as a principal means for web-based internal communication, is very effective when sharing a great amount of knowledge within any organisation (Dei 2017:148; Forcier 2013:11). It is usually used to share information and knowledge relevant to the individual or collective employees of an organisation. Battles (2010:258) stated that the intranet created new opportunities for knowledge sharing and collaboration. Also, the goal of any intranet is not just to assemble information and knowledge in one place, but also to share this information and knowledge in an easily accessible and tailored manner (Battles 2010:254). For Rajalampi (2011:10-13), the purpose of the intranet is to make relevant knowledge available and accessible to all the members in a team in order for them to carry out their tasks effectively. Averweg (2012:5) thus recommended that organisations should not only prioritise intranets for information sharing, but also for sharing knowledge, which will result in professional growth and an increase in work performance. Prioritising the intranet for knowledge sharing in an organisation will mean that the challenges faced in using it for knowledge sharing, such as a lack of capability on the side of the employees and the unavailability of intranet tools, are considered and dealt with accordingly by the management (Mphindiwa 2010:7-8).

2.8.2.2 Internet for knowledge sharing

The internet is described as a global system of interconnected computer networks, which serves numerous users around the world (Otieno 2011; Van der Merwe 2001:8). It has become essential to every organisation in the present knowledge era, for communication, interaction,

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learning, and knowledge sharing in general (Otiango 2016:51; Otieno 2011). According to Tahleho (2016:45), Saharabudhe considers the internet to be a provider of extensive pathways through which knowledge is shared because of its simplicity. The internet is a platform for sharing knowledge among group members, organisations, and individuals, as it almost instantly gives answers to questions ,without much of a struggle (Lesley 2015). Similarly, Chipeta (2015:224) reported that employees often acquire and share knowledge through their connections to the internet due to the ease and convenience it affords. Knowledge sharing occurs over the internet when virtual team members, or employees within or outside the organisation, share knowledge using internet connections, such as any of the Web 2.0 platforms (Harden 2012:3890).

2.8.2.3 Web 2.0 for knowledge sharing

The term ''Web 2.0'' was fabricated by O'Reilly Media in 2004 in a conference brainstorming session between O'Reilly and MediaLive international in order to describe the changing trend, or a new way of web-based interaction, contribution, and collaboration (O'Reilly, 2005). Bebensee, Helms, and Spruit (2011:2) described web 2.0 as the reorientation of the Web, encouraging infinite participation, communication, group effort, and sharing among people, which is characterised by the advent of a great amount of content spawned by a collection of internet users. Similarly, the term Web 2.0 speaks of internet-based technologies and systems, which facilitate users' interactions and collaborations with content created via the same interactions and collaborations (Hislop 2013:211). Belanger and Slyke (2011:132) referred to web 2.0 as a second generation of web applications on the internet, which is more user-centred, such as blogs, wikis, social networks, web conferencing, and instant messaging, where the user participates in the interaction.

Web 2.0 tools, such as blogs, wikis, email, WhatsApp, Facebook and Twitter, ensure that knowledge can easily be conveyed, debated, and shared among individuals (Chigada 2014:164-165; Sarrafzadeh et al. 2010:202). These tools enable a more connected interactive web, which encourages easy communication, editing, collaboration, participation, and knowledge sharing (Hosseini & Hashempour 2012:128). The application of web 2.0 tools for knowledge sharing builds enhanced platforms on which users can exchange information, knowledge, express thoughts, and reconstitute existing explicit knowledge (Shang, Li, Wu & Hou 2011:178).

Effective communication, managing personal knowledge, generating new concepts and ideas, finding answers to specific problems, being knowledgeable about current trends, keeping up with the activities of colleagues, and the attainment of desired help and feedbacks have all been reported as gains after applying web 2.0 tools in knowledge sharing within the organisation (Paroutis & Saleh 2009:55; Shang et al 2011:178). Web 2.0 tools have helped employees to overcome setbacks to effective communication, mend the relationship among employees, and encourage a knowledge sharing commitment among library staff members (Stuart 2010:46). Hence, web 2.0 tools have been projected as a system capable of assisting with overcoming the problem of how to effectively manage tacit knowledge in organisations (Standing & Kinitin, 2011:288). This is because web 2.0 applications such as blogs, wikis and emails inspire patrons to be the central fragment of the virtual community, by sharing their thoughts, ideas, feelings, and knowledge with people of interest (Tripathi & Kumar 2010:195). Web 2.0 platforms act like intellectual brokers, encouraging collaboration and shifting knowledge control from platform providers to broadly dispersed knowledge seekers or web users (Shang et al. 2011:178). These functions are significant, because virtual forms of collaboration are essential for knowledge sharing in organisations with the goal to provide quality services and products (Kosonen & Kianto 2009:23; Manamela 2018:127-128; Shang et al 2011:182).

According to literatures, blogs, emails, and wikis are some of the prominent web 2.0 tools used successfully for knowledge sharing. Chigada (2014:165) reported the great reliance on, and successful use of, web 2.0 tools such as blogs, wikis and emails for knowledge sharing. The next sections discuss email, wikis and blogs as knowledge sharing tools, based on the reviewed literatures.

2.8.2.3.1 *Email for knowledge sharing*

Email (a short term for electronic mailing) is a medium of exchange for digital messages through the Internet, or any other computer systems (Freeman 2009:1). Sennewald and Baillie (2016:240) described an email as a system that encompasses the transmission of messages electronically over the internet with the use of electronic devices and telecommunication networks. It involves sending, receiving, forwarding, and storing messages electronically between internet connected electronic devices (Sennewald & Baillie 2016:240). Also, an email is capable of sending and receiving attachments, such as text documents and multimedia files (Laudon & Laudon 2007:220; Sennewald & Baillie 2016:240). In order to send and receive

emails, an email address first needs to be obtained by creating an electronic account with an Internet Service Provider (ISP) (Sirorei 2017:59). This email address is therefore used to send and receive electronic messages and attachments.

Email is one of the prevailing means of creating, organising, sharing, and promptly accessing information and knowledge in organisations (Dei 2017:147). Similarly, Tedmori (2008:11-12) opined that email is a vital collaboration tool and medium for communicating knowledge between members of a virtual team. Wedgeworth (2008:12) pointed out that the process of sending and receiving emails between team members eventually leads to the sharing of knowledge among virtual team members. Stephen (2016:121) reported the common and effective use of email as a knowledge sharing tool among higher learning institution employees in Kenya. The reason for this was attributed to the ease of use and the less complex capabilities required when sharing knowledge via email.

Tedmori (2008:12) opined that the information and knowledge enclosed in emails are easily accessible and reusable by any of the virtual team members, whenever the need arises. This view is also shared by Wedgeworth (2008:14) who stated that emails can be very handy when an employee is sourcing knowledge over and over again while carrying out tasks in the workplace. Forcier (2013:162) also revealed that email is a vital tool for sharing knowledge in the workplace. In addition, Sirorei (2017:59) and Tahleho (2016:47) found that email is a powerful tool for sharing knowledge, especially tacit knowledge, within and outside the organisation. Chipeta (2015:197) also reported the significant use of email for knowledge sharing among employees. To this end, Manamela (2018:37) suggested the archiving of personal emails, which will result in a useful email repository committed towards the course of managing and sharing knowledge.

2.8.2.3.2 Wikis for knowledge sharing

A wiki is a website, which supports the creation and editing of web pages in order to create collaborative websites using a simplified markup language, a "What You See Is What You Get" (WYSIWYG) based Hyper Text Markup Language (HTML) editor, or an ordinary text editor (Tripathi & Kumar 2010:197). Wikis describe online spaces that permit people to include, delete, or modify information directly into a knowledge database, with the option of adding perspectives from different sources (Atwood 2009:50; Boulos, Maramba & Wheeler

2006:1). For Hadjerrouit (2014:301) wikis are web 2.0 tools which allow collaboration by enabling users to add, make adjustments to, or remove content in a shared web environment.

According to Grace (2009:65) and Parker and Chao (2007:57) a wiki is a collaborative and communication platform that guarantees autonomy, usage simplicity and easy accessibility, effortless and unvarying navigational online conventions which is likewise a system to organise knowledge. Levy (2009:125) explained that wikis provide users with the capacity to create engines, which permits easy creation of links between terms, pages, and titles, expanding into another aspect of knowledge. In doing so, wikis provide users with links and references to other websites, that are related to several subjects, in order to assist them in gaining a better understanding of the context, and to easily add and modify information (Grace 2009:65; Murugesan 2007:35). One of the commonly known examples of wikis is Wikipedia (Tahleho 2016:48). Organisations and individuals use wikis for collaboration and the sharing of ideas, organising documents and resources from employees and other individuals respectively, and to support team members and committees in achieving organisational goals and projects (Grosseck 2009:479; Kumar 2009:106).

For knowledge sharing, wikis are said to be particularly significant, because they do not only permit team members to share knowledge into a team-shared space, but also to jointly build a knowledge database by modifying knowledge that has been shared by others on the wiki platform (Kiniti & Standing 2013:192). Stephen (2016:69) posited that wikis, unlike blogs, are concerted websites that improve employees' involvement in, and commitment to, knowledge creation, and knowledge sharing in particular. Wikis also enable knowledge sharing through joint authoring, and online dialogue and debates within the knowledge and learning environment (Kim & Abbas 2010:213).

2.8.2.3.3 Blogs for knowledge sharing

The term "Blog" comes from the word "web-blog", a word which point to entries on a website (Ramirez 2007:12). Blogs are web pages maintained by respective authors in a typical inverse chronological order (Kim & Abas 2010:213). Similarly, Dorn and Sahinyan (2011:12) described blogs as highly structured websites that contain dated entries about a specific topic in reverse chronological order, where the most recent entry appears first. Janus (2016:36) opined that a blog is a frequently updated or restructured website, or webpage, which is

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efficient for knowledge sharing. Blogs are easily created, maintained, and used, which means that minimal technical skills are required from its users in order to fully exploit its features (Tahleho 2016:49). Blogs are usually owned and maintained by an individual or an organisation (Tripathi & Kumar 2010:196). The content of a blog includes knowledge in the form of texts, images, videos, and links to other websites or blogs (Iglesias-Pradas, Hernández-García and Fernández-Cardador 2017:221). It is used to improve the flow and sharing of knowledge, resulting in generation novel knowledge (Yu, Lu, & Liu 2010:33). Chai, Das and Rao (2011:310) indicated that virtual team members can make use of blogs to encourage knowledge sharing among themselves.

The activities carried out on blogs occur through an asynchronous form of communication of posting commentaries or news, making knowledge available through the archive of previous posts, and through the links to various other knowledge sources (Ramirez 2007:12; Boulos et al. 2006:2). The functions of blogs, such as permanent links, trackbacks, and comments, allow users to interact and participate in generating and sharing knowledge (Chai & Kim 2010:408; Nelson 2008:136). Blogs engage people in knowledge sharing, co-assembling knowledge, deliberations, and discussions (Chai & Kim 2010:408). According to Tahleho (2016:49), Godwin-Jones explained that blogs could also function as online journals, where its contents can be written by an individual or a group of contributors, rendering the possibility of making knowledge available to a wider audience. For this reason, blogs have become popular for knowledge sharing (Chai & Kim 2010:408). Dorn & Sahinyan (2011:31) stated that the use of blogs for knowledge sharing is popular for two reasons. One reason is the capability to engage and serve a wider audience at the same time, while the other is the features of providing synchronous communication through visible updates and instantaneous feedback through comments.

Studies have shown positive outcomes on the use of blogs as a tool for knowledge sharing by employees in various organisations. The study by Chigada (2014:137), which was carried out in the banking sector, revealed the utilisation of blogs among employees for knowledge sharing. The study opined that the significant use of blogs for knowledge sharing can effectively enhance knowledge sharing among employees. Similarly, Iglesias-Pradas et al. (2017:221) stated that the effective use of blogs significantly facilitate knowledge sharing among employees. The successful application of blogs as knowledge sharing tools greatly depends on the availability of relevant systems, such as laptops and computers (Chigada

2014:24). However, Dei (2017:149) reported the lack of blog usage for knowledge sharing among employees. The study indicated that this lack is not based on the unavailability of necessary systems, but on the lack of awareness about the use and benefits of blogs towards effective knowledge sharing. The advocacy, therefore, should be towards emphasising the benefit of blogs for knowledge sharing, and how to effectively do so.

The utilisation and efficiency of knowledge sharing and knowledge sharing tools, in any organisation, depends greatly on the relevant factors (Dikotla 2016:117; Noor, Hashim & Ali 2014:1314). Therefore, having established the tools for knowledge sharing in the above sections, it is essential to discuss the factors which generally influence knowledge sharing. The next section explains some of these factors, which past literatures have shown to be critical to knowledge sharing.

2.9 FACTORS OF KNOWLEDGE SHARING

There are several factors that influence the success or failure of knowledge sharing among employees within an organisation (Boateng et al. 2015:218; Chigada 2014:217; Kaewchur & Phusavat 2016:237). These factors include physical objects, such as tools and technologies; abstract concepts, such as motivations, organisational culture, and national culture; and organisational resources, such as time and space, and access to knowledgeable people in an organisation (Ajie 2019a; Awodoyin et al. 2016:14; Isa et al. 2016:218; Mosha 2014:28). Other factors include trust, self-efficacy, self-confidence, and organisational commitment (Alam, Abdullah, Ishak & Zain 2009:116-119). Factors such as the right organisational culture, motivations (rewards and incentives), trust, management support and information technology are success factors to knowledge sharing in an organisation (Kaewchur & Phusavat 2016:236; Sandhu et al. 2011:222).

According to Isa et al. (2016:218) and Mosha (2014:28), the factors that influence knowledge sharing in an organisation is categorised into three major categories, namely individual factors, organisational factors, and technological factors. Noor et al. (2014:1317), in their study on factors influencing knowledge sharing, developed a model which presented knowledge sharing factors in three categories of individual factors, organisational factors and technological factors. Also, Razmerita, Kirchner and Nielsen (2016:5-8) discussed knowledge sharing factors within three categories of Individual factors which is concerned with personality and attributes,

Organisational factors which is about organisational culture and structures and technological factors which relates to technological and infrastructural availability and usability. This study adopted this categorisation and discussed these factors according to the outlined categories in the next sub-sections.

2.9.1 Individual factors influencing knowledge sharing

The individual factors of knowledge sharing explain how employees and other individuals influence knowledge sharing (Dikotla 2016:198). Factors, such as trust, awareness, and personality, determine if and how employees, particularly library staff engage in knowledge sharing. This is evident in the study carried out by Isa et al. (2016:219), which reported that library staff members engage in knowledge sharing due to their trust for one another, their individual personalities, and their awareness of the importance of knowledge sharing. This awareness is one of the crucial factors that affect knowledge sharing in organisations, since those with little or no awareness of knowledge sharing shows that their employees do not understand the relevance of knowledge in an organisation and therefore, do not share knowledge (Alhalhouli, Hassan & Der 2014:925). According to Isa et al. (2016:218), Van den Brink posited that the personality factor of knowledge sharing points toward the employees' value, attitude, emotions, and mood towards knowledge sharing.

The personalities of employees emanate from their different cultures, values, traditions, and educational background, which influence their willingness to share knowledge (Noor et al. 2014:1317). Isa et al. (2016:218) showed that the personality factor is significant to knowledge sharing and argued that, employees with an extrovert personality are more likely to collaborate and share knowledge with colleagues. Personal attributes of employees, such as trust, communication skills, and interpersonal skills, can either encourage or discourage knowledge sharing in an organisation (Mosha 2014:32-33). According to Islam et al. (2011:5906), communication, that is, interaction between employees, is relevant to knowledge sharing. Employees need basic skills, such as communication and interpersonal skills, to be able to effectively share knowledge for the benefit of all (Dikotla 2016:197; Mosha 2014:33)

Researchers regarded the trust factor as an important determinant of knowledge sharing engagements, since employees need the existence of trust to openly share knowledge. The trust factor describes the set of beliefs one person has for another, with the assurance that their

actions towards them will always mean loyalty and never betrayal (Islam et al. 2011:5902). Kaewchur and Phusavat (2016:237), Mosha (2014:32), Mládková (2011:253) and Tahleho (2016:52) all identified trust as one of the crucial factors of knowledge sharing, which encourages employees to openly respond to, and engage in effective knowledge sharing. Consequently, employees are more likely to take part in knowledge sharing if they trust the colleagues they interact with (Dikotla 2016:95-96).

According to Ling (2011:329), regardless of the fact that knowledge sharing is vital to organisational operations, employees are still unsure about those they should share knowledge with. An assurance that the shared knowledge will not be misused, and that the knowledge sharer will obtain a significant value in future for the knowledge shared, will help to create a trustworthy environment for knowledge sharing in an organisation (Ling 2011:329). Trust is needed, because a large aspect of knowledge to be shared and harnessed is tacit in nature (Dikotla 2016:96). Individuals rarely share their expertise, experience, skills, or insights with people who they do not trust (Mládková 2011:253). A study carried out by Paliszkiewicz (2011:172) on trust and knowledge sharing, revealed that, within organisational settings trust has been demonstrated to be an important predictor of knowledge sharing. This is similar to the assertion that trust among employees enhance knowledge sharing, where knowledge is freely shared without any hesitations (Noor & Salim 2011:111).

2.9.2 Organisational factors influencing knowledge sharing

Organisations need to employ various approaches, and carry out certain actions, according to the available means and peculiarity of situations, in order for knowledge to be created and shared effectively among their employees (Gajic & Riboni, 2010:20). The organisational factors of knowledge sharing refer to the measures and actions taken by an organisation that influence knowledge sharing in the organisation (Mosha 2014:29). It is seen as the top management support towards knowledge sharing within an organisation (Noor et al. 2014:1316). Isa, et al. (2016:218) and Sirorei (2017:182-183) identified the organisational factors of knowledge sharing as organisational culture, reward and recognition, management support, organisational structure, and leadership. Awodoyin et al. (2016:15) identified other organisational factors of knowledge sharing, namely, the availability of time and space for employees to engage in knowledge sharing.

Organisational factors, such as organisational culture, refer to the shared beliefs, values, and practices of an organisation, which often influence the norms and behaviour of its employees, and its activities (Anantatmula 2010:242). It is a unique asset which provides the logic of distinctiveness to an organisation's employees, and which furnishes them with unprinted guidelines for workplace behaviour and values (Chigada 2014:56). Organisational culture greatly influences knowledge sharing in an organisation, as it transcends into a knowledge sharing culture, which is concerned about creating new knowledge and retaining the organisational knowledge for use in easily accessible media available to employees (Chigada 2014:56; Kaewchur & Phusavat 2016:237; Mustaq & Bokhari 2011). The organisational culture of an organisation reflects and prioritises the knowledge sharing culture in order to promote the sharing of knowledge and skills, especially those acquired through learning, and by performing tasks in the workplace (Caruso 2017:47).

The knowledge sharing culture has been described as organisational policies, which support knowledge sharing, as well as the attitude towards this kind of sharing in an organisation (Vuori & Okkonen 2012:596-597). The organisational knowledge sharing culture has also been viewed as a culture which encourages and supports the sharing and reuse of knowledge in order to improve task performances (Omerzel et al. 2011:113). This culture results in employees' quick responses towards knowledge sharing for better task performances (Chigada 2014:135).

In addition to the organisational knowledge sharing culture, management support is another organisational factor of knowledge sharing which plays a crucial role in the effectiveness of knowledge sharing in organisations (Haque & Anwar 2012:122). This takes place through the development of adequate knowledge sharing enabling policies, and the provision of funding to enhance knowledge sharing (Haque & Anwar 2012:122). Management support improves the trust among an organisation's employees in order to enable the engagement and commitment to knowledge sharing (Jeenger & Kant 2013:9; Muchaonyerwa 2015:75). Employees' willingness to share knowledge is also greatly influenced by management support through making available motivations, such as incentives, rewards, or promotions for those who share knowledge (Lin 2007:319; Razmerita et al 2016:8). Phung, Hawryszkiewycz, and Binsawad (2016:77) considered management support a knowledge sharing enabler. Their study also opined that a lack of effective management implementations and support, in terms of efficiently relating the values and relevance of knowledge sharing, might hamper the sharing of

knowledge in an organisation. It is extremely important for an organisation's management to fully support knowledge sharing policies and initiatives for the purpose of building and supporting a positive knowledge sharing culture among employees of the organization (Atkova & Tuomela-Pyykkönen 2015:112; Phung et al. 2016:77).

Researchers have also recognised reward system such as recognition and incentives as positive motivational factors of knowledge sharing within the organization. Chang and Chuang (2011:10) opined that individuals can engage in knowledge sharing if the perceived benefits outweigh the perceived loss of valuable knowledge. Similarly, Islam et al. (2011:5903) posited that an effective reward system is crucial to motivate employees to share knowledge among their colleagues and between different organisations, and in the absence of adequate motivation employees may be unenthusiastic about sharing their knowledge due to the likelihood of receiving no benefits for doing so.

2.9.3 Technological factors influencing knowledge sharing

Technology has been acknowledged as an essential enabling factor for sharing and managing knowledge organisations, owing to its functionality and usability in facilitating knowledge sharing and reducing its barriers (Kaewchur & Phusavat 2016: 237; Razmerita et al. 2016:8; Shahid & Alamgir 2011:3). Technological factors influencing knowledge sharing can be discussed in view of ICT infrastructures, ICT tools and ICT know-how (Isa et al. 2016:219).

ICT infrastructures serve as facilitators of knowledge sharing because of their close relation to the knowledge management systems used for sharing knowledge (Volady 2013). They make knowledge sharing easier and more functional. When functional ICT infrastructures are absent it is hard for an organisation's employees to gainfully and adequately share knowledge on a large scale (Skyrme 2011). Examples of ICT infrastructures are internet capability, internet servers, digital telephone networks, fixed broadbands, and mobile phones (Pradhan, Mallik & Bagchi 2018:91-92). These infrastructures serve as facilitators of knowledge sharing by assessing the apparent availability and suitability of ICT tools, such as hardware, software, and other peripheral equipment (Isa et al. 2016:219; Vanderlinde & Braak 2010:546-547).

ICT tools refer to applications that are available in organisations to facilitate knowledge sharing. ICT know-how, on the other hand, describes the computer literacy of an individual, and his or her knowledge on the use of ICT tools for knowledge sharing and task performance (Isa et al. 2016:219). Appropriate ICT training of an organisation's employees is positively connected to knowledge creation and knowledge sharing (Isa et al. 2016:219). The availability of modern required tools and technological equipment are major factors that tend to influence knowledge sharing in an organisation by fostering the readiness and ease of sharing knowledge (Awodoyin et al. 2016:14).

The fact that knowledge has to be shared through certain means and channels has placed more emphasis on technology as a vital factor of knowledge sharing, while focusing on ICT infrastructures (Noor et al. 2014:1317). Studies have shown that technology has a huge influence on knowledge sharing in any organisation. Dikotla (2016:243-244) described the adequate availability of technological infrastructures and know-how in an organisation as a success factor of knowledge sharing, and the unavailability thereof as a hindrance to sharing knowledge. Similarly, Assefa, Garfield and Meshesha (2013:8) and Phung et al. (2016:77) indicated that ICTs will be an enabling knowledge sharing factor once the abilities, infrastructures, systems, and measures are developed to support an organisation's knowledge sharing activities.

The factors of knowledge sharing can either result in the positive or negative outcomes for knowledge sharing. This depends on the barriers to the positive considerations and implementations around the above discussed factors, and knowledge sharing itself. Therefore, the discussion about knowledge sharing in academic libraries for improved service provision should include a discussion on the possible knowledge sharing barriers within an organisation. The next section discusses the barriers to knowledge sharing in organisations.

2.10 BARRIERS TO KNOWLEDGE SHARING

According to some literatures, the barriers to knowledge sharing is categorised into individual, technological and organisational barriers. Individual barriers denote aspects like cultural differences, a lack of trust, motivation, social networking skills, time, awareness, and

communication skills. Organisational barriers include the poor culture of an organisation, the crumbly structure of an organisation, the lack of support from management, the lack of strategies for knowledge sharing, the insufficient infrastructure, the inadequate staff training, and the competition within the organisation. Technological barriers involve factors such as the lack of integration of Information Technology systems, the lack of proper maintenance of integrated Information Technology systems, the employees' indisposition on the use of Information Technology systems, the lack of technical support, and the lack of employees' Information Technology know-how (Patel 2015:428; Sandhu et al. 2011:219). Similarly, Santos, Soares and Carvalho (2012:30-33) reported that inadequate ICT systems and capabilities, a lack of initiative and strategy, a lack of trust, and a lack of time and resources result in knowledge sharing barriers.

For Chong, Yuen and Gan (2014:221-222) the top challenges facing knowledge sharing in an organisation include a lack of a motivation system, such as rewards and recognition, a lack of prescribed and familiar channels to promote knowledge sharing, and a lack of time to share knowledge. They further stressed the need to develop effective knowledge sharing strategies in order to encourage and sustain knowledge sharing. Similarly, a study by Dikotla (2016:197), on knowledge sharing in municipalities for improved service delivery, revealed that the knowledge sharing barriers include a lack of trust, a lack of communication and interpersonal skills, an inferiority complex, and a lack of interaction between the knowledge holder and those who require the knowledge. The study reported that a lack of trust is the most significant barrier to knowledge sharing, this corroborates the studies by French (2010), Wang and Noe (2010) and Siadat et al (2012). According to Siadat et al. (2012: 865), a lack of trust among people involved in exchanging and sharing knowledge is a barrier to easy acquisition and sharing of knowledge.

Now convinced that an extant review of literature has been carried out on knowledge sharing and its components in order to better situate knowledge sharing in academic libraries, the discussions in the next section are centred around knowledge sharing among academic library staff for improved service provision in the library, which is the focus of this study. The section discusses ways in which knowledge sharing among staff affect the provision of services in academic libraries, the knowledge sharing tools employed by these staff, the factors that

influence knowledge sharing among them, and also the barriers. This is done in an attempt to seek answers to the research questions, by reviewing past literatures and similar studies within the academic library setting.

2.11 KNOWLEDGE SHARING AMONG ACADEMIC LIBRARY STAFF FOR THE PROVISION OF SERVICES

The provision of services is still the most critical characteristics of the academic library, and the academic library user is the core reason for its existence (Adeniran 2011:210; Ikolo 2018:882; Lekay 2012:24). Therefore, satisfying user needs is essential, and requires the provision of efficient library services and products that will meet these needs (Ikolo 2018:882; Tahleho 2016:1). The quality of the services offered is the most significant element amid the academic library operations (Akinola 2019:2-3; Kulkarni & Deshpande 2012:2). Information technological expansion and the varying demands of library users have resulted in increased calls for a better approach to service provision in academic libraries (Anna & Puspitasari 2013:6; Jain 2012:142). For this, academic librarians must be fervent in ensuring that information resources are always made available in retrievable forms, and can be enthusiastically dispersed on demand for efficient service delivery (Akinola 2019:3; Kinengyere & Tumuhairwe 2009:1).

In recent times, the most debated factor of survival for academic libraries to remain relevant, and provide efficient services during this era of constant change in knowledge and information demands of users, is knowledge sharing (Awodoyin et al. 2016:13; Muchaonyerwa 2015:3; Sarrafzadeh et al. 2010:199; Tahleho 2016:111-112). The academic library is considered one of the first organisations that employed knowledge sharing in order to aid performance and improve service provision (AlRashdi & Srinivas 2016:32). According to Cheng et al (2009: 313), Lekay (2012:22) and Muchaonyerwa (2015:44), the fundamental purpose of knowledge sharing among academic library staff is to utilise available knowledge in order to improve library service provision to users. This is because knowledge sharing is a process which necessitates conveying knowledge and receiving knowledge (Akparobore 2015:31). For Rajurkar (2011:6) the problem of a dwindling budget confronting academic libraries, and the radical increase and constant shift in user demand due to technological expansion and

knowledge eruption, stimulated the appreciation of knowledge sharing within the academic library, to deliver enhanced and resourceful services with less resources.

Additionally, knowledge sharing in academic libraries is the answer to knowledge creation and reuse, which is pivotal for enhancing innovations, improving productivity, and increasing understanding among academic library employees (Anna & Puspitasari 2013:1). Rajurkar (2011:7) suggested that academic libraries embrace knowledge sharing in order to furnish their employees with the expertise required to provide relevant services to users in this information and knowledge motivated era. According to Awodoyin et al. (2016:13) it is imperative for academic librarians to be armed with relevant kinds of knowledge, to share and store it for the purpose of effectively managing the rapid growth in the library environment, and to provide significant services. Knowledge sharing will afford academic library staff the opportunity to enhance their skills by working together, and eventually improving the library services and its provsion (Ismail & Yusof 2009:40). The more academic library staff members engage in knowledge sharing, the better their performance will be which will result in improved service provision in the library (Ismail & Yusof 2009:37).

Furthermore, academic library staff are enmeshed in continuous interactions with information sources, users, and colleagues, which are resulting in the accumulation of a huge volume of knowledge and experience (Arif & Alsuraihi, 2012:538). Chipeta (2018:117) showed that library workers acquire diverse relevant knowledge through performing tasks, colleagues, networking, the internet, and library data bases. These experiences, and this knowledge, are the library's intellectual resources, and are essential for staff training and retraining, as well as effective library operations. and so, should be effectively shared within the library (Asogwa 2012; Lekay 2012:18; Tahleho 2016:7-8). Academic libraries should endeavour to conserve these sets of knowledge through knowledge sharing in order to avoid losing them when employees quit or retires, which is detrimental to library service delivery (Agarwal & Islam 2015:151; Muchaonyerwa 2015:45; Martins & Martins 2011:61). The knowledge of library staff members ought to be valued and disseminated in seminars and meetings, and the results from such gatherings should be preserved for reference purposes (Asogwa 2012). By doing that, secluded knowledge or skills could be utilised by the whole library staff, which will eradicate or decrease task repetition and form the foundation for solving problems and making

decisions (Anna & Puspitasari 2013:5-6). This will also make the library a developer of new and quality knowledge, thus stimulating novel ideas that will bring about improved service provision for users (Ajegbomogun & Diyaolu 2018:12; Anna & Puspitasari 2013:5-6).

2.11.1 The role of knowledge sharing among academic library staff on library service provision

Knowledge sharing among staff members takes place in all areas of the academic library, and enhances the provision of diverse library services (Awodoyin et al. 2016:16-17). Awodoyin et al (2016) conducted a study on the knowledge sharing behavioural patterns of academic library staff in Nigeria, and the sampled 12 university libraries in the South-West region. The study reported that academic librarians share knowledge among themselves on several areas relating to library services, such as library use, user needs, the planning and acquisition of library resources, and the cataloguing and classification of library materials. They also noted that librarians share ideas and insights relating to the use of technology, reference and readers service, as well as access and information delivery services. The shared knowledge, as revealed in the study, result in increased performance and enhanced effectiveness in service delivery.

According to Lekay (2012:18), the positive role of knowledge sharing is mostly relevant to circulation and reference services, where librarians deal directly with users by registering and updating user profiles and providing referencing and research support to researchers and students alike. Consequently, AlRashdi and Srinivas (2016:36-37) revealed that library employees in the reference and circulation sections share knowledge regarding user/public services, user profiles, as well as user needs among themselves in order to improve their efficiency and the work quality in the library. They also stated that interlibrary loan services are one of the foremost academic library services, where knowledge sharing can be gainfully applied for its provision. According to Lekay (2012:25), the ultimate goal of the reference librarian, providing research support to researchers and postgraduates, is to achieve quality service provision. In this regard, knowledge sharing becomes essential. The reference librarian possesses accumulated knowledge from, and of, relevant reference sources through reference interviews and interactions with users (Chawner & Oliver 2013:29; Parirokh, Daneshgar & Fattahi 2008:114). Through knowledge sharing, such expertise and knowledge could become

an organisational asset for the library, and set the standard for innovation and quality service provision, particularly in the area of reference services (Cheng et al 2009: 322; Lekay 2012:25). This knowledge is also relevant to the library staff members responsible for building library cooperation, or interlibrary loan services, as well as to those responsible for the provision of SDI services. Cheng et al. (2009:322) stated that effective knowledge sharing is important in maximising individual employees' knowledge and skills for the benefit of the entire organisation.

Knowledge sharing is crucial to the deliberate planning of academic library services and resources, and so it is necessary for academic libraries to accept and integrate a knowledge sharing culture (Chipeta 2018:119; Kumaresan 2010:3). Knowledge sharing is essential to academic services and resource planning because, as posited by Daneshgar and Bosanquet (2010:26), it helps academic workers form a better understanding of the varying needs and behaviour of users in order to provide suitable and efficient library services. Also, Lekay (2012:47) reported that an academic library's acquisition librarian, who is responsible for the budgeting and ordering of library resources, may very well benefit from the knowledge of an experienced reference librarian, who has a better understanding of the library users' needs, if they engage in knowledge sharing. The study explained how the experienced reference librarian can share knowledge on user needs with the acquisition librarian, who in turn acquires relevant library resources to satisfy these needs. The implication of this is the provision of quality and efficient library services to users, which is a critical feature of the academic library.

The frequent sharing of knowledge on new developments and trends in librarianship assist academic library staff in resolving problems encountered in their tasks, especially in the provision of cataloguing and classification services (Okonedo & Popoola 2012:15; Onifade 2015:95). The provision of the cataloguing and classification services of the academic library is complex and has a dynamic nature where new trends develop from time to time (Chipeta 2018:42). New classification schemes are developed, and old schemes are frequently updated to accommodate the growing fields and complex subjects. Hence, the competencies and skills required of a good cataloguer entail consistency and accuracy (Ihekwoaba & Okwor 2019:2). Cataloguers in academic libraries, especially those who are new on the job, are likely to encounter challenges when cataloguing and classifying the materials of complex subjects

without the adequate knowledge and experience (David-West & Angrey 2018:96). The knowledge on classification schemes and controlled vocabularies in the classification of library materials are crucial in classifying resources (David-West & Angrey 2018:94-96; Nazim & Mukherjee 2012). This knowledge provides an outstanding basis for the metadata creation needed in developing classification schemes (Nazim & Mukherjee 2012). Hence, the experienced and knowledgeable academic library staff members in this regard, readily and continuously share their expertise and skills with colleagues in order to foster the provision of services (Okonedo & Popoola 2012:6).

In addition, there has been a shift from the traditional cataloguing and classification methods to technological processes that require the use of computers, which means that the library staff members responsible for these tasks need to continuously update their skills (David-West & Angrey 2018:94). Today, academic library cataloguers require sufficient skills in information management, the use of computer applications for cataloguing, and the use of cataloguing databases (Ihekwoaba & Okwor 2019:22). A more viable means of acquiring such skills are through knowledge collaborations, such as mentoring from colleagues in the profession (Ihekwoaba & Okwor 2019:22). Muchaonyerwa (2015:173) found that academic library staff members share knowledge on new and existing practices in cataloguing and classification processes, which is important to ensure the proper organisation of library materials. This makes for the easy retrieval of library resources by users, and ultimately efficient service provision (David-West & Angrey 2018:94; Onifade 2015:95).

Liu, Chang and Hu (2010:455) provide a strong indication on how knowledge sharing among academic library staff assists in task procedures, and how they can familiarize themselves with the operations of all sections of the library. They also argued that effective knowledge sharing is predominantly significant in the provision of insights on the library environment and operations to the staff of the academic library, which place them in a better position to provide efficient services to users. Similarly, Mayekiso (2013:93) revealed that the impact of knowledge sharing on the provision of services in academic libraries, include well-informed staff members, which leads to improved service provision. A well-informed subject or reference librarian is likely to provide relevant and dependent research support services to users and in time. This is because the librarian in question knows what resources to source for and

where and how to source them in order to be able to adequately satisfy the users' research needs.

Akparobore (2015:32) and Anna and Puspitasari (2013:5-6) reported that knowledge sharing generally has a positive impact on all academic library services, and their provision. They noted how knowledge sharing helps each library staff members to learn from the past experiences of others in order to increase their own individual efficiency, thereby reducing task repetition or mistakes, as well as providing better services to users. Correspondingly, Argawal and Islam (2014) maintained that the knowledge of library operations, such as the cataloguing and classification of library resources, the circulation of library resources, the digitisation of library resources, library users and their needs, library resources and technological knowledge, are required for creating innovative knowledge, which leads to the development and improvement of service provision to users, and the general performance of the library. For this, Ajegbomogun and Diyaolu (2018:3) suggested that academic library staff should continuously engage in knowledge sharing as an essential activity aimed at updating their knowledge, and, in the same vein, improving library service provision.

Another way in which knowledge sharing predominantly impacts academic library service provision, especially the provision of acquisition, circulation, reference, serials management, and cataloguing and classification services, is the library automation and application of ICTs. Library automation, which is the use of technologies by academic library staff to provide efficient services to users, is a complex and almost new concept to most academic library staff members (Adebowale et al. 2013:29). Library automation for academic library staff offers them the opportunity to provide relevant and quick services to library users. For the academic library users, library automation facilitates easy and timely access to library services that meet their needs (Akparobore & Akparobore 2019). However, this concept requires adequate knowledge, skills, and expertise in the use of ICT tools and infrastructures (Akparobore & Akparobore 2019; Chawner & Oliver 2013:29). Academic library staff members with the required technical know-how could share their expertise with colleagues who are yet to come to terms with this concept in order to promote their performance, and subsequently, the provision of library services. Onifade (2015:95) reported that academic library staff often share knowledge on library automation with colleagues who still need to master the skills needed to carry out tasks

by using modern technologies in order to enhance innovation and performance, which leads to better service provision.

For example, the development of ICT tools for communication, and the provision of reference services, means that the academic reference librarians, tasked with the provision of these services, need to develop and acquire new skills and knowledge, while still maintaining the old ones, in order to be able to utilise these ICT tools to provide advanced services to users in this regard (Chawner & Oliver 2013:29). These new skills needed include the use of social media platforms and other technologies in order to reach out and provide reference services to users, and which can be shared among those colleagues who engage in knowledge sharing to enhance the library's service provision. Awodoyin et al. (2016:16) reported that library staff engage in knowledge sharing among colleagues to share and exchange knowledge on the use of technologies for library operations. This improves the efficiency of staff performance and ultimately, the service provision in the library.

In inference, the primary purpose of knowledge sharing among academic library staff is to develop their knowledge, and to utilise their available knowledge in order to achieve efficient service provision in the library (Chipeta 2018:119; Lekay 2012:51; Muchaonyerwa 2015:44). Hence, ineffective knowledge sharing among academic libraries' employees is a significant setback towards the efficient service provision (Ismail & Yusof 2009:40). AlRashdi and Srinivas (2016:32) opined that for academic libraries to effectively uphold and utilise knowledge sharing, for the provision of services in academic libraries, it is crucial that they support, develop, and use applicable contemporary systems and tools that facilitate the easy flow and sharing of knowledge. These tools will ensure the continuous and meaningful sharing of knowledge within the academic library environment.

Therefore, the next section discusses some of the tools that are viable for knowledge sharing among academic libraries' staff for improved service provision.

2.11.2 Tools for knowledge sharing among staff for the provision of services in academic libraries

According to the literature reviewed in section **2.8** on knowledge sharing tools, they can be categorised into human-based and technological-based tools. The human based tools include meetings, job rotation, mentorship, trainings, job shadowing, seminars, workshop, as well as CoPs. The technological based tools, on the other hand, include intranet, internet, and the Web 2.0 tools, such as email, blogs, and wikis.

In the academic library environment, several tools and techniques have successfully been adopted for knowledge sharing in order to enhance service provision in the library. These tools and techniques could either be human-based or technological based tools (Tahleho 2016:38). The choice of knowledge sharing tools within a given academic library depends greatly on the employees' comfort level and preference, as well as the cost for acquiring and implementing such tools (Agarwal & Islam (2014:339). Tahleho (2016:96-97) reported that mentorship and job rotation are employed by library staff members in order to share their knowledge and experience among colleagues, for improved efficiency, the smooth running of the library and the overall improvement of service delivery in the library. Lekay (2012:18) indicated the use of meetings, in the form of round-table open forums, as a tool to explore and share the knowledge and experiences of library employees. This is done for the purpose of solving work problems. Lekay (2012:41-42) further posited that knowledge sharing is more effective when it takes place in an informal way, via meetings, telephone conversations, emails, and tea chats. Similarly, Onifade (2015:94) reported that academic library staff prefer to share knowledge through informal channels, such as meetings and verbal discussions (face-to-face interactions). The study also noted that staff members share knowledge for the purpose of increased productivity, through seminars/workshops, mentoring, and CoPs.

Rah, Gul and Wani (2010:25) placed emphasis on the need to develop proficient systems that facilitate the creation and sharing of knowledge among academic library employees for efficient service provision. Such systems include intranet, internet, and the Web 2.0 tools. Kude et al. (2012:228) stated that the internet provides an incredible knowledge sharing enablement to academic libraries through its connections. The birth of contemporary information

technological mediums, such as the Web 2.0 tools, inspires individuals to cooperate and partake in knowledge sharing. Library workers utilising such tools, easily engage in knowledge sharing for self-development, to efficiently satisfy user demands, and to bring about enhanced service provision (Hosseini & Hashempour 2012:128).

The application of proficient knowledge sharing tools such as the Web 2.0 tools in academic libraries, has generally transformed the usual library activities into more collaborative ones in which knowledge and information can easily be shared, accessed, retrieved, and used by the library employees (Ram, Anbu & Kataria 2011:453). Web 2.0 tools, such as wikis, blogs, email, Facebook, Twitter, and WhatsApp, has been employed by academic library staff members in order to better share knowledge among themselves, and to improve their efficiency in library service provision (Mosha 2017:200-203). Emphasis has been placed on the important role blogs play in facilitating knowledge sharing among employees, within and outside the academic library, for the sole purpose of providing efficient services (Iglesias-Pradas et al. 2017:221). This is because blogs are platforms that establish and encourage communication processes among employees or individuals (Manamela 2018:34).

Academic libraries have also adopted wikis to support a variation of collaborative activities, such as knowledge sharing for improved service provision (Tripathi & Kumar 2010:197). These libraries deploy wikis in order to share knowledge among employees on library operations, library planning and policies, ICT developments, details of special projects, and user expectations (Tripathi and Kumar 2010:197). Wikis are employed as an interactive platform to encourage knowledge sharing and develop internal knowledge databases, which are used as reference points when resolving issues relating to the provision of services (Mosha 2017:115; Tahleho 2016:84). Hence, Tahleho (2016:92) suggested training academic library staff on the proper use of ICT tools and infrastructures to facilitate and encourage knowledge sharing in the library for improved service provision. Academic librarians who participate in high-level knowledge sharing, using modern tools and technologies, would impact one another positively and maintain a high performance, which will lead to better services for the library users (Awodoyin et al. 2016:17).

The above discussion underscored the importance of various knowledge sharing tools when implementing knowledge sharing in academic libraries for the provision of services. However, these tools may well not be efficient for knowledge sharing when certain factors, that could influence knowledge sharing are not considered. The next subsection discusses some of the knowledge sharing factors pertinent in academic libraries. These factors could be enabling factors when duly considered, or setbacks when neglected.

2.11.3 Factors influencing knowledge sharing among staff for the provision of services in academic libraries.

Knowledge sharing factors, as revealed in the above discussions in section **2.9**, has been categorised into individual factors, organisational factors, and technological factors. Recently, the technological factors of knowledge sharing have gained more popularity in scholarly discussions within the academic library environment. Technology is considered a great enabling factor of knowledge sharing for the provision of services in academic libraries because, it effectively aids the organisation, incorporation, and dissemination of organisational knowledge (Muchaonyerwa 2015:70). Similarly, for Tahleho (2016:92), the reason why technology is considered a highly influential factor of knowledge sharing is that academic library staff utilise ICT tools in order to conveniently share and retrieve knowledge for improved service delivery. Awodoyin et al. (2016:14) and Chipeta (2018:231-232) reported that the availability of modern ICT tools, ICT infrastructures, and ICT know-how are major factors that tend to influence knowledge sharing in academic library by fostering the readiness and ease of sharing knowledge for better service delivery or hindering same. Hence, Muchaonyerwa (2015:196) recommended that academic library staff should be encouraged to share knowledge through formal and informal technological systems among colleagues in the library.

Besides technological factors and technologies, other factors of knowledge sharing which has been reported to influence knowledge sharing in academic libraries for the provision of services, are the library's knowledge sharing culture, rewards, motivations, trust and commitment, communication skills, and individual personality (Awodoyin et al. 2016:15-17; Sirorei 2017:94-95). Knowledge sharing attitudes among academic library staff can either

make or break better service provision in the library (Ugocha et al. 2018:81). Studies on knowledge sharing within academic libraries have accentuated the significance of organisational background and individual attitudes as factors that contribute towards knowledge sharing (Liu et al. 2010:456). Individual factors, such as trust, an awareness of the knowledge sharing benefits on service provision, communication and interpersonal skills, and knowledge sharing capabilities, have been highlighted as factors that significantly influence knowledge sharing among academic library staff in general, and for improved service provision in particular (Isa et al 2016:219; Mosha 2014:32; Onifade 2015:94; Tahleho 2016:52; Ugocha et al 2018:81). However, trust has been reported as the most significant factor influenceing knowledge sharing among academic library staff (Chipeta 2018:17; Tahleho 2016:52).

According to Chipeta (2018:132) organisational factors, such as management support, is crucial to the sharing of knowledge in an academic library, because the library's management is responsible for outlining the vision and policies on knowledge sharing's premeditated relevance when achieving the library's objectives and communicating same to all employees. The study also revealed that management support entails setting goals for knowledge sharing among employees, and encouraging the effective use of it for the benefit of the library's operation. Management involvement and support, through policies and creating the enabling environment to share knowledge, encourage academic library staff to engage in knowledge sharing among colleagues (Muchaonyerwa 2015:109).

Organisational factors, such as the organisational culture of knowledge sharing, also influence knowledge sharing among academic library staff for improved service provision in the library. Ugocha et al. (2018:81) posited that the organisational culture of knowledge sharing is the backbone to effective knowledge sharing among academic library staff. Tahleho (2016:100), in his study on improving service delivery in academic libraries through knowledge sharing, revealed that the organisational culture, which is the academic libraries' knowledge sharing culture, has a significant influence on encouraging knowledge sharing for improved service delivery. Chipeta (2018:132-133) revealed that the organisational culture of knowledge sharing in academic libraries supports and fosters a good learning environment, creativity, and innovative ideas. According to Muchaonyerwa (2015:120), knowledge sharing can become a

culture within the academic library if the library's top management continuously posits, reiterates, and reinforces knowledge as the 'lifeblood' of any organisation.

Meanwhile, Sirorei (2017:94-95) revealed that rewards, in the form of awards or incentives, are knowledge sharing motivating factors among academic library staff members. Awodoyin et al. (2016:15-17) indicated that the provision of incentives to staff members who engage in knowledge sharing by academic library management, motivates and ensures the continuous sharing of knowledge among staff in order to enhance service provision. Awodoyin et al. (2016:15) argued that library employees are more likely to engage fully in knowledge sharing, and embrace knowledge sharing initiatives, with the assurance that there is a reward afterwards. Mosha (2017:183) suggested rewarding monetary and non-monetary rewards by academic library management in order to encourage knowledge sharing among staff members for enhanced service provision. Non-monetary rewards, such as recognition, training, and promotions, has been reported to be more effective in encouraging knowledge sharing among academic library staff (Mosha 2017:183; Muchaonyerwa & Mutula 2017:18). However, Tahleho (2016:113) reported that in the absence of incentives or other rewards, the majority of staff are motivated and encouraged to engage in knowledge sharing among colleagues because of the benefit of enhanced service delivery.

The use of a reward system to encourage knowledge sharing for service provision may encounter a downside when the system is not clear on who are rewarded, how, and for what (Walter, Ribiere & Galipeau, 2013:4). To gainfully use a reward system to encourage knowledge sharing among library workers for the purpose of enhancing service provision with minimal setbacks, the library must re-align reward schemes in order to precisely account for these vital knowledge contributions (Tahleho 2016:107). Academic libraries' top management should therefore consider policies, and adopt an organisational culture of knowledge sharing, which reflects a reward system where employees with knowledge are encouraged to share it willingly and continuously in order to better service provision (Arzi, Rabanifard, Nassajtarshizi & Omran 2013:5; Mayekiso 2013:99; Tahleho 2016:107).

2.11.4 Barriers to knowledge sharing among staff for improved service provision in academic libraries

The aspiration of librarians to exploit knowledge sharing for the realisation of library goals, and to improve library service delivery, is truncated by some barriers (Patel 2015:428). Understanding the barriers to knowledge sharing is vital for the library to explore ways to encourage and fully utilise the sharing of knowledge for the benefit of improved service delivery (Tahleho 2016:55). The study of Mushi (2009) titled "Intellectual Capital and Public University Libraries: A Knowledge Sharing Perspective" examined factors hampering knowledge sharing in public university libraries in Tanzania. The study revealed that the setbacks include a lack of knowledge sharing culture and strategies, obstinate organisational structures, and individual and technological factors (Mushi 2009:64). Jain (2013:7), recognised knowledge sharing obstacles in academic libraries as a continuous shortfall of the library budget, inadequate staff training, the absence of a knowledge sharing culture, no collaboration among library staff, a lack of motivation, and insufficient technology. Tahleho (2016:104) reported that the greatest obstacle to knowledge sharing for improved service provision in academic libraries is the issue of trust, including trusting colleagues and the library management itself. Other obstacles, which were also reported, include a difference in qualification, a 'knowledge is power' mentality, the lack of rewards, and the lack of required knowledge sharing tools.

For Patel (2015:428), the yearnings of library staff members to engage in knowledge management process such as knowledge sharing for the purpose of improved library service provision and self-development is hindered by barriers such as:

- The lack of co-operation between senior and junior library staff members.
- The unwillingness of junior library staff members to share their knowledge with the perception of no benefits in the form of promotion, recognition appreciation, or salary increase in return.
- The unavailability of up-to-date or proper maintenance of technologies that support knowledge sharing.
- The lack of library staff members' adequate communication skills.
- The absence of staff training, or the inadequate training of library staff members.
- The lack of or inadequate library budget.
- The lack of efficient knowledge sharing tools, such as ICTs.

Conclusively, the barriers of knowledge sharing for improved service provision in academic libraries are not an excuse for academic libraries to ignore the benefits on the provision of services and shy away from engaging in knowledge sharing. Academic libraries and librarians need to progressively change their standards, values, and practices to be able to encourage knowledge sharing among their employees (Awodoyin et al. 2016:13; Mushi 2009:57).

2.11.5 Strategies to encourage knowledge sharing among staff for improved service provision in academic libraries

The rationale behind knowledge sharing among academic library staff and within the academic library environment, is to foster innovation and enhance service provision (Chipeta 2018:219). Hence, there is a need to develop and implement strategies, which are considered to encourage and facilitate knowledge sharing in the library. Knowledge sharing strategies are approaches and deliberate plans adopted to facilitate and support knowledge sharing in an organisation and among individuals (Ali & Khan 2017:73; Dikotla 2016:266; Potocnik, Jurisic & Sneider 2016:4). These strategies evolve around the various tools, factors, and policies that support knowledge sharing (Shannak, Masadeh, Al-zubi, Obeidat & Alshurideh 2013:146). Strategies to encourage knowledge sharing according to literatures, are of two dimensions, namely the personalisation strategy and the codification strategy (Ali & Khan 2017:73-76; Agarwal & Islam 2015; Dewah & Mutula 2016:367; Hoong, Lee & Lim 2015: 295; Johansson, Moehler & Vahidi 2013:298; Montcalm 2013).

The personalisation strategy is concerned with facilitating knowledge sharing through direct contact or face-to-face interactions, such as CoP, meetings, mentorship, apprenticeship, group discussion, job rotation, job shadowing, storytelling, and coaching (Ali & Khan 2017:76; Dewah & Mutula 2016:373; Dikotla 2016:100; Montcalm 2013; Nazim & Mukherjee 2012). This strategy greatly relies on employees' individual relationships and networks, created to facilitate knowledge sharing, and is most relevant when sharing tacit knowledge (Ali & Khan 2017:76; Montcalm 2013). The codification strategy is about the use of technologies to facilitate knowledge sharing among employees, and consequently, knowledge storage (Johansson et al. 2013:299). This strategy tends towards the development and implementation of sophisticated

and relevant ICT tools and infrastructures, such as the internet, intranet, and web 2.0 tools, which support knowledge sharing among employees (Ali & Khan 2017:75; Montcalm 2013). This form of strategy is adequate to share explicit as well as tacit knowledge, and store such knowledge for the use of all employees (Dewah & Mutula 2016:367; Montcalm 2013). According to some literatures, both the codification and personalisation strategies can be adopted to facilitate knowledge sharing within an organisation (Ali & Khan 2017:76-77; Johansson et al. 2013:298; Montcalm 2013; Nazim & Mukherjee 2012; Parirokh et al. 2008:118-119). The codification and personalization strategies play a complementary role toward one another when combined to facilitate knowledge sharing within an organisation (Ali & Khan 2017:73; Johansson et al. 2013:301). However, the choice of which strategy to adopt is crucial to enhancing knowledge sharing, and should reflect the goals of the organisation, as well as what kind of knowledge is needed to upsurge performance and deliver services (Ali & Khan 2017:76; Dikotla 2016:9; Montcalm 2013).

Academic libraries have adopted the use of both the personalisation and codification strategies in order to facilitate knowledge sharing among their employees (Ali & Khan 2017:73; Muchaonyerwa & Mutula 2017:19; Nazim & Mukherjee 2012). According to Nazim & Mukherjee (2012) the types of strategies employed by academic libraries are both codification and personalisation, with a slight dominance of the codification strategy over the personalisation strategy. Other literatures have shown the dominance of the personalisation strategy, which is geared towards maximizing tacit knowledge over the codification strategy within the academic library (Muchonyerwa & Mutula 2017:19). This is because the complexity of the technological systems required to share knowledge in the personalisation strategy is less than that required for the codification strategy (Montcalm 2013).

Elements of the codification and personalisation strategies have been combined within the academic library in order to share knowledge among staff for better service provision and job performance (Anasi, Akpan & Adedokun 2014:363). However, adopting knowledge sharing strategies in the academic library should depend on the goals of the library, what knowledge sharing is set to achieve, and the employees, who are the knowledge sharing audience. According to Ajie (2019a) and Anna and Puspitasari (2013:4), knowledge sharing strategies

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within the academic library should be adapted to the library's condition and context, and staff members should be involved in developing and mapping such strategies, because successful knowledge sharing rely on the audience' participative and contributive role.

Job rotation, mentorship, group discussions, apprenticeship, and rewards are foremost of the personalisation strategies adopted by academic libraries in order to encourage knowledge sharing among library staff for increased job performances and service delivery to users. Muchaonyerwa and Mutula (2017:19) and Nazim and Mukherjee (2012) reported job rotation and mentorship as successful knowledge sharing strategies within the academic library. to enhance service delivery. According to Parirokh et al. (2008:118), academic library staff members have also specified other strategies to encourage knowledge sharing, such as sharing research projects, training programs, teaching methods, newsletters, group discussions, leadership and dedication of time, documenting experiences, publication of manuals, and knowledge sharing policies. Muchaonyerwa (2015:120), in the study about knowledge sharing strategies among academic librarians in KwaZulu-Natal, revealed that the strategies to encourage knowledge sharing include management support, which will help to create a knowledge sharing culture by continuously sensitising staff on the benefit of knowledge sharing to academic library operations. The study also indicated that a reward system, job rotation, and appropriate knowledge sharing policies and resources are strategies adjudged to encourage knowledge sharing among academic library workers in order to improve performance and service delivery.

Similarly, Anasi et al. (2014:363), indicated that encouraging knowledge sharing at all levels and unit, the allocating of weights to staff members' knowledge sharing as part of their performance appraisals, the establishing of appropriate reward systems, the capacity building in ICT, and the availability of ICT infrastructures are all strategies which encourage knowledge sharing among academic library staff. Staff development and the availability of adequate knowledge sharing resources, such as ICT infrastructures and tools, are strong strategies with which to improve knowledge sharing among academic library staff for better service provision. According to Muchaonyerwa and Mutula (2017:18), staff development deals with the weakness in job performances, and instils confidence in staff members so that they can share knowledge.

The provision and availability of ICT infrastructures and tools is an effective strategy with which to encourage knowledge sharing in the library. This is also indicated in the study of Muchaonyerwa & Mutula (2017:18). The intranet, telephones and internet, including email and other web 2.0 tools, such as blogs and WhatsApp, are the common tools integrated into an academic library's ICT strategies in order to encourage knowledge sharing among its staff (Ali & Khan 2017:77; Nazim & Mukherjee 2012). These tools enable easy and effective knowledge sharing, among academic library staff and as well as the storage of tacit knowledge for the benefit of the entire staff towards quality service delivery (Ali & Khan 2017:76-77; Nazim & Mukherjee 2012). The use of these tools for knowledge sharing are the staff members' first choice due to the fact that these technologies have been around for decades and library workers have become familiar with their functionality (Nazim & Mukherjee 2012).

There is no one single successful strategy to encourage knowledge sharing among academic library staff (Anna & Puspitasari 2013:4). Academic libraries should adopt the elements of both the codification and personalisation strategies in order to encourage knowledge sharing among staff. Ali and Khan (2017:73) opined that both the codification and personalisation strategies encourage and facilitate knowledge sharing within the academic library, because both strategies offer several kinds of benefit towards effective knowledge sharing. Academic libraries must choose strategies by determining different strategies not one particular strategy, in order to make sure that the chosen strategies reflect and meet the purpose of knowledge sharing in the library (Anna & Puspitasari 2013:4).

2.12 THEORETICAL FRAMEWORK FOR THE STUDY

A theoretical framework is significant to a research study, because it acts like a structure that supports the entire research process (Creswell & Clark 2017:43; Leedy & Ormrod 2020:66). A theory or a model is the vital unit of a theoretical framework that guides the research questions, asked and answered in a study and helps to explain the researcher's expected study outcome (Creswell & Creswell 2018; Creswell & Clark 2017:44). Lloyd (2010:148), Neuman (2014:57) and Patten & Newhart (2018:8) defined the term theory as a scheme of concepts and explanations that are unified and systematised in order to clarify a phenomenon. In other words, theories are framed to aid the researcher in the explanation, prediction, understanding, or even in the challenging of suppositions in existing knowledge in order to widen the precincts of knowledge (Creswell & Clark 2017:44; Leedy & Ormrod 2020:66; Patten & Newhart 2018:8).

Leedy and Ormrod (2020:66) defined a theoretical framework as a set of existing or newly formulated theories and philosophies, which when combined could assist in understanding the action and reaction, as well as the relationship within a studied phenomenon. Theoretical frameworks can be formed by augmenting the arguments and assumptions of two or more theories to afford a wider perspective for anchoring a research process (Lloyd 2010:247; Neuman 2014:85).

This study is built on two theories in the field of knowledge sharing. The knowledge creation theory of Nonaka and Takeuchi (1995) which is commonly known as the socialisation, externalisation, combination, and internalisation (SECI) theory, and the social exchange theory (SET). The SET was integrated into the SECI theory to better explain the research perspective. This means that the SECI theory is the predominant theoretical framework used to understand the process of knowledge creation and reuse in order to sustain knowledge sharing for improved service provision. This theoretical combination in research, is a form of triangulation, which is referred to as the theoretical triangulation. Theoretical triangulation is the use of more than one theory in a single study, in order to refute or support findings since the different theories employed provides the researcher the opportunity to view the research problem through multiple lenses (Burau & Anderson 2014:266; Hussein 2009:3; Pitre & Kushner 2015:285). However, theoretical triangulation is only possible when the theories involved have at least, a minimal level of compatibility and are complementary to one another (Burau & Anderson 2014:279; Pitre & Kushner 2015:285). This means that the theories to be adopted and combined should be distintive but complementary, and relevant to the research at hand.

2.12.1. Organisational knowledge creation theory (SECI model)

The knowledge creation theory explains knowledge sharing as a continuous process. In this theory, tacit knowledge is converted into explicit knowledge, and vice versa (Mbugua 2018:16; Dikotla 2016:16). The theory enables a continuous process of creation, conversion, and reuse as individuals perform tasks and acquire new knowledge (Hislop, Bosua & Helms 2018:16). The knowledge creation theory was first proposed by Nonaka in 1991 and expanded on by Nonaka and Takeuchi in 1995 (Farnese et al. 2019:1; Virkus 2014:2). The theory has become the central framework for research studies on knowledge creation, knowledge sharing, knowledge transfer, knowledge codification, and reuse (Aurum, Daneshgar & Ward 2008;

Farnese et al 2019:1; Mikic, White & Razak 2009; Virkus 2014:2-3). The theory is popular in research for its focus, which is on studying knowledge creation processes holistically through knowledge conversion from one kind of knowledge to the other in order to generate quality novel knowledge (Farnese et al. 2019:2). Again, the theory also offers practical tools for assessing knowledge creation within an organisational context (Farnese et al. 2019:2).

Nonaka and Takeuchi based their theory on the two major types of knowledge, namely tacit and explicit knowledge (Nonaka et al. 1996:205; Nonaka 1994:14). They proposed four modes by which the two types of knowledge can be created and shared in an organisation. These four modes are socialisation, externalisation, combination, and internalisation (Hislop et al. 2018:10; Nonaka, Toyama & Konno 2000:8; Nonaka et al. 1996:205; Nonaka & Takeuchi 1995:62; Nonaka 1994:18). Hence, the theory is commonly known as the SECI theory, where 'SECI' represents the four modes' acronyms (Gourlay 2003:1).

According to Nonaka (1994:19), Nonaka and Takeuchi (1995:62) and Nonaka et al (1996:206) socialisation processes involve transferring tacit knowledge, and converting tacit knowledge into tacit knowledge, through observations, when working with more skilled and knowledgeable people. It is the conversion of one's tacit knowledge into that of another, which occurs from the sharing of experiences between people (Menolli et al. 2015:292). Externalisation is the process of converting tacit knowledge into explicit (documented) knowledge (Nonaka 1994:19; Nonaka & Takeuchi, 1995:64). It is the process of documenting and verbalising tacit knowledge for easy access (Hislop et al. 2018:12). This process is important to any organisation, but a difficult knowledge conversion process (Karadsheh, Mansour, Alhawari, Azar & El-Bathy 2009:73; Nonaka & Takeuchi 1995:64).

In the combination mode explicit knowledge is converted into explicit knowledge, that is, explicit knowledge is created using a different existing coded knowledge (Nonaka & Takeuchi, 1995:67; Nonaka et al 1996:207; Siadat et al 2012:848). The combination mode, which is considered the simplest form of knowledge conversion, allows for several documents and databases to be reconfigured and developed into organisational knowledge, leading to knowledge sharing within and outside the organisation (Nonaka 1994:19; Siadat et al 2012:848). Employees and individuals exchange and combine knowledge via meetings,

groupware, the exchange of documents, and phone conversations (Nonaka et al 2000:10; Zwain, Teong & Othman 2014:5). The last mode, which is internalisation, involves the conversion of explicit knowledge into tacit knowledge, to the traditional concept of learning (Nonaka 1994:19; Nonaka & Takeuchi 1995:69; Nonaka et al 1996:208). This is when individuals acquire tacit knowledge by internalising explicit knowledge, which means 'learning by doing' (on the job) or 'trial and error' using explicit sources (Farnese et al. 2019:3; Hislop et al. 2018:12). Here, employees and individuals make use of explicit knowledge through listening to and reading manuals or documents about their tasks and organisation, and reacting to them in order to create valuable tacit knowledge and enrich their knowledge base (Nonaka et al. 2000:10).
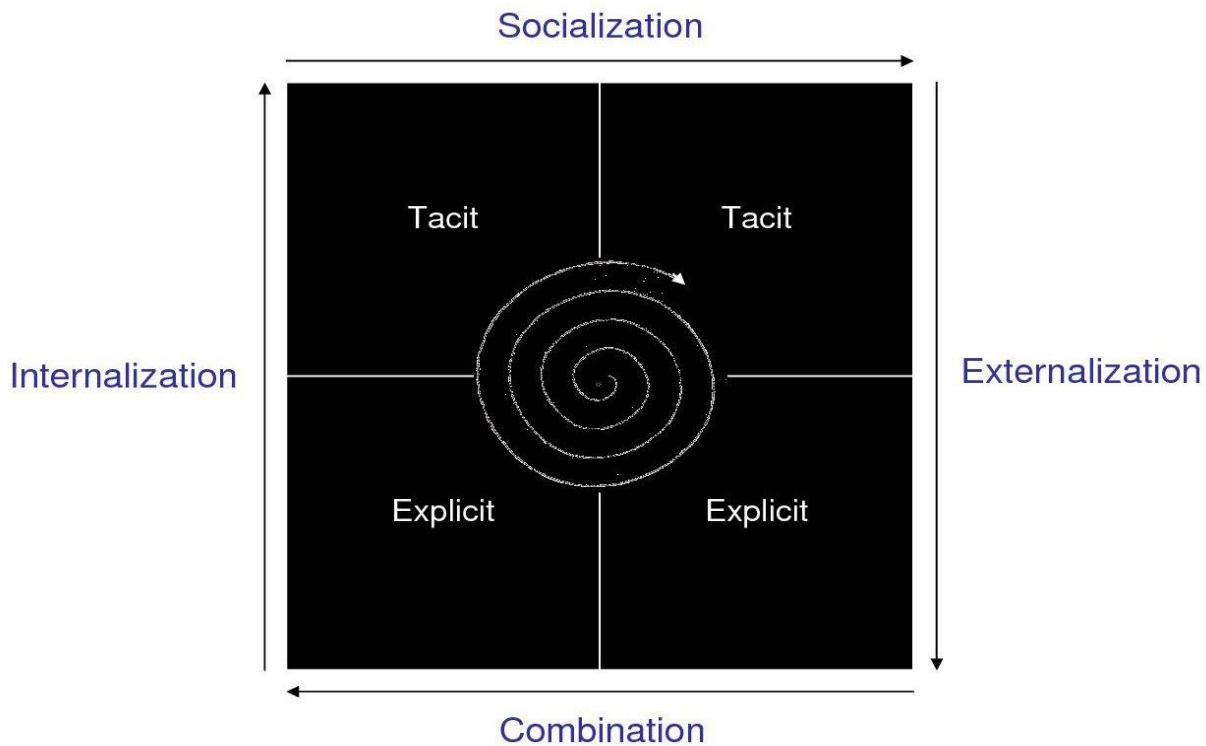
Figure 2.2. The knowledge spirals as illustrated by Nonaka and Takeuchi (1995:71)

The SECI theory guides this study in order to understand the knowledge sharing practice, encouragements, and sustainability among staff at the DELSU library, Abraka for improved service provision. Based on the reviewed literature, this theory is considered useful for this study in exploring how knowledge is created, documented, and shared among staff at DELSU library, Abraka. The SECI is also relevant in examining the tools and factors of knowledge

sharing in the DELSU library, Abraka. According to the reviewed literature, the SECI theory enables a continuous process of creation, conversion, and reuse. This is because it appreciates the dynamics surrounding knowledge and knowledge sharing, and elucidates how knowledge can be generated and shared through the four modes of socialisation, externalisation, combination, and internalisation.

In this study, socialisation explores how the tacit knowledge of one staff member is converted and transferred into new tacit knowledge for another staff member at the DELSU library, Abraka. It is indicated in the reviewed literature that the socialisation mode ensures the flow of tacit knowledge within the library. This can be achieved through observations, formal meetings, job rotation, and training programmes, especially for new staff members.

Externalisation in this study clarifies how the DELSU library, Abraka converts and codifies its staff members' tacit knowledge into explicit knowledge, for easy access and use by all staff. This tacit knowledge can be converted or codified into documents, such as reports, manuals, minutes, memos, authority files or policy papers, for future reference, which could aid the provision of services. An example of this is a common practice often found in the reference and cataloguing and classification sections of the academic library, where staff members document specific knowledge related to daily tasks and procedures, by formulating a document often referred to as the authority file for future reference. This authority files can then be consulted by any staff who find them relevant, to carry out tasks when needed. In summary, externalisation in this study helps to investigate how DELSU library, Abraka converts its staff individual knowledge into an organisational knowledge that is, explicit knowledge.

Combination is the simplest form of knowledge sharing, where explicit knowledge is converted into a more complex and systematic explicit knowledge, using different forms of explicit knowledge. This basically explains how explicit knowledge is categorised and reconfigured in order to form a more valuable and defined explicit knowledge. An example of this is the formulation of annual reports, where the university librarian, who is the head of the library, collects reports from the various section heads in order to form an annual report. This annual report is then disseminated to the entire staff as new knowledge. For this study, combination helps to examine how the DELSU library, Abraka categorises and reconfigures the different captured explicit knowledge into a more valuable, explicit knowledge, which can be used by all the library's staff.

Finally, internalisation in this study will help to examine how the staff at the DELSU library, Abraka, incorporate or utilise explicit knowledge in their daily tasks, thereby creating new tacit knowledge in the process. According to Nonaka (1994:19), internalisation is the conversion of explicit knowledge into tacit knowledge, to the traditional concept of learning. This is when individuals acquire tacit knowledge by incorporating explicit knowledge, this means 'learning by doing' (on the job) or 'trial and error' using explicit sources (Farnese et al. 2019:3; Hislop et al. 2018:12). The implication of internalisation in the DELSU library, Abraka is that when the staff members are exposed to explicit knowledge on library practices or operations, they incorporate this in their daily tasks, and form new individual tacit knowledge in the process, which will eventually become a valuable asset to the entire library. For example, in job orientation programs, new staff members can assume new roles by ordinarily studying documents or task manuals, and reflect upon them, in order to form their own new knowledge, or boost their existing knowledge. Overall, these training programs provide opportunities to employees to assimilate new knowledge into their own intellectual base, and enhance their professional expertise, allowing for the creation of new tacit knowledge (Farnese et al. 2019:3).

2.12.2. Social exchange theory (SET)

The Social Exchange Theory (SET) was developed by the sociologist George Hormans in 1958 (Maiga 2017:11). This is a broad and influential theory that is widely used in the field of social sciences to study the dynamics of exchanging substantial and symbolic information and other resources among different groups and individuals in a work environment (Cropanzano, Anthony, Daniels & Hall 2017:1). The theory was developed to explicate interaction and communication, as well as their influences (Muchaonyerwa 2015:37). For this theory, the emphasis is on trust, commitment, social interactions, and reciprocity as its strength, and these are indispensable among the employees in an organisation (Maiga 2017:15).

Basically, the SET describes the exchange of valuable resources between individuals, with expected benefits for those involved (Razak, Pangil, Zin, Yunus & Asnawi 2016:550). This theory is aimed at maximising the benefits of exchange while tending to minimise the cost of exchanging valuable resources with others (Razak et al. 2016:550; Cyr & Choo 2010:842). The benefit here is not necessarily tangible since the SET is primarily concerned with the principle of reciprocity (Cyr & Choo 2010:827; Razak et al 2016:550). The reciprocity is that exchange

occurs on the premise that people who exchange resources receive rewards as a recompense, at the time or in the future, and those who receive these resources find them valuable (Cyr & Choo 2010:842; Razak et al 2016:550).

The SET for the study of knowledge sharing explains knowledge sharing as a social exchange where individuals engage in, and exchange, knowledge based on a subjective cost-benefit analysis (Bock, Zmud, Kim & Lee 2005; Cropanzano et al. 2017:2; Dikotla 2016:67). According to this theory, knowledge sharing is a social interaction, therefore, trust and commitment are critical elements in knowledge sharing (Maiga 2017:15). The principle of the SET for knowledge sharing also includes reciprocity, where employees share their knowledge with colleagues with trust, and an expectation to either receive the same exchange in future or some benefits (Jinyang, 2015:172). The SET encapsulates that individuals, engaged in knowledge sharing, benefits from it since the sharer are rewarded for sharing knowledge, which is likely shared with perceived individuals in need of it (Razak et al. 2016:550). Employees assess the apparent proportion of gains to costs of sharing their knowledge, and anchor their decisions on the expectancy that it will be valued and bring about social incentives, such as gratitude, admiration, reputation or even tangible incentives (Razak et al 2016:550-551).

According to reviewed literature, the SET explains knowledge sharing as a social interaction, basically about people with knowledge making a decision to avail such knowledge to others who may need it for a defined benefit. The SET was adopted for this study in order to help understand the inspirations and motivations of staff at the DELSU library, Abraka, to share their knowledge among colleagues. The SET also helped in situating the benefits of knowledge sharing on the provision of library services in DELSU library, Abraka. For the employees of the DELSU library, Abraka, knowledge sharing becomes the exchange of information or instructions on library practices, policies, and user needs, for the purpose of better service provision to the library users. Furthermore, the use of this theory will enhance the transfer of essential knowledge, relevant to library service delivery, to appropriate individuals, since employees will only engage in subjective cost-benefit knowledge sharing interactions.

The SET for this study also provides an understanding of factors that motivate knowledge sharing among staff at the DELSU library, Abraka. According to this theory, knowledge

sharing occurs when there is trust and commitment between the participants and the perceived benefits. It posits that people endeavour to interact and share knowledge when they know that they can obtain something in return, and that they are likely to develop a relationship with one another (Muchaonyerwa 2015:37). Finally, the SET is relevant to this study because it outlines how knowledge sharing will take place among staff at the DELSU library, Abraka, for the benefit of improved library service provision.

2.13 OVERVIEW OF THE LITERATURE REVIEW.

From the reviewed literature, a hypothetical model plan was developed to guide the study, showing the relationship between knowledge sharing and the provision of academic library services. The assertion is that the staff at the DELSU library, Abraka, possess diverse knowledge on library practices and operations. Consequently, the more these staff engage in effective knowledge sharing in order to share knowledge, especially their own individual knowledge, the better they become as individuals, including their overall performance in library operations. Better staff performance in library operations will therefore lead to improved service provision in the library. This view is supported by Dalkir (2011) who stated that an acknowledgement of the importance of knowledge, the relationship between tacit and explicit knowledge, knowledge sharing, and its components in general, will result in long term performance improvement and competitive advantage within a given academic library. Effective knowledge sharing refers to the consideration of the factors that influences knowledge sharing positively and negatively. These considerations should be made in order to adopt the critical success factors of knowledge sharing, and discard or deal with those factors that act as barriers to knowledge sharing. It also refers to the due application of knowledge sharing tools, which have been deemed successful in sharing knowledge. Based on the theoretical background of the study, the view is that the DELSU library, Abraka and its staff members, can adopt a knowledge sharing culture in order to create and share knowledge among colleagues for the benefit of improving library service provision in the library.

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                    │      Provision        │
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│   Knowledge on:     │                         │     Task     │
│                     │                         │ Performance  │
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│   owner      │   │                            │   │  receiver    │
│              │   │ Integration of knowledge   │   │              │
│              │   │ sharing facilitators:      │   │              │
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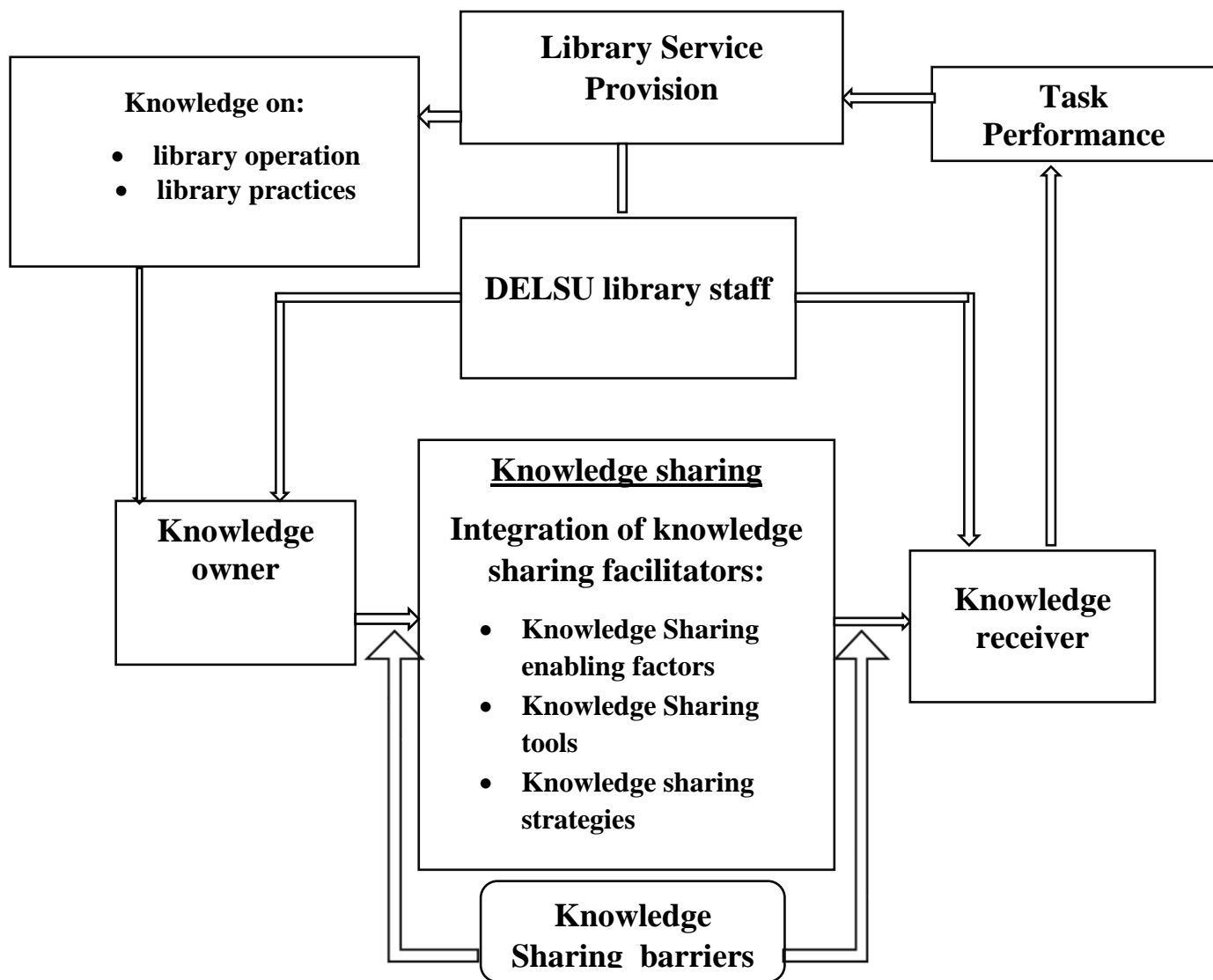
Figure 2.3. Hypothetical study model plan guided by the literature review and theoretical framework

2.14. SUMMARY OF THE CHAPTER

This chapter conceptualised the review of literatures in relation to the objectives of the study in a bid to provide answers to the research questions. The literatures were reviewed on academic libraries, and its roles and services, the knowledge concept, the types of knowledge, the knowledge management concept, knowledge sharing, the knowledge sharing tools, the factors influencing knowledge sharing, the knowledge sharing barriers, as well as knowledge sharing in academic libraries for improved service provision. The discussion about knowledge sharing among academic library staff, for the improvement of service provision, included the tools, factors, barriers, and strategies needed to encourage knowledge sharing. The reviewed

literatures showed a significant positive relationship between knowledge sharing among academic library staff and the provision of services. This chapter also discussed the theoretical framework of the study, which was hinged on two theories, namely the SECI theory and the SET. The next chapter outlines and rationalises the research methodology adopted in this study in order to achieve the research objectives.

CHAPTER THREE
RESEARCH METHODOLOGY
3.1. INTRODUCTION

The previous chapter reviewed and discussed relevant extant literatures to this study. According to Taylor, Bogdan and De Vault (2015:3), research methodology discuss the plan and method adopted by researchers when approaching research problems, and attempting to answer research questions. Research expectations, interest, and purpose form the choice of research methodology, which will be employed in the investigation of a research study (Taylor et al. 2015:3). For Rajasekar, Philominathan and Chinnathambi (2006:5), research methodologies are ways through which a researcher methodically explores and finds solutions to research questions. It is a science of reviewing the way research studies are carried out, which is basically strategic, systematic, and unbiased. Research methodologies entail investigational studies, theoretic techniques, as well as statistical and numerical schemes (Rajasekar et al. 2006:5). In simpler terms, research methodologies are the building blocks to scientific research initiatives, explaining the "how" in building organised knowledge through research (Patten & Newhart 2018:3).

This chapter discusses and explains this study's research methodology. The highlights of this chapter are the research approach, research design, data collection methods, data collection instruments, population, sampling, and sample size. Issues of research validity, reliability and trustworthiness, and ethics are also explained and dealt with in this chapter.

3.2. RESEARCH APPROACH

Research approaches are strategies and procedures used in a research study (Creswell & Creswell 2018:3). They span all the way from the steps of broad assumptions to comprehensive methods of data collection, analysis, and interpretation (Creswell & Creswell 2018:3). These strategies involve numerous decisions, which are taken in order to adequately study a research problem. The researcher's ideology of the research problem, the followed research procedures, and the specific research methods of data collection, analysis, and interpretation all inform a study's research approach (Creswell & Creswell 2018:3). There are three basic research approaches, namely quantitative, qualitative, and mixed method (Creswell & Creswell 2018:3; Creswell 2014:3; Leedy & Ormrod 2013:90-98; Leedy & Ormrod 2020:28-29).

Creswell (2014:4), Leedy & Ormrod (2020:28) and Rajasekar et al. (2006:9) defined the quantitative research approach as that which involves quantitative measurements by using numbers to examine what, where, and when of research problems, and the relationship between research variables. This approach in research measures one or more variables and adopts a statistical analysis with the outcomes of this analysis and research study typically presented in a statistical format (Creswell & Creswell 2018:4; Creswell 2014:4). The assumptions of this approach are to deductively test theories while avoiding research bias, monitoring counterfactual explanations, taking a broad view, and replicating findings (Creswell & Creswell 2018:4; Patten & Newhart 2018:22).

The qualitative research approach is an inquiry approach appropriate for exploring and understanding a complex phenomenon (Creswell & Creswell 2018:4; Leedy & Ormrod 2020:28). The researcher asks the research participants general questions, collects the all-inclusive views of the participants in the form of words, and thematically analyses the collected data (Creswell & Creswell 2018:4). This research approach does not usually make use of numbers, but is descriptive and probing by nature (Rajasekar et al. 2006:9). It explores the why and how of research problems with the application of reasoning and use of words, as opposed to numbers (Rajasekar et al. 2006:9).

The mixed method research approach, on the other hand, exists in between the quantitative and qualitative approaches (Creswell & Creswell 2018:3). This is because it involves, within a single study, the application or integration of both the quantitative and qualitative research approaches (Creswell & Creswell 2018:3; Leedy Ormrod 2016:329; Leedy & Ormrod 2020:337). This research approach allows researchers to combine elements of both the quantitative and qualitative research approaches, with the determination to understand and corroborate the breadth and depth of the research study (Creswell 2014:218). According to Leedy and Ormrod (2016:104) and Hussein (2009:3) the mixed method research approach involves the use of two or more research approaches to address a single research problem, as well as the practice of data or methodological triangulation. Triangulation is the term used in research to describe the application of more than one research approach and methods in order to study a single phenomenon or research problem (Creswell 2014; Creswell & Creswell 2018;

Neuman 2014:166). Methodological triangulation is a form of triangulation (Hussein 2009:4). Methodological triangulation, in research, describes the use of more than one data collection method to collect, analyse, and interpret various data types in a study for the purpose of improving the validity of the research (Hussein 2009:3; Stangor 2011:68). However, according to literature, the mixed method research approach has evolved past just being about triangulation (Creswell & Creswell 2018:14; Creswell & Clark 2017; Patten & Newhart 2018:177). Creswell & Clark (2017:2) and Patten and Newhart (2018:177) explained that mixed method is the integration of quantitative and qualitative research elements throughout the research stages, with neither of the adopted methods integrally linked to any particular inquiry paradigm. Similarly, Creswell & Creswell (2018:4) explained the mixed method research approach as an approach that involves the collection of both quantitative and qualitative data, the integration of the two types of data, and the application of separate designs that may include theoretical backgrounds and philosophical expectations. The core assumptions for adopting the mixed method research approach is that it addresses complicated research problems, and generates richer data, compared to those obtained using any one of the methods alone (Creswell & Creswell 2018:4; Yin 2018).

The mixed method research approach, which is made up of both the quantitative and qualitative research approaches, is used to cater for the weaknesses of one approach over another (Creswell & Clark 2017:8; Babbie 2016:277; Cooper & Schindler 2011; Creswell 2014:217; Creswell & Clark 2017:8). This research approach provides the viewpoint of a heightened confidence in the research process (Yeasmin & Rahman 2012:155). This is because the quantitative and qualitative approaches provide different perspectives on the research problem and each has its weaknesses and strengths. According to Creswell & Clark (2017:7-8), qualitatively studying a few individuals may lead to loss of the ability to generalise research outcome on many. And, to quantitatively examine many individuals will possibly, diminish the understanding of any of the individuals. Hence, the integration of both quantitative and qualitative research approaches helps to offset the weakness of one by the strength of the other and give a more complete understanding of the research problem than either approach by itself (Creswell and Creswell 2018:14; Creswell & Clark 2017:8; Leedy & Ormrod 2016:100; Yin 2018).

There are three standpoints or models on which a researcher can view or apply the mixed method research. There is the convergent model which indicates the application of both research approaches concurrently in order to complement one another, and get an in-depth understanding of the research problem. This model permits the collection of different quantitative and qualitative data sets, simultaneously or at minimum intervals, the separate analysis of data, and the integration of information gathered during the research outcome's overall interpretation or discussion. There is also the explanatory sequential model where the quantitative research approach informs the qualitative one. The quantitative data set is first collected and analysed in order to plan for the collection of qualitative data as a follow-up. Then the findings from both data sets are connected to each other. The last model, which is the exploratory sequential model, is the reverse of the explanatory sequential model. In this model, a qualitative data set is first collected and analysed after which the results inform the quantitative data collection as a follow-up. The findings in this model are also connected to each other during the interpretation (Creswell & Creswell 2018:15; Creswell & Clark 2017:64-66; Creswell 2014:219-227; Leedy Ormrod 2016:331-332; Leedy Ormrod 2020:293-298; Patten & Newhart 2018:177-179).

This study adopted a 'QUAN → qual' mixed method research approach, also referred to as a multimethod research approach (Creswell & Creswell 2018:14; Creswell 2014:217). The notation 'QUAN → qual' signifies the explanatory sequential mixed method research approach, where the quantitative research method is dominant and informs the qualitative research phase (Creswell & Clark 2017:63; Leedy Ormrod 2016:332-333; Leedy Ormrod 2020:294-295). For this study, the quantitative and qualitative phases occurred in sequence. The quantitative phase was conducted first, followed by the qualitative phase. This means that an explanatory sequential mixed method research approach was adopted, where data was collected sequentially, analysed and interpreted separately, after which conclusions and recommendations were drawn from both findings. The decision to apply the mixed method approach in this study was inspired by the kind of research questions and required data. The choice of the mixed method research approach was also prompted by the goal of the mixed method approach that enables an in-depth study through the gathering of rich data, using more than one research method, which the researcher is set out to also achieve.

According to Creswell and Clark (2017:918), Creswell and Creswell (2018:3), Dikotla (2016:128) and Leedy and Ormrod (2016:23), the choice of a research approach is completely subject to the nature of the research problem being studied and the type of data required. This study is seeking to explore the nature and extent of knowledge sharing among staff in improving the provision of library services at the DELSU library, Abraka. The concepts of knowledge sharing and academic library service provision, as well as the possible relationship between them, will be defined using a review of past literatures for a better understanding of the research problem. The main objectives of this research study are concerned with the two dimensions of 'Nature" and "Extent". Thus, "nature" which is the first dimension of the objective for this study can best be explored through a qualitative approach, whereas "extent" can be investigated through a quantitative approach. Kumar (2014:28) asserted that the use of a mixed method approach enhances research possibilities by offering the researcher a way to find answers to all of the research questions in a situation where multiple objectives need to be achieved from a study.

Several studies have successfully applied the mixed method research approach in order to provide answers and insights to research problems from different fields. The leading ones are in the field of social sciences and health sciences. Dikotla (2016) gave positive indications to the use of the mixed method research approach in his study on knowledge sharing as a means of improving service delivery in selected Limpopo municipalities, where he integrated qualitative and quantitative research approaches using a multiple data collection method in order to obtain data from respondents. Tahleho (2016) proved the success of the use of the mixed method research approach in a single study, when he integrated both quantitative and qualitative research approaches using questionnaires and interviews as data collection methods. This was done in order to investigate the relevance of knowledge sharing in the delivery of improved library services at the National University of Lesotho library. Again, Dei (2017:99) successfully adopted the use of the mixed method research approach, made up of quantitative and qualitative research approaches, in order to access knowledge management system implementations in Ghana universities. Dei's study employed questionnaires and interviews as data collection methods, and the collected data were analysed separately and then interpreted (Dei 2017:100). Also, Patel (2019), in his study "Planning and Implications of Social Media Tools to Provide Quality Library Services in Academic Libraries", successfully adopted the

mixed method research approach using questionnaires and interviews as data collection instruments.

Notwithstanding the success of the mixed method research approach, some of its challenges were also acknowledged. The major challenges of the mixed method research approach are the rigorous nature of the procedures involved, and the ability to adequately interpret results from both data sets and draw necessary inferences (Creswell 2014:222; Creswell & Clark 2017:13-14). In order to address these challenges, a step-by-step plan was carefully followed to collect both the quantitative and qualitative data, not minding the time consuming and rigoristic factors. Consequently, both data sets were separately analysed and interpreted, drawing inferences to each other in the final discussion, conclusion and recommendation.

In conclusion, the mixed method approach for this research not only enable an in-depth study of the research problem, but also ensures to some extent, the validity, reliability, and trustworthiness of the study (Creswell & Creswell 2018:14). (Creswell 2014:15) and Kumar (2014:28) opined that the application of the mixed method approach in a study enables the researcher to make use of more than one data collection method, which helps in the validation of the research results. However, a quantitative approach defines the main method of data collection for this study, while the qualitative approach seeks to provide a different and in-depth perspective of the research problem.

3.3. RESEARCH DESIGN

Research design refers to the strategy and method adopted when finding solutions to study problems, which provides specific directions for the research procedures (Creswell & Creswell 2018:11). Research design is useful when doing research because it comprises the framework of steps taken during the execution of a research study, to provide answers to the study's research problems, and deliver results for final data analysis, interpretations, and conclusions (Creswell & Clark 2017:51; Kumar 2012:94). Creswell and Clark (2017:51) defined research design as the procedures involved in collecting, analysing, and interpreting data in a research study. It is the deliberate schedule of the path a researcher will take in order to solve a research problem, including the data the researcher collects and the analysis conducted, in order to and

achieve the research goals (Leedy & Ormrod 2016:92; Leedy & Ormrod 2020:106). The aim of a research design is to understand, determine and describe people's situations, perceptions, principles, interactions and experiences (Leedy & Ormrod 2010:135; Leedy & Omrod 2020:107). There are a number of research design in use and available to researchers for research, they include the case study, the explanatory sequential, the exploratory sequential, the experimental, surveys, the phenomenology, the convergent, the transformative and the embedded research designs (Cook & Kamalodeen 2019; Creswell 2014; Creswell & Clark 2017; Creswell & Creswell 2018). For this study, the focus is on the case study research design embedded in a mixed method research approach. The rationale behind this choice is to ensure that the research focus is not undermined, and that, at the same time, rich data is gathered with more than one data collection instrument.

In a research design, case study refers to a plan which examines, in detail, a particular occurrence, with the use of a variety of data resources in their original setting (Cook & Kamalodeen 2019:9; May 2011:127). The goal is to deal with theory in relation to the experimental situation into an existing life condition (Cook & Kamalodeen 2019:9; May 2011:127). The case study research is designed to study a particular phenomenon or case within context, for either specified purposes or a specific purpose (Pickard 2013:101). Case study research design is investigative and descriptive in nature as it attempts to investigate and describe the studied case through comprehensive and in-depth data collection methods and analysis (Creswell & Creswell 2018:14; Raju & Schoombee 2014:28; Yin 2014:16). The case study could be a person, a character, a group, an organisation, a society, a decision, a process, an incident, or an event (Creswell & Creswell 2018:14; Pickard 2013:103; Punch 2009:119; Punch 2014; Tahleho, 2016:73; Yin 2018).

The case study research design is appropriate in a mixed method research approach, because it allows for the application of both quantitative and qualitative methods in a study in order to get a more realistic view of respondents (Bryman 2012; Salman, Mugwisi & Mostert 2017:28; Yin 2014; Yin 2018). This is because the case study and mixed-method research are not completely separate entities but rather, the borderline between them is penetrable, and fluid, permitting each to either lead, or support in a research study (Carolan, Forbat & Smith 2016:11). Yin (2014:16) and Yin (2018) point out that the principal advantage of a case study research design

is the concentration on a case, or a small amount of cases, from which a great volume of comprehensive information can be gathered, expending mixed methods and data sources. Yin (2014:16) further asserts that a case study research design is also useful to theoretical schemes, and not only to populations or cosmoses. In other words, the goal of the case study research design is also to develop and apply philosophies and investigative overviews, and not only for statistical presentation.

The case study research design within a mixed method research approach is employed in this study, with knowledge sharing among staff for improved service provision at the DELSU library, Abraka as the case study. According to Cook & Kamalodeen (2019:6-7), Creswell and Creswell (2018:15) and Yin (2018), the case study design can be adopted in a mixed method research approach in order to allow for a deductive case documentation, and to generate cases for further analysis. This type of research design is considered a complex research design in mixed method research studies, and is referred to as the mixed method case study research (MMCSR) design (Cook & Kamalodeen 2019:31; Creswell & Clark 2017:116). The MMCSR design is a type of design in mixed-method studies where the qualitative and quantitative data collection results are used to provide in-depth evidence for a case(s), or to develop cases for comparative analysis (Creswell & Clark 2017:116; Yin 2018).

The choice of the MMCSR design for this study is to ensure that the research focus is not undermined, and at the same time, gather rich data with more than one data collection instrument. The research focus is on knowledge sharing among staff at the DELSU library, Abraka for improved service provision. The case study research design was used to specifically and comprehensively study knowledge sharing among the staff for improved service provision at this particular research site. As previously discussed, an explanatory sequential mixed method research approach was adopted. Thus, data collection and analysis for both the quantitative and qualitative phases of the study occurred sequentially. Quantitative data was first collected and analysed by using descriptive analysis, and then qualitative data was analysed by using themes. The results from the data were interpreted alongside each analysis, and conclusions were drawn from both the quantitative and qualitative findings in order to provide answers to the research questions and to satisfy the research objectives.

Tahleho (2016:62) indicated a positive application of the case study research design in a mixed method research approach when he studied knowledge sharing at the National university of Lesotho library for improved service delivery. The case study research design was also successfully adopted by Chipeta (2018:88), with the application of a mixed method research approach, in order to study knowledge sharing strategies at university libraries in Malawi.

In conclusion, the MMCSR design was suitable for this study, because it enabled the researcher to investigate the unique and complex nature of knowledge sharing among staff at the DELSU library, Abraka for service provision in its natural context, using a mixed method approach. The design positively facilitated a more detailed and critical investigation into knowledge sharing among staff for the provision of improved library services at the DELSU library, Abraka. The design further guided the study recommendations and inferences drawn in peculiarity to the studied case.

3.4. POPULATION

The population of a research study refers to all of the study elements that need to be investigated by a researcher in order to achieve the research objectives or outcomes (Pickard 2013:60). The study population is the study group from which the researcher draws a sample, and on which the result of a study is generalised (Connaway & Powell 2010:116; Neuman 2014:247). Also, Bhattacherjee (2012:65) defined research populations as the entire participants of a study, either items or people, that fit into the desired character the researcher seeks to examine. For this study, a census was taken on all of the 63 staff at the DELSU library, Abraka given that the population is small. Census, in research methodology, is a well-organised procedure used in quantitative research, where the entire research population is enumerated (Patten & Newhart 2018:89; Pickard 2013:111; Surbhi 2016; Williman 2016). In quantitative research, a census is appropriate when the size of the entire population is 200 or less (Israel 2018:2; Nardi 2018:41). The 63 staff members at the DELSU library, Abraka are categorised below, according to the information obtained from the staff record at the library's administrative unit:

Table 3.1. Study Population distribution

Categories	Numbers
Professional	12
Paraprofessionals	18

Non-professionals	33
Total	**63**

Source: The Administrative unit, DELSU library

3.5. SAMPLING AND SAMPLE SIZE

Sampling involves choosing a smaller amount or a subset of research participants from the entire study population. On the other hand, sample size, describes the selected amount from the entire study population, which has similar characteristics as the entire research population (Patten & Newhart 2018:89; Gravetter & Forzano 2018:31; Neuman 2014:246; Pickard 2013:59-60). Sampling, in research, is classified into probability and non-probability sampling (Babbie 2013:127; Cohen, Manion & Morrison 2011:153; Leedy & Ormrod 2020:200; Neuman 2011:195; Neuman 2014). Probability sampling is a sampling technique where all intended research participants share an equal possibility to be part of the sample size (Leedy & Ormrod 2020:200; Patten & Newhart 2018:90; Plonsky 2017:513). In contrast, the non-probability sampling technique is where the possibilty of the intended research participants being part of the sample size is unknown and unequal (Cohen et al 2011:153; Gravetter & Forzano, 2018:37; Leedy & Ormrod 2020:205; Patten & Newhart 2018:100). Stratified random samples, simple random samples, cluster samples, and systematic samples are types of probability sampling, which are employed in quantitative research studies. Non-probability sampling, which is employed in qualitative research studies, includes purposive, judgemental, and convenience sampling (Babbie 2013:129-135; Creswell & Clark 2007:113; Leedy & Ormrod 2020:2000-206; Neuman 2011:195; Neuman 2014; Patten & Newhart, 2018:89-102).

A census was conducted on all of the 63 staff at the DELSU library, which represents the sample size for the quantitative part of this study. This is to ensure that no one is left out, and that no view is isolated. However, the qualitative part of the study adopted purposive sampling. Hence, the heads of the library's seven sections, purposively constitute the sample size for the qualitative part of this study. The goal of purposive sampling is to sample research participants with a calculated approach in order to get a relevant sample size, which will help to provide answers to the research questions (Mosha 2017:144; Pickard 2013:64). Purposive sampling is described as the selection of sites or participants for a research study, which will best assist the researcher in obtaining proper knowledge of the research problem and are also willing to give considerations to, and share insights on, the subject being studied (Babbie 2013:128; Collins

2015:82; Pickard 2013:64). The use of purposive sampling in a research study is determined by the researcher's opinion and knowledge on participants who can provide the desired response to the research questions (Babbie 2013:128-129; Gravetter & Forzano, 2018:45; Leedy & Ormrod 2020:206; Patten & Newhart 2018:100; Vehovar, Toepoel & Steinmetz 2016:331). However, it is important for the researcher to explain the rationale used in carrying out the purposive sampling (Leedy & Ormrod 2020:206).

The purposively sampled section heads at the DELSU library, Abraka, provided more detailed and relevant data for the study since they are more involved in the policy and decision-making processes of the library, and their sections. They also have the responsibility of overseeing and ensuring the smooth running of activities geared towards service provision in their respective sections. Therefore, they were appropriate as the sample size for the qualitative part of the study. Purposive sampling has been successfully adopted as a sampling technique in research. Kiruki (2018:78) successfully employed the purposive sampling technique when she selected public university libraries for her mixed method research study "Information Service Provision for the People with Visual and Physical Impairments in Public University Libraries in Kenya". Purposive sampling was also successfully utilised by Tahleho (2016:66) in order to select a sample size of five library professionals at the National University of Lesotho library for the qualitative part of his mixed method research study on improving academic library services through knowledge sharing. He noted that these professionals were selected to give a more valuable response on questions regarding knowledge sharing and library operations and were able to do so. Purposive sampling is therefore considered an adequate and practical sampling technique for the qualitative part of this study.

3.6. DATA COLLECTION METHOD, INSTRUMENTS AND PROCEDURE

Data collection is defined as the process of gathering diverse data, which are significant to a study (Saunders, Lewis & Thornhill 2009:159). There are various data collection methods that may be used in a research study for the collection of relevant data. Babbie (2016:265-267) and Neuman (2014:195) mentioned questionnaires, observations, interviews, and records for content analysis as the major data collection methods used when gathering data during research.

The mixed method research approach adopted for this study permitted methodological triangulation, also known as data triangulation. In research, methodological triangulation describes the use of more than one data collection method to collect, analyse, and interpret various data types in a study, for the purpose of improving research outcomes and validity (Hussein 2009:4; Stangor 2011:68). Methodological triangulation has two basic forms (Creswell 2014:239; Hussein 2009:4). One is the simultaneous or concurrent methodological triangulation where all the methods and processes of data collection, analysis, and interpretation occur at the same time, and the other is the sequential methodological triangulation where the outcome of one method is used to plan the other (Creswell 2014:240).

According to Creswell (2014:15), both quantitative and qualitative data collection methods can be used developmentally, because one helps to inform the other, and the other can provide complementary data in order to support the first one. The reason for this is to strengthen the weakness of any one of the chosen data collection methods (Babbie 2016:277; Patten & Newhart 2018:156). Also, Yeasmin and Rahman (2012:155) argued that the insufficiencies of one data collection method can be overwhelmed through the combination of two or more methods, therefore exploiting their singular strengths.

This study adopted a sequential triangulation method and employed the use of questionnaires and interviews as the data collection instruments, with questionnaires as the overarching instrument. Babbie (2013:230) and Neuman (2014:195), explained that questionnaires in a research study are sets of questions drawn out by a researcher for the purpose of relevant data collection, and could either be closed-ended or open-ended. Closed-ended questionnaires include both questions and corresponding pre-empted set of answers from which the respondent can choose from. The open-ended questionnaires often contain statements that requires the respondent to provide answers in their own words (Leedy & Ormrod 2016:167; Leedy & Omrod 2020:189). Questionnaires could either be served through mail (electronic or print) or in person (Leedy & Ormrod 2016:160; Leedy & Ormrod 2020:181; Rantlha 2017:21).

Interviews are explicit forms of conversation between two or more people, which is typically conducted by someone (the researcher or interviewer) who asks the interviewee or respondent questions in order to derive a response (Babbie 2016:267; Matthews & Ross 2010:219). They can be structured, semi-structured or unstructured (Leedy & Ormrod 2016:160; Leedy & Ormrod 2020:181; Patten & Newhart 2018:161). The structured and semi-structured interviews follow protocols, questions are pre-formulated using an interview protocol or interview guide. Structured interviews often contain further instruction on conducting the interviews. However, the semi-structured interviews allow for some flexibilty during the conversation, where further probing can be done, and questions can be rephrased for better flow. The unstructured interviews are more flexible, they do not require any formal protocol and questions are not necessarily fomulated in advance (Leedy & Ormrod 2016:160; Leedy & Ormrod 2020:181; Patten & Newhart 2018:161). According to Babbie (2016:267), Leedy and Ormrod (2016:160) and Saunders et al. (2009:351), interviews can take place in several forms, including a face-to-face, mail, or telephonically. Saunders et al. (2009:351) further stated that it is acceptable to alternatively conduct interviews via telephone or mail, provided the questions remains the same for all interviewees.

Questionnaires, the main data collection instrument, were used to gather the quantitative data, and interviews, a supplement data collection instrument, were used to gather most of the qualitative data for the study. Questionnaires were administered to all of the 63 library staff at the DELSU library, Abraka and interviews were conducted on the library's purposively sampled section heads. These processes occurred sequentially, based on the availability of the respondents and participants.

The questionnaires for this study contained mostly closed-ended questions and few open-ended questions. Semi-structured interviews were adopted with the aid of a developed interview guide. A semi-structured interview is an interview that is rather structured, but which allows new thoughts and questions to be conveyed or asked in the course of the interview, based on the interviewee's response (Babbie 2016:270; Dei 2017:106). The interview guide contained questions which afforded an opportunity to ask follow-up questions, which are relevant to the study, but not asked in the questionnaires (Patten & Newhart 2018:161).

For this study, the questionnaires were administered in person to those respondents who were available at the time of the data collection visit, with the assistance of the contact person provided by the library management, and via mail for those who were unavailable at the time. Interviews were conducted telephonically for all seven section heads, because they were not available at the time of the visit due to a conference, which was being held in the DELSU library, Abraka. It is noteworthy to mention that that the conference only coincided with the scheduled interview visit because it was not entirely organised by the library's management, and not that the interview visit was not properly scheduled prior to the reseacher's visit. Hence, the chief university librarian, who is the head of the library, suggested that the interview take place telephonically or via mail, and provided the details of the seven section heads. According to Babbie (2016:272), telephonic interviews are adequate in collecting research data, and offer the advantage of a detailed discussion of the research questions without any unease and discomfort for the interviewee. In this regard, the researcher used the developed interview guide, which contains questions that align with the research objectives, in order to conduct the interview. It is imperative to note that before the researcher could begin any form of data collection processes in the library, an ethical clearance certificate, duly obtained from UNISA for the study, was presented to the chief university librarian at the DELSU library, Abraka, who, in return, granted the permission to conduct research in the library, and subsequently collect the required data.

The objective that needed to be achieved when questionnaires were administered to the library's entire 63 staff members was to gather as much data as available, and to ensure that no view is left out in the investigation. Also, the interviews were conducted in order to gather more in-depth data on knowledge sharing, in relation to library operations, policies, and decision making service provision to users. The interviews afforded the participants the opportunity to provide their unbiased view on the subject. Saunders et al. (2009:318) stated that interviews assist the researcher in collecting in-depth data that are relevant to the research objectives. The choice of both questionnaires and interviews as data collection instruments for this study was to also guarantee that the research has extreme quality, in relation to its reliability, validity, and trustworthiness.

3.7 VALIDITY AND RELIABILITY

Validity and reliability are the two concepts on which the quality of quantitative research instruments, data analysis, and interpretation are judged in order to ensure the quality and consistency of the research outcomes (Babbie 2013:353; Creswell & Clark 2017; Creswell & Creswell 2018). These two concepts entail the process of ensuring that the research instruments are capable and consistent in measuring the research variables, and studying the research phenomenon as proposed (Babbie 2013:353; Odede 2018:122; Maiga 2017:86). In research, quantitative data collection instruments, such as questionnaires and data analysis processes, are often subjected to some form of scrutiny in order to ensure its validity and reliability (Neuman 2014:212).

Validity in quantitative research examines the extent to which the data collection instrument accurately measures the research concept (Babbie 2013:353; Neuman 2014:215; Sarantakos 2013:99; Thatcher 2010:125). A research instrument should feature research questions that measure the identified research problem or research phenomenon in order for it to be judged valid (Odede 2018:123). The goal of validity in research, therefore, is to determine and ensure the truthfulness and accuracy of research processes in investigating a research problem, and, in the end, the quality of the research outcome.

Reliability is the consistency of the research instrument in measuring the research concept in order to ensure that the research outcome remains stable, even if the same process is repeated under the same circumstances (Babbie 2013:353; Creswell 2014:201; Lodico, Spaulding & Voegtle 2010:93; Neuman 2014:212). The ability of a research instrument to repeatedly maintain consistency under the same research representation, dictates the quality of the collected data, the interpretation of data, and the outcome of the research in general (Leedy & Omrod 2016:116-117; Odede 2018:121; Rubin & Babbie 2008:180). In other words, reliability is when a research instrument yields the same research outcome by gathering the same data from the same, or similar, data source, and in the same condition, but at different times.

According to Leedy and Ormrod (2016:117) and Creswell and Clark (2011:239), achieving validity and reliability in research involves the application of strategies that deal respectively

with the prospective concerns in data collection, data analysis, and data interpretations. Lodico et al. (2010:93) argued that for a research instrument to have value, it must be seen and declared soundly valid and reliable to the research study. Also, the pre-testing of research instruments, such as questionnaires, has been very effective in achieving sound validity and reliability in quantitative research studies (Krosnick, Lavrakas & Kim 2014:427).

For this study, measures were employed to ensure the validity and reliability of the quantitative research instrument, which are the questionnaires. Firstly, the questionnaires consist of questions which centre on the research objectives, and all the administered questionnaires have the same questions for all the respondents. The content of the questionnaires was judged as valid by the research supervisor, who duly guided the researcher to making sure that the research questions align with the research objectives. Secondly, a pre-test of the questionnaires was carried out on 20 of the 63 research respondents in order to ensure the reliability and validity of the instrument, and to make sure that the questions were understood. According to Majid, Othman, Mohamad, Lim and Yusof (2017:1076), the pre-testing of research instruments, like the questionnaires, is done to ascertain the appropriateness of the questions, to give the researcher a view of the expected outcome, and to provide suggestions on the viability of the research. The pre-testing process of the questionnaires was done via an electronic platform during the period of June 2019. Concepts were duly explained where they were misunderstood or not properly understood, and eventually simplified in the questionnaires later administered for the actual data collection. Thirdly, the technique employed in analysing the collected data was the same for all the questions in the questionnaires. Lastly, the use of more than one data collection method in the search for answers in this study, which resulted to a methodological triangulation, also gave credence to the entire research processs and outcome (Leedy & Ormrod 2016:106).

3.8. TRUSTWORTHINESS

Trustworthiness is the applicable term used in order to describe the quality measure of a qualitative research process, and its outcomes (Creswell & Clark 2017:14; Denzin 2009; Gordon & Patterson 2013; Pickard 2013). Creswell and Clark (2011:239) mentioned that in order to achieve quality research in a mixed method research study, the researcher must outline strategies that correspondingly, address the possible concerns in data collection, data analysis,

and the interpretation processes that could compromise the incorporation of the quantitative and qualitative methods in the study, and the inferences made from such an integration. The researcher is therefore obliged to address the issue of trustworthiness regarding the qualitative data collection instrument, the interviews, employed in this study. Trustworthiness is the extent to which the processes of data collection and data analysis, and the outcomes of such an analysis, are believable and realistic to the real world (Clow & James 2014:315). In determining the trustworthiness of a qualitative research, researchers use credibility, dependability, transferability, and confirmability as the indicators (Neuman 2014; Pickard 2013; Yin 2014; Yin 2018).

Credibility, which is equivalent to internal validity in quantitative research, refers to the truthfulness of the research outcomes, and the extent of confidence that can be placed on the research findings (Leedy & Ormrod 2016:313; Makhubela 2017:56; Rule & John 2011). Dependability, which is equivalent to reliability in quantitative research, refers to the consistency of the researcher's research approach, as well as the stability of findings over time and across varied sites and schemes (Chilisa 2012; Makhubela 2017:56). Transferability, which is equivalent to external transferability in quantitative research, refers to the extent to which the findings of a qualitative research study are applicable to other situations or contexts with different respondents (Mhlongo 2018:100; Makhubela 2017:56). Confirmability is concerned with demonstrating that the findings and interpretations are not the mere imaginations of the researcher, but the conclusions and assumptions drawn from actual data collected during the course of the study (Makhubela 2017:56).

Saunders et al. (2009:156) emphasised the significance of trustworthy and credible research findings, and maintain that the researcher is expected to do their utmost best in lessening the possibility of arriving at inaccurate research findings. Coghlan and Brydon-Miller (2014:691) posited that rigorous research processes, that is, thoroughly and carefully justified findings, are thought trustworthy by the research audience and community.

In order to ensure the trustworthiness of the data collected through the interviews, an interview guide, subject to the research objectives and the supervision of the research supervisor, was developed. This helped to guarantee that similar interview questions were put through to all the interviewees. This measure also ensured the consistency of the data collection instrument. The developed interview guide was then pre-tested on three of the seven participants during

the period of August 2019 for the qualitative aspect of the study in order to determine the viability of the interview guide. The pre-testing of the interview instrument assisted in developing a rapport with the research participants. It also helped the researcher to strengthen interviewing skills, and to gain experience in conducting in-depth, semi-structured interviews (Majid et al. 2017:1076). The participant's understanding of the interview questions was also determined by the pre-test. In this regard, they were affirmative to the understanding of the interview questions. However, the researcher further reviewed the research questions where necessary and added more questions, which helped to satisfy an additional two of the research objectives.

Furthermore, in order to ensure the trustworthiness of research findings, the interview sessions were recorded with the permission of each of the interviewees, which were then transcribed for data analysis and interpretations. Greef (2011:259) and Saunders et al. (2009:339) stated that the use of a recording device during an interview is acceptable, if the interviewer (researcher) first asked the interviewees' (respondents') permission. They further explained that a recording in an interview is done in order to avoid unethical compromises, and to consequently yield trustworthy data. Driscoll (2011:165) posited that the use of recording devices during research interviews eliminate the bias that may occur when researchers rely on their own memories. In this study, the original interview recordings and the transcribed versions were used simultaneously during the process of analysing data and interpreting the research findings. This technique for data analysis was consistently applied to all the responses. Finally, the use of multiple data collection instruments also enhanced the trustworthiness of the research process and findings as the data collected from the questionnaires and interviews was evaluated in order to reach a collective conclusion.

3.9. DATA ANALYSIS AND INTERPRETATION

The data analysis phase of research begins after the collection of relevant data. Research data, especially the statistical data, are without meaning except the patterns within them can be explained and discerned (Leedy & Ormrod 2020:337). Data analysis is the process of assembling the collected research data in order to show and give meaning to the results of the research (Bloomberg & Volpe 2012:109). Interpretation is considered to be the final stage of data analysis. It deals with relating the separate research findings to a prevailing theory, or simply expressing a novel theory, which will properly explain the collected data or outcomes

of a research study (Creswell 2014:163; Punch 2009:169). Interpretation is simply expressing the outcomes of a research study in a way that is easily understandable to the research audience, and which allows further recommendations and studies.

Generally, data analysis in research is linked to the kind of approach adopted in the entire research process (Creswell 2009:218; Leedy & Ormrod 2020:337; Neuman 2014:478). The form in which research data is analysed depends on the type of data collected in a study (Dikotla 2016:177; Leedy & Ormrod 2020:337). Quantitative data analysis is the analysis of statistical data, and qualitative data analysis is the analysis of non-statistical data, collected in a quantitative, qualitative or mixed method research (Creswell 2014:3-4; Saunders et al. 2009:480). Statistical methods are mostly used to analyse quantitative data, and results can be presented using charts, tables, graphs, and histograms (Blakie 2010; Creswell 2014:4). Qualitative data can be analysed using predetermined themes to ensure that related contents are characterised concurrently, but independently based on themes (Creswell 2014:4; De Vos, Strydom, Fouché & Delport 2011:413). In a mixed method research, both quantitative and qualitative data sets are collected (Creswell 2014:217). These sets of data are then integrated in the analysis design by merging, connecting, or embedding the data (Creswell 2014:217). Data analysis in a mixed method research approach occurs distinctively. Here, quantitative and qualitative data sets are analysed and presented separately and accordingly, and then interpreted with inference to each set (Creswell 2014:220).

This study adopted a mixed method research approach, and so collected both quantitative and qualitative data. Thus, quantitative, and qualitative approaches were employed in analysing the collected data. The findings from the questionnaires were first presented, analysed, and interpreted, followed by the findings from the interviews. This was done because the study's main data collection instrument is questionnaires. This made for easy inferences to, and conclusions on, findings from both data collection instruments.

The quantitative data collected with questionnaires were analysed with the SPSS software, and the results were presented in tables, and simple descriptive statistics. SPSS is a computer program employed to analyse quantitative data, and can process a large amount of data by

organising and interpreting them through a range of methods, such as graphs, charts, and tables (Okite-Amughoro 2017:114). The data from open-ended questions were presented in the exact words of the respondents, using italic writing, according to the category of questions they belong to, and was then analysed and interpreted afterwards.

The qualitative data, which represents the data collected with interviews, were first transcribed from the voice recordings into a Microsoft Word document before conducting the analysis. This was a time intensive task, but very essential towards accurate and easy data analysis and the interpretation of research findings. Furthermore, thematic content analysis was used to analyse the qualitative data collected through interviews. Thematic analysis is a descriptive way of reducing data for identification, analysis, and presentation in patterns (themes) within collected data, while segmenting, classifying, summarising, and reconstructing it in order to capture the significance of concepts within the data set (Braun & Clarke 2006:79; Liamputtong 2009:135). The responses from the participants were grouped and analysed in predetermined themes, thereby having all the responses on each question presented in italic writing, analysed, and subsequently interpreted under a relevant theme. The themes were predetermined according to the research objectives outlined in chapter one.

The results were interpreted along with the analysis for data collected from the questionnaires. The same was done for data collected from the interviews. The overall result of both quantitative and qualitative data sets was then discussed in the conclusion and recommendation chapter in order to show and draw inferences where necessary. This helped to corroborate the different perspectives given by both the research approaches and methods employed in the study. It also outlines discrepancies wherever they were discovered.

3.10. ETHICAL CONSIDERATIONS

Ethical considerations are essential to a research study since it prescribes the research ethics and values that serve as guidelines to researchers when conducting research studies and streamlining research activities (Leedy & Ormrod 2020:135; Neuman 2014:145; Plonsky 2017:508; Patten & Newhart 2018:68; Tahleho 2016:17). Researchers are required to review research ethics at each phase of a study, from choosing the topic for research to the distribution

of the study's outcomes (Flick 2014:54; Neuman 2014:145). According to Babbie (2013:32-39), Leedy and Ormrod (2016:120); Leedy and Ormrod (2020:135), Neuman (2014:145) and Odiya (2009:210), ethical concerns entail voluntary participation, due consent of research participants, approval to undergo research in an organisation, participants' privacy and self-esteem, confidentiality and top discretion to the identities of participants, and general risk assessments.

Regarding this study, the researcher is obligated to conduct it with due and careful consideration of the ethical issues of social research and act, in accordance to the research ethic codes stipulated by UNISA (UNISA 2010:3). These codes require the researcher to consider characteristics, such as the informed consent of the DELSU library, Abraka and its staff members, confidentiality and concealment of participants' personalities, as preferred by them, charitable participation and inoffensiveness, as well as approval and ease of access to DELSU, which is the parent institution of the library. These research ethics requirements were adhered to. To this end, an ethical clearance certificate was acquired from the appropriate UNISA research ethics review committee in order to conduct the research, which was presented to the chief university librarian of the DELSU library, Abraka. The researcher also sought and gained the library's permission to conduct research in it.

3.11. SUMMARY OF THE CHAPTER

This chapter discussed in detail the research methodology employed in this research study. The discussions described the adopted research approach, the research design, the study population, the sampling and sample size, the data collection methods, the data collection instruments, as well as the data analysis and interpretation procedures. The chapter also discussed issues around this study's validity and reliability, trustworthiness, and ethical considerations.

The study adopted a mixed method research approach, which allowed for methodological triangulation. The questionnaires were the main data collection instrument, and the interviews were the supplementing data collection instrument. Data from the questionnaires were subjected to statistical analysis, while those from the interviews were analysed using thematic content analysis. The entire staff at the DELSU library, Abraka constituted the study

population. Although a census was taken on the library's entire staff for the quantitative part of this study, purposive sampling was adopted to get the sample size for the qualitative part.

The next chapter discusses this study's findings obtained from the questionnaires and interviews. The discussions entail data presentation, analysis and interpretation.

CHAPTER FOUR
DATA ANALYSIS AND PRESENTATION
4.1. INTRODUCTION

The previous chapter discussed the research approach and methodology adopted for this study. This chapter is set out to analyse, present, and interpret the collected data. The research study adopted a mixed method approach, which integrated the quantitative and qualitative research methods. Hence, both quantitative and qualitative data were collected, with questionnaires and interviews, in order to answer the research questions and meet the research objectives. The presentation of the collected data is broken up into two parts. The quantitative data are presented first and followed by the qualitative data. The quantitative data, gathered with questionnaires, were analysed using descriptive statistics, with the help of notable software called the SPSS, and presented in tables. Then the qualitative data, collected with interviews, were analysed using content analysis and presented in predetermined themes, determined by the research objectives. The following lists these research objectives:

- To identify the various services rendered by the DELSU library, Abraka.
- To establish the practice of knowledge sharing among staff at the DELSU library, Abraka for improved service provision.
- To determine the role of knowledge sharing among staff at the DELSU library, Abraka on the provision of services in the library.
- To explore tools for knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.
- To identify the factors of knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.
- To determine the barriers to knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.
- To suggest strategies for knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.

4.2. QUANTITATIVE DATA ANALYSIS, PRESENTATION, AND INTERPRETATION.

As previously indicated, the quantitative data for this study was gathered with questionnaires. They were divided into two sections, A and B. Section A consisted of questions regarding the

demographic details and characteristics of the respondents, and section B was made up of the research questions, in relation to the research objectives (see appendix A). The questionnaire consisted of mainly closed-ended questions and a few open-ended questions. The result from each of the close-ended questions where analysed first followed by the result from each open-ended question under the heading of "the other category".

All of the 63 staff at the DELSU library, Abraka were the targeted respondents to the research questions contained in the questionnaires. The researcher administered questionnaires to all of these respondents. Out of the 63 questionnaires administered, 60 completed questionnaires were retrieved. This means that, out of the 63 targeted respondents, 60, responded to the questionnaires. This amounted to a 96% response rate. Response rate in research refers to the percentage of the study sample that participated in the actual research study (Bryman 2016:141). In this regard, the acceptable response rate should not be less than 60%, one between 70% to 75% is very good, and one above 75% is considered excellent (Babbie 2013:247; Babbie 2016:264-265; Bryman 2012:224; Johnson & Wislar 2012:1805; Walliman 2016:125). The principle is that the higher the response rate the less likely it is to encounter a research bias than in a low rate response. Equally, a low response rate is a possible indication of a threat to the research outcomes, because the non-respondents are likely to differ from the respondents in ways that include more than just the refusal to partake in the research survey (Babbie 2016:264; Babbie 2013:247). Therefore, this study's response rate percentage is considered excellent and satisfactory in research.

4.2.1. Demographic details

Studies have shown a significant relationship between demographic variables, such as age, gender, educational level, job designation, as well as work experiences and knowledge sharing in the workplace (Balogun 2014:45-46; Boateng et al. 2015:222; Muchaonyerwa 2015:133; Muchaonyerwa & Mutula 2017:11; Omar & Adruce 2017:111-113; Omar & Adruce 2019:349). These studies established the antecedents of demographic variables influencing knowledge sharing behaviours among individuals, which determines how and what knowledge is shared among employees. In particular to the academic library environment, Muchaonyerwa (2015:133) reported that the age variance, the positions held, and the level of experience affected knowledge sharing among academic library staff members.

Based on the above, and also to understand the characteristics of the respondents, the researcher asked questions to ascertain the position, gender, years of experience, age, and how long the respondents have been working in the DELSU library, Abraka. The responses from these questions set the stage for the data collection process, which sought answers to the research questions. They also provided an informed judgement about the appropriateness of the respondents for the study, in order to satisfy the research objectives.

4.2.1.1. Gender of respondents

The responses on gender revealed an equal representation of males and females, a total of 28 (47.7%) respectively. Four (6.6%) of the respondents did not want to state their gender.

The debates regarding the influence of gender on knowledge sharing is quite robust. Reports from past studies have established that gender plays a significant role on how knowledge is perceived, sought after, and shared (Lee, Lee, Seo & Choi 2015:53; Muchaonyerwa 2015:141; Omar & Addruce 2019:349). Boateng et al. (2015:221-222) reported that male employees are more likely to share knowledge than their female colleagues. In contrast, Abukhait, Bani-Melhem and Zeffane (2019:18) and Balogun (2014) reported that the female employees are more likely to engage in knowledge sharing, because they have a better understanding of the benefits in accomplishing their jobs. According to Dikotla (2016:171), Syed-Ikhsan and Rowland opined that knowledge sharing may encounter setbacks when a team or workplace is predominantly made up of a specific gender. This is because the minority gender may be unwilling to engage in knowledge sharing. The inferred implication of the above is therefore that knowledge sharing is highly likely to take place among the DELSU library, Abraka employees, and more often, due to equal gender distribution.

Table 4.1. Gender of respondents

Gender	Frequency	Percentage
Male	28	46.7
Female	28	46.7
Not given	4	6.6
Total	**60**	**100**

4.2.1.2. Positions of respondents

The relevance of this to the research study is due to the assertions by past literatures, which have indicated the influence of employees' job levels and titles on knowledge sharing. Roziana, Azizah and Hamidah (2013:40) reported that the differences in job designations play a role in knowledge sharing among employees, since junior employees may be less willing, or feel uncomfortable, to approach those who are more senior for knowledge. Roziana et al. (2013:40) also indicated that, regarding knowledge sharing, the senior employees are more inclined to their top status colleagues. Similarly, Muchaonyerwa (2015:133) revealed that academic library staff members at different levels have different views concerning knowledge sharing, because the senior management staff, were reluctant to share knowledge or experiences with those who are more junior.

The respondents were asked to indicate their ranking regarding their job descriptions and titles in the DELSU library, Abraka. The responses to this question showed that most of the respondents were librarians 16 (26.7%) out of 43, followed by the library officers, 14 (23.3%). Senior librarians amounted to 6 (10%), assistant librarians to 11 (18.3%), assistant library officers to 8(13.3%), senior library officers to 4 (6.7%), and university librarian to 1 (1.7%). Table 4.2 below clearly shows the distribution between the respondents' positions.

Table 4.2. Positions of the respondents

Positions	Frequency	Percentage (%)
Librarians	16	26.7
Library officers	14	23.3
Senior librarians	6	10
Assistant librarians	11	18.3
Assistant library officers	8	13.3
Senior library officers	4	6.7
University librarians	1	1.7
Total	**60**	**100**

The above table indicates that majority of the staff are within the high ranking positions (University librarian, Senior librarians, Librarians and Senior library officers) in the library and

according to literature this could have an effect on knowledge sharing among staff for improved service provision (Muchaonyerwa 2015:133 & Roziana et al 2013:40)

4.2.1.3. Age of respondents

Age has been reported in previous studies to play a significant role in knowledge sharing among staff members in the workplace. One of the common studies, although old, is that of Riege (2005:23) who argued that age differences have a potential influence on knowledge sharing among colleagues. Therefore, the more age compatible employees are the more they are likely to engage in knowledge sharing. Equally, Bratianu and Orzea (2011) opined that older employees may view the younger employees as a threat in the workplace, and therefore become unwilling or reluctant to share their knowledge. Muchaonyerwa (2015:157) also reported that the age of academic library staff members plays a significant role in their knowledge sharing engagements.

Based on these reports, the researcher asked respondents questions in order to ascertain their ages. The results showed that most of the respondents were between the ages of 35-44 years and 45-54 years, with an equal number of 21 (35%), resulting in a total number of 42 (70%). This was followed by the 25-34 years category with 10(16.7%) respondents. The category with the least respondents was the 55-60 years one, with a total of only 5 (8.3%). Three (5%) respondents chose not to state their age range. Notably, none of the respondents were below 25 years old.

Table 4.3 shows the age distribution of the respondents in frequency and percentage. It also indicates who did not want to state their age range.

Table 4.3. Respondents' age distribution

Age category	Frequency	Percentage
Below 25yrs	0	0
25-34yrs	10	16.7
35-44yrs	21	35
45-54yrs	21	35
55-60yrs	5	8.3
Not given	3	5
Total	**60**	**100**

The researcher is of the opinion that the implication of the respondents' age distribution, as shown in the results above, is that most employees at the DELSU library, Abraka were within

the same age group. Therefore, the age compatibility may encourage knowledge sharing among the staff.

4.2.1.4. Highest qualification of respondents

It has been reported that the qualification of individuals is relevant to knowledge sharing. Kaewchur and Phusavat (2016:237) and Wang and Noe (2010:120) collectively asserted that the educational level of employees influence their involvement in knowledge sharing. Wang and Noe (2010:120) reported that employees who hold higher qualifications more often indulge in, and are positively inclined to, knowledge sharing. This is mainly attributed to the competency required to share knowledge. Hence, the respondents were asked to state their level of education in relation to degrees and certificates obtained.

The results showed that the majority of respondents, 18 in total (30%), hold a Bachelor's degree in LIS as their highest qualification. Then, 16 respondents (26.7%) hold a Diploma in LIS, followed by 13 respondents (21.7%) who have a Master's degree in LIS. The next two categories, with an equal amount of 5 respondents (8.3%), hold a Doctoral degree and Senior Secondary School Certificate Examination (SSCE). The remaining 3 respondents (5%) hold a Postgraduate Diploma in LIS as their highest qualification.

Table 4.4 clearly shows the qualifications of respondents in frequency and percentage.

Table 4.4. Highest qualification of respondents

Qualification	Frequency	Percentage
SSCE	5	8.3
Diploma in LIS	16	26.7
Bachelor's degree in LIS	18	30
Postgraduate diploma in LIS	3	5
Master's degree in LIS	13	21.7
Doctoral degree in LIS	5	8.3
Total	**60**	**100**

From the above results, and as indicated in Wang and Noe (2010:120), the researcher inferred that the majority of the staff at the DELSU library, Abraka might be more inclined to share their knowledge since they are averagely qualified, and so are competent enough to do so. The results also indicate that the respondents were appropriate for the study and could satisfy the research objectives.

4.2.1.5. Respondents' years of experience

The reports from past literatures have highlighted the relevance of employees' years of experience to knowledge sharing among colleagues in the workplace. Allameh, Abedini, Pool and Kazemi (2012:171) argued that when employees serve in a particular job position for a long time, they acquire more knowledge and become more enthusiastic about sharing their knowledge with less experienced colleagues. Also, Muchaonyerwa (2015:157) found that work experience influences knowledge sharing among academic library staff members when he studied the knowledge sharing strategies in university libraries in KwaZulu-Natal. Based on this, the researcher asked the respondents a question regarding years of experience. The question was aimed at finding out how much work experience staff members at the DELSU library, Abraka possess, which could be shared, and which is relevant to the provision of services in the library.

The results indicated that the majority of respondents, 17 in total (28.3%), had work experience of 11-15 years, followed by 13 respondents (21.7%) with 16-20 years work experience. This in turn is followed by 11 respondents (18.3%) who had work experience of between 0-5 years. This is followed by 9 respondents (15%) with 6-10 years work experience, 7 respondents (11.7%) with 21-25 years work experience and 2 respondents (3.3%) with 31-35 years work experience. The least, only 1 (1.7%) of the respondents had work experience of between 26-30 years. This means that more than two-thirds of the total respondents, which amounts to 40 (66.7%), had worked in a library environment, and gained work experience of at least 11 years.

Table 4.5 reflects these results.

Table 4.5. Respondents' years of experience

Years of experience	Frequency	Percentage
0-5yrs	11	18.3
6-10yrs	9	15
11-15yrs	17	28.3
16-20yrs	13	21.7
21-25yrs	7	11.7
26-30yrs	1	1.7
31-35yrs	2	3.3
Total	**60**	**100**

Based on the report by Allameh et al. (2012) and Muchaonyerwa (2015) as earlier mentioned, the above results imply that the majority of staff members at the DELSU library, Abraka possess a great amount of experience or knowledge, which can be enthusiastically and frequently shared among those with less experience. Also, according to past literatures, this knowledge and experience form part of the library's intellectual resources, which is essential in order to train and retrain staff members for effective library operations and service provision (Anna & Puspitari (2013:3); Arif & Alsuraihi, (2012); Asogwa 2012; Lekay 2012:18; Tahleho 2016:7-8).

4.2.1.6. How long respondents have been working in the DELSU library, Abraka

The length of time in which employees have worked together is significant to how much they engage in knowledge sharing among themselves. Omar and Adruce (2017:113) indicated that employees who have worked together in a particular workplace for a long period of time tend to be more comfortable with and inclined to sharing knowledge among themselves. Hence, the researcher sought to find out how long the respondents have been working in the DELSU library Abraka.

Table 4.6 shows the results to this question.

Table 4.6. How long respondents have been working in the DELSU library, Abraka.

Years working in the DELSU library, Abraka.	Frequency	Percentage
0-5yrs	14	23.3
6-10yrs	11	18.3
11-15yrs	23	38.3
16-20yrs	7	11.7

21-25yrs	3	5
26-30yrs	1	1.7
31-35yrs	1	1.7
Total	**60**	**100**

Table 4.6 shows that while the majority of respondents, 46 in total (76.7%), have worked in the library for 6 years and longer, 14 of them (23.3%) have worked there for 5 years or less. This is an indication that while most of the DELSU library, Abraka's staff members are old ones, few can be considered new. The implication of this, according to past literatures, is that apart from accumulating vast experiences and knowledge over the years, staff members at the library feel more comfortable and safe engaging in knowledge sharing among colleagues. This feeling of comfort and safety can be attributed to the trust built over time, which is very essential for effective knowledge sharing (Omar and Adruce 2018:4). The results also indicated that new staff members could readily gain experience and knowledge through on-the-job training or mentoring from the majority of those who are older, and who have become more knowledgeable about library operations (David-West & Nmecha 2019).

4.2.2. Research objectives

This is the second section of the questionnaire. It focused on realising the research objectives through the research questions. The findings from this section were analysed, interpreted, and presented in a pattern that seeks to give answers to each of the research questions, which will satisfy the research objectives. Hence, each objective of the study will be the headings for each result analysis and presentation.

4.2.2.1. Services provided at the DELSU library, Abraka.

The first objective of this study was to find out what services are provided at the DELSU library, Abraka. Respondents were asked to indicate what these services are. This was done in order to establish what services the library is required to provide to its user community, which could be enhanced through knowledge sharing. In order to satisfy the objective, one question was directed towards the respondents.

What are the services provided at the DELSU library, Abraka?

The respondents were implored to either tick the affirmative 'YES' box or the negative 'NO' box. The list of services in the following table was obtained from the reviewed literatures (Arumuru 2015:47; Ikolo 2018:885; Khan 2013:54-61; Singh 2010:4-10; Sidorko & Yang 2009). Table 4.7 clearly indicate what services are rendered in the library.

collection development services, such as:	Yes		No	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Selection and acquisition of library resources	60	100%	0	0%
Cataloguing and classification of library resources	60	100%	0	0%
Weeding of library resources	60	100%	0	0%
Reference services, such as:				
Information literacy	60	100%	0	0%
Research support	60	100%	0	0%
Reprographic (photocopying, binding, and printing)	54	90%	6	10%
Bibliographic description	53	88.3%	7	11.7%
Indexing and abstracting	55	91.7%	5	8.3%
Marketing	59	98.3%	1	1.7%
Circulation services, such as:				
User education	57	95%	3	5%
Interlibrary loan	40	66.7%	20	33.3%
Selective dissemination of information (SDI)	54	90%	6	10%
Document delivery (DD)	44	73.3%	16	26.7%
Current awareness	55	91.7%	5	8.3%
Borrowing, reservation and renewal	60	100%	0	0%
User registration	60	100%	0	0%

Table 4.7. Services provided at the DELSU library, Abraka.

The results in Table 4.7 shows that all services listed were offered at the DELSU library, Abraka. This finding coincides with the information reported in some literatures. Arumuru

(2015:47), Ikolo (2018:886), Iwhiwhu et al 2010:5, Khan (2013:54-61) and Singh (2010:4-10) reported that academic libraries provide services, such as reference services, circulation services, collection development services, indexing and abstracting services, bibliographic services, user education services, research support services, current awareness services, document delivery services, interlibrary loan services, renewal services, and reservation services. The services which received the highest affirmative responses of 60 (100%) were the research support services, information literacy services, weeding services, cataloguing and classification services, selection and acquisition services, user registration services, and borrowing, reservation and renewal services. The services which received the least affirmative response to its provision in the library were the interlibrary loan services at 40 (66.7%). This reduced response coincides with the findings of Arumuru (2015:47) and Ikolo (2018:889) which received a less than average percentage of affirmative responses. Ikolo (2018:889) further concluded that the provision of interlibrary loan services in the library is inadequate and often not available. Hence, her recommendation that, the DELSU library, Abraka should increase their provision of interlibrary loan services to users.

The other category

The open-ended question in the other category revealed the provision of postgraduate services and serial services in the library. Three respondents provided response in this regard. Below are the responses;

"Postgraduate service"

"Serial services"

"Serials services"

However, the outcomes from both the close-ended and open-ended questions establishes that the DELSU library, Abraka is service oriented, and that through its staff, provide numerous services to its user community in order to satisfy their needs, and achieve the library's goals, just like with any other academic library, as discussed in the literature review chapter.

4.2.2.2. The practice of knowledge sharing among staff at the DELSU library, Abraka for improved service provision

The second objective of this study was to establish the practice of knowledge sharing among staff at the DELSU library, Abraka for improved service provision. Questions were set out in the questionnaires in order to satisfy this objective. Four questions that relate to it were asked.

The first question was asked in order to determine the respondents' understanding of knowledge sharing. The second question was asked in order to find out what their opinions are about the benefit of knowledge sharing on academic library services. The third and fourth questions were concerned with finding out about the respondents' engagement in knowledge sharing among colleagues for the provision of services in the library. These questions were asked collectively in order to establish whether knowledge sharing is being practiced among staff for improved service provision at the DELSU library, Abraka.

What are the DELSU library, Abraka staff' levels of understanding on knowledge sharing?
In order to establish the practice of knowledge sharing among staff at the DELSU library, Abraka for improved service provision, the researcher considers it important to first find out how much the staff members understand knowledge sharing. The results presented in Table 4.8 revealed revealed that 59 of the 60 respondents understand knowledge sharing. The majority of them, a total of 32 (53.3%), possess a high level of understanding. Only 1 (1.7%) of the respondents indicated a lack of understanding.

Table 4.8 indicates what the respondents' responses were.

Table 4.8. Respondents' level of understanding of knowledge sharing

Level of understanding	Frequency	Percentage
Highly understand	32	53.3
Understand	27	45
Do not understand	1	1.7
Total	**60**	**100**

The above results confirmed the report of Onifade (2015:94) that the concept of knowledge sharing is not new to academic library staff who deeply understand knowledge sharing and its benefits on library service provision. Khan (2014:91) also reported the in-depth understanding of knowledge sharing by academic library professionals, in both public and private universities. The report further showed that the library workers see knowledge sharing as the communication, exchange, transmission, and absorption of knowledge. Similarly, Akparobore (2015:34) and Tahleho (2016:112) reported the understanding of knowledge sharing among academic library staff.

The implication of the results to this study is that the staff at the DELSU library, Abraka have a better understanding of knowledge sharing, which consequently, leads to a more meaningful appreciation and smooth application of knowledge sharing for improved service provision. This also imply that the staff members are appropriate respondents for this study since they understood what was being studied.

How beneficial is knowledge sharing among staff towards the provision of library services at the DELSU library, Abraka?

In order to further establish knowledge sharing practices among staff for improved service provision in the library, respondents were also asked to indicate how much knowledge sharing among staff benefits towards the provision of services in the library. The results showed that all 60 (100%) respondents appreciate and consider knowledge sharing among staff as beneficial towards service provision. The majority of the respondents, a total of 38 (63.3%), responded that knowledge sharing is 'very beneficial', and the remaining 22 (36.7%) agreed that it is 'beneficial'. None of them answered that knowledge sharing is 'not beneficial' towards the provision of services. These findings correlate with earlier reviewed literatures, including that of Anna and Puspitasari (2013), Awodoyin et al (2016), Okonedo and Popoola (2012), Onifade (2015) and Tahleho (2016). These five liteteratures reported that knowledge sharing has a high relevance and significance to academic library service provision. Onifade (2015:94) indicated that staff members, with a knowledge sharing understanding, understands and appreciates its benefits on library service provision. The outcome is also similar to Razmerita et al, (2016:16), who showed that employees consider knowledge sharing important enough to enhance performance and promoting services within an organisation.

The above imply that the staff at the DELSU library, Abraka consider sharing their knowledge among colleagues as relevant and beneficial towards the provision of services in the library. Thus, they may engage in effective knowledge sharing in order to enhance library service provision in the library. According to Alhalhouli et al. (2014:925) and Isa et al. 2016:219, the employees and organisations that understand the benefits of knowledge sharing are more committed to knowledge sharing in order to ensure the continuous provision of efficient services. While referring to the academic library, Tahleho (2016:113) showed that staff members' awareness of knowledge sharing benefits on service delivery, stimulates and encourages knowledge sharing among staff within the library for improved service provision.

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How often do DELSU library, Abraka staff share knowledge among colleagues for improved service provision?

The respondents were also asked to indicate how often they share knowledge among colleagues for the provision of services in the library. The results showed that out of the 60 respondents, 25 (41.7%) of them 'often' share knowledge with colleagues for improved service provision. This is closely followed by 24 (40%) respondents who said that they 'very often' share knowledge with colleagues for improved service provision. However, a significant number of 11 (18.3%) respondents responded that they do 'not often' share knowledge among colleagues for improved service provision in the library.

Notwithstanding, the general outcome is an indication that knowledge sharing occurs on a continuous and frequent basis among the staff members at the DELSU library, Abraka for the purpose of improved service provision to users. This outcome is similar to the study by Okonedo and Popoola (2012:11), which reported that academic library staff members often share knowledge with colleagues on varied areas regarding the provision of services to users. The study also reported that the reason for frequent and continuous knowledge sharing among these colleagues is to enhance efficient service provision.

What kind of knowledge do DELSU library , Abraka staff share among colleagues in order to enhance service provision?

Also, to establish the practice of knowledge sharing among staff at DELSU library, Abraka for improved service provision, the respondents were asked to indicate what kind of knowledge they share with colleagues in order to enhance service provision in the library. To answer this question, the questionnaires contained statements which require the respondents to either answer in the affirmative or in the negative. These statements were informed by literatures, including that of Akparobore (2015:34), Awodoyin et al. (2016:16), Onifade (2015:95), and Okonedo and Popoola (2012:11).   The question was asked to obtain a better understanding of the kinds of knowledge DELSU library, Abraka staff shares among colleagues for the purpose of improving service provision in the library. The question, and the received responses also helped to understand the extent to which the staff at DELSU library, Abraka share knowledge in order to improve service provision in the library.

Table 4.9 displays the responses obtained from respondents.

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Table 4.9. The kind of knowledge staff share for improved service provision

Statement	Yes	No
I share knowledge on users' needs with colleagues to enhance service provision in the library.	59(98.3%)	1(1.7%)
I share knowledge on the best practices and policies in library operations, such as, reference, circulation, readers, and cataloguing and classification services, with colleagues to enhance service provision in the library.	59(98.3%)	1(1.7%)
I share knowledge on lessons learned from past mistakes on the job with colleagues to enhance service provision in the library	50(83.3%)	10(16.7%)
I share knowledge on new trends in librarianship, such as the use of technologies in library operations (library automation), with colleagues to enhance the service provision in the library	59(98.3%)	1(1.7%)
I share knowledge on personal experience and issues with colleagues to boost their confidence, and enhance service provision in the library	43(71.7%)	17(28.3%)
I share knowledge on educational issues with colleagues to enhance service provision in the library	58(96.7%)	2(3.3%)

The above table shows that the categories that display 59 (98.3%), and which contain almost the total number of respondents, respectively share with colleagues, knowledge on new trends in librarianship, such as the use of technologies in library operations, users' needs, and on the best practices and policies in library operations, in order to enhance the provision of services in the library. These findings are similar to those reported in the studies of Akparobore (2015:34), Awodoyin et al. (2016:16), Okonedo and Popoola (2012:11) and Onifade (2015:95). Onifade (2015:95) reported that academic librarians share among themselves knowledge on new trends in librarianship, which involves library automation and the use of trending technologies to enhance service delivery in the library. Equally, Akparobore (2015:34) and Onifade (2015:95) revealed that library staff members engage in knowledge sharing to share knowledge on subjects, such as cataloguing, library policies, acquisition, indexing, and circulation, in order to enhance the provision of services to users.

The studies of Awodoyin et al. (2016:16) and Okonedo and Popoola (2012:11), concerning knowledge sharing among academic library staff members, admittedly corroborated the above findings with similar outcomes. The studies reported that academic library staff members share knowledge on library practices, new trends in librarianship, such as library automation,

knowledge on readers, references, and circulation, as well as cataloguing and classification services.

Additionally, 58 (96.7%) of the total respondents said they share knowledge on educational issues with colleagues in order to enhance service provision in the library, and 2 (4.7%) answered otherwise. A majority of 43 (71.7%) respondents also indicated that they share knowledge on personal experiences and issues with colleagues, and 17 (28.3%) of them answered in the negative. Interestingly, the above findings are contrary to reviewed literatures. For example, Okonedo and Popoola (2012:12) maintained that academic library staff members prefer to only share knowledge relating to work matters.

A majority of 50 (83.3%) respondents responded, in the affirmative, that they share knowledge on lessons learned from past mistakes on the job with colleagues to enhance service provision in the library, and the remaining 10 (16.7%) responded that they do not. However, the reviewed literatures neither reported similar findings nor contrary ones.

The implication of the results to this study is that DELSU library, Abraka staff share among themselves, all kinds of available knowledge that could enhance service provision. Foremost of the knowledge shared among the library's employees relates to library policies, best practices, trends in librarianship, and education. This knowledge could either be categorised as tacit or explicit knowledge as evident in the literature review discussion. So far, they are considered to be relevant to service provision in the library.

4.2.2.3. The role of knowledge sharing among DELSU library, Abraka staff on the provision of services

The third objective of this study is to determine the role of knowledge sharing among DELSU library, Abraka staff on improved service provision. This will assist in unravelling the benefits of knowledge sharing among staff to service provision in DELSU library, Abraka. The researcher asked two questions in order to determine what services knowledge sharing among staff at DELSU library, Abraka is beneficial towards the improvement of their provision and in what way.

What services do knowledge sharing among staff at the DELSU library, Abraka help to improve the provision?

For the first question, respondents were asked to indicate their level of agreement or disagreement to the statement inferring that knowledge sharing helps to improve the provision of different services in the DELSU library, Abraka. The statements were developed based on the reviewed literatures, which highlighted that the provision of academic library services can be improved through knowledge sharing among library workers. The researcher therefore sought for answers using a likert scale of 5 levels, which comprises of 'strongly agree', 'agree', 'neutral', 'disagree', and 'strongly disagree'. Here the respondents were required to tick an option in order to signify their level of agreement on the benefits of knowledge sharing on the provision of the academic services listed.

Table 4.10 presents the respondents' responses to this question.

Table 4.10. Knowledge sharing on service provision

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Knowledge sharing among staff help in the provision of technical services (acquisition, cataloguing, and classification of library resources).	41(68.3%)	19(31.7%)	0(0%)	0(0%)	0(0%)
Knowledge sharing among staff help in the provision of reference services.	36(60%)	24(40%)	0(0%)	0(0%)	0(0%)
Knowledge sharing among staff help in the provision of user education services.	35(58.3%)	22(36.7%)	3(5%)	0(0%)	0(0%)
Knowledge sharing among staff help in the provision of current awareness services.	31(51.7%)	25(41.7%)	0(0%)	2(3.3%)	2(3.3%)
Knowledge sharing among staff help in the provision of inter-library loan services.	25(41.7%)	20(33.3%)	9(15%)	6(10%)	0(0%)
Knowledge sharing among staff help in the provision of Selective Dissemination of Information (SDI).	29(48.3%)	28(46.7%)	2(3.3%)	1(1.7%)	0(%)

Knowledge sharing among staff help in the provision of research support services.	45(75%)	13(21.7%)	2(3.3%)	0(0%)	0(0%)
Knowledge sharing among staff help in the provision of indexing and abstracting.	26(43.3%)	28(46.7%)	4(6.7%)	0(0%)	2(3.3%)
Knowledge sharing among staff help in the provision of reprographic services (such as binding and photocopying).	25(41.7%)	30(50%)	5(8.3%)	0(0%)	0(0%)
Knowledge sharing among staff help in the provision of circulation services.	43(71.7%)	17(28.3%)	0(0%)	0(0%)	0(0%)
Knowledge sharing among staff help in the provision of document delivery services (DD).	31(51.7%)	21(35%)	7(11.6%)	1(1.7%)	0(0%)
Knowledge sharing among staff help in the provision of bibliographic services.	35(58.3%)	21(35%)	4(6.7%)	0(0%)	0(0%)
Knowledge sharing among staff help in the provision of borrowing, reservation, and renewal services.	27(45%)	24(40%)	8(13.3%)	1(1.7%)	0(0%)
Knowledge sharing among staff help in the provision of information literacy services.	33(55%)	24(40%)	3(5%)	0(0%)	0(0%)

The results showed that the majority of respondents strongly agreed that knowledge sharing among staff members help in the provision of academic library services. While a good number of the respondents were also in agreement, only a few were neutral or in disagreement. A majority of 45 (75%) respondents strongly agreed that knowledge sharing enhance the provision of research support services in the library, and 13 (21.7%) of them were in agreement. All of the respondents, a total of 60 (100%) strongly agreed, and agreed, that knowledge sharing helps in the provision of collection development services, circulation services, and reference services. These findings are corroborated by the studies of AlRashdi and Srinivas (2016:36-37), Lekay (2012:18), Okonedo and Popoola (2012:6) and Onifade (2015:95). These studies reported that knowledge sharing is highly beneficial to academic library staff members in the provision of reference services, circulation services, and collection development services. The reports of Onifade (2015:95) and Okonedo and Popoola (2012:6) stressed the

high significance of knowledge sharing among those staff members responsible for the acquisition services, cataloguing services, and classification services of the academic library.

Also, the results in Table 4.10 comparatively coincides with the reports from reviewed literatures, such as AlRashdi and Srinivas (2016:36-37), Awodoyin et al. (2016:17) and Lekay (2012:18). They reported that knowledge sharing among academic library staff members is relevant to promoting the provision of user education services, circulation services, reference services, collection development services, information delivery services, and interlibrary loan services.

The implication of the above results is that DELSU library, Abraka staff are confident that sharing knowledge among themselves has a positive impact on, and helps in, promoting library service provision in the library. This affirms the view shared in literatures that, knowledge sharing among staff enhance service provision in the academic library. According to Akparobore (2015:32) and Anna and Puspitasari (2013:5-6), knowledge sharing generally has a positive impact on all academic library services, and in improving their provision. The findings also agree with the opinions which state that the primary purpose of knowledge sharing among academic library staff members is to provide efficient services to users (Lekay 2012:22; Muchaonyerwa 2015:44).

In what way(s) has knowledge sharing among DELSU library, Abraka staff, improved the provision of library services in the library?

For the second question set out to satisfy the third research objective, the respondents were asked to indicate how knowledge sharing among staff has benefitted the provision of services in the library. The question was asked using a five-point Likert scale, where the respondents were required to indicate their level of agreement or disagreement with statements, which have been formulated from reviewed literatures (Awodoyin et al. 2016:16; Chipeta 2018:119).

Table 4.11 shows the respondents' responses to the above question.

Table 4.11. Ways in which knowledge sharing among staff benefits service provision

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree

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Knowledge sharing among staff assists in avoiding the duplication of work.	25(41.7%)	28(46.6%)	0(0%)	4(6.7%)	5(7%)
Knowledge sharing among staff assists in the provision of timely services.	31(51.7%)	26(43.3%)	0(0%)	2(3.3%)	1(1.7%)
Knowledge sharing among staff assists in the provision of cost-effective services.	27(45%)	29(48.3%)	3(5%)	0(0%)	1(1.7%)
Knowledge sharing among staff assists in avoiding the repetition of mistakes.	34(56.7%)	17(28.3%)	5(8.3%)	3(5%)	1(1.7%)
Knowledge sharing among staff assists in understanding users' needs.	44(73.3%)	14(23.3%)	1(1.7%)	1(1.5%)	0(0%)
Knowledge sharing among staff assists in providing solutions to problems encountered on the job.	37(61.7%)	22(36.6%)	1(1.7%)	0(0%)	0(0%)
Knowledge sharing among staff enables the learning of the best library practices and policies in the provision of services.	41(68.3%)	17(28.3%)	1(1.7%)	1(1.7%)	0(0%)

The results in the above table showed that the majority of the respondents strongly agreed that knowledge sharing assists in learning the best library practices, avoiding the repetition of mistakes, providing solutions to problems encountered on the job, understanding users' needs, and the provision of timely services. Though not strongly, a majority also agreed that knowledge sharing among staff helps to avoid task duplication, and to provide cost-effective services to users. The least percentage of respondents either remained neutral, disagreed, or even strongly disagreed that knowledge sharing could assist in any of the ways mentioned in Table 4.11. Significantly, the highest majority of respondents, a total of 44 (73.3%), strongly agreed that knowledge sharing assists in understanding users' needs, and is followed by 41 (68.3%) respondents who strongly agreed that knowledge sharing assists in learning the best library practices and policies. This particular finding coincides with that of AlRashdi and Srinivas (2016:36-37) and Awodoyin et al. (2016:17) who reported that knowledge sharing among academic library workers brings about the understanding of users' needs and the learning of the best library practices and policies.

However, all the findings are similar to past literatures. Awodoyin et al. (2016:16) reported that knowledge sharing among academic library staff members enables them to learn about the best library practices, provide cost effective services, avoid the repetition of task mistakes, provide solutions to problems encountered on the job, and save the time of providing services to users. Chipeta (2018:119), among others, found that knowledge sharing assists academic library workers in providing timely and worthwhile services to users, and enables academic libraries to provide efficient services, even when faced with dwindling budgets. Anna and Puspitasari (2013:5-6) showed that knowledge sharing among academic librarians helps them to avoid the repetition of tasks, and forms the foundation for solving problems and making decisions in the library.

The overall implication of these findings to the study is that DELSU library, Abraka staff are drawn to the gains of knowledge sharing, regarding service provision, and are inclined to sharing knowledge for improved service provision in the library. They apply knowledge sharing, as a means of promoting services in the library, to users by most importantly understanding their needs and learning the best practices to satisfy these needs. AlRashdi and Srinivas (2016:36-37), Awodoyin et al. (2016:17) and Daneshgar and Bosanquet (2010:26) all revealed that knowledge sharing helps academic library staff members to form a better understanding of users' needs, which consequently leads to the provision of efficient services to the users

Other category

Further probing in the other category of how knowledge sharing among staff has benefitted service provision in the DELSU library, Abraka received multiple responses. These responses are listed below:

"Stress-free, accurate and timesaving services".

"Great extent".

"Knowledge sharing have caused user satisfaction. It improves increase in services provided".

"Saves time and make for accuracy of services provided"

"Saves time".

"It has greatly improved my input and output in rendering services to my patrons".

"It has improved my task performance and helped me with providing quality services".

"increase in the number of the library patrons since the services have improved".

"attractive and efficient services which could bring about an increase in the number of patrons to the library for assistance.

"it has helped me to acquire new knowledge and save me some cost in doing so outside the library environment".

"Gaining new knowledge on standard library operation applicable in standard libraries".

"It has helped me to understand and know things about my job that I did not know before. Create awareness and also improve ICT skills".

"Becoming well-informed about library services and the delivery".

"It is highly educative, and it increase one interest in search of knowledge and by that improve service output in the library".

"knowledge sharing is the greatest asset among staff in any organisation, it creates an enabling environment in the workplace".

"knowledge sharing among staff make for improved service provision because it makes me know more".

"it contributes to doing my job effectively and quicker".

The above responses indicate that the respondents understand and appreciate the positive role of knowledge sharing among staff in their performance and subsequently service provision in the library. The common view shared among them is that knowledge sharing enables the provision of timely and accurate services with fewer difficulties. Another common view shared is that knowledge sharing among staff enhances their skills and knowledge in carrying out their tasks effectively, which ultimately leads to improved service provision in the library. These views are similar to that shared in Mayekiso (2013:93), that the benefits of knowledge sharing in the academic library, include well-informed staff, which leads to improved service provision. Similarly, the study by Muchaonyerwa (2015:123) revealed that academic library staff are of

the opinion that by sharing knowledge, they gain new knowledge, which is relevant to improving library operations.

4.2.2.4. Tools for knowledge sharing among DELSU library, Abraka staff for improved service provision in the library

The fourth objective of this study is to identify the tools employed for knowledge sharing among DELSU library, Abraka staff for the purpose of enhancing service provision in the library. According to reviewed literatures, these tools describe the techniques and channels employed in knowledge sharing. They have been categorised into two categories, namely the human-based and technological-based tools. Therefore, two closed-ended questions and one open-ended question were emanated in order to satisfy the above objective. The first question was asked in order to find out what human-based knowledge sharing tools are viable for knowledge sharing among staff for improved service provision in DELSU library, Abraka. The second question was asked in order to find out what technological-based tools are viable for knowledge sharing among staff for improved service provision at DELSU library, Abraka. The last question was asked in the other category in order to find out what other tools, not listed in the questionnaires, are viable for knowledge sharing among staff at DELSU library, Abraka for the improved service provision in the library.

The first two questions required the respondents to state their responses by either answering in the affirmative ("YES"), or in the negative ("NO"), to the viability of the knowledge sharing tools listed in the following tables. The list was developed from past related knowledge sharing studies, which was reviewed in chapter two.

The results to these questions are displayed in Tables 4.12 and 4.13 respectively.

Table 4.12. Human-based tools for knowledge sharing

Tools	Yes	No
Mentorship	51(85%)	9(15%)
Job rotation	60(100%)	0(0%)
Job shadowing	29(48.3%)	31(51.7%)
Storytelling	12(20%)	48(80%)

Seminars/Workshops/Conferences	60(100%)	0(0%)
Trainings	60(100%)	0(0%)
Meetings	59(98.3%)	1(1.7%)
Communities of Practice (CoP)	16(26.7%)	44(73.3%)
Brainstorming sessions	17(28.3%)	43(71.7%)

The above results showed that the human-based tools, such as job rotation, seminars, workshops, conferences, and trainings were highly and adequately utilised for knowledge sharing among DELSU library, Abraka staff members for improved service provision in the library. This is because, all the respondents, a total of 60 (100%), unanimously affirmed that these tools are viable for knowledge sharing among colleagues in the library for the purpose of improving service provision. A majority of 59 (98.3%) respondents also confirmed the use of meetings as a tool for knowledge sharing among colleagues in the library for the purpose of enhancing the provision of services. Also, 51 (85%) respondents verified the use of mentorship as a knowledge sharing tool among colleagues in the library for improved service provision. These findings are in agreement with Lekay (2012:41-42), Onifade (2015:94) and Tahleho (2016:96-97) who reported the effective use of meetings, job rotation, seminars, workshops, conferences, trainings, and mentorship as knowledge sharing tools among academic library employees in order to better service delivery. The reason for this trend, according to Onifade (2015:94), is that academic library staff prefer sharing knowledge among colleagues through informal and more interactive channels. However, these findings contradict that of Muchaonyerwa (2015:164), who showed that meetings and similar gatherings were considered insignificant channels by academic library staff for sharing knowledge concerning task operations among colleagues.

The results also indicated that the viability of storytelling as a tool for knowledge sharing among staff for improved service provision in the library, received the majority 48 (80%) negative responses and only 12 (20%) affirmative responses. This is followed by the viability of CoPs as a knowledge sharing tool with 44 (73.3%) negative responses and only 16 (26.7%) affirmative responses. Brainstorming for knowledge sharing among staff for improved service provision which received 43 (71.7) negative responses and only 17 (28.3%) affirmative

responses. Also, job shadowing as knowledge sharing tool for improved service provision in the library received 31(51.7%) negative responses and only 29 (48.3%) affirmative responses.

The findings on job shadowing and CoPs are in conflict with some of the reviewed literatures. For instance, while these two tools were said to be used in the DELSU library, Abraka for knowledge sharing among staff, in order to improve service provision, the overall response indicates a low and insufficient usage. This is contrary to the studies of Dei (2017:61), Dikotla (2016:179), Hackert (2013:21) and Dewah (2012:69), who all reported a very high and effective use of CoPs and job shadowing as knowledge sharing tools among employees within the academic library and other organisations for better performance and service delivery.

Also, the findings on storytelling and brainstorming indicated that although they were viable knowledge sharing tools among staff at the DELSU library, Abraka for the purpose of enhancing service provision, they were not utilised by the majority of respondents. This could mean that these tools were not fully embraced by most staff members, or were used passively, unintentionally, and unplanned. This is in agreement with some of the studies and literatures that were reviewed in the past. Dikotla (2016:178), Manamela (2018:69-70), Onifade (2015:94) and Tahleho (2016:114) respectively, reported the non-existence and inadequate or passive use of storytelling and brainstorming for knowledge sharing within the academic library and other organisations in order to improve performance or service delivery. However, Muchaonyerwa (2015:163) described storytelling as a very useful informal channel for sharing knowledge among staff concerning work operations within the academic library, which results in better service delivery.

The overall implication of these findings to this study, is that human-based knowledge sharing tools, such as meetings, trainings, job rotation, seminars, and job shadowing were highly viable for knowledge sharing at the DELSU Library, Abraka for the purpose of improving service provision. This means that the library's staff members mostly utilise these channels in order to share knowledge among colleagues about the services they provide. Other tools, such as CoPs, storytelling, and brainstorming were hardly used in the library to share knowledge for improved service provision.

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Table 4.13. Technological-based tools for knowledge sharing

Technological-based tools/infrastructures	Yes	No
Blog	23(38.3%)	37(61.7%)
Twitter	12(20%)	48(80%)
Wikis	21(35%)	39(65%)
Facebook	37(61.7%)	23(38.3%)
WhatsApp	59(98.3%)	1(1.7%)
Email	37(61.7%)	23(38.3%)
Internet	32(53.3%)	28(46.7%)
Telephone/mobile phone	41(68.3%)	19(31.7%)

The findings in Table 4.13 indicated that technological-based knowledge sharing tools are utilised by DELSU library, Abraka staff members in order to share knowledge among themselves for improved service provision. However, the responses in the table did not show an overwhelming or unanimous affirmation to the use of most of these technological tools. WhatsApp as a tool for knowledge sharing for improved service provision received the most positive responses, a total of 59 (98.3%), with only 1 (2.3%) negative response. This is followed by 41 (68.3%) respondents who affirmed the use of telephones/mobile phones for knowledge sharing among staff for the purpose of improving library service provision. A majority of respondents, 37 (61.7%) in total, agreed that Email and Facebook are viable technological-based knowledge sharing tools among staff for the enhancement of service provision. Also, 32 (53.3%) respondents indicated the viability of internet in as sharing tools among colleagues in the library. These responses agree with similar studies by Anasi et al. (2014), Chipeta (2018) and Dei (2017) which were also discussed in the literature review chapter. Chipeta (2018:124) revealed the significant use of telephones, internet, email, and Facebook platforms by academic library staff for knowledge sharing among colleagues in order to improve performance and work quality. Similarly, Anasi et al. (2014:359) revealed the use of telephones, email, and Facebook platforms by academic library staff members in Nigeria to share knowledge among colleagues for professional growth. Equally, although not within the academic library environment, Dei (2017:177) also reported the use of WhatsApp, Facebook, internet, email, and telephones for knowledge sharing among academics in order to optimise the gains of knowledge. On the contrary, Muchaonyerwa (2015:191) and Muchaonyerwa and

Mutula (2017:15) reported that academic library staff do not utilise telephones and social networks, such as email and Facebook, for knowledge sharing in order to improve work and services, but to foster their personal relationships with colleagues, and their social interactions.

Furthermore, other tools, such as blogs, wikis, and Twitter received the least affirmative responses. Most significantly, the viability of Twitter for knowledge sharing among staff only received 12 (20%) affirmative responses, but 48 (80%) opposing views. This is followed by the viability of wikis for knowledge sharing among staff in the library, which received 21 (35%) affirmative responses and 39 (65%) negative responses. This could only mean that these tools are not adequately and consistently used for knowledge sharing among staff at the DELSU library, Abraka for the purpose of improving service provision in the library. These findings are similar to some of the reviewed literatures. Chipeta (2018:125) and Muchaonyerwa (2015:161) revealed the insignificant use of web 2.0 tools such as blogs, wikis and twitter for knowledge sharing among academic library staff members. Muchaonyerwa (2015:161) also reported that even though these staff members are acquainted with, and make use of, blogs and wikis, they do so only for social networking, and not for sharing knowledge which would benefit the library's operation or improve on its service provision. However, literatures have also reported a significant use of web 2.0 tools, such as blogs, wikis and twitter for knowledge sharing and have placed them in the centre of effective, adequate, and easy knowledge sharing among employees in any organisation. The assertion put forward by Chigada (2014:164-165) in his study, carried out within the financial organisation, is that web 2.0 tools ensure that knowledge can easily be conveyed, debated, and shared among individuals. While particularly referring to the academic library, Awodoyin et al. (2016:15) reported the use of blogs, wikis, Twitter, and other social media platforms for knowledge sharing among staff members for the purpose of enhancing staff performance and library services.

The implication of the above overall findings is that technological tools are used for knowledge sharing among DELSU library, Abraka staff in order to improve service provision, but not as overwhelmingly as human-based tools. And while WhatsApp is the most used technological tool, for knowledge sharing among staff at the DELSU library, Abraka for the purpose of improving service provision in the library, Twitter is the least utilised one.

Other category

In the other category, where respondents were asked to indicate what other tools not mentioned in the questionnairres, are used, to share knowledge among colleagues in order to improve service provision, revealed the use of group discussions, apprenticeships, and really simple syndicate (RSS) feeds. These responses are listed below:

"discussions. Group discussions".

"hands-on-practices. Apprenticeship".

"group discussions".

"Really simple syndicate (RSS feed)".

According to some literatures, group discussions is another commonly used tool for knowledge sharing among academic library staff members for the purpose of promoting better output and service provision in the library (Dei 2017:221-222; Kumaresan & Swrooprani 2013:60; Onifade 2015:94). These studies reported that academic library employees prefer and share knowledge through informal channels, such as group discussions in coffee/tea and conference rooms. This preference could be attributed to the relaxed states of the mind and the absence of laid down rules or restrictions associated with such discussions. On the contrary, Muchaonyerwa (2015:164) revealed that although coffee rooms were used for group discussions by academic library staff members, the discussions were not concerned with sharing knowledge on work related issues in order to increase performance and service delivery in the library, but to strengthen the employees' individual and personal relationships. The reviewed literatures did not reveal the use of apprenticeships and RSS feeds for knowledge sharing within the academic library specifically for improving service provision. However, past literatures have revealed their usage for knowledge sharing within organisations, including academic libraries. Anari, Asemi, Asemi and Munir (2013:16), in their study concerning social interactive media tools and knowledge sharing, reported the use of RSS feeds for knowledge sharing among academic librarians. The study attributed this common use to the reputation of the RSS technologies, and their availability on most library websites. The study of Panahi et al. (2013:391), titled "Towards Tacit Knowledge Sharing Over Social Web Tools", revealed

that RSS technologies are more relevant and appropriate in sharing explicit knowledge among employees, but they also indirectly help to disseminate tacit knowledge widely by increasing the visibility of knowledge published in other places. The study also revealed the relevance and use of apprenticeships as tools for sharing knowledge, especially tacit knowledge, among individuals and employees (Panahi et al. 2013:383).

4.2.2.5 Factors of knowledge sharing among DELSU library, Abraka staff for the provision of services in the library

The fifth objective of this study is to identify the various factors of knowledge sharing among DELSU library, Abraka staff for the provision of services in the library. Several studies have categorised knowledge sharing factors into individual, organisational, and technological factors. Noor et al. (2014:1317), in their study on factors influencing knowledge sharing, developed a model which presented knowledge sharing factors in three categories of individual factors, organisational factors and technological factors. Also, Razmerita et al (2016:5-8) discussed knowledge sharing factors within three categories of Individual factors which is concerned with personality and attributes, Organisational factors which is about organisational culture and structures and technological factors which relates to technological and infrastructural availability and usability.

In view of the above, three questions were asked in order to establish the individual, organisational and technological knowledge sharing factors among staff at the DELSU library, Abraka for the provision of services. Using a five-point Likert scale for these questions, respondents were asked to indicate how much they agree or disagree with the listed individual, organisational and technological knowledge sharing factors as influences towards their sharing of knowledge among colleagues for the purpose of improved service provision in the library. The results are presented in the next sections.

What are the individual factors influencing knowledge sharing among DELSU library, Abraka staff for improved service provision?

Individual factors of knowledge sharing entail self-efficacy and subjective norms of individuals, such as trust, communication skills, and awareness (Alhalhouli, et al. 2014:920-921; Isa et al. 2016:219; Noor et al. 2014:1316-1317).

Respondents were asked to indicate their level of agreement or disagreement to statements that suggest the individual factors of knowledge sharing, as developed from the reviewed literatures.

The results to this question are displayed in Table 4.14.

Table 4.14. Individual factors of knowledge sharing

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Trust is a factor that is crucial to knowledge sharing among staff for improved service provision in the library.	28(46.6%)	31(51.7%)	0(0%)	0(0%)	1(1.7%)
Awareness of knowledge sharing benefits on improved service provision is crucial to knowledge sharing among staff in the library.	30(50%)	26(43.3%)	4(6.7%)	0(0%)	0(0%)
Communication and interpersonal skills are factors that is crucial to knowledge sharing among staff for improved service provision in the library.	35(58.3%)	20(33.3%)	3(5%)	1(1.7%)	1(1.7%)

According to Noor et al. (2014:1317), individual differences are based upon their diverse cultures, traditions, principles, and norms and so individual characteristics influence the inclination towards knowledge sharing. Equally, the above results showed that almost all the respondents were in agreement that the listed individual factors are crucial to the sharing of knowledge among DELSU library , Abraka staff. The majority of the respondents, 35 (58.3%) in total strongly agreed that staff members' communication and interpersonal skills are factors that are crucial to knowledge sharing among colleagues for improved service provision in the library. Equally, 20 (33.3%) respondents agreed. The responses support the view of Islam et al. (2011:5906) that communication and interpersonal relationships are crucial to knowledge sharing. Dikotla (2016:197), in a related study, found that communication and interpersonal skills are factors that greatly impact knowledge sharing among employees. The study further

explained that these skills are factors that determine whether an employee will engage in knowledge sharing among colleagues for better performance and service delivery. In the same vein, Chipeta (2018:148) argued that confidence in individual capabilities such as communication and interpersonal skill stimulates knowledge sharing among academic library staff members.

All the respondents, except 1 (1.7%), gave a positive response on trust among colleagues as a factor that is crucial to knowledge sharing in the library, with 28 (46.6%) of the respondents strongly in agreement and 31 (51.7%) in agreement. It is evident in the reviewed literatures that trust is a significant factor of knowledge sharing. Kaewchur and Phusavat (2016:236-237), in their study on key factors influencing knowledge sharing, found that trust is most crucial to knowledge sharing among employees and individuals. Islam et al. (2011:5906) also found that there is a positive and significant relationship between trust among employees and knowledge sharing. When employees consider their colleagues trustworthy, they are more willing and comfortable to share their knowledge with them (Chipeta 2018:17). The results supported the reports by Dikotla (2016:95) and Tahleho (2016:52). These reports indicated that trust is a key factor of knowledge sharing, which can either result in the progress or regress of knowledge sharing among employees in organisations, including academic libraries.

The statement "Awareness of knowledge sharing strategies and benefits on improved service provision \is crucial to knowledge sharing among staff in the library" also received positive responses, where 30 (50%) respondents strongly agreed, 26 (43.3%) agreed, and 4 (6.7%) stayed neutral. According to Isa et al. (2016:219), Onifade (2015:94) and Tahleho (2016:52) the awareness of knowledge sharing benefits on service delivery is also a strong determinant on whether the academic library staff will engage in knowledge sharing.

The implication of the above outcomes is that DELSU library, Abraka staff members' trust for one another, communication and interpersonal skills, and their awareness of knowledge sharing benefits on academic library service provision, greatly influence their knowledge sharing among staff for improved service provision in the library. This supports the opinion shared by Isa et al. (2016:219), Mosha (2014:32) and Tahleho (2016:52) which reported that library staff

members engage in knowledge sharing based on their trust for colleagues, their individual personalities, including communication and interpersonal skills, as well as their awareness of the importance of knowledge sharing towards improved service provision.

What are the organisational factors crucial to knowledge sharing among DELSU library, Abraka staff for improved service provision?

The organisational factors of knowledge sharing are concerned with the organisational approach and position towards knowledge sharing, as well as the measures and actions taken by the organisation that influence this sharing (Mosha 2014:29). These factors include management support, motivations such as rewards and recognitions, organisational culture, and structure (Isa, et al. 2016:218; Noor et al 2014:1317; Sirorei 2017:182-183).

Respondents were asked to indicate their level of agreement and disagreement with the three organisational factors highlighted in the reviewed literatures and mentioned in the questionnaires in relation to how they influence knowledge sharing among the library's staff for improved service provision.

Table 4.15 shows the respondents' responses.

Table 4.15. Organisational factors of knowledge sharing

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Organisational culture of knowledge sharing influences knowledge sharing among staff for improved service provision in the library.	25(41.7%)	31(51.7%)	2(3.3%)	0(0%)	2(3.3%)
Management support influences knowledge sharing among staff for improved service provision in the library.	41(68.3%)	16(26.7%)	0(0%)	2(3.3%)	1(1.7%)
Motivations, such as rewards and incentives, influence the sharing of knowledge among staff for improved service provision in the library.	41(68.3%)	15(25%)	1(1.7%)	1(1.7%)	2(3.3%)

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The above results showed that organisational factors, such as management support and motivations, (rewards and incentives) greatly influence the sharing of knowledge among DELSU library, Abraka staff for improved service provision in the library. An equal majority of respondents, 41 (68.3%) in total, strongly agreed that management support and motivations have huge influences on knowledge sharing in the library. The amount of respondents that agreed on this are 16 (26.7%) and 15 (25%) respectively. These responses reflect the position of reviewed literatures on knowledge sharing factors among employees. Awodoyin et al. (2016:15) and Kaewchur and Phusavat (2016:237) reported that motivations are key factors of knowledge sharing among employees. With regard to the academic library environment, Awodoyin et al. (2016:15) reported that employees are more motivated to engage fully in knowledge sharing and embrace knowledge sharing initiatives with the assurance that there is a reward afterwards. Awodoyin et (2016:17), Chipeta (2018:231) and Tahleho (2016:90) equally revealed that management support is crucial to effective knowledge sharing among library workers. They suggested that the academic library's management should create policies and strategies to encourage the effective flow of knowledge sharing within the library in order to remain innovative, and subsequently provide efficient services to users.

The response on organisational culture as a factor of knowledge sharing among staff for improved service provision in the library also had the majority of respondents responding in affirmation, but the level of agreement is reduced compared to that of management support and motivations. A total of 25 (41.7%) respondents strongly agreed, 31 (51.7%) agreed, 2 (3.3%) stayed neutral, and 2 (3.3%) strongly disagreed. These findings are corroborated in the studies of Chigada (2014:56), Mustaq and Bokhari (2011) and Tahleho (2016:100). As revealed in the reviewed literatures, organisational culture greatly influences knowledge sharing in an organisation, because it transcends into a knowledge sharing culture. This culture is concerned with creating new knowledge, and retaining organisational knowledge in order to use it in easily accessible media, which is available to all employees (Chigada 2014:56; Mustaq & Bokhari 2011). In particular to the academic libraries, Tahleho (2016:100), in his study on improving service delivery in academic libraries through knowledge sharing, revealed that organisational culture, which is the academic libraries' knowledge sharing culture, has a significant influence on knowledge sharing in academic libraries to encourage knowledge sharing for improved service delivery.

The implication of the above findings is that management support, motivations, and organisational culture of knowledge sharing are organisational factors that influence knowledge sharing among DELSU library, Abraka staff for improved service provision. Therefore, more attention should be paid to these factors by staff of DELSU library, Abraka in order to achieve the knowledge sharing benefits on service provision. This is corroborated by the opinion of Chipeta (2018:235), who stated that in order to enhance knowledge sharing among academic library staff members, for the benefit of the library and its services, knowledge sharing factors, such as motivation, organisational culture and management support should be reviewed and prioritised.

What are the technological factors influencing knowledge sharing among DELSU library, Abraka staff for improved service provision?

Technological factors of knowledge sharing include ICT tools, ICT infrastructures, and ICT know-how (Noor et al. 2014:1317). Using a five-point Likert scale, respondents were asked to state their level of agreement or disagreement on statements implying that technological factors influence knowledge sharing among staff for improved service provision in the library.

Table 4.16 displays the responses to the question.

Table 4.16. Technological factors of knowledge sharing

Technological factors of knowledge sharing	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
ICT tools and infrastructures influence knowledge sharing among staff for improved service provision in the library.	49(81.6%)	9(15%)	1(1.7%)	0(0%)	1(1.7%)
ICT know-how influences the sharing of knowledge among staff for improved service provision in the library.	45(75%)	12(20%)	2(3.3%)	0(0%)	1(1.7%)

The results showed that ICT tools and infrastructures are major factors influencing knowledge sharing among DELSU library, Abraka staff for improved service provision in the library. A

high majority of 45 (81.6%) respondents strongly agree, 9 (15%) agree, and the other 2 (3.3%) remain neutral and strongly disagree respectively. The relevance of ICT tools and infrastructures towards effective knowledge sharing have been emphasised in literatures in line with promoting and enhancing knowledge sharing for better staff performance and service provision (Ajie 2019a; Kaewchur & Phusavat 2016:237). Ajie (2019a), in her study "Issues and Prospects of Knowledge Sharing in Academic Libraries" posited that the availability of required modern technological tools and infrastructures is a major factor influencing knowledge sharing among employees. She argued that the availability of technological tools has the tendency to enhance the willingness and ease of knowledge sharing among staff members. Thus, Muchaonyerwa (2015:196) recommended that, in order to encourage knowledge sharing among staff, the academic library management, with the provision of adequate ICT tools and infrastructures for knowledge sharing, should encourage employees to share knowledge through formal and informal technological systems in order to maximise the gains of knowledge sharing on academic libraries' operations.

The statement "ICT know-how influences the sharing of knowledge among staff for improved service provision in the library" also had the majority of respondents, 45 (75%) in total, strongly in agreement. This is followed by 12 (20%) respondents in agreement and 1 (1.7%) strongly in disagreement. Technological know-how, which refers to the competency or the knowledge needed to make use of ICT tools for knowledge sharing, is considered a critical success factor of knowledge sharing in organisations, including academic libraries. Enakrire and Ocholla (2017:5) and Isa et al. (2016:220), in their respective studies, found that ICT know-how is a significant factor, which influences knowledge sharing among employees. According to Isa et al. (2016:220) the ability to efficiently utilise technological tools for knowledge sharing enhances adequate knowledge sharing among employees, and saves time and required costs for knowledge sharing.

The overall implication of the above findings is that technological factors such as the ICT tools, infrastructures and know-How have a huge impact on whether DELSU library, Abraka staff will share knowledge among themselves in order to enhance service provision in the library. This is in agreement with the studies of Awodoyin et al. (2016:14) and Chipeta (2018:231-232) which report that the availability of modern ICT tools and ICT infrastructures, as well as the

ICT know-how of academic library employees, are major factors that tend to influence the sharing of knowledge in the academic library by fostering the readiness and ease of sharing knowledge for better service delivery or hindering same.

Other category

The other category for this study's fifth objective consists of two questions. The first question sought to find out what knowledge sharing factors respondents thought will enhance knowledge sharing among staff for improved service provision in the library. The second question sought to find out what motivates respondents to share knowledge among colleagues for the provision of services. These questions were asked in order to solicit responses which could further shed light on the factors of knowledge sharing among DELSU library, Abraka staff.

The first question "***what are the factors that could enhance knowledge sharing for improved service provision in the library?",*** received the following 12 responses:

"*Organising seminars to share knowledge on new skills and grow librarians*".

"*Everything about Information and Communication Technology*".

"*Information and Communication Technological infrastructures such as the internet and websites*".

"*provision and availability of internet, like Wi-Fi at all time*".

"*Adequate network bandwidth and constant electricity provision*".

"*availability of internet connections like Wi-Fi all the time and other technological tools to communicate and share knowledge*".

"*In-training program for staff to understand knowledge sharing and the benefits on services*".

"*internal training in the department*".

"*technological tools such as email and blogs, know-how and finance*".

"*Organising workshop or seminars to share knowledge on new skills and knowledge to improve staff output of performance*".

"Motivation".

"motivation of staff".

Technological factors of knowledge sharing are considered prominent factors of knowledge sharing for improved service provision by the majority of the respondents. According to them, the availability of ICT tools, ICT infrastructures and ICT know-how will facilitate the sharing of knowledge among staff for improved service provision in the library. Four of the responses indicated that organising knowledge sharing programs, such as seminars and trainings will enhance knowledge sharing among the library's employees for improved service provision. This can be interpreted and classified as organisational factor of knowledge sharing, in the form of management support towards organising seminars and trainings to encourage and facilitate continuous knowledge sharing for improved service provision in the library. Two of the respondents were also of the opinion that organisational factors, in the form of motivations, will enhance knowledge sharing in the library for improved service provision. Although the kinds of motivation were not mentioned, Mosha (2017:183) and Muchaonyerwa and Mutula (2017:18) indicated that motivations towards knowledge sharing are rewards and incentives, which could take the form of promotions, recognitions and monetary rewards.

The overall views shared by the respondents support the studies of Razmerita et al. (2016:8) and Tahleho (2016:108-109), which reported that availability of adequate ICT tools, ICT infrastructures and ICT know-how, and staff motivations, are critical success factors of knowledge sharing among staff in order to improve performance and productivity.

The second question "***What motivates you to share knowledge among colleagues to better the provision of library services in your library?",*** received the following 16 responses:

"The availability and use of ICT facilities motivates me to share knowledge".

"improving service provision and staff performance in the library".

"What motivates me to share knowledge is to better the services provided".

"What motivates me to share knowledge is that I have been trained to provide efficient services and so I must do all it takes to do so. And since knowledge sharing is very helpful in providing efficient services then I am always ready to engage in it".

"improving services provided in the library to users".

"as you share knowledge, I also gain from the experience".

"because it makes not one staff knowledgeable, relevant and indispensable but all staff. And at the end our job is done easily with more experienced hands on board".

"the flare to know more on librarianship. Passion for personal development and providing adequate services to users".

"the idea of making knowledge available for all"

"because it enhanced services provided in the library".

"It gives me a great satisfaction that people are getting well-informed through me".

"create room for friendship and interpersonal relationship".

"incentives or any other form of rewards like promotion".

"For the improvement of our library services and the benefit of users".

The above responses showed that providing efficient services to users is the motivation for most of the respondents to engage in knowledge sharing among colleagues for improved service provision in the library. A majority of eight responses indicate that the motivation to share knowledge comes from the need and eagerness to better service provision in the library. This view is similar to that reported by Tahleho (2016:113) that in the absence of incentives or other rewards, the majority of academic library staff members are motivated and encouraged to engage in knowledge sharing among colleagues because of the benefits of enhanced service delivery. Other motivations to share knowledge among colleagues for improved service provision as indicated through the responses above, are self-development and career expansion, learning new knowledge, the zeal to know more about the profession through interactions, creating interpersonal relationship, being rewarded with promotion, and the availability of ICTs.

4.2.2.6. Barriers to knowledge sharing among DELSU library, Abraka staff for improved service provision in the library

This is the sixth objective of the study, which is concerned with determining the barriers to knowledge sharing among DELSU library, Abraka staff for improved service provision in the library. The reviewed literatures revealed several barriers to knowledge sharing within and outside the academic library. These barriers formed the basis for the two questions asked in order to satisfy this particular objective.

What are the barriers to knowledge sharing among DELSU library, Abraka staff for improved service provision?

For the first question, respondents were asked to indicate the various barriers to knowledge sharing among staff in the library for improved service provision by either answering in the affirmative or in the negative to statements in this regard.

Table 4.17 presents the findings from this particular question.

Table 4.17. Barriers to knowledge sharing among staff for improved service provision

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
Lack of awareness of how to adequately share knowledge is a barrier to knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.	35(58.3%)	18(30%)	1(1.7%)	5(8.3%)	1(1.7%)
Unwillingness to share knowledge is a barrier to knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.	33(55%)	25(41.6%)	1(1.7%)	0(0%)	1(1.7%)
Lack of trust is a barrier to knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.	34(56.7%)	22(36.6%)	3(5%)	0(0%)	1(1.7%)

Lack of motivation (such as reward and incentives) to share knowledge is a barrier to knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.	38(63.3%)	18(30%)	4(6.7%)	0(0%)	0(0%)
Lack of interpersonal and communication skills among staff is a barrier to knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.	30(50%)	27(45%)	0(0%)	1(1.7%)	2(3.3%)
Inferiority and superiority complexes among junior and senior staff are barriers to knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.	38(63.3%)	19(31.7%)	1(1.7%)	2(3.3%)	0(0%)
Lack of a knowledge sharing culture is a barrier to knowledge sharing among staff at the DELSU library, Abraka for improved service provision.	42(70%)	16(26.7%)	2(3.3%)	0(0%)	0(0%)
Lack of necessary ICT infrastructures, ICT tools and ICT know-how is a barrier to knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.	42(70%)	14(23.3%)	2(3.3%)	1(1.7%)	1(1.7%)

The above results revealed the knowledge sharing barriers which deter DELSU library, Abraka staff from sharing knowledge for the purpose of improving service provision in the library. The responses showed that all the listed barriers were militating against knowledge sharing among staff for improved service provision in the library. A majority of 42 (70%) respondents equally and strongly agreed that the lack of ICT tools, ICT infrastructures and ICT know-how among staff and the lack of a knowledge sharing culture in the library, were barriers to knowledge sharing among staff for the purpose of improving service provision in the library. This is followed by a lack of motivation, and inferiority and superiority complexes, among junior and senior staff members, which also had an equal majority of 38 (63.3%) respondents who agreed strongly. Also, a majority of the respondents strongly agreed that a lack of trust, an unwillingness to share, and a lack of interpersonal and communication skills were barriers militating against knowledge sharing among staff for improved service provision in the library.

These findings are similar to the reviewed literatures. Awodoyin et al. (2016:17), Patel (2015:428), Sandhu et al. (2011:209-210) and Tahleho (2016:104-105), reported that the

barriers of knowledge sharing among academic library employees ranges from a lack of trust, a lack of motivations, a lack of interpersonal and communication skills, an unwillingness to share, and a lack of ICT infrastructures, ICT tools and ICT know-how. In particular to knowledge sharing for improved service delivery within the academic library environment, Anasi et al (2014:364), Awodoyin et al (2016:17) and Tahleho (2016:104-105) reported that an unwillingness to share knowledge, a lack of trust, a lack of communication skills and a lack of ICT infrastructures and ICT know-how posed a great challenge to knowledge sharing. On the contrary, Muchaonyerwa (2015:136) reported that a lack of communication skills or expertise is not a significant barrier to knowledge sharing among academic library staff members. However, the study reported that employees' unwillingness to share their knowledge is a significant barrier to knowledge sharing within the academic library.

A lack of awareness on how to adequately share knowledge was also indicated as a barrier to knowledge sharing among staff for improved service provision in the library by a majority of 53 (88.3%) respondents. Awodoyin et al. (2016:17) reported similar findings. The study revealed that many academic library staff members are not aware and do not understand how to effectively share knowledge among colleagues. It further suggested that this could be linked to the lack of interpersonal and communication skills required to adequately share knowledge among colleagues in order to enjoy the gains of knowledge sharing in academic libraries, which are geared towards promoting service delivery to users. Communication and interpersonal relationships are essential to knowledge sharing. Thus, adequate skills are required in this regard in other in order to achieve effective knowledge sharing between employees (Dikotla 2016:197; Islam et al. 2011:5906; Mosha 2014:33).

The implication of the above findings is that, there exists a number of barriers, which hinders knowledge sharing among DELSU library Abraka staff for improved service provision in the library. These barriers include a lack of trust, a lack of motivation, a lack of awareness on how to effectively share knowledge, a lack of ICT tools, ICT infrastructures and ICT know-how, inferiority and superiority complexes among staff members, a lack of communication and interpersonal skills, and a lack of a knowledge sharing culture. However, the most important barriers are a lack of a knowledge sharing culture, a lack of motivation, a lack of ICT tools, ICT infrastructures and ICT know-how, and inferiority and superiority complexes among staff.

Other category

This category put forward the second question, which sought to determine other knowledge sharing barriers not mentioned in the questionnaires. Respondents were required to indicate what these knowledge sharing barriers are. The following responses were received:

"Unreliable electricity supply".

"Lack of electricity supply".

"inadequate electricity supply and internet connections".

"fear of letting others know or have more knowledge than yourself".

"Jealousy".

"Lack of commitment by the staff".

"Junior staff are sometimes not receptive to new knowledge especially from senior colleagues, inferiority complex"

The researcher expected to receive responses which could link demographic variables, such as age, gender, qualifications, and years of experience to the knowledge sharing among staff in the library as indicated in some of the literatures reviewed, but this was not the case. However, the respondents mostly indicated the lack of adequate electricity supply as a barrier to knowledge sharing. According to Anasi et al. (2014:360), this lack of electricity is linked to the lack of and use of ICT tools among academic library staff to share knowledge among colleagues. This is because electricity supply is needed to develop and utilise most of the ICT tools, which could facilitate knowledge sharing among the library employees. The respondents also indicated the lack of staff commitment and jealousy, as well as their fear of losing value, letting others know what they know as factors which impede knowledge sharing among staff in the library for improved service provision.

4.2.2.7. Strategies to enhance knowledge sharing among DELSU library, Abraka staff for improved service provision

According to some literatures, in order to encourage knowledge sharing among academic library staff, the academic library must develop and implement strategies, which include deliberate plans, policies and actions to facilitate knowledge sharing for better performance, innovations, or quality service delivery (Muchaonyerwa & Mutula 2017:4). The last objective of this study is to suggest strategies in order to encourage and improve knowledge sharing among staff at DELSU library, Abraka for improved service provision in the library. The researcher therefore considers the suggestions from the respondents on knowledge sharing strategies relevant to this objective. The respondents were asked to indicate strategies which they think would enhance knowledge sharing among staff in the library for improved service provision. This was an open-ended question, which required the respondents to answer in their own words. They provided the following responses:

"Staff should be motivated to enable them share knowledge for improved service provision. Technological infrastructures for sharing knowledge should be put in place and the culture of sharing knowledge should be improved upon".

"Funding bodies should take the library serious. And provide funds for the library to put in place tools that facilitate and supports effective knowledge sharing among the library staff for improved service provision".

"Encouraging library staff by educating them on the importance of engaging in knowledge sharing activities. Provision of forum to sensitise staff on knowledge sharing practices and how to effectively share knowledge".

"There should be motivation. Creation of awareness of knowledge sharing benefits on service provision and how to share knowledge efficiently. Provision of technological infrastructure for sharing knowledge".

"I recommend that the library develop and maintain the necessary facilities like internet, computers and others so that knowledge sharing would be effective".

"Provision of adequate internet connections and power supply".

"Staff need to be motivated to enable them share knowledge for the purpose of improving services. Awareness of the benefits of knowledge sharing on services. Interactive and communicative skills should be improved upon among staff".

The above responses show that the strategies suggested to enhance knowledge sharing among DELSU library, Abraka staff for improved service provision are mainly centred around the development and maintenance of ICT tools and ICT infrastructures, a rewards system, the continuous awareness of the importance of knowledge sharing to the provision of library services, as well as how to effectively share knowledge among colleagues. The emphasis placed on ICT tools, ICT infrastructures, and the expertise from suggested strategies is reflected in reviewed literatures, such as that of Tahleho (2016:115-116). Suggested strategies about motivations and rewards also reflect the suggestions found in earlier knowledge sharing studies, including that of Awodoyin et al (2016), Onifade (2015) and Tahleho (2016). However, the suggested strategy on the provision of adequate power or electricity supply seems to be unique to this study. This is because there was no inference to such a strategy in earlier studies. Nevertheless, the researcher considers adequate power or electricity supply as part of ICT infrastructures since it will determine and encourage the availability and usability of ICT tools for knowledge sharing.

4.3. QUALITATIVE FINDINGS

This section presents, analyses, and interprets the qualitative findings gathered through the conducted interviews. As discussed in the research methodology chapter, the interviews were used as a supplement data collection method in order to further shed light on the research objectives. In this regard, the interviews focused on five out of the seven objectives of the study.

The interview participants consisted of the purposively sampled seven DELSU library, Abraka section heads. All of them were available for interviews, and were interviewed telephonically, as indicated in chapter three.

The developed interview guide consists of two parts. The guide also assisted the researcher in asking questions, which sought to further satisfy the research objectives. The responses from

the participants were grouped, analysed, and interpreted in predetermined themes according to the research objectives, and were presented in quoted italic writing.

4.3.1. Description of interviewed participants (opening)

The first part of the interview guide, which was titled "opening", is concerned with establishing the characteristics of the interviewed participants. They were the DELSU library, Abraka's seven division heads, and were between the ages of 40 and 50 years. Their years of experience were between 14 and 25 years. Four of the participants held Doctorate degrees in LIS. The other three held Master degrees in LIS with one of the three, currently studying for a Doctorate degree.

4.3.2. Research objectives

The second part of the interview guide contained questions that sought to satisfy four of the research objectives, which required in-depth investigations as considered by the researcher. As indicated in the research methodology chapter, interviews are used as a supplement data collection instrument, mainly to obtain in-depth and consistent outcomes, and also to ensure the trustworthiness of the whole research process as well as the overall outcome.

4.3.2.1. Knowledge sharing practices among DELSU library, Abraka staff for improved service provision

One of the objectives of this study is to establish the practice of knowledge sharing among DELSU library, Abraka staff for improved service provision in the library. The findings from the questionnaires have, to a certain extent, established knowledge sharing practices among DELSU library, Abraka staff for improved service provision in the library. However, the researcher sought to acquire a better understanding of these practices. This was accomplished through the interviews, and by asking questions in order to clearly understand the kinds of knowledge that are shared among the library's employees for improved service provision. The interviews also revealed how the library ensures that these knowledge are continuously shared among all the staff members, and remain accessible to them in order to assist with service provision in the library even when they exit the library.

4.3.2.1.1. Kinds of knowledge shared by DELSU library, Abraka staff for improved service provision

The interviews revealed that DELSU, library, Abraka staff mostly share knowledge on library operations, library service processes, library practices, and past mistakes made among colleagues. Three of the participants mentioned that the knowledge shared on library operation and practices is often about the cataloguing and classification of library materials. One of the participants mentioned sharing knowledge on new trends and best practices in library operations, especially on the issue of library automation and use of ICTs, in order to provide efficient services to the library users. This outcome is consistent with Awodoyin et al. (2016:16-17) and Okonedo and Popoola (2012:11). Their studies revealed that academic library staff members possess various knowledge, relevant to performing library tasks, and share such knowledge in order to improve effectiveness in the library. Awodoyin et al. (2016:16) indicated that library staff members are more enthusiastic about sharing knowledge with colleagues, on the new and best library practices, especially with regard to the use of technology for effective service delivery, and cataloguing and classification. The participants' responses are presented below:

Participant 1: *"I share knowledge mostly on library operations and library service processes especially in cataloguing and classification where I have vast experience".*

Participant 2: *"Knowledge on library practices especially in the area of cataloguing and classification. New trends in cataloguing and classification".*

Participant 3: *"General knowledge on the automation of library services. there are trendy ways of library services, the use of technologies like social media platforms to perform some of the services like the user Education in the reference section and things like that. I share frequently such knowledge with my colleagues as a trained and experienced electronic and system librarian".*

Participant 4: *"It depends on the situation at hand. I share knowledge mainly on day-to-day tasks in the library among colleagues as staff. Knowledge on library practices and operations".*

Participant 5: *"Knowledge on how some of the books and other materials are being catalogued and classified. Like in cataloguing and classification, there are some materials that the subject*

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areas are not found directly in the classification scheme, I share my knowledge on how to adequately classify such materials from my experience with colleagues. I share knowledge on how to classify materials which are ordinarily difficult to classify so the users can access them easily in the library's catalogue. Also, I share knowledge on acquisition procedures and plans on how to procure materials".

Participant 6: *"Generally experienced staff share knowledge on library practices with new staff or old staff who are posted to their divisions. For instance, in my division, I share knowledge frequently and especially with staff who get posted here from other division in order to facilitate our job in the division. These staff may have little or no knowledge about the activities and processes that takes place in the division so they will need the knowledge to work effectively.*

Participant 7: *"I share tacit knowledge and explicit knowledge. Knowledge on library practices, daily task, work done, and mistakes made to avoid other staff making same mistake.*

The general implication of the above outcomes is that DELSU library, Abraka staff possess and share relevant kinds of knowledge frequently among colleagues for the purpose of enhancing service provision in the library. This either includes tacit or explicit knowledge. The outcomes from the interviews have helped in defining the specific kinds of knowledge shared among staff at the library towards enhancing service provision in practical terms.

4.3.2.1.2. How the DELSU library, Abraka ensures that employees' owned knowledge is harnessed when they leave the library, either through resignation, retirement, or death, for the purpose of improving service provision

Employees' individual knowledge is important to daily organisational tasks, in order to encourage innovations, decision-making, policy-making, problem solving, and productivity (Ayoub et al. 2017:597; Shongwe 2016:146). Hence, it is crucial for academic libraries to harness this knowledge and continuously use them to better service provision. Anna and Puspitasari (2013:1) reported that knowledge sharing in academic libraries is the answer to knowledge creation and reuse, which is pivotal for enhancing innovations, improving productivity, and increasing understanding among academic library employees.

The interviews revealed how DELSU library, Abraka staff create and reuse knowledge through knowledge sharing for the benefit of enhancing service provision in the library. The human-based tools for knowledge sharing in the library were also revealed here. The participants' responses are presented below:

Participant 1: *"One of the problem tacit knowledge is how to keep it, how to retain it when the owner leaves. Generally, these knowledge are again preserved in the minds/heads of the staff who might have gain these knowledge through observation of, job rotation or training with the experienced librarian. The library tries to harness this type of knowledge through mentorship and job rotation. From time to time we rotate staff to learn under these people that are carrying certain crucial knowledge, that is certain experts in certain fields as way of harnessing their tacit knowledge before they exit the library.*

Participant 2: *"Training and retraining process for subordinates and new staff. Documentations of how certain work issues were resolved. In my section here. We do training continuously and also document some task procedures so that no staff becomes indispensable".*

Participant 3: *"Yeah, apart from the in-house training that we do, we also document most of the knowledge and put them on handbooks which we share at the end of the training exercise and copies are also kept in the archives of the library. So, we don't only document, the library make sure such knowledge is imparted in others through trainings and the trainings have become a continuous process and a way of retaining or harnessing tacit knowledge in the library.*

Participant 4: *"We do documentation of these knowledge from time to time, for example in cat and class, we have a manual that we record how we solve problems, we also make copies for staff who requires it. We also do this by calling on staff who might have left the library due to retirement, resignation to help out with hiccup we might experience during task executions.*

Participant 5: *"By documenting the knowledge before these staff leaves so that new staff or other staff can have access to them for reference purpose. There is no ICT systems for storing and keeping these tacit knowledge because it is still at the developmental stage. But the manual systems are very much in place.*

Participant 6: *"Experienced Staff are made to train other staff before they exit the library. There is a process of training and retraining in the library in order to bridge the gap between*

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the highly experienced staff and less experienced staff in the library. Experienced staff are assigned to continuously train selected staff in their various divisions through maybe workshops, seminars and mentoring.

Participant 7: *"through mentorship, job rotation and training such as workshops. I constantly train staff under me as a way of sharing knowledge as required by the library. This practice is done in all the divisions of the library as required by the library in order to have successors or staff who can fill in vacuums left when experience staff leaves the library. So, this knowledge is continuously passed on, it is a tradition of the library.*

According to Dikotla (2016:8-9) and Kumaresan and Swrooprani (2013:56), tacit knowledge is crucial for enhancing services and productivity within any organisation, and it is often challenging to share or harness this type of knowledge. The above responses showed that staff at the DELSU library, Abraka understand the importance of knowledge, especially tacit knowledge, and acknowledge the difficulty in harnessing such knowledge. Hence, they are engaged in continuous trainings, mentorships, and job rotations in the library in order to try and harness and retain this knowledge for use by all staff in the library. By doing that, no knowledge becomes lost when any staff members leave the library since their Knowledge is frequently shared through trainings and mentoring of staff as well as job rotation.

The interviews also revealed that apart from what they refer to as in-house trainings, documentation, where experienced staff members are required to document solved problems and their solutions, is also a way through which the library harness staff owned knowledge. An example of such documents was mentioned by one of the participants, who in detail describe how this documentation occurs. In his words he said that *"In the technical unit, which is in charge of cataloguing and classification, we have a manual developed by one of our staff to help the library staff in the area of cataloguing and classification. This manual was developed with the staff owned knowledge and it is peculiar to the library for ease of work performance in that unit".* It was also revealed that on rare occasions retired staff members are called upon to assist with challenges the library might encounter in the course of providing services. This could mean that, the experiences and knowledge of staff members especially those exiting the library are not adequately, and holistically harnessed through appropriate knowledge sharing

channels, such as mentorship, before they leave the library (David-West & Nmecha 2019; Mavuso 2007:19).

Human-based tools, such as trainings, seminars, and job rotations were mentioned as tools which assist in the practice of harnessing employees' owned knowledge. The knowledge sharing tools revealed here also coincide with the human-based tools reported in the questionnaire findings and the reviewed literatures.

4.3.2.1.3. Systems for documenting solved problems and their solutions by DELSU library, Abraka staff in order to share this knowledge subsequently for improved service provision

Knowledge sharing among academic library staff helps them to form the foundation for solving problems and making decisions in the library, which are geared towards improving service provision (Anna & Puspitasari 2013:5-6). It is therefore expected that academic libraries develop an effective system to document mistakes made, and problems solved, by staff members in the course of carrying out daily tasks and the solutions to such problems. The interviews revealed that there are certain forms of systems adopted to document such knowledge, but only in individual divisions of the library. The interview also revealed that these systems are not in digital form in all the divisions. The participants' responses are presented below:

Participant 1: *"there is no general system for this. both electronic and manual form. But In individual divisions there are systems in place. for example, in cataloguing there is what we call authority list, that authority list is a record of how we treated, how we handled certain problems over time so even if I don't meet with you, I can solve the problem by looking at certain records you have kept over the years".*

Participant 2: *"Yes we have. Like abstracting and indexing related issues, we document problems solved and solutions and then send to the readers division as a whole and also any other section who might require it".*

Participant 3: *"Yes, we have manual documentation in individual divisions of the library, nothing generally".*

Participant 4: *"No we do not have a specified platform for general use of the library except the ones we develop or create in our individual divisions and units. Each division of the library have its own system of documenting these knowledge, especially knowledge on problem encountered and solved during the course of performing task and rendering services".*

Participant 5: *"Most of the divisions in the library have the culture of taking notes on problem solved and task procedures in order to assist newly posted staff to the division. Documentation is the only way the new staff and old staff can have idea on solutions to previous problem, encountered on the job and task performed with procedures followed. This will reduce repetition and duplication of jobs as I earlier mentioned. There is no ICT systems for storing and keeping these tacit knowledge because it is still at the developmental stage. But the manual systems are very, much in place".*

Participant 6: *"No general system. But there are documentations on mistakes made and problems solved and how they were resolved in most divisions".*

Participant 7: *"We document them manually and file them for easy access here in my division. I am not aware if this is practiced in other department t but I think it should. But there is no general documentation of any sort that I know of presently though some plans are ongoing".*

There are no central systems for documenting, problems solved on the job, and their solutions, both manually and digitally. However, it is reassuring to find out that manual documentation of problems solved on the job and the solutions takes place at divisional levels in the library.

4.3.2.1.4. How the DELSU library, Abraka ensures that documented knowledge is easily accessible for staff for the purpose of improving service provision

The interviews further revealed that documented knowledge on solved problems and adopted procedures are easily accessible, and is made available to all the DELSU library, Abraka staff members on request, and without any form of restrictions for the purpose of enhancing service provision in the library. This, according to the reviewed literatures, helps the staff members to avoid the repetition of mistakes, and subsequently results in efficient service provision (Akparobore 2015:32; Anna & Puspitasari 2013:5-6). Below are the responses from the participants. Two of the participants almost provided responses that were identical to the one

given by **participant 5**. Therefore, the researcher assumed it was not necessary to also include their responses.

Participant 1: *"Yes, these records are easily accessible by staff, they are there in the various divisions as tools, we see them as tools for carrying out tasks".*

Participant 2: *"Yes, these documents are readily available and accessible to staff who requires them".*

Participant 3: *"Of course, these documents are easily accessible to all staff who may require them. They all have the hard copy as well as the electronic copy at their disposal. some of them are posted into their email box when requested so it's always there for them to access".*

Participant 4: *"Staff can request for the documents when needed because it is kept in the library with no access restrictions".*

Participant 5: *"Yes, they are easily accessible to the staff and no form of restrictions "*

4.3.2.1.5. How the DELSU library, Abraka ensures that knowledge gained externally by staff is shared among colleagues in order to improve service provision in the library.

According to the reviewed literatures, it is understood that academic library staff obtain knowledge not only from day-to-day library tasks, but also externally from conferences, seminars, trainings, CoPs, and technological platforms, such as blogs. The interviews revealed how such knowledge is shared among the entire library staff at DELSU library, Abraka for improved service provision in the library. The participants' responses are presented below:

Participant 1: *"The staff who went for the training, workshop or seminar is expected to write an official report and train others in our in-house training"*

Participant 2: *"Yes, it is part of the library's policy to train staff. so, staff training is always budgeted for in terms of finances for the logistics and all. so periodically when things pop up the staff that are core to the library development are usually sponsored for trainings. And the moment they come back it is the library policy that you train other staff on what you have gone to learn concerning the job the moment you come back".*

Participant 3: *"It is compulsory for staff who goes out to training, seminars, workshops, conferences and the likes to acquire knowledge to organise an in-house training for the*

purpose of sharing the knowledge gained. They are also required to write reports in order to document the knowledge gained".

Participant 4: *"Yes, for instance when we started this automation process which is still underway, there were some staff who were sent out for trainings in this regard especially on new trends in cat and class like koha. On return from such trainings these staff are required to train all other staff who did not undertake these trainings with them through an in-house training and also the writing of reports to document the knowledge gained from the training. There are ICT tools for other purposes like storage of thesis, dissertation and some special materials a form of repository in the library but there is no effective ICT tools for ks yet but it is under development".*

Participant 5:" *There is what we call in-house training. Whenever staff returns from trainings, seminars, workshops and others they are asked to do an in-house training and train others who did not attend the training as resource persons. We also have a general in-house training for all staff to share knowledge on emerging trends in various library services, this happens about twice in the year".*

Participant 6:" *The staff is called upon to organise an in-house training for other staff in order to impart this knowledge gained from the external training. Recently three staff including myself were sent on an ICT related training and we were mandated to train other staff who did not attend the training. Also, the staff will have to put such knowledge to work so that other staff can observe and learn".*

The responses showed that staff members who acquire knowledge externally, especially those sent out to obtain knowledge by the library management, are mandated to share such knowledge among other colleagues through an in-house training, such as seminars and workshops organised in the library. The staff are also expected to document this knowledge in the form of reports, which are then archived for everyone to use in order to enhance service provision. This corroborates the study by Asogwa (2012), which suggests that library staff members' knowledge should be valued and disseminated in seminars and meetings, and the results from such gatherings must be preserved for reference purposes in order to enhance performance and service provison. By doing that, secluded knowledge or skills could be utilised by the entire library staff, which will eradicate or decrease task repetition, and form the foundation for solving problems and making decisions (Anna & Puspitasari 2013:5-6). This

practice also ensures that knowledge do not die, and is available to everyone who needs it (Dikotla 2016:8; Jones & Leonard 2009:27).

4.3.2.2. The role of knowledge sharing among DELSU library, Abraka staff on service provision in the library.

The third objective of the study was to determine the role of knowledge sharing among DELSU library, Abraka staff on the provision of services in the library. The question regarding this objective assisted in achieving a more detailed understanding of the role of knowledge sharing among DELSU library, Abraka staff on service provision. The interview responses also helped to further clarify how knowledge sharing among staff at the library improves service provision. The participants' responses are presented below:

Participant 1: *"Knowledge sharing helps a lot to improve library service delivery. For example, in cat and class especially classification there are certain range of numbers assigned for the purpose of classifying specific broad subject areas. Different librarians may assign different class numbers within the number range to same subject, this doesn't make the class numbers wrong or right but acceptable since it falls within the subject number range. Sharing such basic but technical knowledge with colleagues makes the work run smooth, help avoid task duplication, saves time and also gives staff confidence in their ability. Knowledge sharing can instil confidence in library staff when they carry out daily tasks in the library"*.

Participant 2: *"you know the profession actually is evolving, new development is popping up here and there, this is a very dynamic profession. What is obtainable in less than 5,3,4 years becomes obsolete. So, knowledge sharing is one veritable way of trying to keep staff current with the trending issues in the profession being a dynamic profession. we need to share knowledge so that we can perform our task efficiently and provide improved services especially when the library is moving from the normal orthodox library to what is obtainable in a modern-day digital age. So generally, the services rendered in the library is positively affected through knowledge sharing, there is no department that is not affected"*.

Participant 3: *"Sharing knowledge among staff help make the provision of services in the library more efficient. For example, When you are employed or when you're posted to unit, the previous colleagues or those who have been working there put you through what the process is or the activities of that unit and within the period of time you now learn the rudiments for*

example cataloguing you learn the rules; What to do, what steps to follow, descriptive cataloguing before you go to subject catalogue in cataloguing".

Participant 4: *"The purpose of knowledge sharing in the library is to develop all aspect of the library. Knowledge sharing among staff have been of great benefit to us here in the library especially in the circulation section to improve our services to the users".*

Participant 5: *"Knowledge sharing helps to improve the efficiency of library services provided. Because most of the knowledge shared by librarians helps to facilitate our jobs, and also avoid the repetition and duplication of most of those services. So, knowledge sharing helps to improve services, fast track the delivery of services".*

Participant 6: *"Knowledge sharing improves productivity in the library. As an experienced librarian in the library share their experience with colleagues it enhances performance which will result in quality services for our clients"*

Participant 7: *It is very essential for colleagues to share knowledge. Although most staff hoard their knowledge which is not good for effective library services. Sharing knowledge among colleagues affects the effectiveness of the library positively. So that users can benefit in the long run. For example, if a colleague has knowledge on a particular user's need and how to meet it but refuse to share with other colleagues who might be on duty when this particular user calls this will make the library inefficient when the staff on duty cannot satisfy this user because he lacks the right knowledge of the user's need. The user's need may be met at this particular instance but not in time or satisfactorily or even not at all due to lack of adequate knowledge which is available to another staff who is hoarding this knowledge".*

The interviews highlighted the importance of knowledge sharing among DELSU library, Abraka staff for improved service provision. The interview revealed that knowledge sharing among staff at the library assists with improving service provision by ensuring the best library practices, offering timely and relevant services to users, avoiding the repetition or duplication of tasks, providing solutions to problems on the job, and understanding users' needs. The interviews also revealed how knowledge sharing among staff in the library increases productivity and performance, especially in the provision of reference services, circulation and cataloguing services, and classification services. This occurs when staff members become more informed and confident when they gain new knowledge from colleagues. This outcome is

corroborated by the studies of AlRashdi and Srinivas (2016), Anna and Puspitasari (2013) and Awodoyin et al. (2016), which were reviewed in the second chapter.

4.3.2.3. Tools for knowledge sharing among DELSU library, Abraka staff for improved service provision

One of the objectives of the study is to determine what tools are viable for knowledge sharing among DELSU library, Abraka staff in order to improve service provision. The questionnaire findings revealed conflicting outcomes on the ICT tools adopted in the library. The interviews, however, focused on, and helped in, this regard by providing in-depth data, which provides clarity on the ICT tools/ infrastructures viable for knowledge sharing among staff in the library for improved service provision. The interview also suggested ICT tools that are relevant to knowledge sharing among the library's staff in order to improve service provision.

4.3.2.3.1. ICT tools/infrastructures currently in use at the DELSU library, Abraka in order to enable knowledge sharing among staff for the purpose of improving service provision

The interviews revealed what ICT tools and infrastructures are available or unavailable for knowledge sharing among staff for improved service provision in the library, as well as how and why. Although the question was primarily meant to reveal the ICT tools, the 'why' responses obtained explained some of the barriers to knowledge sharing among staff for improved service provision in the library. The following are the responses provided by the participants:

Participant 1: "*For technological systems, we have intranet. we don't have web 2.0. what we have most of them are human base tools*".

Participant 2: *"None because they are not fully functional yet"*.

Participant 3: *"in the e-library division of the library, we have the repository where all our manuals are being archived and most of our scholarly works are archived there as well, so it is bundle of knowledge where staff can go to at any time to retrieve whatever they wish to retrieve. We have video tapes although it is still in the developmental stage, not fully developed also in the e-library division we have a section that is on twitter, on development of librarianship. We have a lot of blogs where we share knowledge within the e-library division in the library and acquire knowledge from other library staff outside the library. When we receive new knowledge, we digest it test it then share with the entire library"*.

Participant 4: *"There is intranet but not available to all staff. The library is yet to have the web 2.0 tools for knowledge sharing. Although staff share knowledge using individual email and whatsApp. This problem is mainly due to lack of electricity and alternative power supply. Lack of constant power supply renders the intranet and internet inefficient"*

Participant 5: *"Apart from ICT tools for knowledge sharing we have job rotation, mentorship, job shadowing, in-house trainings which is very peculiar to the library's knowledge sharing system, meetings, seminars and other human-based tools. Me that is talking to you now, I was once in the technical service division before I was rotated here".*

Participant 6: *"No adequate ICT infrastructures in place yet, we are just starting to develop them, soon they will be available. We only make use of personal emails and social media platforms to share knowledge with ourselves as colleagues. There is internet but it is not always functional because we are yet to set all other infrastructures up for its smooth running".*

Participant 7: *"There are no proper ICT tools and infrastructure at the moment for general use to share knowledge, the library is only developing them now. Though as colleagues we share knowledge among ourselves using web 2.0 tools which we own individually like Facebook, WhatsApp, twitter and personal blogs. There is internet that is not really functioning. As we are talking now engineers are working in the library in this regard".*

The participants revealed through their responses that the DELSU library, Abraka does not have fully functional ICT tools, which also includes the web 2.0 tools. The reason for this is attributed to the unavailability of an adequate library budget and a constant electricity or power supply. However, personal ICT tools and infrastructures of individual staff members, such as the internet and mobile phones, and web 2.0 tools, such as email, Facebook, Twitter and blogs, are being utilised by them in order to share knowledge among themselves and improve service provision. This explains the conflicted responses obtained through the questionnaires on the availability and viability of some of the ICT tools, especially the web 2.0 tools listed in the questionnaire. Hence, the researcher is satisfied that the interviews have been able to clarify these discrepancies, and provide in-depth and balance outcomes on the ICT tools and infrastructures available for knowledge sharing among staff for the purpose of improving service provision at DELSU library, Abraka.

4.3.2.3.2 ICT tools/infrastructures the DELSU library, Abraka staff think the library still needs in order to enable knowledge sharing among staff for improved service provision

Follow-up questions in the interviews revealed the ICT tools and infrastructures the DELSU library, Abraka lacks for knowledge sharing among staff in order to improved service provision in the library. The interviews also revealed the ICT tools which the staff considered relevant to knowledge sharing among staff for improved service provision in the library. The paticipants' responses are presented below:

Participant 1: *"functional web 2.0 tools. They are very important to knowledge sharing. like the blog, Facebook, WhatsApp, and email. The library should have a website and blog designed to effectively share all kinds of knowledge among staff to aid service delivery. A functional official emailing system among staff not this personal use of email accounts".*

Participant 2: *"central intranet like the telephone. The internet. A functional internet is what we are clamouring for to assist in knowledge sharing for service delivery. And thank God it is being developed now. When the internet is in place as well as a constant power supply every other technology will be adequately functional for knowledge sharing among staff for the purpose of making our job easier and productive".*

Participant 3: *"The web 2.0 tools such as blogs, twitter, emails and whatsApp are veritable tools for knowledge sharing if you really want to share knowledge. We need these tools centrally and fully functional among all staff for knowledge sharing. ICT tools is the gateway, the conduit through which knowledge is actually shared. As ICT evolves knowledge sharng becomes much easier. We also need a multimedia studio because I believe these knowledge are better shared and stored on maybe hard drives, video tapes and other electronic formats that can be used to share and store knowledge so that instead of going through these manuals it can be accessed electronically. From time to time staff can view and access knowledge on library practices that pertains to their sections".*

Participant 4: *"The first solution is to have a constant power supply in the libtrary. We need a well-developed website, blogs, email system and every other web 2.0 tools, but their functionality all depends on constant power supply. Low budget contributes to the problem of constant power supply".*

Participant 5: *"ICT tools for knowledge sharing like the common telephone. functional internets and web 2.0 tools such as emails"*

From the above responses, it was clear that the DELSU library Abraka does not have a functional internet and web 2.0 tools. Therefore, the library needs a functional internet and web 2.0 tools, such as blogs, for sharing knowledge among staff members in order to improve service provision in the library. However, during the interviews, the researcher was informed by almost all the participants, and reliably so, that the development and installation of a functional internet, which will engender some of the web 2.0 tools, such as blogs and email were underway, even at the time of the interviews. The participants, most of who were excited about the installations of the internet and the subsequent development of other web 2.0 tools, listed blogs, WhatsApp, email, Twitter, and telephones as important ICT tools required in the library for staff to share knowledge in order to enhance service provision.

The researcher understood from the interviews that although library employees utilise ICT tools such as the internet, email, blogs, WhatsApp, twitter, Facebook and mobile phones to share knowledge among colleagues for improved service provision, these were not supported or provided for by the library, but by individual staff members.

4.3.2.4. Strategies to encourage knowledge sharing among DELSU library, Abraka staff for improved service provision in the library.

The last objective of the study is to suggest strategies that encourage knowledge sharing among staff for improved service provision at the DELSU library, Abraka. The interview questions posed to the participants in this regard were designed to first gather data in order to better understand the strategies that are in place at the library to promote knowledge sharing among staff for improved service provision. And then to suggest strategies that will encourage knowledge sharing among staff at DELSU library, Abraka for improve service provision. The researcher was primarily curious about the existing knowledge sharing strategies, encouraging knowledge sharing for improved service provision, in order to make relevant suggestions.

4.3.2.4.1. Plans and policies put in place at the DELSU library, Abraka in order to encourage and ensure a knowledge sharing culture for improved service provision in the library.

The interviews revealed that there were no cogent or written plans and policies in the DELSU library, Abraka to encourage a knowledge sharing culture among staff members for improved service provision in the library. However, there were some forms of unwritten policies and ongoing plans, which are encouraging the culture of knowledge sharing to a certain extent. The participants' responses are presented below:

Participant 1: *"Although there are plans but no written policies. Recognition and rewards are most times given to those who share knowledge with the discretion of the library head or management. There is silent policy of training and retraining in the library by experienced staff".*

Participant 2: *"We have plans and policies though not written down that allows for continuous organisation of trainings, seminar, workshop where we can gain new knowledge and also contribute knowledge. There is a policy or tradition that mandate staff to train others when they return from whatever training., workshops or conferences. There are plans which are ongoing to develop a fully functional internet and other ICT tools in the library to promote knowledge sharing among staff in order to enhance service efficiency".*

Participant 3: *"You see because of falsity of funds, the library sends out very senior library staff in each department for crucial training, the policy is when you came back from the training you do a documentation, a report on the training attended, what you gained, a very comprehensive report which is submitted to the head of the library and to the vice chancellor. These reports form the basis of the knowledge you acquired through the training which can be transmitted to other members of the library for their own use. It is also a policy that the moment you come back from trainings you notify the management on the date you will want to train the other staff on what you have learnt. With these policies in place, it encourages knowledge sharing culture in the library".*

Participant 4: *"There are plans but most are not being realised due to lack of power supply. plans regarding ICT tools for knowledge sharing. There is a policy though not written down for staff to organise in-house trainings and write reports on return when they are sent for trainings, workshops, conferences and seminars".*

Participant 5: *"The plans are under way as the development of ICT tools are underway. The sharing of knowledge mostly depends on ICT tools, if these tools are on ground like the internet staff will be more involved in knowledge sharing. So, we are on the foundation stage with these plans and policies. The only policy that tends to encourage knowledge sharing is that of writing a report on return from trainings, seminars, workshop, and the likes. although not written down, it is a form of policy for staff to organise an in-house training on return from external training or any knowledge acquisition events".*

Participant 6: *"The plans are ongoing, like I mentioned earlier we just started developing ICT tools that can actually encourage knowledge sharing culture for service delivery in the library. No written policies although staff are mandated to engage in continuous knowledge sharing through trainings, job rotation, mentorship and so on. Especially staff who are sent out to acquire knowledge".*

Participant 7: *"Yes there are policies even though they are not written down. That is why when people are sent for training, they have to train others so that the library can move forward. There are sometimes rewards for staff who engage in these trainings or any form of knowledge sharing activity. Staff are discouraged from hoarding knowledge".*

Partial plans or policies are there for staff members to engage in continuous training and retraining so that they can share knowledge, especially new knowledge, among colleagues. The unwritten policies in the library also require that staff members, who are sent out for trainings, organise what is referred to as in-house training in order to share the obtained knowledge with all staff and also to write a report documenting it for future reference. There is no plan or policy regarding rewards or any sort of motivations towards knowledge sharing in the library. However, plans are ongoing to develop ICT tools and infrastructures that support and encourage knowledge sharing among staff in the library for improved service provision. Muchaonyerwa and Mutula (2017:17) reported similar findings stating that academic libraries in KwaZulu-Natal do not have policies in place to promote knowledge sharing among employees. The study also reported that technologies were not implemented as knowledge sharing strategies in the studied libraries.

The conclusion is that although deliberate plans and policies regarding knowledge sharing are critical strategies that encourage knowledge sharing within the academic library, DELSU library, Abraka is yet to adopt this strategy. This could mean the absence of management

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support for knowledge sharing among staff for improved service provision through written policies and well-developed plans. It is indicated by the participants, especially participant 1, that the reward policy, and any other policies that can encourage knowledge sharing for improved service provision in the library, is available and implemented, but only at the discretion or will of the management in place at a particular time. This outcome is contrary to the studies of Arzi et al (2013:5), Mayekiso (2013:99), and Tahleho (2016:107) which appraised and suggested the consideration of clear policies that reflects an effective reward system by academic libraries' top management, where employees with knowledge are encouraged to share knowledge willingly and continuously in order to better service provision. Muchaonyerwa and Mutula (2017:18) also indicated that a knowledge sharing culture could be encouraged if top management continuously reiterate the importance of knowledge sharing within the academic library operation by using an adequate plan and policy development.

4.3.2.4.2. Kinds of rewards given in order to encourage knowledge sharing for the purpose of improving service provision at the DELSU library, Abraka.

According to Islam et al (2011:5903), an effective reward system is crucial for motivating employees to share knowledge among colleagues and between different organisations. Also, in the absence of adequate motivation, employees may be unenthusiastic about sharing their knowledge due to the likelihood of receiving no benefits.

The interview follow-up questions revealed the kinds of rewards and motivations given to staff who share knowledge for improved service provision in the library in order to encourage continuos knowledge sharing.   The participants' responses are presented below:

Participant 1: *"Although not often or consistent, sending those who share knowledge out for more training, nominating them to represent the library or university in crucial events and promotions. There is sometimes some form of incentives that a given to those who share knowledge, but all are in the discretion of the library's management at the time".*

Participant 2: *"No known rewards are given for sharing knowledge".*

Participant 3: *"That is the funny aspect of it, they say the reward of the teacher is in heaven. The reward we get or the joy we derive from sharing knowledge is that when we share knowledge people are learning fast and the services being rendered   are more efficient. the*

joy that you are the one evolving and transforming the library. Being the driving wheel of the evolution of the library. No tangible reward".

Participant 4: *"No known rewards".*

Participant 5: *"There is no reward policy in the library. But appreciations are sometimes rendered to staff who share knowledge".*

Participant 6: *"Promotion is one of the rewards that is sometimes given to such staff. Also, recommendation to attend trainings either within or outside the country. But when you don't share knowledge you may likely not get this recommendation".*

Participant 7: *"No adequate reward, I will almost say there is no reward but sometimes these sets of staff may get promotions or recommendations but not always. They are also sent for more trainings, but I will say these are not adequate".*

The responses show that although incentives, promotions, recommendations, being given more responsibilities or sent for trainings are motivations in place to encourage knowledge sharing in DELSU library, Abraka for improved service provision, it is not consistent. Also, these motivations are only applied at the discretion of the management in in charge at any particular time. Hence, two of the participants outrightly denied being aware of any form of reward given to staff members who shared knowledge. According to them, they have never received any rewards for engaging in knowledge sharing on several occasions, in order to enhance service provision in the library.

The implication of these outcomes is that the DELSU library, Abraka's reward system is not clear on who gets what, and when. This could adversely affect the sharing of knowledge willingly, and continuously by staff at library, among colleagues for improved service provision. According to Walter et al. (2013:4), the use of a reward system to encourage knowledge sharing for service provision may be ineffective when the reward system is not clear on who is rewarded, how and for what. Tahleho (2016:107) also reported that in order to gainfully use a reward system to encourage knowledge sharing among library workers for the purpose of enhancing services, with minimal setbacks, the library must re-align reward schemes to precisely account for these vital knowledge contributions.

4.3.2.4.3. Ways in which staff at the DELSU library, Abraka encourage knowledge sharing among colleagues in the library for improved service provision

The follow-up interview questions also revealed the ways in which DELSU library, Abraka staff encourage knowledge sharing among colleagues, within their individual capacity as employees, and especially as division heads, in order to enhance service provision. The participants' responses are provided below:

Participant 1: *" when I make people to share their knowledge I recognise and appreciate them. I acknowledge them, like so and so person is the reason why I am so and so person, you mention them. This will motivate them to share more ".*

Participant 2: *"Organising interactive programs such as seminars and workshops within my division"*

Participant 3: *"Sharing knowledge with my colleagues and sometimes rewarding them for sharing knowledge when they do. They will also reciprocate and share their own knowledge with all if I share knowledge with them as a senior colleague"*

Participant 4: *"Like I said earlier, I don't hoard knowledge, whatever new knowledge I gain I share it with my colleagues to make our tasks easier, quick and efficient so this way I am encouraging them to do likewise. Also, sometimes I offer them incentives not monetary though, to make them share whatever knowledge they have in accomplishing specific tasks quickly and effectively. I also offer them kind gestures when they share knowledge.*

Participant 5: *"I always spur my staff and colleagues to share knowledge by telling them the benefits of sharing knowledge. It makes our work easy and faster and it is good for all of us. An example was earlier today when I came in to the department and met some interns sitting idle because they do not have the knowledge of how to do what the staff were doing, I approached the staff and implore them to share the knowledge of how that particular task is done with the intern so they can all perform the task together quickly and efficiently instead of doing it alone and leaving the interns idle, left out and unproductive.*

The above responses showed that the DELSU library, Abraka's division heads do not only engage in knowledge sharing for improved service provision, but also to encourage others to share their knowledge for the same purpose. Incentives, organising interactive programs, appreciation, and giving due recognition are also ways in which these staff members encourage knowledge sharing among colleagues in the library for improved service provision.

As seen in the above discussions, the interview follow-up questions achieved the aim of finding out what knowledge sharing motivations are employed by the library's division heads. However, the interview outcomes have further shown the extent to which DELSU library, Abraka staff appreciate the benefit of sharing knowledge for improved service provision in the library. This further corroborates the assertion by Patel (2015:428), stating that academic library employees aspire to engage in and exploit knowledge management processes such knowledge sharing, in order to enhance their performance in particular, and service provision in general.

4.3.2.4.4. Knowledge sharing motivations among DELSU library, Abraka staff for improved service provision

A follow-up question revealed the motivations of knowledge sharing among colleagues for improved service provision in the DELSU library, Abraka. The participants gave similar responses. One of the responses summed up all of the others. It is indicated below:

"One, when I share knowledge and discover that, the people I shared knowledge with are carrying on and making use of the knowledge effectively to enhance the delivery of services in the library, it encourages me to share more. Two, when I am recognised or rewarded for sharing knowledge. Lastly, when I know that sharing knowledge does not make me easily dispensable.

The ultimate motivation for staff at DELSU library, Abraka to share knowledge among colleagues for improved service provision is the fulfilment derived from providing efficient services to the library users. However, receiving incentives, recognitions, promotions, and not being regarded as irrelevant after sharing their knowledge also motivates them to share knowledge among colleagues for improved service provision in the library.

This implies that in spite of the various challenges of knowledge sharing for improved service provision in the library, such as the lack of clear policies on rewards and the lack of adequate

ICT tools, the DELSU library, Abraka staff members still engage in knowledge sharing for the sole purpose of improving service provision in the library. This outcome is similar to the study of Tahleho (2016:113), which also indicated that academic library staff members are motivated to share knowledge among colleagues, ultimately, because it enhances efficient service delivery to users.

4.3.2.4.5. What are the strategies to encourage knowledge sharing among staff for improved service provision in the library?

All the participants were asked to suggest strategies to encourage knowledge sharing among staff for improved service provision in the library. The interviews revealed strategies similar to those divulged in the questionnaires. These mainly revolve around three key aspects, namely ICT (tools, know-how, and infrastructures), policies, such as reward systems, and adequate funding. The participants' responses are presented below:

Participant 1: *"Development and maintenance of ICT tools and infrastructure that supports knowledge sharing especially the web 2.0 tools. policies and plans that supports adequate reward systems. Recognition and rewards like promotions, trainings and incentives. So, when there is a reward system it will make knowledge sharing worthwhile. Knowledge sharing policies that says when staff share knowledge it does not make them to be replaced, does not make them to be redundant, it does not make them powerless they will share more because nobody wants to lose his place.*

Participant 2: *"Adequate funding for each division to facilitate knowledge sharing especially here in readers service division where we share information and knowledge with other divisions almost on daily basis manually through printed documents. Adequate and functional knowledge sharing ICT tools. So that we will not only share knowledge within the library but with colleagues in other library and also gain new knowledge from them to grow the libraries productivity and improve efficiency.*

Participant 3: *"One of our major problem is basically not having a written policy on reward. We acquire knowledge individually and so may be reluctant to share these knowledge acquired at our own cost without any form of reward or encouragement. The area of incentive is still*

very important, it should not only be about how many papers have you published in a reputable journal that will call for your promotion, all these talks there, training here they are very important in the library. If someone does not have knowledge on issues, there is no way he is going to train others. Recognition and promotions, people should be recognised when they share knowledge, it does not necessarily mean financial reward but recognition, awards, appreciations and other intangible rewards. These aspects should seriously be looked into. People should also be encouraged to publicise their works on the institutional repository for others to have access to them. Doing a research amounts to nothing when the output of the research has not been disseminated. So, for knowledge sharing to thrive for the purpose of improving services in the library adequate reward system should be enshrined in the library policies so that people will be motivated to acquire and share more knowledge. Also, an enabling environment to share knowledge be made available. The knowledge sharing technologies like the web 2.0 tools, blogs, should be in place to allow for knowledge sharing for service delivery. Constant power supply should be available. For individuals to share knowledge it has some costs but if these structures are put in place people can easily share".

Participant 4: *"A more functional internet and intranet with proper maintenance. The use of blogs, Facebook and others. Maintenance of ICT tools already in the library. Policies and effective plans in place for knowledge sharing. I will also suggest a written policy on job rotation in the library".*

Participant 5: *"The first strategy I will suggest is that it should be the library's written policy that all staff of the library irrespective of the division they work in the library to be ICT compliance. Also, a written reward policy with a reward system that rewards staff with knowledge and experience that makes them available to all in the library, staff who engage in knowledge sharing. There should also be a written policy that mandates staff who goes out for training to acquire new knowledge to ensure that every other staff benefits from the training and knowledge gained. Also, ICT tools and infrastructures should be on ground so that staff can easily share tacit and explicit knowledge at their convenience. There should be a form of social platform to encourage knowledge sharing in the library, a social interaction platform where staff can easily and readily share knowledge for example, staff out on trainings can easily share knowledge gained even while still on training. These platforms can become a form of knowledge hub for the library and its staff".*

Participant 6: *"Adoption, development and use of ICT tools to share knowledge. giving rewards to staff that share knowledge. Adoption of reward policy".*

Participant 7: *"Reward and incentives to encourage staff willingness to share. Actually, a written policy to this effect. Adequate ICT".*

The participants did not hold back on giving their candid suggestions on knowledge strategies, which they require in order to encourage knowledge sharing among staff for improved service provision. General ICT compliance, such as ICT tools, ICT infrastructures, and ICT know-how, are one of the foremost strategies suggested. Written policies on job rotation and that which mandates staff members to share knowledge among colleagues, especially when they return from trainings or seminars, were also suggested. Written policies on a reward system, for those who share knowledge, were also suggested as a strategy that will improve the sharing of knowledge among staff members for improved service provision in the library. Adequate funding was also suggested to ensure the availability of relevant tools and infrastructures that facilitate knowledge sharing among staff for improved service provision in the library. The suggested strategies coincide with some of the strategies reported in past studies to have encouraged and promoted knowledge sharing among employees within the academic library and other organisations in order to enhance service provision and productivity. Three of these studies are Dikotla (2016:212-213), Muchaonyerwa (2015:120) and Muchaonyerwa and Mutula (2017:17-18) They reported that the adoption of ICTs, clear policies on a reward system, job rotation, and management support serve as strategies for promoting knowledge sharing, which improves service delivery and staff performance.

4.4. SUMMARY

This chapter discussed the results from the questionnaires and interviews. The discussions entailed the presentation, analysis, and interpretation of collected data. These have revealed that staff at the DELSU library, Abraka are tasked with the provision of various services in the library, which can be greatly improved by knowledge sharing. The sad discovery is that even though staff members hold a great amount of knowledge and experience that could help improve service provision in the library and appreciate knowledge sharing not much is being done by the library's management to encourage and sustain knowledge sharing among staff to improve service provision. There are no strategies that could encourage knowledge sharing in

the library. This means that the library lacks deliberate plans, actions, and policies geared towards knowledge sharing. Also, there are no adequate ICT tools and enabling infrastructures, such as power supply, computers, or internet. This has been viewed by the staff as a setback to knowledge sharing for improved service provision in the library.

The next chapter discusses the conclusions drawn from the research findings in relation to the research objectives and the study recommendations.

CHAPTER FIVE
CONCLUSION AND RECCOMENDATIONS
5.1. INTRODUCTION

The previous chapter presented, analysed, and interpreted the data collected from the questionnaires and interviews. This chapter discusses the conclusions drawn from the study, and the recommendations suggested according to the research findings. The aim of the study was to establish the role of knowledge sharing in the provision of improved services in the DELSU library, Abraka. Seven objectives emerged as the study objectives, and seven research questions were developed to satisfy these objectives. These research questions are presented below:

- What library services are provided at the DELSU library, Abraka.
- Is knowledge sharing practiced among staff at the DELSU library, Abraka for improved service provision in the library?
- What is the role of knowledge sharing among staff at the DELSU library, Abraka on improved service provision in the library?
- What are the tools for knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library?
- What are the factors of knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library?
- What are the barriers to knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library?
- What are the strategies to enhance knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library?

The study adopted a mixed method research approach, which resulted in data triangulation. Hence, the conclusions drawn, and the recommendations made, reflect the findings from both the questionnaires and the interviews. The discussions on the conclusions and recommendations were done according to the research objectives, for orderliness and clarity. That is, conclusions were made according to findings that relate to each research objective. However, recommendations were made not only based on the research findings, but also on the extant literatures reviewed for the study.

5.2. CONCLUSIONS

The conclusions on each research objective are discussed below, based on the research findings from both the questionnaire and the interviews.

5.2.1. Services provided at the DELSU library, Abraka

The first objective of the study was to identify the services provided at the DELSU library, Abraka. The findings revealed that the library provides the following services:

Collection development services

- Acquisition services
- Cataloguing and classification services
- Weeding services

Reference services

- Information literacy services
- Research support services
- Indexing and abstracting services
- Bibliographic description services
- Reprographic services
- Marketing services

Circulation services

- User registration services
- User education services
- Inter-library loan services
- Selective dissemination of information (SDI) services
- Borrowing, reservation, and renewal services
- Document Delivery (DD) services
- Current awareness services

5.2.2. Knowledge sharing practices among staff at the DELSU library, Abraka for improved service provision.

The second objective of the study was to establish knowledge sharing practices among staff at the DELSU library, Abraka for improved service provision. In order to achieve this objective, the understanding of knowledge sharing by the staff was first sought. The findings revealed that the staff at DELSU library, Abraka understand what knowledge sharing is, and what its benefits are on library service provision. The staff are often engaged in knowledge sharing among colleagues in order to share both tacit and explicit knowledge, such as knowledge on user needs, best library practices and policies, new trends in librarianship, lessons learnt on the job, and educational issues, in order to provide better service provision in the library. However, knowledge on the best library practices, the new trends in the cataloguing and classification of library materials, and the use of technology for providing library services are the most important aspects of knowledge sharing among staff for improve service provision. This coincides with studies done by Awodoyin et al. (2016:16) and Okonedo and Popoola (2012:11), which indicated that academic library staff members often share knowledge on best library practices and policies, cataloguing and classification, library automation, as well as the new trends in librarianship.

Continuous training, referred to as in-house training and documentation, are ways in which the library tends to harness the knowledge of its staff, especially in a situation where they exit the library for any reason. Also, the library occasionally calls on staff who have exited the library for their knowledge and experiences in solving problems encountered while in the course of service provision and to train current staff. The library does not have a formalised and central system for documenting solved problems, and their solutions, in order to enhance the library's service provision. This is only done at individual divisions, and the documentations are easily accessible by all staff. Also, as a knowledge sharing practice, the library sometimes sends out its staff members for training, which are relevant to its operations and management. On their return, these staff members are required to share their new knowledge with their colleagues, and to write a report, which is then archived for future references and use in promoting service provision in the library. These practices, however, are not formalised, and when they occur depends on the direction of the management at a given period.

5.2.3. The role of knowledge sharing among DELSU library, Abraka staff on improved service provision.

The third objective of the study was to find out what role knowledge sharing among staff at the DELSU library, Abraka play on improved service provision in the library. The findings revealed that knowledge sharing among staff in the library positively enhance the provision of all services provided by the library. This coincides with studies done by Akparobore (2015:32) and Anna and Puspitasari (2013:5-6), which reported that knowledge sharing generally has a positive impact on all academic library services and their provision.

The role of knowledge sharing among staff in the DELSU library, Abraka for improved service provision include the provision of timely services to users, the avoidance of task repetition, the avoidance of the repetition of task mistakes, understanding user needs, the learning and adoption of best library practices and policies, the provision of cost-effective services, and the provision of accurate and effective services. Knowledge sharing among staff in the library also makes for a better informed and prepared staff, who becomes more productive in rendering efficient services to users. The overall outcomes highlight the crucial role played by knowledge sharing among the library staff in improving service provision. The study of Mayekiso (2013:93) indicated that knowledge sharing among academic library staff enhance the understanding of users' needs, and make for a well-informed staff, who in turn provide efficient services. Also, the studies of Akparobore (2015:32) and Anna and Puspitasari (2013:5-6) noted how knowledge sharing helps each library staff member to learn from the past experiences of others in order to increase their individual efficiency, thereby reducing task repetition or mistakes and providing better services to users.

5.2.4. Tools for knowledge sharing among staff at the DELSU library, Abraka for improved service provision

The fourth objective of the study was to find out what tools are used for knowledge sharing among staff at the DELSU library, Abraka for improved service provision. The research findings revealed that human-based knowledge sharing tools, such as mentorship, job rotation, meetings, trainings, and seminars/workshops were more used for knowledge sharing among staff in the library for improved service provision. Others, such as brainstorming, group

discussions, apprenticeship, storytelling, job shadowing, and CoPs were also used, but only by few of the staff members, and inadequately.

Technological-based knowledge sharing tools were also used for knowledge sharing among staff for improved service provision in the library, but not sufficiently. The technological-based tools, such as WhatsApp, Facebook, internet, emails, wikis, blogs, and telephones/mobile phones were only used at personal levels in order to share knowledge with colleagues where necessary, and to improve the provision of services in the library. There are no such tools available in the library for general use. No internet services, blogs, emails, or websites, and the library are only in the process of developing such infrastructures in order to support knowledge sharing among staff in the library for improved service provision to users. This means that the use of technological platforms for knowledge sharing among the staff at the DELSU library, Abraka for improved service provision, is not formalised and central. This is similar to the conclusions reached by Anasi et al. (2014:366) that academic library staff in university libraries in Nigeria are yet to formalise and exploit ICT tools, for knowledge sharing among colleagues to either improve service delivery or for professional development.

5.2.5. Knowledge sharing factors among staff at the DELSU library, Abraka for improved service provision

The fifth objective of the study was to identify the factors influencing knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library. The findings revealed the following;

- Individual factors, such as trust, awareness of knowledge sharing and communication, and inter-personal skills influence knowledge sharing among staff in the library for improved service provision.
- Organisational factors, such as organisational culture of knowledge sharing, management support towards knowledge sharing, and motivations (rewards) for knowledge sharing influence the sharing of knowledge among staff in the library for improved service provision.
- Technological factors, such as ICT tools, ICT infrastructures, and ICT know-how were also reported as influences on knowledge sharing among staff in the library for improved service provision.

The provision of improved and efficient services to users, as well as the unwritten policy which mandates staff to share knowledge gained externally through trainings, are the success factors of knowledge sharing among staff in the library. According to the research findings, staff are motivated to share knowledge among colleagues since it amounts to the provision of better services, which gives them a form of job satisfaction. This is similar to the report by Tahleho (2016:113), which stated that the improving service delivery is the ultimate success factor of knowledge sharing among academic library staff members. The DELSU library, Abraka does not have reward policies or systems set out to encourage knowledge sharing among staff for improve service provision in the library. Rewards, in the form of more responsibilities and trainings, are sometimes used to motivate staff members to engage in knowledge sharing among colleagues for improved service provision, but only at the discretion of the management at hand.

5.2.6. Barriers to knowledge sharing among staff at the DELSU library, Abraka for improved service provision

The sixth objective of the study was to determine the barriers to knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library. The findings revealed the following as the barriers to knowledge sharing among staff at DELSU library, Abraka for improved service provision in the library:

- The lack of awareness of channels to adequately share knowledge.
- The lack of trust among staff members.
- An unwillingness to share knowledge.
- The lack of motivations, such as rewards, promotions, recognition, and incentives.
- The lack of interpersonal and communication skills among staff.
- Inferiority and superiority complexes among junior and senior staff members.
- The lack of a knowledge sharing culture that is supported by the library's management.
- The lack of proper and formal policies and plans by the library's management to support knowledge sharing among staff in the library.
- The lack of necessary ICT infrastructures, ICT tools, and ICT know-how.

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Other knowledge sharing barriers are the lack of commitment by staff members towards knowledge sharing, the lack of an electricity/power supply, and jealousy. However, the greatest barriers to knowledge sharing in the library is the lack of ICT capabilities, which include tools, infrastructures and skills, the lack of a knowledge sharing culture, inferiority and superiority complexes, as well as the lack of motivations. According to Awodoyin et al. (2016:16), the major barriers to knowledge sharing among academic library workers are the lack of understanding on how to adequately share knowledge, which entails ICT capabilities like the use of modern technologies to share knowledge, and social networking skills. On the contrary, the study of Awodoyin et al. (2016:16), also revealed that the lack of ICT tools and ICT infrastructures are not significant barriers to knowledge sharing among academic library staf f members.

5.2.7. Strategies to encourage knowledge sharing among staff for improved service provision at the DELSU library, Abraka.

The seventh objective of the study was to suggest strategies to encourage knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library. The findings revealed that there are no existing strategies that encourage knowledge sharing for improved service provision in the library. This further reiterate the earlier conclusion that, although some form of knowledge sharing take place in the library, it is not eshrined in the library's activities, its policy and unformalised. Hence, it may well be argued that knowledge sharing only occur in the library by chance, and on ad hoc basis. This is not significantly surprising since it is corroborated by similar studies of Ali and Khan (2017), Awodoyin et al (2016), Maponya (2004), Muchaonyerwa and Mutula (2017) and Tahleho (2016). The studies all concluded that academic libraries are yet to formalise knowledge sharing by developing and implementing strategies to encourage it among staff members for the purpose of improving performance, fostering innovation, and enhancing service delivery. Khan (2014:31), Maponya 2004:16, and Tahleho (2016:112) observed that knowledge sharing at academic libraries is often uncoordinated, usually stems from informal conversations, and occurs by chance.

However, the following strategies were suggested by the DELSU library, Abraka staff in order to encourage and improve knowledge sharing among staff for enhanced service provision in the library:

- Adequate motivations towards knowledge sharing through reward systems duly supported by the library management through written policies.

- Provision of appropriate ICT tools and ICT infrastructures, including adequate power supply and internet access.

- Appropriate and continuous training on how to effectively share knowledge through available channels.

- Proper funding from the parent institution's management.

- Awareness creation of knowledge sharing benefits on service provision and platforms in order to effectively share knowledge.

- Development and maintenance of written policies and plans in order to support knowledge sharing among staff for improved service provision, and to maintain a knowledge sharing culture in the library.

5.3. RECOMMENDATIONS

The recommendation section presents the researcher's recommendations based on the conclusions drawn from the research findings and the studied literatures. The recommendations are geared towards enhancing knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library. The recommendations are therefore based on the following research objectives:

- To identify the various services rendered by the DELSU library, Abraka.
- To establish the practice of knowledge sharing among staff at the DELSU library, Abraka for improved service provision.
- To determine the role of knowledge sharing among staff at the DELSU library, Abraka on the provision of services in the library.
- To explore tools for knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.
- To identify the factors of knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.

- To determine the barriers to knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.
- To suggest strategies to encourage knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.

5.3.1. Recommendations on services offered at the DELSU library, Abraka.

The DELSU library, Abraka provides numerous services to its users. However, the library is a very traditional library. Therefore, the study recommends that the library improves on its reference services, especially in the area of virtual reference services, in order to provide remote services to users. The interlibrary loan services of the library should also be improved upon. From the responses in the findings, and the reports in literatures, these services are merely provided.

5.3.2. Recommendations on knowledge sharing practices among staff at the DELSU library, Abraka for improved service provision.

The practice of knowledge sharing exists among staff at the DELSU library, Abraka as revealed by the findings. However, these practices are not formalised, adequate and appreciated by all of the library's staff with the goal of enhancing service provision in the library. The library sometimes, call on staff that has exited the library for their knowledge and experience, in order to assist with difficult tasks and train current staff members. This practice is not cost-effective and can be avoided by adopting and implementing appropriate knowledge sharing practice of passing this knowledge to others before the eventual exit of these knowledgeable staff members. Summarily, the DELSU, Abraka library is a very traditional library and therefore, knowledge sharing needs urgent attention. The staff are learning to carry out their task better but there is no evidence of innovation because of lack of adequate knowledge sharing.

Hence, the recommendation here is that the library management educate all the staff members on the benefits and role of knowledge sharing among staff on the provision of services. The library should adopt, maintain and provide awareness on effective knowledge sharing practice in order to holistically harness individual knowledge for improved service provision in the library. Also, the library needs to develop and maintain a centralised database for documenting problems solved and their solutions, and ensure that such database is easily accessible by all the staff members in order to enhance service provision in the library.

5.3.3. Recommendations on the role of knowledge sharing among staff at the DELSU library, Abraka on the provision of services in the library.

Knowledge sharing among staff at the DELSU library, Abraka plays a significant role in improving service provision in the library. The library management should continuously create awareness among the entire staff on the role knowledge sharing among staff could play in promoting service delivery to users. The benefits of knowledge sharing among staff of the library should be made known to all staff through regular job performance appraisals and service delivery evaluation gatherings. This will highlight the importance of knowledge sharing among staff for improved service provision in the library, and expand its role as well.

5.3.4. Recommendations on the tools for knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.

According to the research findings, tools that are available for knowledge sharing among staff in the library are not adequate and formalised for general viability. As indicated in the conclusion, only some of the human-based tools are being adequately and generally employed to share knowledge among staff in the library. Therefore, knowledge sharing tools, such as the internet, blogs, WhatsApp, Twitter, emails, and phones should be put in place, enhanced, and explored in the library in order to efficiently share knowledge among staff for improved service provision.

5.3.5. Recommendations on the factors of knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.

The research findings on the factors and barriers to knowledge sharing among staff at the DELSU library, Abraka revealed that management support is highly significant in either promoting or hindering knowledge sharing among staff. Trust among staff members, and between management and staff members, is also a critical influence on knowledge sharing among staff in the library. The recommendation therefore is that the library's management, through properly written policies and laid down plans, should build and maintain trust and a culture of knowledge sharing among staff in the library. The library management should

develop and maintain a written policy, which will help to set up a proper reward system in order to motivate staff to share knowledge among colleagues for improved service provision in the library.

The findings also revealed that the lack of ICT tools, ICT infrastructures, and ICT know-how are great barriers to knowledge sharing among staff for improved service provision in the DELSU library, Abraka. The recommendations, therefore, are that plans on the development of adequate internet access, which was underway during the data collection period, should be duly completed and maintained in order to facilitate knowledge sharing among staff for improved service provision. Ultimately, staff members should be trained and retrained continuously on ICT capabilities and efficient utilisation. Finally, funding should be made available for proper infrastructures, such as an adequate power supply and website development, in order to enhance the application and use of ICT tools for knowledge sharing among staff in the library for improved service provision. The issue of the lack of an electricity supply is intertwined with the lack of ICT tools and ICT infrastructures (Anasi et al. 2014:360). The cost of setting up, running, and maintaining technological tools and infrastructures to support knowledge sharing is vast, and the lack of such resources is a barrier to knowledge sharing in any organisation (Jeenger & Kant 2013:2-3). Knowledge sharing is bound to fail if the necessary basic technological infrastructures and tools required for knowledge sharing are not made available. Hence, adequate resources, including funds, should be made available to support effective knowledge sharing.

5.3.7. Recommendations on the strategies to encourage knowledge sharing among staff at the DELSU library, Abraka for improved service provision in the library.

The recommendations on the strategies to encourage knowledge sharing among staff at the DELSU library, Abraka are informed by the research findings from suggested strategies by the library staff and by the reviewed literatures. Strategies to encourage knowledge sharing among staff at DELSU library, Abraka for improved service provision have been developed. They are recommended as guides for developing effective strategies to encourage knowledge sharing among staff for improved service provision in the library.

Staff knowledge

Tacit
- Intellectual capital
- Job Experience
- Work skills

Explicit
- Database
- Work practice Documents
- Policy documents
- Scholarly communications

Knowledge sharing goals

Overall improved service provision
- Innovation
- Increased performance
- Capacity building

Knowledge sharing strategies

Personalisation strategies
- Effective reward system linked to the value of knowledge shared towards service provision
- Continuous awareness on knowledge sharing and benefits
- Regular person-to-person knowledge sharing activities
- Staff development to build knowledge and knowledge sharing capabilities
- Regular appraisal of knowledge shared against service provision
- Appropriate knowledge sharing policy and plans

Codification strategies
- Adequate funding for required ICT resources and capabilities for sharing knowledge and storage;
  i. ICT infrastructures
  ii. ICT tools
  iii. ICT trainings (Know-How)

Improved Knowledge sharing among staff

Figure 5.1. Strategies to encourage knowledge sharing among staff for improved service provision

Adopting knowledge sharing strategies requires due consideration of the type of knowledge to be shared (available and required knowledge), and the end goal which knowledge sharing is expected to achieve (Dikotla 2016:9; Montcalm 2013). The above proposed model suggests the integration of both personalisation and codification strategies, linked to the available staff members' knowledge, required knowledge, and the knowledge sharing goals, to facilitate knowledge sharing among staff at the DELSU library, Abraka for improved service provision. This means that the strategies will adapt to the library's knowledge need, and reflect the ideals of the library's staff, who are the knowledge owners and receivers. Ajie (2019a) and Anna and Puspitasari (2013:4) posited that knowledge sharing strategies within the academic library should be adapted to the libraries condition and context. Staff should be involved in developing

and mapping such strategies, because successful knowledge sharing is reliant on the audience's participative and contributing role.

The codification and personalisation strategies play a complementary role towards one and the other when combined to facilitate knowledge sharing within an organisation (Johansson et al. 2013:301). In the above proposed model, the combination of elements of the personalisation strategy, such as the person-to-person interactions (mentorship, meetings, job rotation, seminars, workshop, and apprenticeship) with elements of the codification strategy, such as the internet and web 2.0 platforms, will result in easy and effective knowledge sharing. Codification strategies are highly relevant in the convenient knowledge sharing and the documentation of shared knowledge, especially tacit knowledge for future reference towards quality service provision in the library. According to Ali and Khan (2017:76-77) and Nazim and Mukherjee (2012), elements of the codification strategies, such as the ICT infrastructures, enable easy and effective knowledge sharing among academic library staff, and the storage of tacit knowledge for the benefit of the entire staff towards quality service delivery. This means that the library staff members will continue to generate new knowledge when they share knowledge, apply shared knowledge, store shared knowledge, and reuse stored knowledge in a continuous process. This view is supported by the SECI theory adopted for this study, which explains knowledge sharing as a continuous process. The theory views knowledge sharing as a cyclical process where tacit knowledge is converted into explicit knowledge, and vice versa, through knowledge sharing and reuse (Dikotla 2016:16; Hislop et al. 2018:16; Mbugua 2018:16;).

Again, adopting elements of the personalisation strategy, such as an effective reward system, which is linked to the value of knowledge shared towards service provision, will prompt the staff members' engagement in knowledge sharing, knowing that they will be duly rewarded. Also, the strategy of regularly carrying out an appraisal of shared knowledge against service provision will highlight the benefit of knowledge sharing among staff, which is improved service provision, and could serve as knowledge sharing motivations. According to the SET theory, which is one of the theories that inform this study, knowledge sharing among individuals is encouraged when the benefit of sharing outweighs the cost of sharing (Bock, Zmud, Kim & Lee 2005; Cropanzano et al. 2017:2; Jinyang, 2015:172). In other words,

employees assess the apparent proportion of gains to the costs of sharing their knowledge, and anchor their decisions on the expectancy that it will be valued, and bring about social incentives, such as gratitude, admiration, reputation, or even altruism, and tangible incentives.

The strategy of developing appropriate policies in order to support knowledge sharing is relevant to promoting a strong knowledge sharing culture in the DELSU library, Abraka. A policy document that supports knowledge sharing will reflect and deal with the issues of knowledge sharing motivations and facilitators, such as rewards and ICT tools, and eliminate knowledge sharing barriers in order to create a knowledge sharing culture in the library (Arzi et al 2013:5; Mayekiso 2013:99; Muchaonyerwa & Mutula 2017:18; Tahleho 2016:107). A strong knowledge sharing culture will mean that there is a conducive environment for staff to enthusiastically share their knowledge and acquire new knowledge with little or no barriers. A knowledge sharing culture within the academic library supports and fosters a knowledge sharing environment, with the necessary prerequisites (Chipeta 2018:132-133; Tahleho 2016:100). Also, developing policies that support knowledge sharing will also ensure that knowledge sharing is formalised and well-coordinated in the DELSU library, Abraka for improved service provision. According to Arzi et al (2013:5), Mayekiso (2013:99), and Tahleho (2016:107) and this study's outcomes, the DELSU library, Abraka can only fully benefit from knowledge sharing among its staff when knowledge sharing is formalised, and occurs in a coordinated and goal-oriented manner.

Overall, the formulation and adoption of strategies that encourage knowledge sharing among the DELSU library, Abraka staff, will result in improved service provision as illustrated in the proposed model, which is the ultimate goal of knowledge sharing, within the academic library and other organisations. According to some literatures the primary purpose of knowledge sharing among academic library staff is to develop their knowledge and to utilise available knowledge for the provision of efficient services to users (Chipeta 2018:119; Lekay 2012:22; Muchaonyerwa 2015:44). Therefore, the promotion of knowledge sharing among academic library staff members means maximising isolated essential knowledge in order to achieve the goal of the academic library, which is the provision of adequate service to users, through effective knowledge sharing. In order to achieve effective knowledge sharing, academic

libraries must formulate and adopt strategies to encourage knowledge sharing among their staff, and in turn, eliminate the barriers of knowledge sharing thereof.

5.4. AN OVERVIEW OF THE RESEARCH OUTCOMES AND CONTRIBUTION

The aim of the study was to establish the role of knowledge sharing among the DELSU library, Abraka staff on improved service provision in the library and to develop a strategy to encourage knowledge sharing among staff for improved service provision in the library. The objectives set out for the study enabled the researcher to achieve this aim. The outcomes of the study as well as the suggested strategies represent the research contributions to existing knowledge. Knowledge sharing among the DELSU library, Abraka staff plays a significant role in improving service provision in the library. This role is reflected in its benefits on service provision in the library, which includes well informed and efficient staff members, the avoidance of task mistakes, understanding user needs, the provision of efficient and accurate services, the provision of timely and cost-effective services, the learning and adopting of the best library practices, the avoidance of task duplication, and the provision of solutions to problems encountered on the job. This is because, consequently, these benefits undoubtedly result in an overall improved service provision to the library users. Job rotation, trainings, seminars/workshops, mentorship, and apprenticeship are tools mainly used to share knowledge among staff for improved service provision in the library. Other tools employed include Facebook, WhatsApp, blogs, internet, and phone communications, but only at individual level and not adequately utilised. Individual factors, organisational factors, and technological factors have an influence on knowledge sharing among staff in the library for improved service provision. The ultimate barriers to knowledge sharing among staff in the library for improved service provision are the lack of management support, the lack of motivations, and the lack of ICT tools, ICT infrastructures and ICT know-how. However, the improvement of service provision to users (user satisfaction) and motivations, such as rewards and recognitions, although not frequently, are at the forefront of knowledge sharing motivations.

The researcher has recommended the formalisation of knowledge sharing among staff in the library through the adoption of strategies that support this sharing in order to improve service provision in the library. The strategies include the creation of awareness among staff on the adequate use of all applicable knowledge sharing mediums and technologies in order to

enhance continuous knowledge sharing among staff for improved service provision in the library. An adequate reward system should also be considered and maintained in order to motivate staff in the library to engage in knowledge sharing among colleagues for improved service provision in the library. Policies should be developed in order to support knowledge sharing for improved service provision. ICT infrastructures and ICT tools should be made available and implemented in order to share knowledge among staff for improved service provision. Finally, Adequate funding must also be made available in order to support the cost of procuring and maintaining systems and infrastructures that facilitate knowledge sharing among staff for improved service provision.

In conclusion, the benefits of knowledge sharing among staff within academic libraries on service provision in these libraries is far reaching, and is aimed at improving service provision in these libraries. This is because the knowledge of staff members is valuable to service provision. This set of knowledge is linked with staff development, increased performance, and innovations, which ultimately leads to improved service provision within academic libraries. Hence, academic libraries should make an effort to understand the available and required knowledge, explore tools for knowledge sharing, consider knowledge sharing factors, and determine the barriers to knowledge sharing in order to develop strategies which will be effective in encouraging knowledge sharing among staff members for improved service provision. These strategies will in effect, eliminate the knowledge sharing barriers, and bring about effective knowledge sharing among staff members for the benefit of service provision.

Below is an integrated model of the research outcome overview and the suggested strategies to encourage knowledge sharing among DELSU library staff for improved service provision, which represents the overall research contributions. The researcher has proposed the model in order to serve as a guideline for the DELSU library, Abraka and other academic libraries, in order to implement effective knowledge sharing among staff for improved service provision to users.

Kinds of knowledge

- Users' needs
- Lesson learned
- New trends
- Best practices
- Personal experience
- Educational knowledge

Tools for knowledge sharing

- Meetings
- Job rotation
- Mentorship
- Trainings/workshop/seminars
- Facebook
- WhatsApp
- Email
- Telephone/Mobile phone
- Internet

Knowledge sharing factors

- Trust
- Communication/interpersonal skills
- Awareness
- Organisational culture
- Motivation
- Management support
- ICT tools/ infrastructures
- ICT know-how

Barriers to knowledge sharing

- Lack of trust
- Lack of ICT capabilities
- Lack of awareness of how to share knowledge
- Lack of interpersonal/communication skills
- Lack of motivation
- Inferiority and superiority complexes
- Unwillingness to share

Effective knowledge sharing among staff

Knowledge sharing roles

- Provision of timely services
- Learning best practices
- Avoidance of mistake repetition
- Understanding users' needs
- Avoidance of work duplication
- Provision of cost-effective services
- Providing solutions to problems

Knowledge sharing strategies

- Effective reward system linked to the value of knowledge shared towards service provision
- Continuous awareness on knowledge sharing and benefits
- Regular person-to-person knowledge sharing activities
- Staff development to build knowledge and knowledge sharing capabilities
- Regular appraisal of knowledge shared against service provision
- Appropriate knowledge sharing policy and plans
- Adequate funding to ensure the availability and implementation of required ICT resources and capabilities for sharing knowledge and storage;
  i.   ICT infrastructures
  ii. ICT tools
  iii. ICT trainings (Know-How)

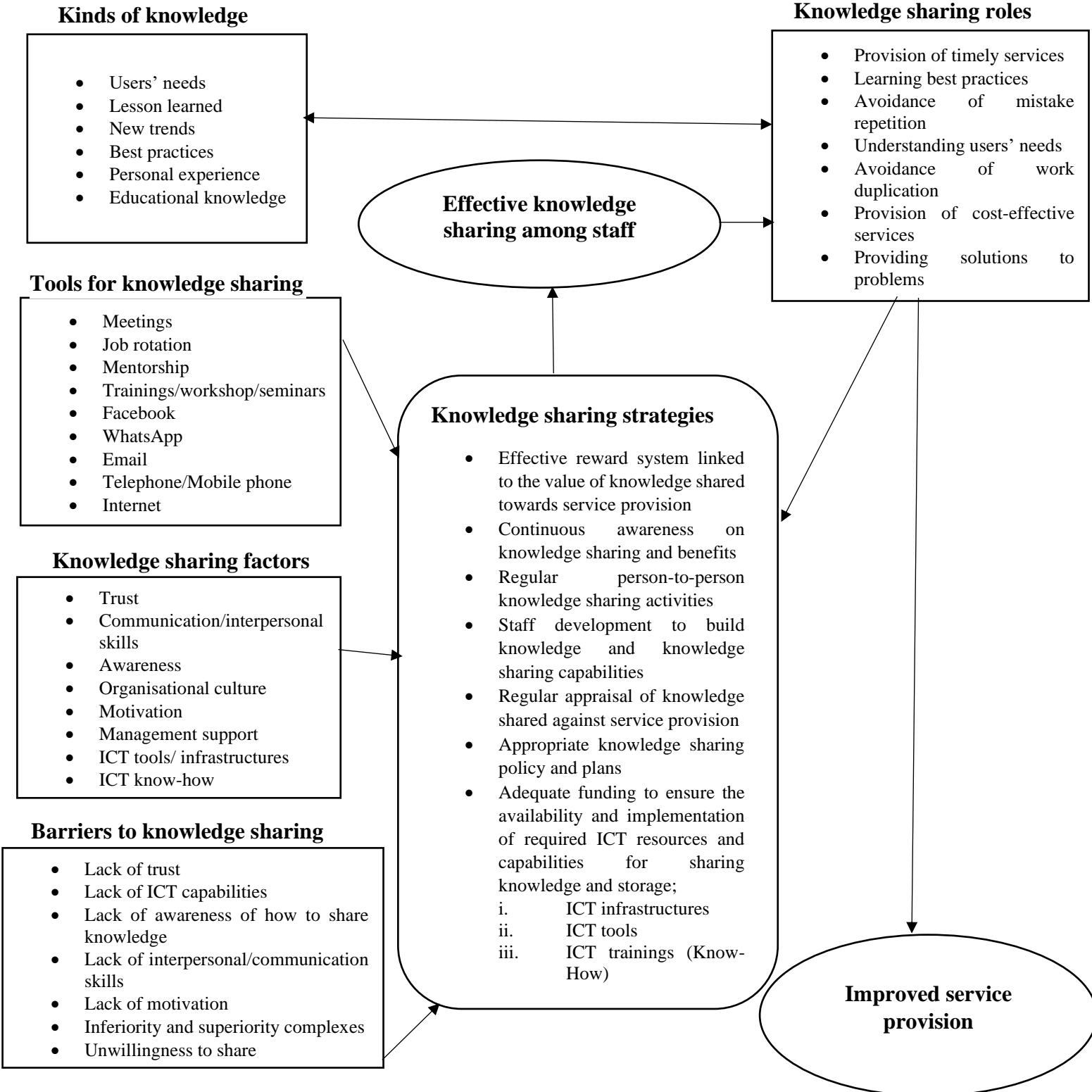## Improved service provision

Figure 5.2. Proposed model for effective knowledge sharing among academic library staff for improved service provision.

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5.5. SUGGESTIONS FOR FURTHER STUDIES.

This study was context specific, and a case study of the DELSU library, Abraka which focused on knowledge sharing for improved service provision. A similar study should be done to include the other two libraries in the Anwai and Oleh campuses of the DELSU. This study investigated little about how knowledge is being generated by staff at DELSU ,Abraka library. Hence, further studies should be carried out to investigate knowledge generation by staff in the library. Furthermore, wider studies can also be investigated to cover other academic libraries in the Delta State and Nigeria at large. These studies should reveal the knowledge sharing strategies, factors, tools, and practices among staff members of other academic libraries, and the goals. This will allow for the comparison of the strategies, factors, tools, and barriers of knowledge sharing among academic library staff in Nigeria in particular, and the world in general, in order to enhance service provision to users.

5.6. CONCLUSION

This study's aim was to establish the role of knowledge sharing among DELSU library, Abraka staff on improved service provision and to further suggest strategies to encourage knowledge sharing among staff for improved service provision in the library. Through the lens of two of the prominent knowledge sharing theories (SECI and SET), extensive reviews of extant literatures, and data collected using questionnaires and interviews, this study was able to establish the role of knowledge sharing among DELSU library, Abraka staff on improved service provision in the library. This study highlighted the factors influencing the sharing of knowledge among staff in the library for improved service provision. Also, the study explored and identified the tools and barriers to knowledge sharing among staff in the library for improved service provision. Consequently, the study suggested strategies to encourage knowledge sharing among staff for improved service provision and further proposed a model to guide knowledge sharing among staff in the DELSU library, Abraka and other academic libraries for improved service provision.

Although this study was carried out within just one academic library and may be considered a limited one, the outcomes and study recommendations could become relevant to other academic libraries with the goal of encouraging effective knowledge sharing for improved

service provision. Therefore, the researcher is positive that this study will not only add to existing knowledge, but also assist academic libraries in achieving effective knowledge sharing among their staff members and enhance service provision to their user communities.

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APPENDIX A: QUESTIONNAIRE
QUESTIONNAIRE

KNOWLEDGE SHARING AMONG STAFF AT DELTA STATE UNIVERSITY LIBRARY, ABRAKA FOR IMPROVED SERVICE PROVISION.

Dear Participant,

My name is Lydia Osarugue Izu and I am studying for my Masters' degree in library and Information Science at the University of South Africa, Pretoria. As Part of the requirements for this degree, I am undertaking a research study in the area of knowledge sharing in academic libraries. The topic of my research study is KNOWLEDGE SHARING AMONG STAFF AT DELTA STATE UNIVERSITY LIBRARY, ABRAKA FOR IMPROVED SERVICE PROVISION. I humbly request your candid response to the questions in this questionnaire to enable me find answers to my research problems. The information collected through this questionnaire will be used solely for the purpose of this research with utmost confidentiality. This means that your identity will not be disclosed, and the information given will be treated as confidential during and after the research study.

For any questions you may have regarding this research study please contact me on;

Email- lydiabenizu@gmail.com

Phone- +27836021276

Please fill out your answers in the spaces provided.

a) Position……………………………………………………….

b) Gender…………………………………………………………

c) Years of experience………………………………………………….

d) Education, please choose the highest qualification and tick the appropriate box.

[ ] WAEC, NECO

[ ] Certificate in Library and Information Science (LIS)

[ ] Diploma in LIS

[ ] Postgraduate diploma in LIS

[ ] Degree in LIS

[ ] Masters in LIS

[ ] PhD in LIS

[ ] Other (please indicate)………………………………

g) Please indicate your age range by ticking in appropriate box below.

Below 25yrs	
25-34yrs	
35-44yrs	
45-54yrs	
55-60yrs	

h) Please indicate how long you have been working with DELSU library, Abraka by ticking the required box below.

Years range	Response
0-5yrs	
6-10yrs	

11-15yrs	
16-20yrs	
21-25yrs	
26-30yrs	
31-35yrs	

SECTION B: RESEARCH QUESTIONS

Question 1: What services are provided at DELSU library, Abraka?

1.1. What services are provided at Delta state university (DELSU) library, Abraka? (Please respond Yes or No to the services available in the library by ticking the appropriate box).

Services	Yes	No
Selection and Acquisition services		
Cataloguing and classification services		
Weeding services		
Research support service		
Information literacy service		
Marketing service		
User Education service		
Current awareness services		
Inter-library loan services		
Selective Dissemination of Information (SDI)		
Indexing and abstracting service		
Reprographic services (printing, binding, photocopying.)		
User registration service		
Document delivery services		
Bibliographic description services		
Reservation, borrowing and renewal services		

Other services available at the library not listed above please specify…………………………

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Question 2. Is knowledge sharing practiced among staff at DELSU library, Abraka for the provision of improved services?

2.1. To what extent do you understand knowledge sharing in general? (Please tick in the box provided)

[ ] Highly understand.

[ ] Understand.

[ ] Do not understand.

2.2. To what extent is knowledge sharing beneficial in the provision of library services?

[ ] Highly beneficial to the provision of services

[ ] Beneficial to the provision of services

[ ] Not beneficial to the provision of services

2.3. How often do you engage in knowledge sharing in the library for improved service provision? (please tick in the appropriate box)

Frequency	Response
Very often	
Often	
Not often	

2.4. What kind of knowledge do you share among colleagues to enhance service provision? (Please indicate Yes or No to the following statement by ticking in the corresponding boxes provided)

Statement	Yes	No
I share knowledge on users' needs with colleagues to enhance service provision in the library		

I share knowledge on best practices and policies in library operations (such as reference, circulation, readers and cataloguing and classification services) with colleagues to enhance service provision in the library		
I share knowledge on lessons learned from past mistakes on the job with colleagues to enhance service provision in the library		
I share knowledge on new trends in librarianship such as the use of technologies in library operations (library automation) with colleagues to enhance the service provision in the library		
I share knowledge on personal experience and issues with colleagues to boost their confidence and enhance service provision in the library		
I share knowledge on educational issues with colleagues to enhance service provision in the library		

Question 3. What is the impact of knowledge sharing among staff on the provision of improved services at DELUS library, Abraka?

3.1. In the rating scale below indicate your agreement or disagreement on whether knowledge sharing among staff may help to improve the following library services (Please tick in corresponding boxes that best describes your level of agreement or disagreement)

Services	1 **Strongly Agree**	2 **Agree**	3 **Neutral**	4 **Disagree**	5 **Strongly disagree**
Knowledge sharing among staff help in the provision of Collection development services (acquisition, cataloguing and classification of library resources)					
Knowledge sharing among staff help in the provision of Reference services					
Knowledge sharing among staff help in the provision of User Education service					
Knowledge sharing among staff help in the provision of current awareness service					
Knowledge sharing among staff help in the provision of Inter-library loan services					
Knowledge sharing among staff help in the provision of Selective Dissemination of Information (SDI) service					
Knowledge sharing among staff help in the provision of Research support service					
Knowledge sharing among staff help in the provision of Indexing and abstracting service					
Knowledge sharing among staff help in the provision of Reprographic services (binding, photocopying etc.)					
Knowledge sharing among staff help in the provision of Circulation services					
Knowledge sharing among staff help in the provision of Document delivery services					
Knowledge sharing among staff help in the provision of Bibliographic description services					
Knowledge sharing among staff help in the provision of Borrowing, reservation and renewal services					
Knowledge sharing among staff help in the provision of Information literacy service					

3.2. Please tick the appropriate box that best describes the level of your agreement or disagreement to the following statements on the ways that knowledge sharing among staff assist in the provision of better services in the library

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
Knowledge sharing among staff assist in avoiding the duplication of work					
Knowledge sharing among staff assist in the Provision of timely services					
Knowledge sharing among staff assist in the provision of cost-effective services					
Knowledge sharing among staff assist in avoiding the repetition of mistakes					
Knowledge sharing among staff assist in understanding users' needs					
Knowledge sharing among staff assist in providing solutions to problems encountered on the job					
Knowledge sharing among staff enable the learning of best library practices and policies in the provision of services					

3.3. **In your views, how have you as a staff and consequently service provision benefitted from sharing knowledge with colleagues in the library?**
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Question 4. Factors of knowledge sharing at DELSU library, Abraka for improved library service provision.

The following questions are asked to find out the factors of knowledge sharing for improved service provision in your library. Factors influencing knowledge sharing has been categorised into individual factors, organisational factors, and technological factors and so the questions have been put through categorically.

4.1. To what extent do you agree to the following statement on individual factors influencing knowledge sharing among DELSU library, Abraka staff for the provision of improved services? (Please tick in the appropriate boxes that best describes your level of agreement or disagreement to the under listed factors influencing knowledge sharing).

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Trust is a factor that influence knowledge sharing among staff for improved service provision in the library.					
Awareness of knowledge sharing benefits on improved service provision influence knowledge sharing among staff in the library					
Communication and interpersonal skills are factors that influence knowledge sharing among staff for improved service provision in the library.					

4.2. To what extent do you agree to the following statement on the organisational factors influencing knowledge sharing among DELSU library, Abraka staff for the provision of improved services? (Please tick in the appropriate boxes that best describes your level of agreement or disagreement to the influence of the following organisational factors on

Statements	5 Strongly agree	4 Agree	3 Neutral	2 Disagree	1 Strongly disagree
Organisational culture of knowledge sharing is a factor that influence knowledge sharing among staff for improved service provision in the library.					
Management support is a factor that influence knowledge sharing among staff for improved service provision in the library					
Motivations such as rewards and incentives influence the sharing of knowledge among staff for improved service provision in the library.					

knowledge sharing)

4.3. To what extent do you agree to the following statement on the technological factors influencing knowledge sharing among DELSU library, Abraka staff for the provision of improved services? (Please tick in the appropriate boxes that best describes your level of agreement or disagreement to the under listed factors influencing knowledge sharing).

Technological factors of knowledge sharing	1 Strongly	2 agree	3 Neutral	4 Disagree	5

	agree				Strongly disagree
Information and communication technology (ICT) tools and infrastructures influence knowledge sharing among staff for improved service provision in the library					
ICT Know-How influence the sharing of knowledge among staff for improved service provision in the library					

4.4. In your opinion, what are the critical success factors that will enhance knowledge sharing among staff for improved service provision in your library?..

……………………………………………………………………………………………..

……………………………………………………………………………………………..

4.5. What motivates you to share knowledge among colleagues to better the provision of library services in your library?...

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Question 5. Tools for knowledge sharing among staff for improved service provision at DELSU library, Abraka.

5.1. What tools are in place in the library to support knowledge sharing among staff for improved service provision (Please indicate Yes or No to the knowledge sharing tools available in the library by ticking the corresponding boxes)

Tools	Yes	No
Mentorship		
Job rotation		
Job shadowing		
Storytelling		
Seminars/Workshops/Conferences		
Training		

Communities of Practice (CoP)		
Brainstorming sessions		
Meetings		
Blog		
Twitter		
Wikis		
Facebook		
WhatsApp		
Email		
Internet		
Telephone/mobile phone		

5.2. In your opinion what other tools apart from the ones listed above are viable in sharing knowledge for improved service provision in your library?..

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Question 6. Barriers to knowledge sharing among staff at DELSU library, Abraka for improved service provision in the library.

6.1. To what extent do you agree to the following statement on the barriers to knowledge sharing among DELSU library, Abraka staff for improved service provision? (Please tick in the appropriate boxes that best describes your level of agreement or disagreement to the underlisted barriers to knowledge sharing in the library).

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
Lack of awareness of how to adequately share knowledge is a barrier to knowledge sharing among staff at DELSU library, Abraka for improved service provision in the library.					
Unwillingness to share knowledge is a barrier to knowledge sharing among staff at DELSU library, Abraka for improved service provision in the library.					
Lack of trust is a barrier to knowledge sharing among staff at DELSU library, Abraka for improved service provision in the library.					
Lack of motivation (such as reward and incentives) to share knowledge is a barrier to knowledge sharing among staff at DELSU library, Abraka for improved service provision in the library.					
Lack of interpersonal and communication skills among staff is a barrier to knowledge sharing among staff at DELSU library, Abraka for improved service provision in the library.					
Inferiority and superiority complex among junior and senior staff are a barrier to knowledge sharing among staff at DELSU library, Abraka for improved service provision in the library.					
Lack of knowledge sharing culture is a barrier to knowledge sharing among staff at DELSU library, Abraka for improved service provision.					
Lack of necessary ICT infrastructures, tools and Know-How is a barrier to knowledge sharing among staff at DELSU library, Abraka for improved service provision in the library.					

6.2. In your opinion, what other barriers not listed above could impede knowledge sharing for improved service provision in your library?

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Question 7. Strategies to encourage knowledge sharing among staff for improved service provision

Please suggest strategies that may help improve knowledge sharing at DELSU library, Abraka for the provision of improved library services.

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APPENDIX B: INTERVIEW GUIDE

PROVISION OF ACADEMIC LIBRARY SERVCES THROUGH KNOWLEDGE SHARING AMONG STAFF AT DELTA STATE UNIVERSITY LIBRARY, ABRAKA.

Dear Participant,

My name is Lydia Osarugue Izu and I am studying for my Master's degree in Library and Information Science at the University of South Africa, Pretoria. As Part of the requirements for this degree, I am undertaking a research study in the area of knowledge sharing in academic libraries. The topic of my research study is PROVISION OF IMPROVED LIBRARY SERVICES THROUGH KNOWLEDGE SHARING AMONG STAFF AT DELTA STATE UNIVERSITY LIBRARY, ABRAKA. I humbly request your candid response to the questions which you will be asked in this interview using this interview guide to enable me find answers to my research problems. The information collected through this interview will be used solely for the purpose of this research with utmost confidentiality. This means that your identity will not be disclosed and the information given will be treated as confidential during and after the research study.

For any questions you may have regarding this research study please contact me on;

Email- lydiabenizu@gmail.com

Phone- +27836021276

OPENING

Please tell me who you are, your job as a librarian in DELSU library Abraka, your years of experience as a librarian and how long you have been working in this library?

<div align="center">

RESEARCH QUESTIONS

</div>

1. **Knowledge sharing practices among staff at DELSU library, Abraka for improved service provision.**

- What kind of knowledge do you share for the purpose of improving service provision in your library?

- How does DELSU library, Abraka ensure that employees' owned knowledge is harnessed when staff leaves the library either through resignation, retirement or death for the purpose of improving service provision?

- Does DELSU library, Abraka have a system for documenting problems solved in the library in other to share this knowledge subsequently for improved service provision?

- How does DELSU library, Abraka ensure that documented knowledge is easily accessible for staff for the purpose of improving service provision?

2. The role of knowledge sharing among staff at DELSU library, Abraka on improved service provision

- How does knowledge sharing in the library help to improve the provision of different services at DELSU library, Abraka?

3. Tools for knowledge sharing among staff at DELSU library, Abraka for improved service provision.

- How does DELSU library, Abraka ensure that knowledge that is gained by staff externally is shared among colleagues in order to improve service provision in the library?

- What information and communication technological tools (both hardware & software) are currently in use in your library to enable knowledge sharing for the purpose of improving service provision?

- What kind of information and communication technological tool do you think the library still needs to enable knowledge sharing among staff in order to improve service provision?

4. Strategies to encourage knowledge sharing among staff for improved service provision

- What plans or policies are in place at DELSU library, Abraka to encourage and ensure knowledge sharing culture in the library?
- What kinds of rewards are given to encourage knowledge sharing for the purpose of improving service provision in the library?
- In what ways have you encouraged knowledge sharing in the library for the purpose of improving the provision of library services?
- What knowledge sharing strategies will you suggest your library adopt for the purpose of improving service provision?

APPENDIX C: TURNITIN DIGITAL RECEIPT

turnitin

Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author: Lydia Osarugue Izu
Assignment title: Revision 3
Submission title: Complete dissertation including title
File name: Chapter_1-5_Lydia_s_dissertation.d
File size: 527.46 K
Page count: 206
Word count: 68,619
Character count: 397,269
Submission date: 17-Sep-2020 09:53AM (UTC+0200)
Submission ID: 1389304152

KNOWLEDGE SHARING AMONG STAFF AT DELTA STATE UNIVERSITY
LIBRARY, ABRAKA FOR IMPROVED SERVICE PROVISION.

BY

LYDIA OSARUGUE IZU

61275786

Submitted in accordance with the requirement for the degree of

MASTERS

In the subject

INFORMATION SCIENCE

At the

UNIVERSITY OF SOUTH AFRICA, PRETORIA

PROMOTER: PROFESSOR M. C. FOMBAD

NOVENBER 2020
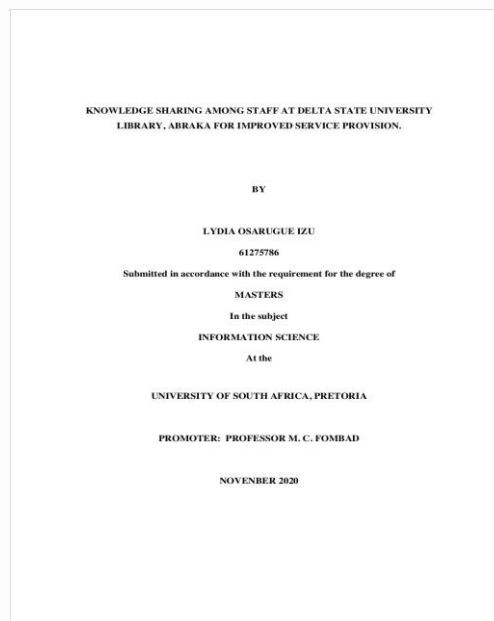
APPENDIX D: TURNITIN SIMILARITY INDEX

APPENDIX E: ETHICAL CLEARANCE

UNISA | university of south africa

DEPARTMENT OF INFORMATION SCIENCE ETHICS REVIEW COMMITTEE

24 May 2019

Dear Lydia Osarugue Izu

DIS Registration #: Rec -240519
References #: 201 9-DIS-0018
Name: LO Izu
Student #: 61275786

Decision:

Ethics Approval from 24 May 2019 to 24 May 2024

_____

Researcher(s):   Lydia Osarugue Izu
                 61275786 @mylife.unisa.ac.za
                 083 602 1276

Supervisor(s):   Prof MC Fombad
                 fombamc@unisa.ac.za
                 012 429 6042

Provision of academic library services through knowledge sharing among staff at Delta State University Library, Abraka.

Qualifications: Masters Study

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INFORMATION SCIENCE RESEARCH ETHICS COMMITTEE FOR THE ABOVE-MENTIONED RESEARCH. ETHICS APPROVAL IS GRANTED FOR FIVE YEARS.

The ***low risk application*** was reviewed and expedited by the Department of Information Science Research Ethics Committee on 24 May 2019 in compliance with the Unisa Policy on Research Ethics and the Standards Operating Procedure on Research Ethics Risk Assessment. The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy of Research Ethics.

2. Any adverse circumstances arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the Department of Information Science Ethics Review Committee.

3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.

4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards the protection of participants' privacy and the confidentiality of the data should be reported to the Committee in writing, accompanied by a progress report.

5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no. 4 of 2013;
Children's Act no. 38 of 2005 and the National Health Act, no. 61 of 2003.

6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.

7. No field work activities may continue after the expiry date of **24 May 2024**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

*The reference number **2019-DIS-0018** should be clearly indicated on all forms of communication with the intended research participants, as well as the Committee.*

Yours sincerely

Dr Isabel Schellnack-Kelly
Department of Information Science: Ethics Committee