

SOCIAL MEDIA AND THE PROVISION OF LIBRARY
AND INFORMATION SERVICES AT THE UNIVERSITY
OF LIMPOPO LIBRARY

By

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SOCIAL MEDIA AND THE PROVISION OF LIBRARY
AND INFORMATION SERVICES AT THE UNIVERSITY
OF LIMPOPO LIBRARY

By

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2019

DECLARATION

I **Mpho Gift Mogale**, declare that the thesis entitled: **Social Media and the Provision of Library and Information Services at the University of Limpopo Library** is my own work and that it has not been submitted before for any other degree or assessment at any other university. The sources I have used or quoted have been indicated and acknowledged by means of complete references.

.....
MR MOGALE M.G.

.....
DATE

DEDICATION

This work is dedicated to my loving parents (though my Mom passed on before I could graduate) and my siblings, as well as my partner, whose unconditional support, love, inspiration and guidance have enabled me to complete this study.

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ABSTRACT

The use of social media (SM) tools in both public and private institutions is growing remarkably. Academic libraries, in particular are confronted with serious challenges of becoming the leader in adopting various SM platforms to enhance the delivery of library and information services to their users. This study investigated the extent and ways in which librarians attached to the University of Limpopo library use SM platforms in the provision of library and information services to their patrons. The study examined types of SM tools used, purposes that SM tools are used for in academic libraries, factors that determine and impede the use of SM, as well as the attitudes of the library staff towards the use of SM in providing library and information services. The study adopted a qualitative research approach through the use of a semi-structured interview (administered face-to-face) with 10 academic librarians at the University of Limpopo (UL) as a data collection method.

The findings of the study show that UL library staff largely use SM platforms such as Facebook to market and promote library services as well as Library-Blog to liaise with the schools or faculties. The study further revealed that librarians at UL are not in charge of SM applications. Instead the Marketing and Communication Department administrator is responsible for the management of SM in the university. The study notes that library personnel are aware of various SM platforms. Therefore, it has a direct influence on their use in work-related tasks. Moreover, the ease of use, low cost, high demand and usefulness of SM applications are contributory factors which motivated the librarians to want to use it. The study further reveals factors that inhibit the effective use of these applications and recommends that library management should create SM policies to boost the effective use of SM for the benefit of library patrons.

KEYWORDS: SM, Social Networks, Academic Library, Technology Acceptance Model, University of Limpopo, librarians, Users

LIST OF ACRONYMS AND ABBREVIATION:

CAS-Current Awareness Services

DCU- Dublin City University

ECAR- Educause Centre for Applied Research

ICT- Information and Communication Technology

IT- Information Technology

IP- Internet Protocol

HR- Human Resource

LIASA- Library and Information Association of South Africa

LIS- Library and Information Services

OPAC- Online Public Access Catalogue

RSS- Really Simple Syndication

SDI- Selective Dissemination of Information

SM- SM

SN- Social Network

SNs- Social Network Sites

SRC- Student Representative Council

TAM- Technological Acceptance Model

UK- United Kingdom

UKS- Universal Knowledge Software

UL- University of Limpopo

UNESCO- United Educational Scientific and Cultural Organization

UNISA- University of South Africa

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CHAPTER ONE

INTRODUCTION AND BACKGROUND INFORMATION

1.1 INTRODUCTION

Social Media (SM) technologies and tools are growing very fast in every aspect of human life (Kaur, 2015). The use of SM is tremendously growing both in private and public institutions. It has become idealistic that both private and public entities should take advantage of these new tools to effectively and efficiently develop their businesses and to strengthen themselves in the global competition. Several futurists have also long highlighted and predicted the importance of embracing SM in higher educational institutions as new tools of improving on teaching, learning, research and community engagement or outreach programmes. The United Educational Scientific and Cultural Organization (UNESCO, 1998:84) visualised that “the usage of ICT in Higher Education in the twenty-first century is associated with the development of life-long learning, more equity of access, and quality improvement of teaching methods, diversification of for cooperative-collaborative autonomous learning and troubleshooting of the physical environment”. SM technologies are not an exception to this vision. Khan and Ansari (2014:2) pronounce that “SM tools can enable academics to interact on issues pertaining to course work, and use them to share information amongst themselves and with their learners”. Higher educational institutions have, therefore, become leading players in developing innovative ideas for the exploitation of the educational potential of SM.

As one of the basic components of the higher education system, academic libraries have also realised the potential of adapting to or going along with these new information technology innovations and advances to communicate and share information with library users in their pursuit to support teaching, learning, research and community engagement. Rubin (2010:200) describes the academic library as “the

heart of every higher education institution” as it serves the academic community of these institutions, which include undergraduate and postgraduate students, academic and support staff, and researchers with information materials for teaching, learning, research and community engagement. Moran and Leonard (2009:2) affirm that “academic libraries are essential to the functioning of universities and the achievement of their academic strategic goals and mission”. This implies that as universities strive to be competitive in teaching, learning, research and community engagement, the utilisation of various SM as new and emerging channels of communication in order to improve the provision of library and information services in academic libraries is also evident.

Hosseini and Hashempour (2012:133) note that SM “provides opportunities for information professionals to reach a plethora of users, and to interact and seek feedback from them, because they are interactive in nature.” Hunsinger and Senft (2014:57) also posit that SM “can be a great contributor in the field of information sharing”. Penzhorn and Pienaar (2009:60) remark that “most academic libraries promote and disseminate information services through SM platforms such as Google plus, online tutorials, Flickr, Instagram, Twitter, Myspace, Blogs, Facebook, Library thing and Tumblr, and further that SM enhances immense improvement in the provision and sharing of volumes of quality information services to users in academic libraries”. Lwoga (2011:28) suggests that “university or academic libraries should capitalise on the rapid emergence of SM such as Instagram, Twitter, Facebook, Blogs, Online tutorials and online videos in order to improve the delivery of library and information services to their patrons, especially in light of the fact that almost all students use these platforms”. It is, therefore, of paramount importance for academic libraries to move at the same pace with these new advancements in information technologies in order to support the strategic goals and mission of their parent institutions.

The emergence of information technology requires universities and their libraries and information services to remodel to future libraries. “Future libraries provide both

physical and soft copy materials not to mention its primary focus of creating indexes, annotations and guides through the use of SM networks to meet the needs and interest of the community” (Sadeh, 2007:307). Tancer (2008) opines that tools such as Facebook cannot only represent a trend towards a people search engine; instead they are utilised to discover resources and to articulate one’s information needs. Tancer (2008) goes on to indicate the power of Facebook for its ability to surpass traditional search engines. Facebook friends help one another to find amicable solutions towards individual information needs through posting. The advantage of receiving responses after posting is that it provides a huge variety of responses which enable the poster to choose the answer relevant to question posed.

A study conducted by Charnigo and Barnett Ellis (2007) on 127 US academic librarians on how librarians feel about Facebook ascertained that librarians have discovered, and are aware, of Facebook. However, some viewed “Facebook as an important tool of providing library services and communicating with users. Some view it as distraction and addiction which is out of professional practice scope. It was discovered that few librarians (3%) had Facebook profiles. Most librarians (34%) have personal profiles and more than three to five librarians do not do Facebook. As much as time changes, it is also important for libraries to keep in line with these changes”. De Rosa, Cantrell, Havens, Hawk, Jenkins, Gauder, Limes and Cellentani (2007:5) indicate how “social networking could be applied by libraries to provide a special perspective on the use of SM”. Both users and library directors from various countries were sampled to determine the functionality of Facebook. It was found that users and library directors show no interest on the inclusion of SM sites in libraries. Most library directors do not see a need or role that SNs can play in libraries. However, some libraries included it in the experimental phase, while others indicated “to use them to communicate and maintain users’ rapport” (De Rosa *et al.*, 2007:5).

However, it is general knowledge that everything has advantages and disadvantages. Jones and Soltren (2005:33) highlighted the “pitfalls and danger of SM sites, in particular Facebook. Facebook amongst other SNs allows users to

reveal too much information due to its user friendliness”. Therefore, there is a need to adequately protect users’ information from being amassed by third parties or wrong people. The changes on the features of Facebook account would limit and protect users’ privacy information to be in the wrong hands (Jones & Soltren, 2005).

As much as there is a great need to embrace SM in libraries, it is also of utmost important to implement SM policy guide in every institution (Light & McGrath, 2010:290). For libraries to sustain and succeed in the use of SM, client service levels should be maximised through consideration of users’ viewpoints and by adequately responding to their comments with regard to library brand (Ajjan & Hartshorne, 2008:72). It is of paramount importance that the engagement between librarians and users is satisfactory and appropriate. The content posted, tone and language used should always be censored before reaching potential, or prospective users. SM policy to regulate the use of SM in work places should be in place in every institution and should highlight punitive actions to be taken if one fails to adhere.

Taylor and Francis (2014:3) contend that there is division amongst librarians on the benefits of introducing formalised SM policies and plans. There is no agreement across librarians on how much SM can or should be controlled. Hence, some are of the idea that library should be represented as a professional function with consistent tone, while others believe in a more human approach, which insists that with staff in hand, individuals are allowed to express their own ideas and personalities on SM activities. Librarians in higher institutions find that a level of organisation and scheduling is a prerequisite to avoid duplication and ensures a constant flow of communications and interaction (Taylor & Francis, 2014:3).

Abrahams (2017:3) is of the idea that “there are different SM tools which are of utmost importance in promoting and marketing libraries”. It is believed that Pinterest can be used to promote books, library collections, and online repositories for students working collaboratively, and allows audience to pin reviewed reading.

Twitter should be utilised to connect with researchers for customer service, the provision of library news and for interacting or connecting with other libraries worldwide. Facebook provides a less formal platform than Twitter. Hence, it is more social and provides a friendly environment for library users or students (Ellison, Steinfield & Lampe, 2007). YouTube could allow one to post videos about the library history, university orientation and for posting information literacy videos.

Subsequently, the endorsement and utilisation of SM in academic libraries has emerged as a topical issue in institutions of higher learning, with more emphasis on whether or not they should embrace new SM (Hosseini & Hashempour, 2012:134). Numerous questions arise to subject the implementation of SM in libraries from library administrators such as “we are understaffed and always busy, how can we find time to use SM? Why should we offer or promote SM?” As such, a social librarian is of utmost importance to tackle such issues.

The indication and practical demonstration of the usefulness and benefits that come with SM usage afterwards is an influential tool to win the hearts of library administrators and library directors to give a green light to embark on the adoption of SM in libraries. Therefore, it is the responsibility of the academic library to provide quality library and information services that should satisfy the information needs and expectations of library users, and to reach them in whatever channel of communication at their disposal. It is equally important to explore how these academic libraries strive to be on par with swift advancements in new SM in order to support learning, teaching, research and community engagement.

1.2 BACKGROUND INFORMATION

The University of Limpopo is situated in Mankweng, about 30km East of Polokwane. This academic institution was established as a result of the merger between the former University of the North and the Medical University of Southern Africa

(MENDUSA) on the 1st January 2005. However, following nine years of amalgamation, these two campuses were unbundled whereby the University of Limpopo campus became a stand-alone institution. The university consists of four faculties, namely, Health Sciences, Management and Law, Science and Agriculture, and Humanities. These faculties offer a wide range of programmes, leading to certificates, diplomas and degrees, part time degree and post-graduate degrees up to doctoral level, which equip students with knowledge, skills and values needed in our modernising communities, the Southern African region and the world at large (UL Annual Report, 2014). For the faculties to achieve their goals, they need a library. It is for this reason that each faculty has been allocated its subject librarian. The University of Limpopo Library acquires, organises, and facilitates access to information and services that support teaching, learning, research and community engagement programmes of the university. It is for this reason that the university of Limpopo library is divided into four sections, namely, Acquisition Section, Cataloguing and Classification Section, Readers Services Section and Subject Reference Services Section. The acquisition section works in hand with all university faculties and divisions with the library to ensure that all selected materials are purchased, accessioned and processed for payment of all library materials. The cataloguing department catalogues and classifies newly acquired library materials according to their disciplines. The aim is to give each library material its unique number (call number) to identify it within the library and for security purposes. The readers' services section is responsible for the provision of assistance to library patrons for effective, efficient and easy access and retrieval of library information.

The circulation section is the face of every library. This department is responsible for the management of library collection. The circulation section manages and maintains the shelves, checks in and out library materials, renews books, register new members, interlibrary loans, the maintenance of records and statistics. The setting of circulation in nature is common to most library types. Lastly, the Reference service department plays an important role in the library spectrum. The Reference services specialises in research and information. The department is there to satisfy diverse needs of library users by providing reliable and relevant feedback to the answers

posed by patrons and assist them with research materials and strategies. It is common for public service to have a reference area. However, most comprehensive information is provided from the reference desk.

The specific mission of the University of Limpopo is “to provide efficient and effective client-driven and innovative information service” (UL Strategic Plan, 2014: 20). SM is one way of providing such a service in the modern world. The study is also driven by the UL library ‘s desire to adapt to the forces of reshaping teaching and learning, research and community engagement, while taking cognisance of the emerging technologies. Gone are those days where libraries have to go the extra mile to reach users through the marketing and publishing of content. The traditional marketing of library services and resources is time-consuming. It is a costly process to print and publish posters, flyers and articles. Moreover, it was grounded with geographic boundaries, which hinder the accomplishment of users’ needs in time. One can say “invention of SM champions the smooth process of provision of library and information services in academic libraries” due to its effectiveness of time convenient, cost effectiveness and unlimited reach of location. SM tools enable librarians to connect instantly and directly with patrons through different Social Network sites for exploration (Murphy, 2013). Therefore, there is a need to investigate how academic libraries and librarians take advantage of SM as an alternative channel of communication with users or clients in order to improve on the provision of library and information services.

1.3 PROBLEM STATEMENT

SM has apparently brought a lot of opportunities for academic libraries in as far as the provision of library and information services to the library patrons is concerned. The traditional way of creating, acquiring, using and disseminating information is complemented to a great magnitude by the use of these new tools. Ezeani and Igwesi (2012) remark that “with the exponential growth of the use of SM such as Facebook, MySpace, Twitter, You Tube, it became inevitable that librarians must learn the use of these tools to be able to keep their ever growing and sophisticated patrons”. Therefore, the adoption and subsequent successful implementation and

usage of SM in academic libraries require keen and willing librarians or information professionals who are accustomed and conversant with these new technological innovations. The level of interest and skills in the use of SM across library staff is one of the factors that might enhance or impede the successful adoption and implementation of SM in academic libraries. Dickson and Holley (2010:475) remark that “librarians must be proactive in SM attempts and must be willing to participate in this mode of communication on an on-going basis. Librarians will be required to have SM prowess to be able to apply these tools in their respective libraries. Library professionals should be able to cope with various SM tools to identify the appropriate tools which work to the advantage of the library and its users”. The effective use of SM tools requires one to have technological and interpersonal skills. This brought about a social librarian who is responsible as a creator, curator, promoter, educator, filter, connector, facilitator, experimenter and beacon (Murphy, 2013).

Zohoorian-Fooladi and Abrizah (2014:159) acknowledge that “despite the widespread use of SM by students and their increased use in higher education, very little empirical evidence is available concerning the prevalence of use among academic librarians”. Some academic librarians might have adopted several SM, but challenges such as limited funds to support the use of more advanced SM, internet connectivity, technological infrastructure and information technology division policies and other challenges might have prevented information professionals and librarians to adopt SM to their optimal potential. It appears that there is no indication of opinions from information professionals on the benefits derived from the use of these tools, and the challenges that they encounter in their quest to implement the use of SM. Mabweazara (2014:13) acknowledges that “academic libraries have to contend with a number of factors that impede or cripple the maximum usage of these tools among librarians”. Therefore, this study looks at the role of SM in complementing the delivery of library and information services in academic libraries from the perspectives of academic librarians.

1.4 MOTIVATION

There is great reliance on the history of traditional methods in the marketing and promotion of libraries, which is the reason some libraries are reluctant to adopt and use SM to market and promote these libraries (Abrahams, 2017). With the current situation, libraries are bound to change and to adapt to the needs of users or patrons and to be competitive on the library spectrum with their competitors in order to attract large numbers of users. The more users love and are satisfied with the services provided, the more sustainable they can be (Gillen, 2008). “The power of SM as enablers of library and information services provision and as viable means in competitive environments with other information sources appear to be overlooked by academic librarians and university’s top management” (Taylor & Francis, 2014:14).

SM provides opportunities to reach a wide range of library users in their own preferred environments and to create significant awareness about library resources. In addition, it provides an avenue which can extend library services beyond the traditional library operation. Although they are used mostly for personal than for professional development and promotion of their respective libraries, library and information service professionals are aware of the power of SM. The embracement of official SM profiles of libraries is compulsory for the development of libraries in this technological age, but few libraries locally have official SM profiles. In developed nations, the library and information services (LIS) professionals are adopting SM to develop their libraries and profession. In addition, in developing countries like South Africa, for instance, they have enormous amount of prominent users of SM tools. However, they lag behind in the adoption of these tools for the development of the professionals and libraries (Mabweazara, 2014:13).

The application of SM in libraries might contribute greatly in re-shaping the traditional ideas of the LIS. Nowadays in the world that is dominated by millennials, which is technologically-wise, most duties or tasks are executed online. SM features and functionality can be capitalised as it offers instant communication and access to nationwide information. SM tools offer great opportunities in LIS spectrum, which can

be capitalised for the development of professionals and libraries. Libraries are social institutions which connect and cater for the needs of communities. Therefore, the study examined the opinions of academic librarians and information professionals regarding the benefits and challenges of utilising SM in the provision of library and information services. The study intends to look at the role of SM in transforming the provision of library and information services at the University of Limpopo.

1.5 PURPOSE OF THE STUDY

1.5.1 Aim of the study

The aim of this study is to examine SM tools used by academic librarians and their role in improving the provision of library and information services in the University of Limpopo library.

1.5.2 Objectives of the study

- To establish the types of SM used by the library in providing information to clients.
- To determine the purposes for which the UL library uses different types of SM.
- To identify factors that determines and impedes the effective usage of SM tools in the UL Library.
- To ascertain the perspectives of library staff towards the use of SM in the provision of library and information services.

1.6 DELINEATION AND SCOPE OF THE STUDY

The study was conducted at the University of Limpopo academic library services department. The University of Limpopo is located in Mankweng Township in Capricorn District of Limpopo Province. The population for research concentrated only on academic librarians who are full time employees in the reader and references services of the University of Limpopo library. These librarians were chosen mainly because their work involves communicating with clients on a daily basis. It is therefore believed that librarians who communicate with clients on a

daily basis will be reliable sources of information on whether the library uses SM to communicate with library users. Furthermore, these participants are reliable because they are the ones who are responsible for marketing and promoting the library to the community at large. Therefore, it is important to examine if they use SM for performing their tasks of interacting with library users.

Willems, Adachi, Bussey and Doherty (2018:135) remark that “the term SM is often used interchangeably with social networks such as Facebook and Twitter. It is an umbrella term that encompasses 13 different subtypes, including blogging tools, business and social networking tools, forums, photo sharing tools, business collaboration tools, service and product reviews research networks, video sharing tools and virtual worlds. Maness (2006) confirms that social networks enable messaging, blogging, streaming media and tagging, and gives examples of such media as Facebook, MySpace and Flickr. Table 1.1 below shows the types of SM in use today as categorised by Choi and Yang (2009).

Table 1. Classification of Social Media

Categories	Services	Websites
Communication model	Blogging	Wordpress, Blogger
	Microblogging	Twitter, Me2day, Tumblr
	Social networking	Facebook, LinkedIn, Ning, Cyworld, MySpace, Google+
	Event networking	Meetup.com, Upcoming,
	Instant messaging	KakaoTalk, WhatsApp, Line, Viber
	Videoconferencing	Skype, GoogleHangout
Collaboration model	Wikis	Pbworks, Evernote, Twiki
	Social bookmarking	Delicious, Scoop.it, Diigo, Pinterest, Stumbleupon, Digg, Flipboard, Readwrite
	Reviews & opinions	Eopinions, City-data.com, Kindle.amazon
	Community Q&A	Yahoo! Answers, Askville, Spring.me, Quora
Sharing model	Photo	Flickr, Instagram
	Video	Youtube, Vimeo, Vine
	Livestreaming	Ustream.tv, Justin tv
	Audio and music	iTunes, Last.fm, Soundcloud
	Documents, files, books, magazines	Scribd, Issuu, Slideshare, 4shared, Google Docs
Entertainment model	Virtual worlds	Second Life, The Sims
	Game sharing & play	Miniclip, Kongregated, Anipang, Candycrash

Source: Choi & Yang, 2009.

Table 1.1. Types of SM in use

Therefore, there are different types of SM that are in use. Some are used through the Web 2.0 and others through Web 3.0 platforms. Yi (2014:220) acknowledges that “the term Web 2.0 was first documented by Tim O’ Reilly in 2005” where he referred to Web 2.0 “as a basic change from the static and non-interactive websites to the dynamically generated, more user friendly websites through a greater range of software applications such as blogs, Wikis and social networking sites”. Dickson and Holley (2010:469) suggest that Web 2.0 can be “loosely defined as the evolution to a social and interactive Web that gives everyone a right to participate”. Web 2.0 platforms, therefore, need to be construed from an academic and educational perspective in higher learning institutions. Surely, academic librarians who are innovators and early adopters of Web 2.0 tools have SM policies in place and are

presently looking, if not migrating into the educational potential of Web 3.0 and cloud computing. Web 3.0 on the other hand is about representing meaning, connecting knowledge and bringing these closer together and is highly characterised by intelligence (Bolinder, 2008).

This study is concerned only with web 2.0 technologies, more especially with social networking tools such as Facebook, blog, Twitter, YouTube, etc., that allow users to interact with the web and allow sharing and collaboration with others (Yi, 2014). Most of these SM are applied through Web 2.0 platform. In table 1 above, the services provided and the websites of SM involved in this study are blogging such as blogs and Wikis, social networking such as Facebook and Twitter, and video such as YouTube.

1.7 SIGNIFICANCE OF THE STUDY

The study investigates SM and the provision of information services to both library staff and users in academic libraries. The researcher believes that SM tools are very important, and thus should be embraced and adopted in academic libraries. They are loaded with convenient features which, if used effectively and efficiently, can enhance job performance, thereby enabling smooth collaboration and interaction amongst library staff and users. Clients will be timely informed in order to offset the barrier of time, distance or location and cost.

Theoretically, this study is important because it will create awareness of the importance of SM in complementing and transforming the traditional operation of disseminating information by library staff to library users (students, researchers, lecturers and administrative staff). Practically, the findings of this study will help to eradicate barriers impeding the maximum use of SM tools in academic libraries. Moreover, the findings might be useful to information professionals in terms of knowledge of network sites that users are active on and appreciate. Furthermore,

it will provide insights amongst library directors or managers to encourage and motivate their staff to harness SM networks.

1.8 METHODOLOGY

1.8.1 Research approach

The study adopted the qualitative research approach. The qualitative approach addressed the reasons behind the use of certain SM. Qualitative research is an inquiry that seeks in-depth understanding of social phenomena. It mainly focuses on the "why" rather than the "what" of the phenomena and relies on direct experiences of human beings (Babbie, 2014). Therefore, this study sought to understand in-depth the reasons behind the stated attitudes and perspectives of the participants towards SM.

1.8.2 Research design

The study used a phenomenological research design. Phenomenological research design involves the asking of questions about the perceptions of people and their understanding of a particular phenomenon. In this study, questions are asked about the perceptions and understanding of librarians in the usage of SM in providing library and information services in academic libraries. Burns (2000:566) emphasises that "phenomenological survey can also be used to probe the attitudes of the population towards a particular phenomenon, of which this study sought to probe". Therefore, phenomenological research design was useful in determining the participants' perspectives and their understanding of the use of SM for the delivery of library and information services in a university library environment.

1.8.3 Data collection method

The data of the study was collected by means of a semi-structured interview. This type of data collection instrument provided a convenient way of administering the

participants' information and confidentiality. The study also used open-ended questions, leading to in-depth information about the participants' purposes and reasons for using particular SM. In this way, the semi-structured interview also prevented biasness aspects of the study. The interview schedule was divided into six sections which will be discussed in chapter three of this report in detail.

1.8.4 Population and sampling

The population of this study comprised eight subject librarians and two librarians, of which one librarian is the head of information literacy, and the other readers' services librarian from the University of Limpopo library. This entails that there were ten (10) participants in this study. The selected participants were purposively selected because their duties include the provision of information to users. They are the ones who are responsible for rendering information services at information desk. As a result, they are in contact with library users on a daily basis.

The sampling method chosen for this study was purposive because the target participants were librarians whose work is to communicate and provide information to users. It was therefore, simple to get research answers from these participants since they interact with users daily as part of their daily designated tasks and activities.

1.8.5 Data analysis

The data of this study was analysed by means of thematic text analysis. Specifically, the responses from participants were analysed through thematic text analysis. Braun and Clarke (2006) define thematic analysis as a way of seeing and making sense out of seemingly, unrelated material. Responses from the participants were analysed, and similar responses were categorised into themes.

1.8.6 Quality criteria

The interview schedule of questions was first distributed to few librarians who did not form part of the study. Before the researcher can commence with data collection, it is important to test the preferred methods of data collection through a pilot study. A pilot study is commonly called as a small-scale trial of a particular research component. It is a process where one carries out a preliminary study through all research procedures with a small sample or part of the preliminary stage where “the instrument to be used in the study is tested or trialled with the people who share common characteristics with the intended or actual study participants” (Bertram & Christiansen, 2014:49). This enabled the researcher to establish whether questions on the interview schedule are measuring what they are supposed to measure when administered to the targeted population (Strauss 1987).

Establishing the trustworthiness of research results and findings is one of the key components of qualitative research (Maree, 2012). Four criteria for establishing trustworthiness of research results and findings are commonly known as credibility transferability, dependability and confirmability. These are discussed in chapter three of this research report.

1.9. SUMMARY OF CHAPTERS

Chapter 1

This chapter outlines the main essence of this study, and in the process emphasise the reason beyond the study. The research problem, brief research methodology used to collect data to answer the research questions, background and context of the study, as well as the motivation and rationale of the study are introduced in this chapter.

Chapter 2

Chapter two of this report provides discussion and analysis of different literature with regard to SM tools used in academic libraries. The literature focused mainly on the usage of SM by librarians in a university library, the purpose/s of library use of SM tools, factors that determine and impede the use of SM in the library and the librarian's attitudes towards the use of SM in the academic library. This chapter also provides a discussion of the theoretical framework on which this study is based, namely, Technology Acceptance Model, proposed by Fred A Davis in 1989.

Chapter 3

This chapter highlights the entire description of the research methodology and design adopted in this study. The chapter represents an in-depth discussion of the research methods, processes and techniques that were used to collect and analyse data of this study.

Chapter 4

Chapter four provides presentation, analysis and interpretation of the data collected using semi-structured interview in chapter three. Data are presented and analysed by categorising them into themes and the findings are interpreted in terms of previous studies that were conducted on the topic.

Chapter 5

This chapter provides major findings of the study based on each objective. Based on the findings, the chapter also provides suggestions and concludes by summarising the findings. In addition, it correlates the study findings with TAM theory in order to highlight the importance and usefulness of the theory. It provides the conclusions and suggestions to UL library with reference to the study findings. Furthermore, further areas of study are emphasised.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter represents an in-depth review of literature related to the topic under investigation in this study. Literature review means careful examination or evaluation of published information or data on a specific subject or topic. It is a critical discussion or evaluation of all significant and available literature that contributes to understanding of the subject matter. Maree (2012: 75) defines literature review as “a critical and in depth evaluation of previous research on the researched topic”. It is a summary and synopsis of a particular area of research; it allows individuals reading the research to establish why the particular research programme was pursued. Literature review also involves the collection and synthesis of existing information relating to the research topic. The purpose of reviewing previous research is “to clarify which research had previously been carried out that could provide the answers to the research questions” (Ngulube, 2009:23).

The significance of literature review is to carefully examine the body of literature which will point towards the answer to the research question. This implies that the research will test the research question against what is already known. Literature review also helps in “identifying gaps in research and thereby coming with a new angle or modifying what already exists, and familiarise the researcher with the latest development in the area of research as well as in related areas” (Pickard, 2007:51). The literature to be reviewed in the research is from scholarly journals, textbooks, authoritative databases and conference papers.

There are a number of studies at local, regional and international levels on the use of SM and their role in the provision of information in academic libraries. This section looks at what makes SM to be an important tool to improve on the provision of library

and information services. The literature of the study is based on the objectives of this study. This implies that literature review serves to explain in depth, the types of Social Networking tools, followed by their purpose and usefulness in academic libraries. The challenges of using SM as well as attitudes of the population towards the use of SM for the provision of information in academic libraries are also discussed. However, before embarking on the above, it is necessary to provide a picture of the theoretical framework on which this study is based.

2.2 THEORETICAL FRAMEWORK

There are substantial number of studies and researches that have been conducted about interactions between people and information technology. Several models were developed to provide the theoretical basis or framework for research on the acceptance of information technology and information systems. Among some of the models that were developed with regards to interaction between people and new information technologies are Theory of Reasoned Action (TRA) developed by Fishbein and Ajzen (1975), Theory of Planned Behaviour (TRB) by Ajzen (1995), Rogers' (1995) Diffusion of Innovations Theory and the Technology Acceptance Model (TAM) advanced by Davis (1989). This study used the former (TAM) which was developed by Fred. D. Davis in 1989 as the theoretical framework or model on which the current study is based.

The Technology Acceptance Model (TAM) is rooted in the Theory of Reasoned Action proposed by Fishbein and Ajzen in 1975, which proposes that beliefs or external variables influence activities, which in turn lead to intentions and the generation of behaviours. The model postulates that "perceived usefulness" and "perceived ease of use" influence attitudes to computer technologies, which in turn influence information technology usage.

- Perceived usefulness is the prospective user's subjective probability that using a specific application system will increase his or her job performance within an organisational context. It relates to job effectiveness, productivity

(time saving), and relative importance of the system to one's job. According to Davis (1989:25), perceived usefulness "is defined as a degree to which individuals believe that using a particular technology would improve their performance at work". For example, in this study it is about how the use of SM can enhance the provision of library and information services to users in the academic library. The usefulness of SM usage will be determined by the users' appreciation of channel of communication and interaction with the system.

- Spacey, Goulding and Murray (2004:553) define perceived ease of use "as a degree to which an individual believes that using a particular technology or system would be free of effort". Therefore, if information professionals perceive a particular SM/s as easy to use and easy for users to browse, they are likely to adopt and use it. Perceived ease of use refers "to the degree to which the prospective user expects the target to be free from effort in terms of physical and mental effort as well as ease of learning" (Davis, 1989:320). This is coupled by user friendliness as another important factor encouraging computer usage.

It is these two beliefs, that is, "perceived usefulness" and "perceived ease of use" that determine one's intention to use computers and related technologies. Therefore, perceived usefulness and perceived ease of use "are fundamental determinants of predicting an individual user's intention to use new information technology" (Will Wai-kit Ma *et al.*, 2005:388). Lu *et al.* (2003:207) posit that these determinants "serve as the basis for attitudes towards using a particular technological innovation, which in turn determines the intention to use and then generate the actual usage behaviour". The model is therefore, also based on the contemplation that usage or non-usage of information technology can only be recognised if attitudes towards computers or satisfaction in using computers are investigated. Attitudes refer to the tendency of an individual to respond favourably or unfavourably to an aspect of his or her world. One of the objectives of this study is to determine attitudes of librarians towards the use of SM in academic libraries.

Applying this explanation to the context of this study suggests that academic librarians who use SM tools are receptive to their use in the provision of library and information services. This entails that they are open to the purported benefits of these tools in the provision of library and information services in academic libraries. If the use of SM in academic libraries is to be considered desirable, academic librarians must first accept these tools in their work, that is, they must be receptive to the presence and benefits of the tools.

According to TAM, “other factors that are important in the interaction of people with new information technologies influence the utilisation of computer technology by individuals or groups of individuals are organisational support, satisfaction with information technology and perceived benefits” (Western Dwan, Makkai, Del Mar & Western, 2001:10-11). Western *et al.* (2001:11) further reckon that “satisfaction with using information technology is strongly dependent upon the user’s background, especially his/her past experience with computers and the skills acquired as a result and organisational support”. “This implies that experiences and skills of using information technology are positively associated with end user satisfaction. User background will also influence one’s receptivity of SM usage. Prior experience and a positive assessment of one’s own skills tend to be associated with higher levels of user satisfaction. However, the user background knowledge of a particular technology may strongly determine their satisfaction, especially those who with skills or those who do not have exposure” (Western *et al.*, 2001:10). Librarians with little experience and poor skills in using SM tools do not use them in academic libraries. This is the reason that one of the objectives of this study is to find out about SM tools that these librarians personally use. Moreover, the ease of use portrays the comprehensiveness of a particular technology to operate.

Organisational support is understood as the attitude of an individual’s organisation towards new information technology and the support that one’s organisation provides to encourage the adoption and use of such information technology. The kind of

support that an organisation may provide to the individuals within it includes training on the use of computers, material support, adapting to technological changes in the environment etc. In summary, organisational support in the form of the provision of the necessary infrastructure, incentives, training, and the creation of an environment conducive to change encourages individuals to accept SM tools. Furthermore, Western *et al.* (2001:10) show that organisational support “is a contributory factor that influences the use of SM by individuals or a group of individuals”. The support may be in the form of the provision of training and funding to adopt the technologies needed to enhance job performances and to encourage the adoption of new technologies.

The main reason for choosing the model in the study is that TAM is mostly used by researchers to investigate human intentions to use and adopt technology (Spacey, Goulding & Murray, 2004; Mabweazara, 2014). The use of this model helps the researcher to predict library staff’s acceptance of technology that provides information service to their clients and users’ gratifications of the adopted technology. The perceived usefulness (PU) and ease of use (PEOU) help to predict users’ attitudes towards using the SM. Moreover, users’ attitudes and perceived usefulness influence behavioural intentions of individuals to use the system (Davis, 1989:26). Therefore, the theory is relevant and useful in answering the research problem.

There are a number of studies that used TAM to discover the usage of new information technology applications, systems and tools. A study conducted by Spacey, Goulding and Murray (2004) also employed the Technological Acceptance Model (TAM) as a theory to explore the attitudes of the public library staff on the use of the internet. The study was conducted from 14 libraries in England and firmly focused on measuring the perceived ease of use and perceived usefulness, the behavioural intention, the subjective norms and attitude that influences the participants to use the internet. The study found that librarians are impressed that internet tools make their jobs easier because they provide them with effective and

efficient communication towards both staff and library clients, and that they are overwhelmed with the use of internet technologies. Furthermore, it was indicated that it assists them to collaborate with their colleagues within England from other institutions through platforms such as email and online chats. In contrast with the adoption and willingness to use these internet technologies, it was found that there were some barriers which deprived the librarians from using these technologies. It was reported that network failure was one of the hindrances, since they were solely relied on it to execute some tasks, therefore could not work when the internet was down. The use of passwords which sometimes requires them to consult with the ICT personnel before gaining access, firewall and internet response time proved to be frustrating by the library staff. This means that provision of effective information need assisted by reference service to the users might become difficult. Moreover, the study revealed that librarians who had internet prowess found it easy to use whereas those without such skill found it to be a stressing and difficult task to do, as a result they end up not adopting it. The study contended that TAM revealed that the intention to use the internet is intertwined with the attitude since the majority of the librarians reiterated that internet was easy to use. Hence they find no reason not to adopt and use it in their work places.

Moreover, Aharony (2009) adds more information and ideas to what is said by Spacey, Goulding and Murray (2004) in their study that focused on the use of SM technologies in different types of libraries; namely academic librarians, public librarians and school librarians. The study sampled 168 librarians using the big five model of personality proposed by Tupes and Christal in 1992. The researcher's intention was to examine if personality characteristics (change, empowerment and extroversion), motivation, importance, computer expertise and capacity had effects on studying and integrating different applications of SM. The study found that resistance to change by librarians can be an enormous hindrance on the use of SM, since they are afraid of exploring new things (technologies). The study found that library managers are comfortable using SM technologies than their subordinates and are eager to adopt and introduce these tools in their respective libraries. This means

that library managers will encourage and assist their librarians to use SM tools because they understand their usefulness.

It was also found that lack of SM skills knowledge was one of the factors that discouraged other library staff from using these tools. Therefore, it was recommended that computer training would be helpful to help librarians to understand and use these technologies. In addition, the study reveals that extroverts are always ready to learn and explore new technologies. Therefore, it was found that key factors that could motivate library staff to use SM technologies were knowledge, familiarity and ability to use computers. On the other hand, a study conducted by Banda (2011) on the use of social networking tools by librarians in public universities, namely Copper-belt University, Mulungushi University and University of Zambia. The study found that Information and Communication Technology department (ICT) restricted librarians to get access to some Web-based facilities and that SM tools are hardly used for work-related activities in Zambia. Other barriers that were found to be challenging to overcome were that librarians prefer to do things in a traditional way than on SM, had bandwidth problem, lack knowledge on the use of SM tools and that they do not have time to use SM tools.

A study conducted by Ramadani, Demiri and Saiti-Demiris (2014) applied TAM to build an understandable model to present the use of SM channels based on customers' characteristics such as language, accessibility and trust of SM channels. The study found that the perceived usefulness, accessibility, ease of use, attitude, trust of the SM channels, enjoyment, self-efficacy and social influence were some of the factors that influence the behavioural intention of customers to use SM channels.

Moreover, a study conducted by Tripathi (2014) focused on factors that influence the use of social networking sites. The study applied TAM to explain the phenomenon. The study reveals that the perceived ease of use and usefulness are key factors that influence the intention for people to use social networking sites. The study goes on

to uncover more to give answers to the TAM model. It was found that the design of the website and the quality of the content influence the perceived attractiveness. This means that the perceived attractiveness has an influence on the perceived usefulness. Therefore, this means that the perceived attractiveness would influence the perceived usefulness. Furthermore, the perceived risk was found to have a negative influence on trust, whereas the security and privacy risk together was found to influence a perceived risk. Moreover, it was found that trust has an influence on both perceived usefulness and perceived ease of use.

A study conducted by Shin (2010) to investigate users' motivation of engaging in social networking through online social networking services compared with their behaviour. The primary goal was to examine the differences between USA and Korean users by conducting a survey on social networking site users to determine the key differences between the two countries. The study discovered that what significantly motivate users to engage in SM through online social networking services compared with their behaviours among users from different countries is quite evident with its dimensions or differences. The contrasts of ideology represent the environmental background to which one is encountering. The dimensions which came about to be of motivation to users' engagement of online social networking is believed to be perceived security, perceived usefulness, perceived ease of use, perceived involvement, flow, social pressure, perceived enjoyment and perceived connectedness.

Shin (2010:473) goes on to explore the importance of both extrinsic and intrinsic motivation for using social networking sites between the USA and Korea. It is believed that both countries showed different sets of motivations. The results showed that the primary motivation for Korean users was for enjoyment which was greatly influenced by perceived involvement, whereas the users' main motivation was dependent on how useful they perceived social networking sites, which is heavily influenced by users' feelings of connectedness.

Therefore, this means that users' attitudes and intentions to use social networking sites attributes are both intrinsic and extrinsically motivated. Extrinsic motivation moves people to engage in something due to external factors such as high marks for good work or getting a reward for exceptional participation on a task. Intrinsic motivation makes people to engage in something for pleasure or to explore and they do it without external pressure or motivation. People engage in activities out of love or passion, for self-satisfaction and for enjoyment (Shin, 2010:473).

2.3 TYPES OF SM

There is a prodigious number of social networks and huge demands of these tools globally. SM are categorised into six types, namely, collaborative projects such as Wikipedia; blogs and microblogs such as Twitter; content communication such as you-tube; social networking sites such as Facebook; virtual gaming worlds and virtual social worlds. Willems *et al.* (2018:135) note that, "the key characteristic of all SM includes to some extent the ability to produce and to consume content in a networked environment".

Castro-Romero (2015) emphasises participation, openness, conversations, community and connectivity as the most important and basic characteristics of SM. Participation emphasises that SM encourages contributions and feedback from everyone who is involved. It blurs the line between media and audience. Openness means that SM is open to feedback and participation, and encourages making comments and sharing information. Conversation refers to the fact that SM is a two-way conversation rather than a broadcasting tool, where content is transmitted or distributed to an audience. Community emphasises that SM allows people who share common interests to communicate effectively, while connectivity means making use of links to other sites, resources and people (Castro-Romero, 2014). Therefore, several concepts are used to refer to various forms of SM into categories, namely, publication tools, sharing tools, discussion tools, virtual worlds, social gaming, online gaming, and many more. This results into the emergence of much-publicised SM applications such as Facebook, MySpace, Twitter, YouTube, blogs

and Wikis. SM have been renowned as a powerful instrument, able to change people's perception of learning and knowledge gaining.

2.3.1. Facebook

Facebook is a social networking tool that was launched in February 2004, and is owned and operated by Facebook. Facebook is “a social utility that helps people communicate more effectively with their friends, family and co-workers” (Yi, 2014:221). Carlson (2010) notes that Facebook was founded by Mark Zuckerberg with his college roommates and fellow Harvard University students Eduardo Saverin, Andrew McCollum, Dustin Moskovitz and Chris Hughes. The founders had initially limited the website's membership to Harvard students, but later expanded it to colleges in the Boston area, the Ivy League, and Stanford University. It gradually added support to students at various other universities before it opened to high-school students, and eventually to anyone. Facebook now allows anyone to become a registered user of the website acquired through Google (Nguyen, 2004).

To participate in Facebook, users must register, after which they may create personal profiles, add other users as friends, exchange messages, and receive automatic notifications when they update their profile. Additionally, users may join common-interest user groups organised by workplaces, schools or colleges or other characteristics. The users may categorise their friends into lists such as People from Work or Close friends. Therefore, the library can also register its account and invite libraries and users as its friends.

Several publications have mentioned that Facebook has over one billion active users. Users create profiles with photos and images, lists of personal interests, contact information, memorable life events, and other personal information such as employment status. They can communicate with friends and other users through private or public messages, as well as a chat feature, and share content that includes website URLs, images, and video content (Nguyen, 2004). One of the most

popular applications on Facebook is the Photos application, where users can upload albums and photos. Facebook allows users to upload an unlimited number of photos compared with other image hosting services. Privacy settings can be set for individual albums, limiting the groups of users that can see an album. For example, the privacy of an album can be set so that only users' friends can see the album, while the privacy of another album can be set so that all Facebook users can see it (Nguyen, 2004; Mazman & Usluel, 2010).

Academic libraries cannot ignore the fact that Facebook can be used to market its services to library users, thereby making it more visible and strengthening engagement with users (Breeding, 2007). Yi (2014) mentions studies that were carried out to investigate how librarians used SM to market their library services and resources to non-traditional library users. Facebook was found to be the most used social networking site in academic libraries. Xia (2009) in Yi (2014) found that "regular and consistent use of the Facebook group, for example, notifying users of new services and resources, maintained a positive connection between the library and its users in a more casual manner than traditional means". A further study by Garcia, Norton and Tenant (2012), in Yi 2014) "suggests that the more likes the Facebook page has, the greater the potential for engagement with users via this medium."

2.3.2. Twitter

Twitter is a real time networking platform through which users communicate and share information of interest via a 'small burst' of information called 'tweets'. Each tweet is a short update (less than 140 characters) containing user comments, musings or questions. Networks are established by 'following' or creating friends with similar interests. Unlike many other social platforms, updates are possible via the internet, smartphones applications, or SMS, making it one of the most versatile platform available (Tiernan, 2013:1). The use of Twitter has quickly come into the educational setting since its launch in 2006.

Twitter, at its origin, was not invented for educational purposes but for people with similar interests to share personal matters. But due to the large number of students who are being exposed to smartphones and the internet, Twitter has come to be considered as a tool for learning. Jolly, Scott and Pfanner (2013) state that even though Twitter has an American root, it is truly an international phenomenon. Twitter also faces challenges expanding in countries with authoritarian governments (Jolly, Scott & Pfanner, 2013). In just under seven years, Twitter has grown to account for nearly 3% of the entire global population among its active users who have sent more than 170 billion 140 character messages. Today the services “play such a significant role in American culture that the Library of Congress has assembled a permanent archive of the site back to its first tweet, updated daily” (Leetaru *et al.*, 2013: 211).

According to a report in the Sysomos (2014), South Africa has become the 10th largest Twitter user in the world. According to the report, “South Africa accounts for 0, 85% of the total global users of the popular micro-blogging platform, with Japan coming in the 11th place with 0, 71%, the Philippines 12th with 0, 64% and China 13th with 0, 49%. It’s scarcely surprising that the United States ranks 1st with 62, 14% of global Twitter user hailing from there, followed by the UK 7, 87%, Canada at 5, 69% and Australia 4th, with 2, 8%”.

Tiernan (2013:5) states that his research study attempted to use “Twitter as a means of increasing opportunities for interaction and engagement for students, especially those who lack the confidence to engage personally”. The study was conducted in the school of Education studies at Dublin City University (DCU), Ireland. The result of the study concluded that Twitter could be used as an optional tool to encourage engagement from everyone within the group. According to Tiernan (2013:1), “Twitter provides engagement opportunities for timid members of the group, and has a generally positive impact on engagement and discussion for university students”. This comes from the research conducted in the school of education at Dublin city university, Ireland. This study was carried out with a class of seventy-eight first year

undergraduate students. He concluded by saying that Twitter could be used as an optional tool to encourage engagement to everyone within the group, and that it emerged that students who used Twitter appeared to do so to engage in a less threatening way.

Bicen and Cavus (2012:2) mentioned the majority of the participants “spent more time on Twitter. They use it for different reasons like sharing of photos, videos, music etc”. However, educational materials were observed to be least frequently shared by students. Tweeting helps peer support and with activity rising just prior to assessment deadlines or during revision for examination. It also helped them to arrange social meetings and to develop personal learning networks: students use the network when they prepare for school work and often in situations where they were physically isolated from their peers.

The researchers found Twitter to be more useful as a data collection tool to assess and record students’ experiences with a wide range of free and increasingly sophisticated online analysis tools available. Entering a lecture hall for the first time can be potentially be a daunting experience for students, who have often come from smaller groups to a much larger diverse group of people. This environment can prove difficult for students to adapt to, and very often they are shy and feel intimidated in the lecture settings. This can lead to lack of interaction, especially in the early stages of university life, and lectures may become empowered by the few dominant voices in the room.

2.3.3. Blogs and Wikis

A blog “refers to the category of a Website where the content is presented in a continuing sequence of dated entries” (Rubin, 2016: 185; Kim & Abbas, 2010:213). It allows individuals to share their ideas by posting them on the Website, permitting others to respond to that which is shared. Users of a blog can react to the content, contribute their own content and view others’ comments or content. Kim and Abbas (2010:213) suggest that “in a blog, users can still post concerns, problems

encountered in the library, and their insights into or perhaps solutions to the problems”. Libraries use blogs to communicate or disseminate news or information to users about new services, developments, new books, and to stimulate discussions. It can therefore be used as current awareness or alerting tool, and even to promote the library and its services to users. On the other hand, a wiki differs from a blog in that the content is created without any defined owner or leader. Wikis have little implicit structure, allowing the structure to emerge according to the needs of users (Mitchell, 2008, in Rubin, 2016). It is a web-based collaborative tool that allows users to edit the already existing content and to create new content like Wikipedia (Rubin, 2016:186). They are also known as a “peer-based and user-based knowledge repository” (Kim & Abbas, 2010: 213).

Maness (2006) confirms that the global proliferation of blogs and Wikis has enormous implications for libraries. Blogs can be used to publish because they enable the rapid production and consumption of web-based publications. Blogs are therefore another form of publication for libraries and they are therefore an integral part of knowledge production. Maness (2006) further states that Wikis are essentially open-webpages where anyone registered with the wiki can publish on it, amend it and change it. Kim and Abbas (2010:213) remark that Wikis can “facilitate knowledge sharing, collaborative authoring and online discussions in an academic library”. Therefore, Wikis can enable social interaction among librarians and patrons.

As users share information and ask questions, and answer questions to one another, librarians can also do the same within a wiki and a record of such transactions archived for future reference, and the transcripts are in turn resources for the library to provide as reference (Maness, 2006:78).

Kim and Abbas (2010:213) demonstrate that “blogs and Wikis can be posted in such a way that each blog and wiki has its own title of location, and blog or a wiki category label”. For example, children’s literature, audio-visual materials, electronic databases, curriculum text books, education etc. This will make the posted information to be easily found by users of such blogs and Wikis. A study by Bejune

(2007, in Kim & Abbas, 2010:213) found that “45.7% of libraries have used Wikis for collaboration, 31% have used them among library staff only, 14.3% have been used among library staff and patrons, and only 8.6% of the surveyed libraries used Wikis for collaboration among patrons”.

2.3.4. YouTube

According to Jim (2006), YouTube video-sharing is a website on which users could upload, share and view videos. YouTube was the fastest growing site on the web, uploading more 65 thousand new videos and delivering one hundred million videos views per day. It was ranked the fifth most popular website on alexa, far out-pacing My Space’s rate of growth. YouTube has today become the leader in online video, and is regarded as the premier destination to watch and share original videos worldwide through the Web. Snelson (2008:67) says that “many universities have, in one way or another, used the videos or DVD’s as teaching media, which was very expensive to maintain”. YouTube has, however, provided an opportunity for universities to distribute videos electronically to a much wider audience at once, without reproducing the videos and then physically distributing them to each user. Once videos are linked on YouTube, students are in a position to view them anytime a need arises. Academics can record their lectures and podcast them to their students on YouTube. Students can then listen to class podcasts in their cars, homes, at the gym and even more often, than once.

YouTube provides a lot of videos and other educational materials which are very helpful to students around the world. For example, students who are presuming nursing as their profession are able to view videos on YouTube on how to operate a person with heart failure as well as other examples of how to help a patient give birth to a child. Burke and Snyder (2008:2) argue that “YouTube can be a valuable instructional resource, and illustrate the potential of Web 2.0 tools that learners of the current generation identify with. As a teaching supplement, YouTube can inspire and engage learners and support their digital learning styles. For non-traditional older learners, YouTube may offer the student with an opportunity to experience new technology or technology that will provide them with marketable skills for future

careers”. It is imperative for instructors to utilise available innovative resources such as YouTube and to help learners create content that they find relevant and engaging. In addition, YouTube is a free teaching resource, which is an important consideration for educational budgets.

2.3.5 WhatsApp

WhatsApp is an instant messaging application which was invented by Brian Acton and Jan Koum in 2009. It provides cross-section messaging and voice over internet protocol service and is available at no cost. Through the use of WhatsApp, “one can be able to send instant messages, images, videos, audios, document files and allow users to make full-duplex communication through the use of internet connectivity” (Purkayastha & Chanda, 2018:71). It operates over different operating systems such as Blackberry OS, Nokia series 40, Symbian, Tizen, iOS, Mac OS, Windows OS and Android (Ansari & Tripathi, 2017:361).

WhatsApp is one of the most effective and efficient SM tools of sharing information and communication. In the library environment, it can be used to provide LIS to users. Instant messaging application became part of our life and it is prevalent among persons of diverse age groups, especially youngsters. It can be used for different reasons such as chatting, sharing of scholarly content, photos and videos, user location, connecting with friends, forward messages and studying in groups (Ansari & Tripathi, 2017).

According to the statistics accrued from WhatsApp blog, “there are 1 billion daily active users of the application, 1.3 billion monthly active users, more than 55 billion messages are sent daily, 1 billion videos are shared daily and 4, 5 billion photos are also shared.” It is supported by over 60 languages in India (Purkayastha & Chanda, 2018:70). According to Purkayastha and Chanda, (2018:71) and Ansari and Tripathi, (2017:361), the following are some of the benefits of incorporating WhatsApp in libraries:

- “WhatsApp can help the library in promoting library services and provide effective reference services in real time.
- It can help to ensure effective communication between library staff and their users. It allows reciprocal communication among library staff and their patrons.
- WhatsApp is less costly and require little training.
- In the acquisition section, it can be used to ask users about suggestions of acquisition of best books and can give feedback.
- WhatsApp can help in the provision of effective Current Awareness Services (CAS) and Selective Dissemination of Information (SDI), Indexing and Abstracting.
- It can be used in libraries to provide information about upcoming events such as library news, conferences/ seminars, e-journals, hyperlink of e-books, reprographic services, important announcements, notifications and reminders on a particular issue (e.g. reminding users on the expiring date of borrowed library materials).
- WhatsApp can be used to do outreach activities like resource sharing of the library through inter-library loans, where users can ask for their required books from the library in real-time.
- Libraries can provide users with information regarding rules and regulations of the library, lists of available journals, arrival of successive issues of journals and new arrival of books.”

According to Arif and Mahmood (2012:470), the following are challenges of incorporating WhatsApp in libraries:

- “The external factors such as lack of training, technological infrastructure, internet connectivity and hardware may hamper access.
- It might be difficult to maintain library branding for resource accessible through WhatsApp.
- Lack of funds in libraries to support more advanced SM tools.
- It is time-consuming and demand huge maintenance.

- It requires technological experts to effectively and efficiently provide information to users.
- The levels of skills and interests vary across library staff in the provision of services through WhatsApp”.

2.4 SM IN EDUCATION

SM technologies are regarded as educational tools that have been depicted positively and negatively by educationists. As the popularity of social network sites increases rapidly, most educational specialists have discovered the potential for their usage in education, since it is believed that these tools have the ability to promote collaboration and active learning (Maloney, 2007). Moreover, Selwyn (2009) contends that SM tools may benefit students as they provide new dimensions of networks for collaborative learning, which is primarily based on common interests. The growing number of SMI tools does not only serve the library professional to execute their tasks smoothly without any kind of barrier of time and distance. But also provide students with a powerful weapon to interact amongst themselves, supervisors or lectures with regard to academic matters. The exclusive elements and features of SM Networks (SMN) have incredible educational qualities as they permit peer feedback and match the social contexts of teaching (Mason, 2006). The conversational, collaborative and communal qualities of social network sites provide what can be believed to be a good model or long awaited model of learning due to their collaborative elements, which encourage participation for users.

The youth of today are heavily engaged in informal learning and multichannel online and offline learning ecologies and are sometimes frustrated when classroom instructions seem closed backwards through comparison. “The ever-evolving educational systems from various institutions have created unique expectations of the school and university as places in society” (Greenhow, Robelia & Hughes, 2009:246). Greenhow, Robelia and Huges (2009) regard modern schools and universities as “magic womb” as they build teenagers into adulthood. Moreover, these tools allow a process of learning to be unbundled from its traditional form of

learning to technological gadgets like cell phones and laptops. A study conducted by Smith, Salaway and Caruso (2010) on Educause Centre for Applied Research (ECAR) on undergraduate students and information technology stated that “the use of SM by students has greatly increased from 2007”. As a result, the gap between young and old academics’ use of SM is shrinking. The study finds that most undergraduate students are familiar with and use Wikis, social network sites, video sharing websites, coursework-related collaboration, web-based calendars, blogs, micro-blogs and social bookmarking. Therefore, this is a true reflection that students are integrating on SM in their academic experiences both formally and informally. College faculties are increasingly using SM tools in teaching and learning activities. In some instances, some lecturers are encouraging students to use blogging platforms, Facebook and WhatsApp in the development of e-portfolios, which have become an important authentic assessment tool in higher education. Social networks like Twitter have “a positive impact on students’ engagement in the classroom, whereas wiki software contributes immensely in terms of motivating and encouraging students to engage in collaborative projects that support the creation and management of content and editing” (Penzhorn & Pienaar, 2009:67).

If library professionals, faculties and students share a common goal on the use of SM that are available and applicable, it might assist in information-sharing and improving their communication channels. Since these tools (SM) provide new ways of information sharing bagged up with instant communication, “teaching and learning, libraries should take advantage of this by expediting the process of adoption of SM tools in their respective libraries to ensure that their users are well-served and satisfied with their services” (Lwoga, 2011:28). However, it might not be possible to satisfy all users in terms of gratification.

Social network sites (SNs) encourage students to network, open, collaborate, amass wisdom, grow desire to know and use, therefore it perpetuates social transformation practices underway. In other words, this might suggest that higher education is being challenged by perceptions that “SM are empowering students to take charge

of their own learning, resulting in what some interpret to mean that there is no arbiter of their knowledge, work, publication or thinking” (Mabweazara, 2014:13). Anderson (2008) contends that Web 2.0 technologies are encouraging a pedagogical transformation where the community recognises the curriculum rather than the path to understanding or accessing the curriculum, and that higher education institutions should integrate SM platforms that invest the creation of personal and social learning spaces to support more learner-centred “personalized” educational systems.

Rana and Singh (2014:78), in their investigation named “the use of social networking in academics: benefit and opportunity”, ascertain that most students are of the idea that social networking sites have a positive impact on academic performance, and that with their versatility elements, they can also be used for various academic activities such as communicating with the faculties and university authorities, communicating with lecturers and supervisors, making academic discussions with classmates and chatting with friends in respect to topics of educational interest. The study contends that social networking sites services can become learning networks as well as research networks when used for the right reasons.

Students are believed to be investing precious time and energy on SM with an attempt to build relationships around common interests and knowledge communities (Maloney, 2007:26). Moreover, these tools might be beneficial to students as they allow them to participate in new networks of collaborative learning, mostly based on interests not catered for in their immediate educational environment. This is evidenced by the fact that some educationalists are moved to adopt SM networks on the conventional integration and communication between students and educators. Some educators have already appreciated the capacity of networking services because “they provide them with easy forum to network positively with students” (Lemeul, 2006:116).

2.5 PURPOSE AND USEFULNESS OF SM IN LIBRARIES

The need of social networking tools in libraries have grown prodigiously world-wide. SM are used for various purposes according to the needs of users in various libraries. This is informed by “the use of SM and their flexibility, convenience and ability to overcome barriers such as time, location and cost” (Ajjan & Hartshorne (2008:71). SM may be used for various purposes within the library, including the marketing of library services, activities and events; the enhancement of library user education programmes and more importantly, their ability to engage library users. Therefore, all SM tools discussed above can be are used mostly to provide current and up-to-date information to clients, provide links to other open source library resources, and give information about new arrivals in the case of books through the link to the library Worldcat and updated lists of journals. The previous top-bottom approach to service delivery, where the library would pass information down to its patron without feedback will no longer suffice the ever growing clients (Ezeani & Igwezi, 2012).

Collins and Quan-Haase (2013) conducted a longitudinal study examining the adoption rates and usage patterns of SM sites such as Facebook, Twitter, YouTube and Flickr by academic libraries, as well as how these SM applications are implemented on a regular basis within the unique context and mandate of academic libraries in Ontario. “It was found that of the twenty-one (21) academic libraries examined in 2010 and 2011, twelve libraries in 2010 and fourteen libraries in 2011 had at least one official SM channel. During the interim period, three university libraries previously without a SM presence acquired one, and one university library deleted their sole media account during that period”.

The findings of this study suggest that both the geographical location of an academic library as well as the size of the university has an impact on the adoption and use of SM (Collins & Quan-Haase, 2013). Furthermore, “the study also found that Twitter

was the most frequently used platform than Facebook, while YouTube was the least widely used SM tool by academic libraries, and that the use of Flickr was largely static. Library news was the most frequently tweeted content across all libraries, followed by promotion, external linkages, responses to requests and finally general announcements. Facebook was also used to distribute library news, display photographs, and supply information about library resources and services”.

Hough and Neuland’s (2012) study indicate that 80% of programmes provided by the University of South Africa (UNISA) library are accessible through SM technologies. UNISA library uses SM tools to extend and promote library and information services to both open and distance library users. Penzhorn (2013:57), in a study conducted at the University of Pretoria, demonstrates that “the application of SM such as Wikis, Blogs, Flickr, Really Simple Syndication(RSS) feeds and YouTube in an information literacy course can enhance a unique e-learning environment”. Librarians use SM technologies to illustrate concepts in information literacy (Luo, 2009).

Penzhorn and Pienaar’s (2009) study investigated the use of SM tools for innovative services at the University of Pretoria library (South Africa). “It was found that Skype, Gaming, Blogs, Wikis and YouTube increase the quality of service delivery in the library. These SM tools are used for various purposes to achieve the goals of the library. Blogs are used to update users about new books. Skype was uploaded in every library computer for reference purposes in order to enable librarians to answer patrons’ queries”. Facebook was used to communicate with students, librarians and faculty staff. In addition, YouTube used to post different videos to create awareness and to market the library. Penzhorn and Pienaar (2009) further found that Wikis and Blogs enable librarians to go straight to users with accurate information relating to new services, reliable news and service development.

Rogers’ (2009) study focuses on how American libraries use SM technologies for public relations to attract new users. The study found that YouTube, Blogs and instant messaging are the most effective tools in the marketing of library services. Chan (2012:53) concurs that SM offer a reduced cost in the advertisement of library

services. Chu and Meulemans (2008) looked at how San Marco students at California State University use Facebook and Myspace. The study found “that 90% of the students use these platforms for social and academic purposes. The study concludes that since students are familiar with these tools, university libraries should use them for reference services, outreach programmes and information literacy programmes. However, Really Simple Syndication (RSS) can also be used as a syndicate service to distribute content and to advertise ploy to lure potential users to visit library websites” (Breeding, 2010:29). According to Abrahams (2017:4) on Universal Knowledge Software (UKS) presentation on SM library training,” over 70% of academic libraries have adopted SM tools, 60% indicated to have adopted one SMI account in three years or longer, 30% of librarians are posting once daily”. In addition, it was found that “Twitter, Blogs and Facebook are the most popular social network sites used in libraries, and that about three libraries have SM policy. Furthermore, 40% of libraries indicated to have no plans in hand to adopt or introduce social networks sites”.

Bradley (2011) suggests that library and information services (LIS) professionals and paraprofessionals use SM to engage in professional development, to communicate and to connect with LIS colleagues globally. A similar study by Melcrum (information and Research Company) show that the use of SM to communicate with employees has two benefits namely, engagement and collaboration (Manchester, 2007). Bottles and Sherlock (2011) point out that SM should be a shared responsibility, and no department should maintain a sole control of it in academic institutions. Moreover, Laura (2011) indicates that there are no clear guidelines as to who should be responsible for SM. It is about who is best suited for the job, be it HR marketing and communications, IT departments or LIS staff.

Hosseini and Hashempour (2012:133) claim that “these tools can enhance information services with multimedia experience”. Furthermore, SM tools enable collaboration, offer improved section management by allowing instant communication, and improve accessibility and integration of cataloguing resources

for the cataloguing department (Xu, Ouyang & Chu, 2009:324). Kwanya, Stilwell and Underwood (2012:133) draw similar conclusions “that SM technologies improve interactions between librarians and users in the process of facilitating communication and feedback”. Riza-Ayu and Abrizah (2011:239) indicate that libraries that update their status daily have the highest user engagement.

A study by Nfila (2010:2) indicates that “the academic library plays a central role in implementing SM that enhances the demands for both students and faculty at the University of Botswana”. The findings of the study indicate that “the library plans to adopt SM simplicity by producing podcasts to record lecture courses, course materials and tutorials, and to post them on Blogs so that registered students can download and use them”. Baro, Ebiagbe and Godfrey (2013:10) in their comparative study between university libraries in Nigeria and South Africa find that 81% of librarians in South Africa use SM tools to announce library news and events to their users. They argue that 28.1% of librarians in Nigeria are reported to use SM technologies for library news or events to users. The study indicates that “Wikis, Facebook, Twitter, RSS feeds, YouTube and Blogs are used to render those services to their users”. Dickson and Holley (2010:470-471) highlight the “use of Facebook by academic librarians to market library opening hours, location, and web site information; to create event invitations to library users; and to embed the library catalogue, LibGuides; and ask-a-librarian to allow students to access their contents without visiting the library web site”.

Reuben (2008) noted that from November 2007, many universities and libraries tapped at the opportunity to create official Facebook presence for their universities and libraries. Facebook is one of the communication technologies that has been widely-adopted by students, and therefore has the potential to become a valuable resource to support their educational communications and collaborations with academic departments or schools. Libraries can also use Facebook to promote library services to patrons. Using Facebook may allow educators to interact with more students, moving away from traditional one-way of communication towards a multi-way communication, with students taking on an active role (Ventura & Quero, 2013:1032). Academics who see teaching as establishing a relationship and keeping

close contact with students may view technologies like Facebook as an efficient way of accomplishing this connection. It is for this reason that some universities, faculties, schools and libraries have their own official Facebook pages to link with those of their students.

Blogs and Wikis also have potential uses by academic libraries. One of the qualities of good customer service is to allow library users to provide feedback about the services which they receive from the library. Therefore, "it is through Blogs and Wikis that these users can provide feedback about the information they receive from the library and about the library itself" (Dickson & Holley, 2010:471). These can also be used by libraries to post news about the library and events occurring in the library, including creating subject guides for users. Blogs and Wikis allow users to post comments in response to an article or a comment. The primary use of Wikis and Blogs in Higher Education may be to support group work among students. Using comments on blogs and Wikis can encourage students to help each other with their writing, since they can be used for real-world writing experiences (Grosseck, 2009:479). Blogs and Wikis are therefore also ideally suited for collaborative learning. Higher learning institutions can use blogs for marketing purposes and can be used by academics to post news articles to open conversations about them, as well as about faculty teaching and research. Twitter is an instant messaging tool that allows users to send short messages and updates. It can be used to increase the sense of community and accessibility which is required for collaborative learning (Grosseck, 2009:479).

YouTube will allow the library to post user education videos for users to learn about using library resources and services. The library can create podcasts on how to search library catalogues and databases and to post them on the website through YouTube. These user education videos can also be shown to users during classroom library instruction. Therefore, YouTube has today become the leader in online video, and it is regarded as the premier destination to watch and share the original videos worldwide through the Web. Many academic libraries have, in one

way or another used the videos or DVD's as the library instruction teaching media, which was very expensive to maintain. YouTube has, however, provided an opportunity for academic libraries to distribute videos electronically to a much wider audience at once, without reproducing the videos and then physically distributing them to each user. Once videos are linked on YouTube, students are in a position to view them anytime a need arises. Librarians can record their library instruction presentations and podcast them to their students on YouTube. Students can then listen to class podcasts in their cars, homes, at the gym and even more often than only once. Studies in American universities and colleges indicate that more than 80% of university students own at least one device that can download and play recordings (Lum, 2006).

2.6 CHALLENGES OF USING SM IN ACADEMIC LIBRARIES

Several concerns about the use of social networking by academic libraries have been raised and must be considered by any academic library currently using SM sites or considering the implementation of SM outreach programmes (Dickson & Holley, 2010:474). Low usage and participation, resistance on the part of students, and issues of privacy of individual students are some of the concerns that must be considered when considering SM presence of academic libraries. Sekyere (2009) notes that some students use SM to interact with fellow students for the purpose of distracting themselves from academic activities.

In contrast with the usefulness of SM in academic libraries, Collins and Quan-Haase (2012:3) identify several challenges identified by library management. The first is that the use of SM is a waste of time and resources, as it is time consuming. Some indicated that inadequate infrastructure and lack of skills also contribute. Griffey (2010) holds that some libraries find it difficult to provide access to SM because the sites are blocked by IT departments. Arif and Mahmood (2012:470) identify major obstacles that militate against the use of SM, including insufficient Information and

Communication Technology (ICT) infrastructure such as low bandwidth and lack of technical skills to make the best use of these tools.

Chu and Du (2013:1) opine that hesitation among library staff and low participation of patrons are major barriers to the usage of SM. The use of SM for academic purpose, according to Chu and Nalani-Meulemans (2008), becomes difficult as students have shown not to be interested in communicating with their professors on Myspace and Facebook, rather prefer email as they deemed it reliable. A similar view was shared by Connell (2009), indicating that students show huge interest and comfort when using social networking to communicate amongst themselves or friends, not librarians, as they feel that librarians will infringe with their personal privacy. Mundt (2013) confirms that lack of staff resources or competence, privacy issues and general hesitation regarding the potential benefits of SM and deficiency of SM policies make it difficult for German public and academic libraries to optimally and beneficially use the SM.

2.7. THE EFFECTS OF SM ON ACADEMIC LIBRARY USERS

A large amount of time nowadays is spent on digital gadgets such as laptops, smartphones, etc. Hence this tool makes work and purchase or selling online possible with just a connection to the internet. Students use the internet for their reasons and responsibilities, although it is observed that it brings negative effects on their academic performance. Rana and Singh (2014:78) are of the common idea that students spend more time going through various social networks purposes other than academic activities, thus plays its toll on their academic performance.

SM tools are considered to be some of the fastest sources of communication, in particular for academic use, as they allow the dissemination of common quality information to both students and lecturers in their faculties. However, some scholars are of the idea that SM has unwanted outcomes from students' performance. De Villiers (2010:175) agrees with such statement, as it was found that notwithstanding

the fact that most social network sites are created for learning purposes, it was evident that most users show almost no effort of finding academic information.

In a study conducted by Abir and Ali (2014:2) on “the impact of social networking on college students”, it was ascertained that indeed there is a frequent use of SM by college students, and that they spend a number of hours on various sites to search and collect information. What is stressing is the fact that most students are faced with a serious problem of filtering, trusting and selection of appropriate and relevant information from different networking sites. In addition, it was understood that these networking sites affect college students in both positive and negative ways. SM tools have become sharing platforms that enhance accessibility, encourage cooperation and intensify users’ motivation to take part in academic activities. Moreover, SM presence assists also in bridging gaps in knowledge and physical distance. The examination of the use of social network sites in South African universities had grown tremendously and beyond its expectations. Hence it is believed that students are positively painting and recommending the use of different platforms to promote information sharing beyond borders, since they provide convenient communication with both classmates and lecturers.

Although people have different reasons or motivation in the adoption or use of SM, it is understood that some adopt it because of enjoyment which is highly perpetuated by involvement. Others are motivated by its importance or usefulness which is influenced by users’ feelings of connectedness (Shin, 2010). Social networking sites are perceived as electronic connection amongst a plethora of users regardless of distance and time, which is one thing that is worth celebrating. However, the unfortunate part of it is that people are addicted to it. This means that huge amount of time is uselessly spent and the security of users is at stake (Abdulahi *et al.*, 2014:67). SM tools are ruining the future and career of students. It impacts on the academic performance, health and their security space.

The integration of SM comes with advantages (innovative mechanism of learning and enable tagging people according to images and places) and disadvantages. Some researchers pointed out that it is risky to share data about one's own geographical location with others. Therefore, this might have brought the idea that one is watched or monitored and is expected to act in a particular way in particular situations. Church and de Oliveira (2013:290) acknowledge that not only does the loss of privacy increase risks, but also improvisation. However, due to deficiency of privacy users tend not to be confident enough to feel comfortable in their own identities and skin.

In terms of academic performance, some educationists are of the idea that the use of social networks may negatively affect students' performance. It is found that students who spent more time on social network sites are likely to spend less time in their studies, hence they had lower grades (Karpinski & Duberstein, 2009). It was found that some social network sites are frequently used to interact with friends, and few are used to interact with academic staff. In addition, it is believed that the rationale beyond the use of SM tools is to interact with friends and is least used to seek information to assist in educational activities (Selwyn, 2009).

Previous studies have shown that location based social networking might have consequences that could be both disruptive and empowering to relationships. Hence providing one with real time location to a friend or relative would reaffirm the aspects of trust (Fusco *et al.*, 2011). It is believed that mobile social presence empowers students to take more personal control of their mobile devices. However, this requires learners to be able to control their desire of chatting regardless of time-frame and their behaviour in deciding how often to access and ways they prefer to interact (how, when and in what way).

The incongruous usage of SM tools may lead to negative impacts and extracting effects such as interference of face-to-face and conversational interaction when mobile technology is used. Furthermore, even the time for responses may not be met as anticipated. Therefore, librarians are tasked with a huge responsibility to

provide social network sites that are user-friendly, used by a number of libraries and believed to have positive feedback, and most importantly, the ones that are used by their patrons (Tu *et al.*, 2012:252).

It is believed that the WhatsApp messenger makes communication easier and at high speed to enhance the effective flow of information and ideas amongst students. Moreover, Yeboah and Ewur (2014:5) found that the use of this tool has a negative impact on students' performance in Ghana. The study further found that this tool consumes huge amount of students' time. It is slowly but surely destroying students' spelling, writing and grammatical construction of sentences. One can say that what always matters most is not the quantity but the quality of technology that you have to meet one's desired achievements. However, when these SM tools are not effectively and efficiently used, they can cause serious harm on an individual's goal. Social networking sites are internet-based instruments that promote collaboration and information sharing. They can be used in academic settings to promote student engagement and facilitate learning. Academic performance indicates the understanding of concepts, skills, ideas and knowledge of an individual and is depicted through individual performance together with the grades enrolment.

2.8. PERSPECTIVES OF LIBRARIANS TOWARDS SM

Nowadays, most of university libraries have discovered the importance of incorporating SM to be able to promote their library resources and services. Through the use of Facebook, blog and Twitter etc., the library can advertise services that it provides. Hence SM boasts with its plethora of opportunities to reach library users and allow convenient interaction. In tandem, it allows library users to be in charge of promoting library programmes and events by rating, retweeting, reviewing and sharing with friends, colleagues and neighbours. It is undisputable that SM tools have converted the world into a global village where people find, communicate, sell, buy and meet each other. Therefore, in the 21st century, it is common that university

libraries are using SM potentials to their advantage, since they are dealing or serving the millennials.

The most important principles of librarians are to offer library and information resources and services to all library users (students and staff). Library staff are expected to render services such as references, indexing and abstracting and referral services. Moreover, they are also responsible to provide print and non-print information accessible to the users. Sometimes the library's profile is judged according to the nature of library and information services rendered. The services offered should meet the needs of library users, since it is determined by the extent the patrons' awareness of such resources and information services. A study conducted by Spacey, Goulding and Murray (2004) report positive responses from librarians on the use of SM tools in the library. It is reported that librarians are happy and convinced that SM tools make their jobs easier by allowing efficient communication amongst library users and staff. It breaks down the boundaries of time and location as it helps them to communicate with other librarians around the world.

Similar statements shared by Khan and Bhatti (2012) focus on two universities in Pakistan, where it was ascertained that librarians' attitudes towards the use of SM were positive. Hence it is believed that these tools promote the library and have an important role in marketing library products and other online services. The librarians agreed that SM are of paramount importance in marketing library services and in attracting a plethora of potential users in the library. It provides library clients with an opportunity to connect, communicate, create and share information. It is also helpful in locating information, knowledge sharing and distance learning. The study participants were strongly convinced that SM should also be used to create group discussions and to promote library services. Librarians (79%) in the USA are highly impressed by the evolution of library technologies and believe that SM tools can be effectively and efficiently used to promote library services such as virtual references,

CAS (current awareness services) and new arrival of library materials (Rogers, 2009).

The use of social networking sites in the library requires librarians to be pro-active users at all times, hence some tools such as Facebook require frequent updates to become effective or efficient. Facebook can be effectively used to promote library exhibits, workshops, events and other activities. Moreover, since the applications are constantly changing, librarians should always be ready to jump or adopt new tools.

In contrast with the challenges faced by librarians in the adoption of SM in libraries, Rogers (2009:6) states that library administration becomes a common problem as librarians are unable to accept and use SM tools due to lack of knowledge. However, training is sometimes offered, some library professionals are reluctant to learn, hence they see it as a waste of time due to fear of change. In yet another line of thought, Spacey *et al.* (2004) assert that age has influence on the adoption and use of Facebook, since young librarians appreciate the adoption whilst older librarians express discomfort that Facebook is not easy to use.

There are different reasons why some libraries do not have SM platforms, namely: lack of time and the idea that SM are of no use or useless in academic settings. Libraries are experiencing several drawbacks on the use of SM, such as insufficient use and library users do not use similar networks in libraries (Rogers, 2009). For instance, the university community is unwilling to interact with librarians on library Facebook, because they consider the use of e-mail as an appropriate tool to communicate with librarians. Moreover, tools such as Facebook can be used for content delivery, library outreach programmes, and information literacy instructions. According to a study conducted by Dickson and Holley (2010), few (17%) of the students surveyed are of the idea that they would proactively add a library as a friend to their personal account. A large number of participants (58%) would like to accept

the library request but are not proactive. An average number of participants (25%) would not accept a library friend request.

There are few comments which serve as evidence to the challenges encountered with regard to the use of SM tools in libraries. A study conducted in the USA by Dickson and Holley (2010:469) provides proof of opinion why librarians do or not use Web 2.0 tools to promote library materials.

“Our administration has not yet embraced the technology”.

“Our library does not use Web 2.0 for library promotion because of the librarian’s as well as citizens’ lack of understanding of Web 2.0 social marketing tools”.

“We need to look into this, but are not using”.

“Still we are trying to get buy-in-from admin to use these tools. One blog that has never had a hard launch still in test”.

One respondent stated that SM sites are blocked in their library and stated that:

“I believe that they (SM) would work very well in a large city, but in our rural, conservative area we are not using any of these. In fact, we have blocked both MySpace and Facebook within the last 6 months and blocked You Tube within the last year” (Holly, 2010:469).

Mack Mack, Behler, Robert and Rimland (2007:51) mentioned that “why a librarian might not create a Facebook profile for his/her library is a concern about privacy of students. Librarians are very concerned about students’ privacy in online ‘Social Network Sites’”. In fact, students are far less concerned with privacy than many librarians assume they are. Librarians have been champions of patron privacy in the face of the Patriot Act and other potentially invasive laws, and have made themselves known in the popular media as real advocates of privacy. This concern with protecting privacy is a potential hindrance to our ability to provide and effectively utilise tools that students need and want to connect with others, share information and learn (Dickson & Holley, 2010:473).

Librarians are not allocated sufficient time to learn to use SM tools, and they are not prioritised. The technical requirements around knowledge of social networking tools such as Facebook and Twitter made it hard for librarians to learn, implement, explore and administer these tools because they are deprived of time (Chu & Du, 2013). For an instance, Twitter, with its operation like newsfeeds, requires frequent attention, therefore it becomes difficult for library staff to frequently monitor them. It was discovered that the monitoring of these tools requires manpower and additional time. This accentuates that the minimising factor that militate the effective and efficient use of social networking tools should be considered for future implementation (Chu & Du, 2013).

According to Bakporhonor (2015), some of the overwhelming challenges in the library spectrum are unstable power supply. This means that the provision of the internet or information and use is compromised at unison. This militates or discourages librarians along with their patrons from taking part in online platforms. The issue of awareness is worrying some, more especially in the developing nations. Bakporhonor (2015) indicated that most librarians in African countries are not yet aware of SM services and its role in the libraries, though the few who are aware still struggle to attract productive users for library services. Library users are not aware of the protocol to follow in social communication. Most students and academic staff still lack awareness whether their library have incorporated these tools or not.

Furthermore, given inadequate time for learning and mastering these ever increasing social networking technologies, it becomes hard for librarians to keep abreast with the technological change and needs of library users. Despite time spent mastering it, the regular updating of these tools is time-consuming. Some of the staff members, especially old ones, find it difficult to keep in line with the pace of technological change. The identification of appropriate and reliable tools which users prefer over another due to constant change leaves a lot to be desired. In addition, lack of knowledge and understanding how each tool operates and how it can be adapted

into the library spectrum are some of the challenges that contribute to non-use or ineffectiveness of these tools in some academic libraries.

The lack of understanding and use of networking tools by library staff means limited interaction of these tools. There is lack of agreement between library departments, as some are ready to use SM tools, while others are not willing. Since staff do not use the tools, it becomes difficult to determine the future library users. This could be some of the reasons why students and university staff do not always like to use library SN tools. Furthermore, the language use or tone on these tools requires informality but at the same time presentable (Allen, 2010).

It is evident in a study conducted by Khan and Bahatti (2012), that poor monetary conditions, lack of library resources, lack of awareness and training opportunities in South Asian countries such as Pakistan are contributory factors which slow the adoption of SM in libraries. The same sentiment is shared by Chol (2012), who found that the issue of IT and security in terms of firewall becomes worrisome, as they (firewalls) do not allow the use of SM tools and are extremely difficult to maneuver. As a result, it becomes the barriers that deprive some libraries in Australia to use SM. According to Ezeani and Igwesi (2012), some of the challenges that are faced in libraries are network or cable problems, excessive network collisions, software problems, the use of the same IP address and limited bandwidth to support online participation.

Other problems that prevent the use of SM to promote library materials and services include high cost of ICT equipment, lack of technical knowledge and expertise, resistant to change, inadequate government intervention, corruption and negligence. Moreover, there is lack of technology penetration. This can be as a result of high cost of tariffs and government negligence. For instance, South Africa among other African nations is looking forward when each household and offices would be

connected to the internet at a reasonable cost or at no charge. However, the internet is mostly available to rich people.

The aftermath of new advances in emerging technologies requires a certain prowess in terms of knowledge, skills and competency of librarians in the digital age to be accustomed to the ever-growing technologies in order to meet the demands of students and faculty personnel in dynamic and interactive academic working environment. What is most challenging to academic librarians is that the responsibility for faculty and students' needs for information via innovative approaches lies in their hands. They have to ensure that the information sought is reliable, up-to-date and relevant to their subjects. According to Li (2009:184), it is expected that every librarian should be in a position for essential experiences and skills to:

- Be able to show experience and prowess in the use of different electronic information resources.
- Have skills and experience in developing cutting edge trends and evolving technologies relevant to dynamic and interactive academic learning settings.
- To adequately use integrated library management systems.
- Be able to design and develop web page or web-based instruction
- Have qualification or additional knowledge in database management systems, script programming and software project management to effectively and efficiently execute library issues and tasks that come along with the ever evolving technologies.

In the digital age era, librarians are faced with a variety of challenges and opportunities to enhance and integrate certain academic instructions in active and interactive learning situations. Librarians had to learn different things such as how to design, integrate, enhance, develop, update and maintain library information resources services across different applications. In addition, it is also librarians' responsibility to train or assist library users on the use of future science and technology to solve future issues (Li, 2009).

Therefore, in the modern information society, libraries are expected to deliver and disseminate different information across different platforms, databases, networks, applications, channels and systems due to the emergence of new advanced technologies. Notwithstanding this, new technologies impact on the duties and titles of librarians. Librarians need to learn new dimensions and library trends to meet the challenges posed by information literacy in the digital age (Julien, Gross & Latham, 2018).

2.9 SUMMARY

This chapter highlighted studies that were conducted across the world. The ideal points were to indicate the plethora of benefits that SM tools bring to transform and complement academic libraries in the 21st century. These tools play an important role in promoting the integration and use of library services. The literature indicates different types of SM tools that are used by the library to provide information to clients, the purposes for which libraries use SM, factors that determine and impede the effective use of SM in academic libraries and the attitudes of library staff towards the use of these tools in libraries. The following chapter will provide an in-depth discussion of the methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter discusses research methodology which was adopted to collect data of this study. The chapter describes the processes that were followed and used to gather information of answering the research questions. Furthermore, it expatiates on the data collection tools, population, data analysis and procedures followed to ensure the researcher achieves the aim and objectives of the study. The researcher's prime goal is to have reliable and valuable information to solve and answer the research problem and questions. Therefore, the choice of appropriate methodology, data collection methods and analysis is always essential in any research.

Clough and Nutbrown (2012:5) remark that "research is the investigation of an idea, subject for a purpose. It enables the researcher to extend knowledge or explores theory. It offers the opportunity to investigate an area of interest from a particular perspective". Clough and Nutbrown (2012:5) go on to outline that research originates from unanswered questions or grey areas in the mind of the researcher. One can say that research is a way of describing a systematic investigation of a phenomenon.

Scientifically, research can be measured accurately or the gathered data can be analysed and compared to uncover similarities and differences of the phenomenon (Babbie & Mouton, 2001:79). However, this can only be achieved if appropriate and correct data collection procedures, tools and methods are employed. This chapter covers all these aspects of research by looking at the research design, data collection methods, population and sampling, as well as data analysis procedures. Issues of quality criteria and ethical considerations are also covered. This chapter starts by providing a brief account of purposes of the research methodology.

3.2. PURPOSE OF RESEARCH METHODOLOGY

Research methodology provides specific guidelines or indications to be followed in the study, which assist in the completion of the study. One of the most important tasks of methodology is to explain and justify particular methods used in the study (Welman, Kruger & Mitchell, 2005: 57). Clough and Nutbrown (2012:31) are of the idea that “selection of the methods may be an act of faith rather than a rationale response to a clearly formulated problem. The method may even be an intrinsic part of the problem, rather than extrinsic and disconnected from it. Just as recipes are not simply things that are done to food, but becomes concepts within which method and substance are compounded. So ‘method’ in research can become an intrinsic part of the project. The methods we choose are, in this sense, there to be tested, just as much as substance hypothesis”.

A research method is the strategy of enquiry which underlines the philosophical assumptions of the research design and data collection. It is important for the researcher to be aware that the research method which one chooses determines the manner in which data is to be collected. Hence each research method implies different prowess, assumptions and research practices (Babbie & Mouton, 2001). Bhattacharjee (2012:6) is of the idea that a research methodology serves many purposes, but the most useful purposes are exploration, description and explanation. Exploratory research is effective and useful when the research questions are ambiguous or there is inadequate theory available to predetermine the prediction. It sometimes makes it hard or impossible for the researcher to formulate a basic statement for the research problem.

Exploratory research is used to nurture better understanding of the phenomenon in hand. Moreover, it is a valuable resource to ascertain what is happening, to pursue new perceptions, to probe questions and assess the phenomena in different approaches. It is most convenient especially when the researcher seeks to clarify understanding of a problem. Exploratory research is guided by three principled ways of conducting research, search of literature, talking to experts in the field of study

and conducting focus group interviews. A descriptive research design is mainly focused on the description of situations and things to provide processes of the activity. This type of research is commonly structured and purposefully designed to measure the characteristics described in the research questions. Therefore, the proposition derived from the theory serves to guide the procedure and list of what is required to be measured. The function of descriptive research is to reveal the accurate demographics profile of participants and events of the situations. It is of paramount importance for the researcher to have a strong understanding of the phenomena he/she seeks to research prior to data collection.

Explanatory research seeks to establish relationships between variables. It is concerned with an intense study of the situation or a problem in order to better explain the relationships between variables (Bhattacharjee, 2012:6). The study adopted exploratory research to explore and provide a detailed understanding of the phenomenon in discussion.

3.3 RESEARCH APPROACH

Generally, there are three approaches to research, namely, quantitative, qualitative and mixed method approaches. Pietkiewics and Smith (2012) provide the difference between the two research approaches thus: “qualitative researchers are mainly concerned with meaning, that is, how individuals make sense of the world, how they experience events and what meaning they attribute to phenomena and that they are more concerned with the quality of the experience, rather than causal relationship. On the other hand, quantitative studies are more preoccupied with counting occurrences, volumes in order to carry out statistical analysis”.

A combination of both designs and methods is commonly referred to as mixed method research approach. Creswell and Plano-Clark (2007:5) define mixed-

methods research as a research design which focuses on collecting, analysing and mixing both quantitative and qualitative data collection approaches in a single series of study. Its central premise is that the combination of quantitative and qualitative approaches provides a better understanding of research problems than a single research approach. A mixed methods design is useful to capture the best of both quantitative and qualitative approaches (Creswell, 2003:22). Maree (2007:268) also states that in mixed methods research, the researcher constructs knowledge about real-world issues based on pragmatism, which places more emphasis on finding answers to research questions than of the methods used.

3.3.1. Quantitative research approach

The quantitative research approach is the form of approach in which the researcher uses post positivist statements to cultivate knowledge. It primarily focuses on cause and effect thinking, the use of unique instrument and observation, it deals with numbers, hypotheses and questions to test a theory. It uses experiments and surveys as a strategic element of enquiry to possibly collect data and is the predetermined mechanism that provides statistical data (Creswell, 2003). The study stretches the theoretical framework from which the hypothesis is derived. Furthermore, the experimental sort of design is introduced to measure the variables in question.

In this study, participation is selected randomly in order to be objective (avoid biasness of the results) and to eradicate or reduce errors. This type of approach is deductive in nature; hence the knowledge acquired is based on the testing of the theory. The design of quantitative research requires tightly controlled situations. As such, the richness and meaning are likely to be compromised or sacrificed. This might have brought about validity concerns, although it might be the limitation of the quantitative design. Quantitative approach commonly focuses on generalisations of the population that is being studied (Babbie & Mouton, 2001).

3.3.2. Qualitative research approach

Maree (2007:51) defines qualitative research as a research methodology which is concerned with understanding the process and social context which underlie various behavioural patterns, and is mostly concerned with exploring the why questions of research. This approach of enquiry aims to gather an in-depth understanding of human behaviour and the reasons behind that behaviour. Leedy and Ormrod (2015) note that qualitative research can be used when the researcher seeks to describe certain situations, settings, processes, programmes, relationships, systems or people; to gain new insights about a particular phenomenon; to develop new concepts or theoretical perspectives about a phenomenon or discover problems that exist within a phenomenon; to verify the validity of certain assumptions, claims, theories or generalisations; and to evaluate the effectiveness of particular policies, practices and innovations.

Moreover, Creswell (2003) remarks that the qualitative approach is usually concerned with studying things in their normal setting, with an attempt to make sense or to interpret the phenomena according to the meaning people attach to them. It uses different strategies for inquiry such as ethnography, narratives, phenomenology, case studies or grounded theory. This enables the researcher to collect open-ended data with the intention of developing themes from the data (Creswell, 2003).

3.3.3. Mixed-method research approach

Mixed-method approach incorporates both qualitative and quantitative approaches in a single study. This approach helps to overcome the shortcomings and biases inherent in qualitative and quantitative approaches, and has the potential to be expansive (O'Leary, 2017:164). This means that the mixed approach allows

methodological diversity, inductive and deductive reasoning and complementarity of approaches. This approach, by nature, adds precision of 'words' through dialogue, observation and narrative with the inclusion of numbers and statistics, which enable the results to be generalised (O'Leary, 2017:165). Punch (2006:154) defines mixed method as an empirical research that brings together qualitative data (and methods) and quantitative data (and methods). This method employs both approaches simultaneously to create a research outcome stronger than either method individually. The weaknesses, thereof remain in development, that is, criteria and procedures for judging the quality of mixed methods social inquiry remain problematic, particularly when the studies include stances from different methodological traditions, different methods of relatively equal importance and efforts at integration (Somech & Lewin, 2011:262).

3.3.4. Choice of research approach

This study adopts the qualitative research approach, which approach enables the researcher to understand experiences, opinions and attitudes of the participants towards the use of or lack of use of SM tools in a library spectrum (Babbie & Mouton, 2001). This would be achieved through the answering of 'what', 'how' or 'why' of a phenomenon rather than 'how many' or 'how much'. The qualitative research approach helps to discover fresh and undiluted information, and provides rich data and deep insight into the phenomenon under study (Bertram & Christiansen, 2015:63).

Therefore, adopting this approach ensures that the selected data collection methods supplement the entire research and provide adequate findings. This approach deals with the data that is primarily verbal, extracts meaning from the respondents' perspective of the phenomenon and aims to enable the universe to understand the meaning people attach to everyday life. The qualitative approach is the right approach of this study as the data collected are derived from participants' experience and are interpreted the way they see the social world. This kind of approach assists in discovering the unknown or unexpected, so as to establish new avenues.

3.4. RESEARCH DESIGN

Bertram and Christiansen (2015:207) define research design as a plan of how the researcher will systematically collect and analyse the data needed to adequately answer the research question. According to De Vos *et al.* (2011:171), a research design is “a plan, recipe or blueprint for the investigation”. As such, it provides a guideline according to which selection can be made of which data collection method(s) will be most appropriate to the researcher’s goal and to the selected design. Babbie (2007:112) refers to a research design as a set of decisions regarding what topic is to be investigated among what population with what research methods for what purpose. Kumar (2011:396) agrees with Bertram and Christiansen (2015), that a research design is the procedural plan adopted by the researcher to answer questions vividly, accurately, objectively and economically.

A research design usually conveys the apparatus applied to collect information from the respondents, to select the respondents, how the collected information is analysed and how the researcher communicates the findings. This means that a research design is the process of focusing on which plan or strategy can assist in collecting data. It is a plan of outlining how observations will be made, and gives direction as to how the researcher will carry out the project (De Vos *et al.*, 2011:143). It is the responsibility of the researcher to ensure that the research design is tailored in such a way that it can obtain appropriate data in investigating specific research questions.

The qualitative research design always differs from quantitative research because it does not usually provide the researcher with step-by-step plan to follow. The design in quantitative research determines the choice and actions of the researcher, whereas in qualitative research, the researcher’s choice and action determines the design or strategy (De Vos *et al.*, 2011:312). There are different qualitative research designs, phenomenology, ethnographic research, case studies and grounded theories.

3.4.1 Phenomenology

Creswell (2009) refers to phenomenological study as the study that describes meaning of the lived experiences of a phenomenon or concepts of several individuals. Phenomenology practically aims at explaining how the life world of subjects is developed and experienced by them. O’Leary (2017:149) shares a similar view, that phenomenology is the “study of phenomena as they present themselves in individuals’ direct awareness and experience. Perception, rather than socio-historic context or even the supposed ‘reality’ of an object, is the focus of investigation”. According to De Vos *et al.* (2011:316), the life world describes a person’s conscious experience of everyday life as it happens, and their social actions. The purpose of this approach is to describe what the life world has, or what structures and concepts of experience give form and meaning to it (Schram, 2006).

In phenomenology, it is important for the researcher to adequately understand the phenomenon under study on their own terms to be able to provide precise description of human experience as it is experienced by the subjects, therefore allowing essence to surface (De Vos, 2011). In this study, the researcher’s role was to describe the phenomenon as accurately as possible, refraining from the hearsay or biasness, but remaining genuine to the facts. What is more interesting with phenomenology is that it offers a way of exploring some phenomena that are regarded important in understating our social world, though often overlooked in social studies. By nature, phenomenology explores opinions, beliefs, attitudes, demographics and behaviours of people and studies ideologies, ideas and constructs that make up the social world (O’Leary, 2017:151). The main target of this kind of research design is to produce descriptions full of luxurious images to allow others to share on how a particular phenomenon is experienced.

3.4.2 Ethnography

The ethnographic research approach has common background with the field of anthropology and sociology. It requires the researcher to spend an amount of time with people of diverse cultures in order to understand and record their culture, behaviours and beliefs of a particular community. Ethnographic research can be referred as the investigation of a particular culture through an in-depth study of the members of the culture. It encompasses the systematic collection, description and analysis of data for the expansion of theories of cultural behaviour (Leedy & Ormrod, 2015:139).

The cultural parameter of the study emphasises that people to be studied have the following elements in common:

- Geography
- Shared experiences
- Religion
- Tribal

This means that the researcher's goal is to understand and describe the setting with which the researcher is not familiar with, although some might work in familiar settings. This kind of qualitative research design describes the learned and observable patterns of behaviour, customs and way of life of people. The study is conducted in a natural or real world context where the researcher tries not to interfere in the study as much possible in order to describe the situation as it is. The results of ethnographic research may be revealed using the local language and terminology often used to describe the phenomena (Leedy & Ormrod, 2015).

However, ethnographic research can be difficult tasks to execute when the researcher is not adequately accustomed with the social morals of the people under study or their language. The interpretation from an outsider perspective may bring about misinterpretation of findings which might cause confusion. Therefore, it is advisable for the ethnographic researcher to return to the field to confirm his or her interpretations with the respondents to validate the data before the final stage of presentation of the findings.

3.4.3 Case study

According to Bertram and Christiansen (2015:42), a case study is a systematic and in-depth study of one particular case in its context, where the case may be a person, a group of people, a school, a community or an organisation. A case study research is one of the research approaches that can be applied using qualitative or quantitative stance. It offers rich and in-depth information that is unique. Case studies are descriptive in nature; they describe what it is like to be in a situation. However, they can also be used to generate claims for further verification.

This kind of research design allows the researcher to capture the reality of the participants' lived experiences and thoughts about a particular situation. What matters most in case study research is not necessarily the representative of common cases, therefore the results cannot be generalised. Furthermore, Bertram and Christiansen (2015:43) contend that there are validity concerns which are expressed in the case study. Firstly, to ensure that the data collected reflect the case; secondly, to ensure that the claims are supported by the data and are not generalised beyond what the case can warrant; and lastly is to ensure that when the case study is instrumental, it must be carefully considered how typical the case may be, and which findings can or cannot be transferred to other cases.

3.4.4 Grounded theory

Grounded theory refers to a theory that emerges from observations made in a qualitative study and is grounded in a specific setting (Remler & Van Ryzin, 2015:560). According to Leedy and Ormrod (2015:142), the term grounded refers to the idea that the theory that emerges from the study is derived from and grounded in data that have been collected in the field rather than taken from the research literature. This means that grounded theory, by nature begins from a particular theoretical framework which results into new ideas and knowledge about the phenomena to develop a particular theory. The major purpose of this theory is to start with the data and later use the same data to develop a theory. It uses a prescribed set of procedures to analyse data and to construct a theoretical model out

of it. These forms of studies are of paramount importance, especially in a situation where the current theories about the phenomenon are either not existing or not enough to assist in fielding the knowledge gap (Leedy & Ormrod, 2015).

The grounded theory study basically emphasises the process, which includes people's action together with their interactions, which are related to a particular topic with the aim of developing a theory about the process. Therefore, the approach has roots in sociology, which was developed by Glaser and Strauss (1967) in an attempt to understand the interaction between health care professionals and dying patients. Furthermore, it can also be applied in diverse fields such as geography, nursing, education, psychology, social work and anthropology

The grounded theory data can be collected using various data collection techniques such as interviews, observations, videotapes, documents, historical records and anything that is relevant to provide answers to the research question. The new theory is developed once the researcher recognises new themes emerging from respondents' point of view and observable events. However, the data that is collected need to provide the perspectives and the voice of the participants or respondents (Leedy & Ormrod, 2015).

3.4.5 The choice research design of the study

The research design used in this study is phenomenology, which refers to a person's perception of an event, programme or activity. Its purpose is to understand experiences from participants' point of view and is concerned with discovering the underlying structure of experiences, opinions and views (Pickard, 2014:268). SM as a phenomenon or a new tool and its purpose in different environments can be understood differently by different individuals. In this study, subject librarians were requested to give their perspectives and experiences regarding the use of SM tools and their role in the delivery of library and information services in academic libraries. The study's main focus is to understand and interpret the meaning that research participants provide to their daily lives. In nature the qualitative research aims to

uncover the qualities of human behaviour. Moreover, the prime aim of this method is not to generalise the phenomenon, but to understand and interpret the given meanings and to discover the causes or reasons beyond human actions.

Phenomenological research design has its strengths and shortcomings. The strengths lie in the fact that it seeks to find the universal nature of an experience and can provide a deeper understanding of the human experiences examined (Pietkiewicks & Smith, 2012). The themes and meanings of an experience emerge from the data collected. Furthermore, the qualitative nature of phenomenology allows the researcher to notice trends and to look at the big picture. Therefore, it recognises a lived experience and brings meaning to it. Phenomenology may also contribute to the development of new theories, changes in policies or changes in responses as the results may help expose misconceptions about an experience (Pietkiewicks & Smith, 2012).

Weaknesses in phenomenology lie in the fact that research participants must be able to articulate their thoughts and feelings about the experience being studied (Barbara, 2014). If it is difficult for them to express themselves due to language barriers, age, cognition, embarrassment and other factors, the questions should be made to be as brief as possible. The questions in this study were designed in such a way that they are as short as possible in order not to confuse the participants. Phenomenology also requires interpretation, making phenomenological reduction an important component to reduce biases, assumptions, and pre-conceived ideas about an experience or phenomenon. Researcher bias is difficult to determine or detect. Phenomenological results are not statistically reliable, even with a larger sample size. To overcome this, the researcher collected data from the participants who have experienced SM and developed a composite description of the essence of the experience (Maree, 2012).

3.5. DATA COLLECTION METHOD

Data collection method is a process of gathering and measuring information on variables of interest, in an established systematic manner that gives answers to research questions, evaluate the outcomes and test hypotheses (Bertram & Christiansen, 2015:71). Therefore, data in this research represents the evidence in the form of information that the researcher collected in the study in order to find answers to the research questions posed. The method applied to collect data in this study was interview.

3.5.1. Interview

Interview in qualitative study is referred to as an attempt to understand the real world from participants' perspectives to describe the meaning of human experiences and to reveal their lived world prior to scientific description (De Vos *et al.*, 2011:342). This means that an interview is the conversation between the researcher and the participants. The quantity and quality of information exchanged is determined by the astute and creativity of the interviewer in understanding and managing the relationship with respondents. "Interviews are often used when the researcher seeks qualitative, descriptive, and in-depth data that is specific to the individual and when the nature of data required is too complicated to be asked and answered easily" (Pickard, 2007:172).

The interview is the preferred method of data collection in this research because it has several advantages over other data collection methods. The presence of both the researcher and respondents during the interview session enables the respondents to ask the researcher to clarify the questions posed (which cannot be done with a questionnaire). Face to face interviews also enable the researcher to ask as much questions as possible to acquire adequate detailed information if the respondents have not provided enough details (Leedy & Ormrod, 2015:188). It also becomes easier for respondents to expatiate the phenomenon in detail to the

researcher than to write long responses in a questionnaire. An interview provides more detailed and descriptive data than a questionnaire. The interview is also a reliable method to use in order to have in-depth data from a small number of people (Leedy & Ormrod, 2015:148). However, there are also some disadvantages attached to interviews as a data collection method. Interviews generates large amounts of textual data. This can be difficult to manage, unless the researcher has a clear idea of how the acquired data can be turned into information or analysed. Interviews take the form of self-reported data, which means that the interviewees' responses reflect their own beliefs or behaviour. Sometimes self-reported data might require verification through observation in case the interviewee purposefully or unintentionally provides information that does not accurately represent the phenomena (Leedy & Ormrod, 2015:149). According to Kumar (2011), an interview is one of the most important data collection tools, as it provides a convenient way to administer the participant's information and confidentiality.

3.5.2. Types of interviews questions

By nature, an interview can be structured, semi-structured and unstructured, with advantages and disadvantages (Bertram & Christiansen, 2015:80). This implies that there are three types of interviews, namely, structured, unstructured and semi-structured interviews. Structured interview is one of the forms of interview that follows a set of specific questions, which are done systematically. It is commonly used to assist the researcher to acquire information where the responses are directly comparable. An unstructured interview becomes a method of interview that does not follow any predetermined pattern or style of questions or themes. Therefore, the interviewer addresses the issues as they arise in the interview. An unstructured interview is the most effective and useful method of data collection when the researcher desires to explore the full breadth of a topic or subject (Remler & Van Ryzin, 2015:67). A semi-structured interview follows a certain framework in order to address prime themes, rather than specific information or questions. It allows a particular degree of flexibility for the researcher to be able to respond to answers of the interviewee and to develop themes and issues as they emerge (Leedy & Ormrod, 2015).

The interviews of this study were semi-structured interview. This was adopted as the researcher's tool was to collect adequate data to be able to give relevant and reliable answers to the research questions. Therefore, all relevant topics or questions and issues to be covered were well prepared before the interview. These data collection instruments amass data in the form of conversational style. Semi-structured interviews provide both the interviewer and interviewee with the opportunity to probe for clarity and further discussion of important topics that arise during the heat of the interviews (Remler & Van Ryzin, 2015:69).

The flexibility of this kind of interview schedule gave room for the researcher to elaborate questions based on the participants' level of understanding when necessary (Bertram & Christiansen, 2015:80). Moreover, it allowed the researcher to read the non-verbal communication and reactions of the participants, as it contributed immensely in the analysis of data. The interview was recorded using audio tape, and notes were taken immediately during the interview as a backup and were later transcribed. Bertram and Christiansen (2015:82) contend that it is of paramount importance for the researcher to maintain acceptance and understanding of the participants as one of the basic principles of semi-structured interviews. This proved to yield positive feedback on the researcher and interviewee's interaction throughout the study. It was evident that some participants appreciated the researcher's attitude towards them.

The participants felt welcomed and were encouraged and ready to contribute to the success of the study. However, it was also important for the researcher to ensure that for whatever reasons, he/she does not fall into the trap of emotional attachment towards the participants, as it can hamper or affect the validity and reliability of the data. In addition, it is the responsibility of the interviewer to create a friendly environment for the participants so that they feel welcomed and are able to be open and talk freely without any kind of interruptions. This was accomplished by

permitting the participants to play a role in the study to select the venue of their interest for the interview.

3.5.3. Development of interview questions

The interview (schedule) consisted of six sections which attempted to answer the research problem in order to achieve the research objectives. The first section (A) solicited the participants' demographic information as well as social network tools that they personally use. This enabled the researcher to have predetermined information of whether the participants use SM or not. The second section (B) required the participants to identify SM that they used in the library. Section C sought to ascertain, from the participants, the purposes for which they use SM in an academic library setting. Section D required the participants to identify factors that determine and impede the use of SM in the UL library. The fifth section (E) attempted to determine the attitudes of the participants towards the use of SM in the library. The last section (F) required the participants' remarks about the extent to which they think SM tools can be useful in the provision of information to library and information services. This question was answered by "yes" or "no", and the participants were required to motivate their responses.

3.6 POPULATION AND SAMPLING

3.6.1. Population

According to Bless, Higson-Smith and Sithole (2013:165), population is the set of elements that the research focuses upon. It is the totality of persons, events, organisational units, case records or other sampling units with which the research problem is concerned. Bertram and Christiansen (2015:206) describe population as the total number of people that would fit into the group that is being considered by a particular study.

Therefore, it becomes quite efficient to draw a sample from this population. This means that the population of each study would be determined by the goal the researcher wants to achieve. For instance, if the research topic is "The effect of SM

on primary learners: a case of Leakhale Primary school”, the population of the study would then comprise learners from the chosen school, because they are the appropriate people to give answers to their daily experiences which the researcher deemed problematic.

This helps the researcher to know exactly what those people are experiencing than making assumptions based on observation from a distance. The population always attempts to give readers the specific participants of the study or give boundaries of the study units. According to De Vos *et al.* (2011:391), each population must be studied against the background of more universal social experiences and processes, and that no individual or group is ever only an individual or group. The process of comparison between an individual and group being studied is important, hence the researcher is in pursuit of understanding all aspects of the research topic. The population of the study comprise ten (10) librarians from the University of Limpopo library whose duties are to provide information to users who are responsible for rendering information services at information desk, as well as librarians who are teaching information literacy. One librarian is the head of information literacy, and the other must be readers’ services librarian.

3.6.2. Sampling method

According to Kumar (2011:397), sampling is the process of selecting a few respondents or sample from the sampling population for the researcher to be able to estimate the prevalence of information he or she is interested in. Sampling means taking a portion or smaller number of units of a population as representative or having particular characteristics of that total population. The term “sample” implies the simultaneous existence of a population or universe of which the sample is a smaller section, or a set of individuals selected from a population (De Vos *et al.* (2011:223). Sampling involves deciding which people, events, behaviours and setting to include in the study. Therefore, it is the responsibility of the researcher to decide the number of people or objects to be interviewed.

The sampling method chosen for this study is purposive sampling, which is also called judgemental sampling, since it is based entirely on the researcher's judgement as to which people, group or objects to include in the sample. The sample by no default should compose of units with common characteristics, representative or typical attributes of the population that benefit and help to serve best the purpose of the study (Bertram & Christiansen, 2015:60). The word "purposive" indicates that the sample is applied for a particular purpose or reasons. There are various reasons why a particular sample might have been chosen. Firstly, it might be that it is chosen because it represents the population; and secondly, it might that it encapsulates a number of issues which exist in the population but which are not found all together (Bertram & Christiansen, 2015:61).

Therefore, in this study the sample (purposive) was chosen because the target participants are librarians whose work is to communicate and provide information to users. It would, therefore, be of utmost importance to get research answers from these participants since they interact with users daily as part of their daily designated tasks and activities. Ten participants participated in this study. The rationale beyond the researcher's use of sampling is feasibility. A complete coverage of the total population is possible, but considerations of time and cost might militate the researcher to undertake the study. Therefore, the researcher used a relevant sampling method which provides accurate information than might have been acquired if he or she were to study the entire population (De Vos *et al.*, 2011:224).

3.7. DATA ANALYSIS

The results of this study were analysed using the thematic content analysis method. This method of analysis provides an easy or understandable way of analysing data by grouping it into categories on the bases of themes or similar features. The procedure employed help to reduce and group large quantities of data into meaningful units for interpretation. Once the data was collected, the researcher

transcribed and reread the tape recording. Afterwards, notes were taken during the interview sessions. Since transcribing can be a difficult task, a better way to achieve the research goal was to identify and note down the main themes that emerged while listening to the recordings.

Classifying the information obtained through analytical framework was based on the topics covered with the respondents during interviews. The researcher identifies the prime ideas expressed for each topic and identifies the important points and categorise them according to their characterised themes. The important part is to report the constructive and relevant results of the study. The researcher gave shape, interpretation and meaning of the large amount of raw data accumulated from the participants' responses. Therefore, the analysis would help in revealing the findings of the study without any biasness (O'Leary, 2017:324).

3.8 QUALITY CRITERIA

Before a study is implemented, it is necessary to ensure the reliability and validity of the instrument used. In quantitative studies, a pilot study is carried out, and in qualitative studies, the trustworthiness of the results of the study should be verified for credibility, transferability, dependability and conformability. These are discussed below.

3.8.1 Pilot study

The interview schedule of questions was first distributed to few librarians who did not form part of the study. Before the researcher can start with data collection, it is important to test the preferred methods and to do different practical preparations. A pilot study is commonly called a small-scale trial of a particular research component (Bertram & Christiansen, 2014). It is a process where one carries out a preliminary study through all research procedures with a small sample, or part of the preliminary stage where the instrument to be used in the study is tested or

trialled with the people who share common characteristics with the intended or actual study participants (Bertram & Christiansen, 2014:49).

The interview schedule was piloted by using participants who share similar characteristics with the target population. This enabled the researcher to establish whether the questions on the interview schedule are measuring what they are supposed to measure when administered to the targeted population (Strauss 1987). The pilot study was applied to test the flexibility and comprehensiveness of the question tabled to be answered in the interview. Therefore, it helped the researcher to identify and rectify errors, clarify ambiguous questions and to add or reduce information when necessary. For instance, some of the questions asked by the researcher were ambiguous, difficult to understand and wrongfully constructed. These were discovered after the pilot study, which tested the flexibility and comprehensiveness of the questions tabled to be answered in the interview. Pretesting of the study was useful when the researcher was examining the practicality, reliability and suitability of the method. Therefore, the comment of the participants in the pilot study assisted the researcher to identify and rectify errors, clarify ambiguous questions and add or reduce information when necessary.

For example:

- The question like, which activities and tasks do you think SM can help the library to execute, was not included in the first interview schedule that was piloted. But after that, it was deemed important to complement the purpose that library staff opines on activities and tasks the SM can be of help in libraries!
- In terms of grammatical error, the initial question was, do you use SMs personally? It was later changed to; which SM do you personally use?

Therefore, the researcher had enough time to change all the errors that could have an effect on the study responses.

3.8.2. Reliability and validity

In quantitative research, a pilot study is conducted to ensure reliability and validity. Reliability describes the consistency of results over time and the accurate representation of the population studied. It is also determined by whether the results of the study can be reproduced under the same methodology. Therefore, the instrument used was considered to be reliable (Cele & Lekhanya, 2014:468). The researcher ensures that data collected are not diluted or tampered with from respondents' viewpoints, thus confirmed reliable.

According to Cele and Lekhanya (2014:469), validity is gauged by whether the research truly measures that which it was supposed to measure or how truthful the results are. O'Leary (2017:64) contends that validity is all about measuring what one intends to measure and manage to eliminate any other possible casual relationships. This means that the target is success. The study is valid because it has used different sources to support the data obtained and developed a range of consistent evidence. Therefore, the study objective was achieved because it is not based on the researcher's beliefs, feelings or experiences, but on the collected data from the respondents.

3.8.3. Trustworthiness of the study

Assessing the trustworthiness of research results and findings is one of the key components of qualitative research (Maree, 2012). Four criteria for establishing trustworthiness of research results and findings are commonly known as credibility, transferability, dependability and confirmability.

Credibility has to do with the accuracy of the research findings, which is usually measured through triangulation. Maree (2012) advises that triangulation is not only about using multiple data collection methods, but also about using multiple theories and researchers. The findings of this study were therefore confirmed by looking into the other findings on the same topic through literature review.

Mertens (2005:2) defines **conformability** as the influence of the researcher's judgment minimised and the degree to which others could confirm the results. It is about the researchers' neutrality in the research findings. Biasness and personal motivations of the researcher were avoided at all costs by the researcher. The researcher kept a record of every step taken when collecting and analysing data.

Dependability is concerned with whether the same results would be obtained if the same observation is done. In this study the research findings will be interpreted as they are. The research report will be subject to external assessment by experts in the field.

Mertens (2005:2) shows that with **transferability**, the researcher must give a "thick" description of the results so that the reader can generalise them to other settings. In this study, all the findings and results were interpreted based on the previous research findings on the same topic. The interpretation of data was based on previous research results and the theoretical framework on which this study was based.

3.9. ETHICAL CONSIDERATIONS

The researcher obeyed the ethical guidelines of the research Committee of the University of Limpopo. The researcher ensured that after the approval of the research proposal by the School, the researcher then applied for ethical clearance (attached as appendix three) to be able to collect data. Permission was granted in the form of an approval letter and later a certificate (ethical clearance). The researcher sought permission from UL library authorities to conduct the study.

The targeted participants were asked for their participation in the study, and time was scheduled for each participant. Before each interview session, the researcher explained the nature of research, that participation was voluntary and that participants could withdraw anytime when they feel not to continue with study. The

participants were provided with a consent form (attached an appendix four) which they were to sign. The anonymity and confidentiality of the respondents was observed by the fact that the researcher used codes (e.g (Participant #1).) instead of their names to describe their responses. The collected data was strictly used for academic purpose only.

3.10. SUMMARY

This chapter provided the description of methods used to collect and analyse the data. It gives a detailed explanation and rationale towards the choice and research design used. Moreover, it presented the phenomenological research design as a design of this study, and how it suits well with the methods applied to collect data. The population of the study was selected using the purposive sampling method. Semi-structured interview questions were used to collect information. The next chapter will present a detailed summary and analysis of the gathered data.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

The prime aim of this study was to investigate the use of SM tools in the University of Limpopo library in the delivery of library and information services to library users. This chapter presents the results from the participant's responses and analyses, and interprets the data collected from the academic library staff of the University of Limpopo about their use of SM in providing library and information services to library clients. It has been noted that data was collected through the semi-structured interview in the previous chapter. This chapter presents responses regarding the type of SM tools that are personally used by library staff; the SM used by the University library to provide library and information services to the library clients; the purpose which UL library use SM tools for; identification of factors that determine and impede the effective usage of SM tools in the library; as well as the establishment of attitudes of library staff towards the use of SM in the library to provide services to their clients.

Data are analysed through thematic content analysis and interpreted descriptively by comparing the findings with other researches that were conducted previously about the topic. In addition, data interpretation was supported by the Technological Acceptance Model (TAM) together with related literature and the researcher's personal experience. The researcher conducted interviews with ten library staff whose daily activities is to interact and assist library users with information. The responses solicited from the participants are reported verbatim and the participants who responded to questions are labelled as participant # 1 to participant # 10. The responses solicited out of this study were sufficient to allow the researcher to draw conclusions. The findings begin by providing information about the demographic

profile of the participants in tabular form. This is followed by the presentation of their responses to questions based on the objectives of the study.

4.2 DEMOGRAPHIC PROFILE OF THE PARTICIPANTS

This section comprises data about participants' gender, age, educational qualifications and work experience. These factors are included in this study because they are variables that influence the usage of SM. Such factors include age, gender, educational level, experience and the job performed by the participants, as portrayed in Table 4.1 below.

4.2.1 Gender

According to the results acquired from the study, ten participants participated in this study. This study was dominated by female respondents as compared to males. The belief that librarianship in South Africa is dominated by females is supported by Hoskins (2013:258), who showed that women are usually in most librarians in South Africa. A study by Bopape (2005) also revealed that women are in the majority, but most top positions are occupied by men in South African academic libraries.

4.2.2 Age

The study found that none of the participants were below the age of twenty-five years, while the majority ranged from 36-45 years, and few respondents ranged from 26 to 35 years. Furthermore, some were aged above the mentioned range. It becomes apparent that the library and information science profession lacks youth, who can use SM tools. These results also show that librarianship seems to be dominated by young adults and older employees, who might have some challenges in using SM tools.

Therefore, gaining a better understanding of age is important, particularly as it relates to user acceptance and usage of new information technology systems or applications. One of the factors that might have an influence on the use or non-use of SM tools by library staff is the “generation gap”, which generally associated with age. The term “generation gap” is used to describe differences in behaviour and attitudes towards new information technology systems and applications between members of a younger generation and members of the older generation.

Participant	Gender	Age	Highest Qualification	Experience
#1	Male	36-45 years	Honours degree in Information Studies or Information Science	Between 09-16 years
#2	Female	26-35 years	Honours degree in Information studies	Less than 08 years
#3	Female	26-35 years	Honours degree in Information Studies	Less than 08 years
#4	Male	36-45 years	Honours degree in Information Studies	Between 09-16 years
#5	Male	26-35 years	Honours degree in Information Studies	Less than 08 years
#6	Female	36-45 years	Btech Business and Information Systems	Between 09-16 years
#7	Male	Above 56 years	Honours degree in Political Science	Above 26 years
#8	Female	46-55 years	Master’s degree in Information Studies	Above 26 years
#9	Female	46-55 years	Master’s degree in Information Studies	Above 26 Years
#10	Female	36-45 years	Honours degree in Information Studies	Between 09-16 years

Table: 4.1 Demographic profile of the respondents

4.2.3 Educational Qualifications

Furthermore, the study found that the majority of participants obtained BA Honours in Library and Information Science, while few have master's degree in the same field. There were also some participants who have degrees other than in Library and Information Studies field, which is Honours in Political Sciences and Btech Business Information Systems. There were no PhD holders amongst the respondents. The library was thus dominated by holders of BA honours and master's degrees. This might be due to the system that allows them to upgrade their educational qualifications. This is similar to a study conducted by Bopape (2005) on management development needs of library managers and middle managers, which found that the largest group of respondents was those who had master's in Library and Information Science with fourteen (31.8%) respondents.

Thirteen (29.5%) respondents had BA honours in Library and Information Science, followed by seven (15.9%) respondents who had a B. Bibl (Bachelor of Library Science) degree or a degree plus Higher/Postgraduate Diploma in Library and Information Science. Four respondents (9%) had a Technikon Diploma in Library and Information Science. Three respondents (6.8%) had a matric /school leaving certificate and two (4.5. %) respondents had a Doctorate in Library and Information Science. One (2.2%) of the respondents had another qualification other than the abovementioned qualifications. The report of the Department of Arts and Culture (2010:72) employees who have BA honours in the broad occupation in the field of LIS and archival studies are in the majority.

4.2.4 Experience

Moreover, the study results indicated that few participants have less than eight years of working experience, whereas the majority of participants' experience ranged from 09 to 16 years. None of the participants who participated in this study had experience ranging from 17 to 25 years. Lastly, some participants had above 26 years working experience. The results show that the library is dominated by more experienced employees as most of the respondents were above eight years of experience.

4.3 DAILY JOB ACTIVITIES OF THE PARTICIPANTS

The data of activities that the library staff involved in daily are presented in the form of themes.

4.3.1 Marketing library services

The majority of the respondents indicated that they to play an integral role in marketing the overall library services, resources and programmes. This is what the participants had to say: *“I am responsible for outreach programmes, find innovative way on how to deal with users and marketing library resources”* (Participant #9). *“It assist in orientation for high school learners”* (Participant #3). Marketing library services and resources make library users feel at ease in using the library and establishing a strong working relationship between library users and the library. Mathews (2009:6) states that for academic libraries to be able to achieve their goal of providing materials for study, teaching and community engagement, they should be involved in advertising and marketing achieved through outreach, communication or public relations. Academic libraries should continually strive to reach their customers or users, as well as to communicate their value to their governing body, that is, the university management and ultimately, the Department of Higher Education. Therefore, the marketing and promotion of library services and resources to library users form an integral function in all organisations, including academic libraries.

4.3.2 Liaising with the school or faculty

The results indicated that popular respondents contend that they liaise with the faculty they are serving to ensure all the lecturers and students' needs of diverse information is fulfilled by making sure that whatever they need is available. This is what the participants had to say with regard to liaising: *“I attend school board meetings”* (Participant #2). *“I request materials that are not available in our institution to other library and provides information resources needed to other*

institutions” (Participant #3). *“I liaise with the school and faculty that I am responsible for”* (Participant #10). Furthermore, to ensure that the information consumed is relevant, reliable and up to date about their subjects, the participants do the following: *“I visit academics on daily basis and inform them about new development and collections and ask for suggestions for books from staff and students”* (Participant #7). Many university libraries have adopted the school or faculty liaison librarian structure as an integral part of their service delivery model. The School or Faculty liaison librarian is usually the subject librarian whose role is to partner and engage with the school or faculty teaching and research programme (Rodwell, 2008). With the development of the role of school or faculty liaison library in terms of a partnership and collaborative levels, there is a need to use modern communication technologies for the librarian to liaise with the school or faculty. Some media tools have technologies that can strengthen this relationship.

4.3.3 Training university staff and students

It was found that the majority of respondents share common daily activities which are to train university staff and students on different online pedagogy such as online searches, bibliographic instruction, Refworks, how to use the library catalogue, and how to manoeuvre the library databases (SABINET, EBSCOHOST). This is what the participants had to say: *“I conduct literature searches for students and staff”* (Participant #4). *“I do interlibrary training, library catalogue and RefWorks to students”* (Participant #3). *“I am responsible for ensuring that client service staff, interns and students assistant understand their working environment and duties”* (Participant #9). *“I provide training on bibliographic instruction, how to use library databases (SCIENCE DIRECT, EBSCOHOST) and do presentations to fellow colleagues”* (Participant #1).

Academic libraries can offer library instructional videos and send them to library users to make them aware of the library and its services and resources. The results further demonstrated that few library staff members are responsible for teaching information literacy to first entering students. This is what the respondents had to say

with regard to information literacy lessons: “*I teach information literacy for first entering students*” (Participant #2). What one can retract from the responses is that the majority of library staff share similar responsibilities which are to market the library services, liaise with the University faculty and train students and University staff about online resources available in the library. A few indicated that they teach information literacy. The study finding is supported by UL library mission which is to provide efficient and effective client driven, innovative information services in support of teaching and learning, research and community engagement in collaboration with its stakeholders (UL Strategic Plan, 2014).

YouTube is one of the most popular online videos which often get media attention for its huge inane content. YouTube to date has partnered with major universities worldwide to add useful intellectual content for self-motivated students. This had led educators and librarians to learn how to use YouTube as an educational tool. Academic librarians can record their outreach programmes, diverse learning discourse and workshops and post them for ease of access to its users through YouTube (Ballard, 2012:79).

4.4 SM TOOLS PERSONALLY USED BY PARTICIPANTS

The results indicated that the majority of the respondents use WhatsApp and Facebook for personal reasons, although few confirmed to have Instagram accounts and are using it. This is what some participants said with regard to SM tools: “I use Facebook, Twitter, Instagram and WhatsApp” (Participant #9). “I use WhatsApp, Facebook and e-mail” (Participant #10). “I personally use Twitter, Facebook, Blog, Instagram and WhatsApp” (Participant #6). “I use Instagram, WhatsApp and Facebook” (Participant #3). WhatsApp is a Mobile Instant Messaging applications which are in the market today and through which people interact with one another. This is one of the applications used by almost everybody who has a mobile device. Therefore, it is not surprising that all participants in the study also personally use

WhatsApp. The advantage of WhatsApp over other SM tools is that it enables users to send and receive information, images, videos, audio and text messages to individuals and groups instantly and at no costs (Ansari, 2016). It is one of the most popular paid apps across the mobile platforms.

The entire library staff involved in this study revealed that they were aware of different SM tools and their applications. It was discovered that all respondents were widely aware of WhatsApp, Facebook, Blog and Instagram. Bradley (2011) concurs that LIS professionals are heavy adopters in the use of SM to engage in professional development, communicate with clients and to connect with other LIS colleagues globally. In addition, other SM tools which were less known were LinkedIn, Twitter and YouTube. The librarians indicated to have personally used these tools for personal purposes. However, they sometimes use it for work-related issues and to communicate with clients that are closely related because they fall under the school or faculty that they are assigned to serve. Mabweazara (2014:88) contends that the use of SM tools for personal use were mainly to communicate with friends, family, entertainment, academic purpose, keep updated with current news and archiving personal information. It was also found that Facebook, Twitter and WhatsApp were used for communication and entertainment.

This means that the personal use of SM tools had a contributory effect on the use of these tools at work, because if one does not attempt to personally use them, it might be difficult of them to utilise them at work. One needs to be aware or familiar with certain tools personally to effectively and efficiently use them other than that they can be useless to apply at work. Therefore, the findings align with those of Penzhorn and Pienaar (2009) who ascertained that most librarians are aware of Blogs, IM, Twitter and Facebook.

Facebook has contributed immensely in academic libraries and enhance libraries' social visibility. Facebook helps libraries to acquire and share intellectual content to a

wide range of users within a short period of time. Library staff and library users share a common idea that the incorporation of Facebook in libraries would transform and improve channels of communication and delivery of library and information services (Ballard, 2012:29). Findings by Mbatha and Manana (2012:13) on the use of Facebook by Unisa students indicated that students spend most of their time socialising on Facebook. The students also showed that they would like to see Unisa's academic content posted on Facebook because that is where many of them spend most of their time. They based their argument on the premise that on Facebook they meet different people from all over the globe who could assist them in their studies. The students are clearly reaping many benefits from the use of Facebook in their studies and will continue to do so. Therefore, academic libraries should also embrace the potential of Facebook, bearing in mind that many students prefer to use Facebook for their studies. Moreover, other participants have indicated that they had Twitter and LinkedIn accounts.

According to a report by Sysomos (2014), South Africa has become the 10th largest Twitter user in the world. According to the report, South Africa accounts for 0, 85% of the total global users of the popular micro-blogging platform. Tiernan (2013:5) states that Twitter is used as a means for increasing opportunities for interaction and engagement for students, especially those who lack the confidence to engage personally. Bicen and Cavus (2012:2) found that the majority of students spent more time on Twitter. They use it for different reasons like sharing of photos, videos, music etc. However, educational materials were observed to be least frequently shared by the students. It also helped them arrange social meetings and develop personal learning networks.

The results reveal that SMI tools that are used by the library staff are dominated by WhatsApp and Facebook. This might be because of their user friendliness and their convenience. However, the less or non-use of the other SM tools might be that they do not find them easy to use or are not accustomed to them. Davis' (1989:320) TAM concurs that there are two elements that influence individuals' intention to use a

particular technology. The perceived usefulness and perceived ease of use determines the acceptance and rejection of a particular technology. This means that if the librarian is of the idea that SM tools would help to provide access to useful information at work, easy communication with library users and help them to connect socially, it implies that he or she have recognised SM usefulness. The same applies if the librarian perceives a certain SM tool to be easy to use, they are likely to adopt and use them. Literature shares common SM tools which were identified by the respondents, which include Facebook, YouTube and Twitter in Canadian library staff (Collins & Quan-Hasse, 2012), IM, Facebook, Tags, Wiki and blogs for library staff in Asia and Twitter and Facebook for staff in England (Arif & Mahmood, 2012).

4.5 THE RESPONDENTS' SELF- RATING ON THE USAGE OF SM

The majority of respondents mentioned that they are not new or inexperienced in the world of SM platforms, whereas few agreed to be novice users of SM tools. Most respondents also agreed to be normal users of SM. However, some respondents indicated that they are not ordinary users of SM. The results demonstrate that respondents agree to be excessive users of these tools. On the contrary, other respondents indicated not to be excessive users of SM tools.

The study reveals that the majority of library staff are aware of these tools and are using them. Even though some might not be excessive users, but they have adopted them because of their usefulness and ease of use. The study findings correlate with TAM theory, where it is said that once people recognise the usefulness of the technology, its user friendliness or ease of use, they are likely to adopt it and use it for personal and work-related activities. Farkas (2012) indicated that the ability to use SM tools is part of being information literate. Library and information service professionals are aware of the power of SM, although it is used mostly for personal than professional development and promotion of their respective libraries. Therefore, in terms of librarians' self-rating of the use of SM tools, it was found that librarians are regular users of these technologies. Although they are selective in their use, this

serves as evidence that librarians are aware of various SM platforms and their use. This is the reason why they are able to identify the functions and activities that SM tools can help academic libraries to execute.

4.6 TRAINING RECEIVED ON THE USE OF SM IN THE LIBRARY

When asked about the SM training received, this is what the respondents had to say: “No, the library does not offer such” (Participant #4). “No, we train ourselves on how to SM” (Participant #1). “No, university restricted SM tools during working hours, we access it after hours” (Participant #8). “No, it’s my personal knowledge and it is appropriate tool to reach my clients” (Participant #2). “No, never used. We don’t use SM to market library, they block the use of SM during working hours” (Participant #6). All the respondents indicated that they have never been offered any form of training related to SM tools use in the library. However, one respondent indicated to have offered one through the Library and Information Association of South Africa (LIASA) “No, never offered but got it through LIASA” (Participant #9). The study reveals that no form of training was offered to the library staff with regard to the use of SM tools. The finding is supported by Collins and Quan-Haase (2012), who found that the major reasons for limited or no use of SM tools in academic library was because of the absence of training and funding, poor technological infrastructure and lack of skills or interest amongst library staff.

The study goes on to reveal that the academic location of the library together with the size of the university uptake might be contributory factors that affect the use of SM tools. Harrison, Burrell, Velasquez and Schreiner (2017:249) contend that the power of SM as enablers of library and information services provision and as viable means in competitive environments with other information sources appear to be overlooked by academic librarians and university top management. One of the factors influencing the use of technology highlighted in Davis’ (1989) TAM is the organisational support, which is understood as the attitude of an individual’s organisation towards information technology and the material support that one’s

organisation provides to encourage the adoption and use of information technology. The kind of support that an organisation may provide to individuals within it includes training on the use of computers, material support and adapting to technological changes in the environment. The findings show that in terms of training offered, all librarians did not receive any form of training from the library. It is evident that the personal use of SM tools by librarians plays an important role in the academic library by ensuring that the traditional way of providing information to library users is complemented by an innovative way through the power of different SM technologies.

A study conducted by Bhardwaj (2014:80) in India found that 50% of the LIS professionals indicated to have found out about SM tools through workshops, conferences and training programmes. 53.1% of the library and information science stated that they started using these tools through self-learning, and 35.9% through the help of friends. Furthermore, 7.8% indicated to have learned it through the help of their colleagues, and 3.1% through family members. However, Bhardwaj (2014:1) argue that to ensure the use of these tools in academic libraries, SM applications must be incorporated in the master's degree curriculum for library and information science. Lack of training or workshop knowledge, financial support and skills about the use of SM tools by management affect the effective marketing and promotion of library services (Collins & Quan-Hasse, 2012).

Librarians in academic libraries are confronted with increasing demands, hence libraries are bombarded with forever changing technologies. Librarians are expected to be accustomed with the features of such technologies to be able to use them effectively to affect the improved provision of information and library services. On the contrary, with challenges faced by librarians in the adoption of SM in libraries, Rogers (2009) report that even when training is offered, the major challenge is that some librarians are not willing to learn, as some see it as a waste of time because of fear of change. In addition, age can also be a contributory factor which precludes the offering of SM tools training. It is discovered that most youth librarians appreciate the

incorporation of SM than older librarians who express discomfort with Facebook, saying that it is not easy to use.

4.7 SM TOOLS USED IN UL LIBRARY

The respondents indicated that they use Facebook and library blog. However, it was indicated that the Facebook account does not belong to the library, but a university account which is accessed through the Marketing Department “Facebook, but through university page” (Participant #6). The library blog was indicated to be used not to communicate with library users but with library staff regarding meetings and other library matters “Library blog, but I am not sure it’s operational, past events such as library week and world book day are communicated only to library staff” (Participant #2). Moreover, others indicated to using library guide, e-mail and SMS to communicate with clients.

Figure 4.1 above is an example of a blog posted by the UL library. Some indicated that the library does not use SM tools because of lack of access to these tools. The study results indicate that the library uses Facebook and library blogs mostly, compared to other SM tools. Nfila (2010) states that Facebook and Library blogs are two of the most SM tools adopted by academic libraries due to their flexibility and ability to receive feedback from intended target users. Hence, these tools can assist libraries to post tutorials, course materials, research-related literature and to market library resources.



Open Access Week 2018

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The University of Limpopo hosted their 1st Open Access Symposium which was a success and in a bid to continue to educate the University community about open access, we included a presentation and the policy for your perusal.

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Figure 4.1 UL Library blog post 24 October 2018.

4.8 MOST EFFECTIVE SM's

The majority respondents acknowledged Facebook as the most effective tool in the academic library, whereas few indicated that Twitter and Blog can be useful in the academic library. However, others indicated that WhatsApp, Instagram and libguides can also play a role in libraries. From the above results, library staff strongly believes that Facebook is a tool that each academic library should use effectively and

efficiently to their advantage. The stated reasons by participants being that *“because majority of students are on Facebook and they prefer it, the library should go where their potential users are”* (Participant #5). *“Facebook is easy to use”* (Participant #7). *“It will help us to inform and communicate with students and allow them to participate in library events”* (Participant #1). *“Because it is less costly in terms of data bundles unlike Instagram”* (Participant #4). *“Many people have it on their smart phones”* (Participant #8). *“With Facebook you can paste pictures, pdf articles, videos (training, library Online Public Access Catalogue (OPAC), short tutorials), go live during library events”* (Participant #9). *“Facebook gives option to post long messages as oppose to Twitter”* (Participant #3).

The common idea is reflected on TAM theory that individuals can adopt and use SM tools if they find them useful and easy to use. However, the rationale beyond the high use of Blog might be that it is used amongst library staff to inform them about meetings and other library matters. Similar to the use of Facebook, the motivating idea might be due to many scholars’ findings that most students, especially the millennials or 21st century, prefer to use SM tools such as Facebook to communicate and interact with friends and family. This makes it an important tool in academic libraries to share information with staff and library users (Mabweasara, 2014). In addition, the study found that participants acknowledge that Facebook is the most effective tool in academic libraries. This is supported by librarians’ view that *“with Facebook you can paste pictures, pdf articles, videos (training, library, OPAC, short tutorials), go live during library events”* (Participant #9), and lastly indicated that *“Facebook will help us to inform and communicate with students and allow them to participate in library events”* (Participant #1).

The study finding is supported by Rogers (2009), who states that 79.0% of American librarians strongly believe that Facebook can be effectively and efficiently utilised to promote general library services, create awareness and for virtual reference. Harrison, Burrell, Velasquez and Schreiner (2017) concur that SM technologies have potential to provide various information resources to the university community

in an innovative way and help libraries to overcome the boundaries of time, money and geographic location. They help libraries to remain relevant in the provision of 21st century library and information services.

The study findings align with Ezeani and Igwesi's (2012:6) postulation that SM tools such as YouTube, Facebook and Twitter are increasingly incorporated and used amongst both clients and librarians in Nigerian academic libraries. Ansari (2016) notes that these tools can be used in libraries to improve their services, such as Current Awareness Service, Selective Dissemination of Information, Reference service, Ask-a-librarian and User discussion forum, document reservation, abstract service, library instruction, acquisition feedback, reminders and notifications, library news, and e-book searching. Moreover, others stated that "*Twitter is useful to draw information from e.g. during fees must fall protest it played important role as most people drew information of the developments from it*" (Participant #9). "*Because Twitter handles is easy to trend by creating #tags that can trend*" (Participant #2).

Makori (2011:344) confirms that SM tools like Facebook have hugely assisted university libraries to provide various tasks in the library spectrum such as to promote, expand, support and post information services to library users. Therefore, the flexibility of these tools makes them ideal for such a purpose, thereby sharing similar explanation of TAM theory as it explores the usefulness and ease of use of these applications amongst library staff.

4.9 THE PURPOSE/S OF USE OF SM IN UL LIBRARY

4.9.1 Marketing and promotion of library services

"To market library services and create awareness of our services" (Participant #5).

The majority of the UL library staff acknowledged using SM tools for marketing and promotional purposes.

4.9.2 Inform library clients about new developments

“SM is used to inform students about library rules and regulations and library calendar” (Participant #2). “To alert students of the things that are happening in the library” (Participant #10).

The respondents specified that SM tools in UL library are used to inform their users about everything new that is about to happen. This might imply that UL library users are always up to date regarding library matters.

4.9.3 Communication with library users

“It is robust tools that can be used communicate instantly with library users and staff” (Participant #4).

“To send out messages to reach larger group” (Participant #3).

The respondents indicated that SM tools in the library are used to communicate with the University community (staff and students). Therefore, from all specified purposes UL library uses SM tools to market and promote library resources and services. Chan (2012) shares similar sentiments with the finding of the study that utilising SM technologies in the library offers reduced cost towards advertising library services. It is evident that the incorporation and use of SM tools in academic libraries helps immensely in marketing library services in order to remain relevant in the 21st century. The library can follow trends and use new concepts to promote services and to be on the same level with their competitors (other institutions of higher learning).

4.10 THE ACTIVITIES AND TASKS BETTER DONE USING SM

The respondents were also asked to indicate activities and tasks that could better be achieved if done through the use of SM tools. The responses showed activities and tasks that can be done better with the use of SM tools, as follows:

4.10.1 Inform users of new developments

“Alert university community about events and services offered” (Participant #6).

“Inform library users about library hours, since during exams the time slot changes” (Participant #9).

The respondents believe that by using these technologies, the library can effectively and efficiently inform users about relevant and current library developments.

4.10.2 Marketing library services

“I think marketing library services is the core, since most of our users are on SM” (Participant #5).

The respondents are of the idea that SM tools can provide library with a platform to market its library services.

4.10.3 Promote online training

“I think that SM tools can help the library to promote online training and databases to its users” (Participant #1).

4.10.4 Improve communication between librarians and library clients.

Among some of the responses received were:

“It will encourage users and staff communication” (Participant #6).

“It will improve the time to receive users’ needs and provision of feedback without boundaries” (Participant #4).

The respondents are of the opinion that SM technologies can assist the library to execute the important task which is to improve communication amongst both users and librarians. This might be due to lack of satisfactory communication and feedback between students and librarians in times of need. The respondents' idea is also shared by Kwanya, Stilwell and Underwood (2012) that SM tools can boost interactivity amongst librarians and users, thereby aiding smooth communication and feedback. SM platforms enable collaboration; they provide improved management of section and accessibility through instant communication.

The study found that library staff thinks that SM tools can help the library to inform users about new developments and to market the library services. A similar idea is shared by Mabweazara (2014:13) that SM technologies provide the library with huge opportunities to reach a wide range of library users in their own preferred environments and to create significant awareness about library resources. In addition, it provides an avenue which can extend library services beyond traditional library operation.

Khan and Bhatti (2012) concur with the study finding that Pakistan academic libraries are proliferating on the use of SM tools to allow users to create, help the libraries to get closer to the patrons, connect, converse, market and promote library services and share important information. In addition, the tools attract potential users, enable knowledge sharing, and help locating information and distance learning. Since SM technologies brought diverse functions and characteristics for one to use, it also provides and help libraries to execute different activities or tasks which are beneficial to the improvement and development of library services.

4.11. TASKS AND CTIVITIES DESIRABLE WHEN DONE THROUGH SM

The participants were further asked to show library activities and tasks that would be desirable when done through the use of SM. The following themes were developed from the responses received from the participants.

4.11.1 Marketing library services

“Marketing is the measure product to encourage the use of the library” (Participant #8).

“Marketing, majority do not know about the collections that our library has” (Participant #4).

It is evident that popular respondents indicated that the marketing of library services is one of the goals they want to achieve. This might be due to their experiment of the usefulness of SM tools.

4.11.2 Inform users of library new developments

“Inform students about different library sections” (Participant #9).

“Inform students about due date of borrowed library materials, conferences and upcoming events” (Participant #1).

Furthermore, some participants mentioned that they would like it most if SM platforms are used to inform library user about the new library matters. The study found that the respondents think that marketing would be more desirable when done using SM tools. Few respondents indicated that they would desire it most when these tools help in online training and improve library services and communication. This proves that librarians approve that marketing and promotion of library services is the core and determiner of the success of libraries. Abrahams (2017) concurs that SM platforms contribute greatly in marketing library services due to its diversity and flexibility. This means that if the library is well represented on the online face in terms of promotion and marketing of its resources and services it provides to

patrons, success is certain. Considering the fact that the majority of potential library patrons are on SM technologies, if libraries incorporate and use these tools, this would affect their marketing strategy to attract huge numbers of new users and to improve their services. Hough and Neuland (2012) concur with the study findings that the use of SM tools in academic libraries helps to provide diverse programmes, and market and promote library and information services to both open and distance library users. Hendrix, Chiarella, Hasman, Murphy, and Zafron (2009) share the common understanding that in health libraries, librarians mostly use SM such as Facebook essentially to provide chat reference, provide announcements to library clients, market the library, post photos and have online face.

4.12 FACTORS THAT IMPEDE THE USE OF SM

Mabweazara (2014:13) acknowledges that academic libraries have to contend with a number of factors that impede or cripple the maximum usage of these tools among librarians. Therefore, the participants were also asked to indicate challenges they encounter in the usage of SM tools. Below are the themes that were developed from the participants' responses.

4.12.1 Restriction of access to SM tools

"SM are blocked by ICT during working hours and are accessible after 17h00"
(Participant # 10).

"Some of the SM tools are not available during the day and this impact negatively on our users" (Participant #7).

"We have Wi-Fi but accessible all over the library building, some spot is available and others is not available" (Participant #9).

The majority of participants indicated that they are restricted to access SM platforms during working hours. This means that SM platforms are Unblocked after working hours (17h00). However, it was indicated by some participants that YouTube is currently accessible during working hours. It is evident that the restriction of access

to SM platforms is a major barrier that precludes library staff from using SM in the library. A similar idea is shared by Banda (2011), that the ICT department restricts library staff from having access to SM platforms. It is hardly used for work-related activities. The staff feel comfortable doing things in a traditional way than social networking, bandwidth problem and lack of time and knowledge on the use of SM tools. The issues of policy on the use of SM in libraries also affect most community libraries in Limpopo Province.

4.12.2 Lack of skills, willingness and library SM account

"We don't have SM account that we manage on our own" (Participant #5).

"Some of us do not have skill of the use of SM and some do not prefer to use SM as a platform of communication" (Participant #8).

It is evident from the respondents that some people do not have skills or know how to use them. Some are not willing to learn or use them, and lastly that due to lack of their own library account, this becomes a contributory factor. SM technologies require one to have knowledge of how they are used because they are sometimes complicated and difficult to use if one is not accustomed with their functioning. Furthermore, one needs to have eagerness to learn and use these applications to their advantage. This implies that those who are reluctant to use these tools might be because they have not seen the usefulness of these tools or that they find them difficult to use. The finding is in agreement with the findings by Gray (2004) that the major concerns that inhibit the use of online fora were lack of familiarity with technologies and lack of interest or understanding of how these technologies can assist work.

In addition, the deficiency of these tools in the library spectrum can be stressful, meaning that the needs of different patrons might not be achieved or fulfilled, because users of the 21st century prefer online interaction than physical interaction. This leaves a huge gap of information needs, given the power of SM technologies and the role they play in academic libraries such as UNISA.

4.12.3 Lack of publicised policy

“University does not does not have SM policy” (Participant #2).

The respondents indicated that the University does not have publicised policy on the use of SM tools. This is what one had to say: *“We do not have the support from the management on incorporating SM in the library”* (Participant #7). However, few indicated that lack of management support and network problem were part of the contributory factors that deprived them from incorporating and using these tools in the library. This implies that policies might be formulated when situations arise.

Kooy and Steiner (2010) revealed that fifty institutions (61%) had no relevant policy and 18% were unsure if the policy existed. In addition, the study surveyed that 71% of people assigned to remove objectionable posts had no stated policy backing that decision. With the absence of SM policies in the library, this might lead to the use of these tools, putting the jobs of those who use it for work purposes on the line. However, Cadell (2013) argues that a good SM policy provides protection for librarians and a clear explanation for the use of SM.

From the researcher’s experience, there was no policy on the use of SM in libraries that was put in librarians’ attention during meetings that deal with library-related matters. Even when asking people from top positions, there is no direct answer regarding the adoption of SM. Most answers arising are based on the lack of privacy on SM, and control. Some will go to an extent of saying, “You can use it at your own risk”. This response puts librarians in an awkward position, and end up not using it because they do not want to risk their jobs. However, SM tools are good technologies for marketing and promoting library services.

Despite all barriers and delay in the implementation of SM policy at University level, libraries are bound to compose SM policy of their own until the main University policy is put in place where there is none. This creates a balance and equality to those posting on SM sites and clear guidelines in terms of what is acceptable and

unacceptable online behaviour. Taylor and Francis (2014:18) found that 28% of libraries have already implemented SM policy, whereas 30% were planning to implement. However, the majority (42%) of libraries had no plans to introduce any policy.

This finding confirms the researcher's suggestion made in chapter one that SM tools are not effectively and efficiently used. Amongst others, lack of privacy of SM applications made librarians to be sceptical to use them because they value the privacy of their clients. A similar idea is shared by Bhardwaj (2014:1) in his study on the "Use of Social Networking Sites by LIS Professionals in Higher Education Institution in India", that some of the major concerns of library and information science professionals were cyber bullying and privacy of clients.

4.13 PARTICIPANTS' PERSPECTIVES ON THE USE OF SM IN LIBRARIES

The respondents share the common idea that SM tools are good tools to use to improve the standard of the library and to improve the provision of library and information services to library users. This is what they had to say to substantiate their viewpoint:

4.13.1. Receiving and addressing library users' complaints

"I think is good thing, because you can hear the views and complaints of the users and be able to address them without physical presents of both parties" (Participant #1).

4.13.2. Attracting potential library users

“It is important that SM are used in library since majority of the users are students and they prefer the use of SM to communicate than traditional way. If adopted the library can attract majority of potential users” (Participant #2).

4.13.3. Being on par with counterparts in the industry

“It is a useful tool that can help to keep in contacts with other colleagues in other libraries, will help to make sure we are on par with others and generation y prefer soft copies than printed materials” (Participant #3).

4.13.4. Marketing strategy

“The use of SM in library is effective management strategy and will help the library to market their services” (Participant #4).

4.13.5. Replacement to suggestion boxes

“Suggestion box manually is not effective but if on SM platforms can be effective” (Participant #5).

4.13.6. Updating library users with new developments

“It is good tool, because it can help to improve the library services and students will know what we offer in the library and update them on the new developments” (Participant #6).

A similar idea is shared by Khan and Bhatti (2012), who found that librarians' attitudes towards the use of SM tools in libraries was positive. Furthermore, it was revealed that librarians strongly believe that SM technologies are important for marketing library products and online services, and that these tools offer a better way of marketing library services than traditional methods. It is evident from the respondents' viewpoint that they know the importance of SM tools in the library and

how they can be used to achieve their goals. Hence, they agree that it is a good tool which is worth to be adopted to fasten the process of dissemination of library and information services to clients.

4.14 PARTICIPANTS' PERSPECTIVES ON THE USEFULNESS OF SM IN THE PROVISION OF LIS

Most respondents agreed that SM can be useful in providing library-related matters and information services. This is what the respondents had to say to motivate their standpoints:

“Yes, it can help to facilitate library orientation, training, advertise library databases, online tutorials and communicate with people online without their presence” (Participant #3).

“Interlibrary loan can adopt SM because of its usefulness, as it can help users to check if the book is available through Facebook than physically going to the library” (Participant #7).

“Yes, we are in competitive environment were users prefer to use SM for information resources, we as library must find a way to be represented through SM and be able to offer our services from there” (Participant #6).

“Yes, because the generation of 21st century most of them use SM to communicate with one another and information is disseminated at a faster speed unlike when using traditional media such as posters and other things” (Participant #9).

“It will help to communicate with users effectively, because users use it daily and that others do not have email” (Participant #8).

“It can help with marketing strategy and we can post newly acquired materials to inform the users” (Participant #10).

From the responses provided above, it is evident that respondents know the needs of their clients and library. They understand that the library should move with the time and in the same pace with the technology of today to cater for all the required information needs in different SM platforms in order to be competitive with other institutions of higher learning. The respondents' motivation shares similar characteristics with the TAM theory that motivation for one to use SM technologies is determined by the individual's perceived usefulness of the tool and ease of use.

4.15 THE RESPONDENTS' FINAL SAY ON THE USE OF SM IN ACADEMIC LIBRARIES

Most of the respondents stressed that academic, special and public libraries should adopt SM tools because they play an integral role in complementing traditional ways of doing things, attracting a wide range of potential users at a lesser time, and eradicate barriers. This is what they have to say to substantiate their viewpoint: "It is important that university management allow us to engage on SM so that we can help our users. This will save us time and energy as it is cheaper to use and market our services" (Participant #1).

"The mind-set of the use of SM needs to change, so that students can have an option of requesting books electronically directly to the acquisition section" (Participant #9).

"Visual content of SM comes in handy, because if libraries do not adopt SM the library will become white elephant since the generation we are serving want changing technologies" (Participant #9).

"ICT department and library must work together so that we can achieve our objective, positive arrangement between the two can brought something beneficial to the users. That is if SM platforms are unblocked and allow unrestricted access 24 hours" (Participant #8). The last respondent indicated that *"libraries should have SM policy and online face to be on par with other competitors"* (Participant #6). Lack of

policies and restrictive measures were major concerns acknowledged by many scholars.

The respondents' point of view is supported by Kooy and Steiner (2016:60) that the majority of academic libraries had no policies that govern SM. It is said that most libraries formulate SM policies spontaneously as situations unfold. The respondents' viewpoints prove to be evidence to the knowledge that librarians have about SM tools. The response indicates that the librarians are impressed by transformation that SM technologies can bring in the library to be able to serve their clients effectively and efficiently. It came to the researcher's attention that the library staff are aware of the advantages and disadvantages that come with the incorporation of SM platforms in the academic library. Hence, they propose publicised SM policy to be drafted or handed over for use, so that SM tools are not blocked during working hours but allow unlimited access.

4.16 THE PERSON OR SECTION RESPONSIBLE FOR SM AT THE UNIVERSITY

The majority of the respondents indicated that they have a dedicated team which is responsible for posting library-related matters on SM platforms. However, the team assigns two people to take the information that they want to share about their library services and events to the University's Marketing Department. The information is proof-read for mistakes before it can be put online to protect the university. Then once the Marketing Department has received the information, they either approve or disapprove it. This is what the respondents had to say about the phenomenon. "Administrator at University Marketing Department is responsible for to post everything" (Participant #3). "We don't have specific person to do that, we have marketing team assigned to send messages to the marketing, so that can be posted on SM" (Participant #10). "We go to marketing department and give them what we want to market to post on our behalf" (Participant #5).

A study conducted by Mabweazara (2014) on a comparative study found that at National University of Science and Technology, the Information Technology (IT) Department is accountable for managing the SM applications, whereas at the University of the Western Cape, librarians were directly responsible for managing SM applications. This emphasised that the element of transparency, currency and relevance of information to the patrons might be highly compromised since it was stated that an individual assigned is not an LIS professional and sometimes is not available. The librarians' further stressed the inconvenience of the process that needs to be followed since some valuable facts can be missing due to the middleman's involvement.

According to Taylor and Francis (2014:19), 'the librarian should be the social administrator'. The study further found that 44% agree that there are three or more members on the team that are involved in SM administration, whereas 22% were delegated to a single role. It was further revealed that some libraries divide SM activities according to topics, and appoint an expert to comment on these platforms regularly. The unavailability of policy might be a contributory factor to the centralisation of the SM application. This is the reason librarians suggest that SM restrictions need to be relaxed because of their capability and ability to use SM platforms in a professional way.

However, few respondents indicated that no one is responsible for posting library messages on SM. This is what the respondents had to say: "no one, we do not have an account, but one can personally do that" (Participant #1). "I do not know who is responsible for it. Anyone who wants to communicate with library users or technical personnel can do it" (Participant #8).

Furthermore, the researcher made a follow up question with regard to the procedures and processes they have to follow to ensure that library matters are posted on SM. The majority of the respondents specified that the process is

seriously “inconvenient” to their side since they rely only on administrators in marketing, and if he or she is not available, it means it might be possible that their message cannot be posted, whether emergency or not. This is what the participants had to say when asked about the effectiveness of the process: “The process is inconvenient, because we fail to inform clients about training due to unavailability of responsible library personnel to post on our behalf” (Participant #9). “Because some of the things need to be done at that moment and you do not find the marketing personnel to do it, we need to have our own SM platforms and manage them ourselves” (Participant #2). “Because the middle man is not from the library and that we do not have access to our page to control it on our own” (Participant #4).

In addition, the respondents went on to make recommend that everything should be based on the SM policy, so that they can be allowed to use SM in the library in their own terms. This is what they have say: “management should create a policy to support SM, because the University is afraid that its name can be tarnished” (Participant #6). “I recommend that management should relax SM so that we can use it” (Participant #1). “The library should have its own SM platforms account and be controlled by librarian who knows how to operate them”, “They (management) should entrust staff with freedom of speech, because we know what is acceptable and what is not. The Student Representative Council(SRC) also requested the library to have SM platforms since majority of the posters we put inside University premises are not good enough, because they are not seen by everyone” (Participant #3) and the last respondent indicated that “we should have it our way because we have capabilities to do that. Since, it will be work-related, we are the rightful one who understands users’ needs, the tone and not to write something that will infringe university policy” (Participant #7).

The study found that no library personnel is participating in posting on SM platforms, instead the administrator from the University’s Marketing Department is responsible for posting library-related matters on SM. However, it is highlighted that restrictive and lack or non-use of SM policy on the use of SM tools impacts negatively on

academic libraries to adopt and use these tools. Furthermore, it also affects libraries to market and promote library services effectively and efficiently, meet the needs of users and achieve the strategic goal of the library.

It is evident that the use of SM technologies is rocketing amongst the young generation compared to the adults. These technologies have been embraced by educational and research institutions such as research centres, universities, and colleges which now have online faces. Therefore, the presence of SM tools in universities cannot be overlooked, particularly in libraries. These tools are transforming the library spectrum through the provision of technologies that surpass traditional services.

4.17 SUMMARY

This chapter has presented, categorised and analysed the findings collected through semi-structured interviews from the University of Limpopo library staff. The chapter has presented the data which was collected to address the following objectives: to determine the types of SM used by the library in providing information to clients; determine the purpose/s for which the UL library uses different types of SM; to identify factors that determine and impede the effective usage of SM tools at UL Library; and to ascertain the attitudes of library staff towards the use of SM in the provision of library and information services. The next chapter discusses the findings.

CHAPTER FIVE

MAJOR FINDINGS, CONCLUSIONS AND SUGGESTIONS

5.1. INTRODUCTION

In the previous chapter, the researcher has presented, analysed and interpreted data of the study. The purpose of the current chapter is to summarise the research findings, present the major findings, and propose possible suggestions, based on the findings of the study. The chapter also provides the conclusions derived from the findings of the study, and is divided into re-statement of the objectives of the study, summary, conclusions and suggestions that can be derived from the findings of the study. However, before any conclusions could be made, it is also necessary to highlight some of the limitations of the study.

5.2. RESTATEMENT OF AIM AND OBJECTIVES

This study sought to investigate SM and the provision of library and information services at the University of Limpopo library. This chapter provides the discussion of the study findings, with the aim of addressing the following research objectives which guide this study:

- To establish the types of SM used by the library in providing information to clients.
- To determine the purposes for which the UL library uses different types of SM.
- To identify factors that determines and impedes the effective usage of SM tools at UL Library.
- To ascertain the attitudes of the library staff towards the use of SM in the provision of library and information services.

5.3. MAJOR FINDINGS OF THE STUDY

The discussion was based on various scholarly viewpoints, and indicated that most findings in this study support what has already been found from the literature. This section draws attention to the unique findings of the study.

- In terms of the demographics and daily job activities, it was found that this study revolves around middle-aged librarians whose tasks in the library are to market library services and products to library users. These librarians liaise with members of the faculties regarding library resources and services and train library users on how to use these services and resources.
- In terms of the SM used by library staff and self-rating, the results indicated that the librarians interviewed are personally aware of SM technology, and use Whatsapp, Facebook and Instagram. In as much as there are those who are excessive users of SM, there were those who showed that they are not excessive users of such tools.
- All respondents have never received any form of training or workshop from the library with regard to SM technologies.
- The study found that UL library mostly uses Facebook and Blog. The findings indicate that SM tools used in the UL library include Facebook and blog, Twitter and Likendlin. The reason behind the usage of these tools that were identified might be that they are user friendly and useful in fulfilling their goals. It was found that library staff think that Facebook can be the most effective tool for use in academic library.
- It was found that SM tools are mostly used to market and promote library materials, and to inform library clients about new developments in the library. Moreover, it was indicated that SM technologies are used to inform library clients about new developments and to communicate with library users.

- In terms of activities and tasks which the librarians think can help the library to succeed, it was found that the majority of the librarians believe that SM tools can help the library to inform users about new developments and to market library services. Moreover, the study found that librarians also suggest that these tools can be handy in promoting online training and to improve communication between librarians and library users.
- The study further found that the major concern that mostly impedes librarians to use SM tools in the library included restrictions of access to SM tools during working hours. This implies that librarians' desire to market and promote library services, share information, communicate and interact effectively and efficiently through the use of these tools is compromised. Even though some use these tools using their smartphones for personal and work purposes, this help to keep their clients up to date and provides information literacy programmes. This would be cribbed by inconsistency considering the size of the population serving.
- The study further established that lack of skills, willingness and lack of library SM accounts are contributory factors that inhibit the use of SM applications in library.
- It was also found that there is no publicised SM policy which provides the "dos" and "don'ts" for librarians.
- Furthermore, it was also established that there is no enough bandwidth to support University communities as such causes network problems
- In terms of the person or section that is responsible for pasting library matters on SM platforms, the study found that the University has centralised the use of SM. As such, the Marketing Department administrator is the one who pastes information about the library on SM tools provided it is approved.

- On the attitudes of staff towards SM in the library, the study found that the librarians concur that SM applications are good tools to use in academic libraries in order to meet the needs of the users through the provision of satisfactory library and information services. Hence, it helps the library to receive and address library users' complaints, attract potential library users, complement the traditional suggestion box, marketing strategy and is on the same level with other competitors. The study further established that librarians think that SM platforms are useful in meeting the library's strategic goal. The platforms can help the library to facilitate online library orientation, training, to advertise library resources and online tutorials and to provide virtual communication with library patrons, amongst others. Most of the respondents agreed that SM can be useful in providing library-related matters and information services.
- In their final comments, most of the respondents stressed that academic, special and public libraries should adopt SM tools because they play an integral role in complementing the traditional way of doing things, attract a wide range of potential users at a lesser time and eradicate barriers.

5.4 LIMITATIONS OF THE STUDY

Limitations in research include obstacles or hindrances that were beyond the control of the researcher. These are factors which, if the researcher was able to manage, the study could have shown different results and findings. Firstly, the study focused only on the academic library. It would be much interesting if similar or related studies explore the experiences in non-academic libraries. The study was based on fewer samples and on librarians whose daily routine is to communicate and interact with library users. It might be interesting if the study would have allowed more participants with different tasks in the library spectrum and includes library users, which would give a wide range of views with regard to the use of SM tools in the library.

5.5 CONCLUSIONS

To conclude, SM plays an important role in both private and public sectors for the dissemination of information and the receiving of feedback. The same sentiment can be said in academic libraries, which are not just buildings where people read books, but a place that is associated with technological trends incorporating all kinds of SM tools which are perceived to be useful in libraries.

Librarians are familiar with various SM applications. However, they are selective in which ones to use. The incorporation of SM in libraries is greatly determined by the socio-economic environment which librarians are working in. Furthermore, other contributory factors that foster the effective use of these applications might be shared goals of a particular institution. It is repeatedly suggested in the theory that if people find a particular tool easy to use and useful in their daily routine, then that application is guaranteed to be used by everyone.

Nowadays librarians are aware of different SM such as Facebook, Blog, Whatsapp, Instagram, Twitter and Likendlin etc. The overwhelming proliferation of different SM tools globally brought about both positive and negative outcomes depending on how effective one uses them to their advantage. As such some academic libraries incorporated them to serve their patrons. It was established that librarians' personal use of these applications has a great influence on the use of these applications. Hence it was stated that librarians also use these tools to communicate and to share information with their clients. SM tools can help to market and promote library services and to inform users of new library developments. Academic librarians in African countries are striving to effectively and efficiently use these tools.

Furthermore, it is apparent that librarians are aware of the potential benefits that come with SM use and the personal and professional benefits. SM technologies facilitate the reciprocal communication process and play an important role in helping the academic library to offer their services traditionally and virtually by

overcoming the boundary of time and location. For example, they help the library to offer online library orientation, streaming information literacy programmes and online reference services. Academic libraries are confronted with ever growing challenges each day as forever changing SM platforms increase with time. One of the great challenges is meeting the ever changing needs of library users who are reluctant to learn, lack interest, privacy and security issues which come with the use of SM.

The theory applied in the study, namely, the Technological Acceptance Model (TAM) proved to be useful in interpreting the study findings. The theory indicated that librarians at UL library were motivated by the ease of use and usefulness of SM technologies. They were encouraged to use these tools because they are less costly and are helpful in meeting users' ever changing needs. Lack of SM policies in the library might be the cause of the ineffective use of SM tools in the library.

It is a grave concern that librarians are restricted from using SM applications during working hours. It is equally important to craft SM policies which serve as a guideline on the use of SM at work. Contributory factors such as lack of publicised SM policy, network problem or poor internet connectivity, restriction of SM tools during working hours, reluctance to learn, lack of interest, lack of full knowledge, privacy and security issues have negatively affected the effective use of SM tools in academic libraries.

5.6. SUGGESTIONS OF THE STUDY

The suggestions of the study were based on the findings and conclusions to help library management to enforce the effective use of SM technologies in the academic library. The study suggests the following recommendations:

- University management should have free access to all SM platforms 24 hours.

- Library management should design SM policy to encourage the effective use of SM applications. The policy should be crafted in a way that serves as standard to what is acceptable and not acceptable.
- Library management should encourage and support library staff to upgrade their skills to be on par with evolving technological trends. Library staff have to be allowed to attend training on the use of SM tools in libraries, conferences and workshops.
- Library staff should be responsible for the control and management of SM tools and their use in the library. This can be achieved by allowing the library to have its own SM applications.

Suggestions for future studies are as follows:

- This study focused only on one university library based in South Africa. The findings can therefore not be generalised to other libraries in the country. Future studies should investigate more than one library in the country in order to arrive at comprehensible conclusions about the state of libraries in the country.
- This study focused on the use and adoption of SM tools amongst librarians, it might be much better if other studies include library users (lecturers, students, researchers and other university staff).
- The study applied TAM to measure two elements “perceived ease of use” and “perceived usefulness”. Therefore, it might be helpful if other studies apply more than one theory.

REFERENCES:

- Abdulahi, A, Samadi, B, & Gharleghi, B. 2014. A study on the negative effects of social networking sites such as Facebook among Asia pacific university scholars in Malaysia. *International Journal of Business and Social Science*, 5 (10): 60- 70.
- Abir S. Al-Harrasi & Ali H. Al-Badi. 2014. The impact of social networking: A study of The Influence of Smartphones on college students, *Contemporary Issues in Education Research – Second Quarter*, 7(2) [Online]
<https://www.researchgate.net/publication/261063239> (Accessed 20 March 2018).
- Abrahams, F. 2017. “Social media library training”, UKS, 10 May: 4.
- Aharony, N. 2009. Web 2.0 use by librarians. *Library and information science research*, 31(1): 29- 37.
- Ajjan, H. & Hartshorne, R. 2008. Investigating faculty decisions to adopt Web 2.0 technologies: theory and empirical tests. *The Internet and Higher Education*, 11(2): 71- 80.
- Allen, K. 2010. Survey reveals attitudes towards social media in European libraries. *Information Today*. [Online]
<https://www.infotoday.eu/Articles/Editorial/Featured-Articles/Survey-reveals-attitudes-towards-social-media-in-European-libraries-72075.aspx> (Accessed 12 September 2018)
- Anderson, T. 2008. The theory and practice of online learning. 2nd Edition. Edmonton, AB: Athabasca University Press.
- Ansari, M. S. 2016. Using WhatsApp for service providing in libraries and information centres. *Research gate*, [Online]
<http://www.researchgate.net/publication/319187617> (Accessed 14 September 2018)
- Ansari, M.S. & Tripathi, A. 2017. Use of WhatsApp for effective delivery of library and information services. *Journal of Library and Information Technology*, 37 (5): 360- 365.
- Arif, M. & Mahmood, K. 2012. The changing role of librarians in the digital world: adoption of Web 2.0 technologies by Pakistani librarians. *The Electronic Library*, 30 (4): 469- 479.
- Babbie, E & Mouton J. 2001. *The practice of social research*. Cape Town: Oxford press.
- Babbie, E. 2007. *The practice of social research*. London: Wadsworth.
- Babbie, E. 2014. *The Basics of Social Research*. 6th Edition. Belmont, California: Wadsworth Cengage.

- Bakporhonor, B.A. 2015. Challenges librarians encountering the use of social media for promoting library and information resources and services in University libraries in South Nigeria. *International Journal of humanities and Social Science*.5 (6): 208- 204.
- Ballard, T.2012. *Google this: Putting google and other social media sites to work for your library*. Oxford: Chandos.
- Banda, C. 2011. *Use of social networking tools in libraries in Zambia*. [Online] <http://justinchisenga.blogspot.com/2011/08/social-networking-tools-in-libraries-in.html> (Accessed on 22 August 2018).
- Barabara, K.D. 2014. Understanding participants' experiences: Reflections of a novice research participant. *International Journal of Qualitative Methods*. [Online] <https://journals.sagepub.com/doi/pdf/10.1177/160940691401300121> (Accessed 11 July 2019).
- Baro, E.E, Ebiagbe, E.J, & Godfrey, V.Z. 2013. Web 2.0 tools usage: A comparative study of librarians in university libraries in Nigeria and South Africa. *Library Hi Tech*, 5(1): 10-20.
- Bejune, M. 2007. Wikis in libraries, *Information Technology in Libraries*, 26: 26 - 38.
- Bertram, C. & Christiansen, I .2015. *Understanding research: An introduction to reading research*. Braamfontein: Van Schaik.
- Bhardwaj, R.K. 2014. *Use of social networking sites by LIS professionals in higher education institutions in India: A Study*. Delhi: Routledge.
- Bhattacharjee, A. 2012. *Social science research, methods, and practices*. 2nd Edition. Florida: University of South Florida.
- Bicen, H. & Cavus, N. 2012. Twitter usage habits of undergraduate students, *Journal of Social Behavioural Sciences*, 46: 335- 339.
- Bless, C, Smith, H. C, & Sithole, S.L. 2013. *Fundamentals of social research methods: An African perspective*. 5th Edition. Cape Town: Juta.
- Bolinder, J. 2008. The return of Web 3.0- cloud computing, browser extensions and the distributed web, [Online] <http://impl.emented.com/2008/08/04/the-return-of-Web-30-cloud-computing-browser-extensions-or-the-distributed-Web/> (Accessed 27 November 2017).
- Bopape, S. 2005. Management development needs of library managers belonging to Gauteng and environs library and information consortia in South Africa. *South African Journal of Libraries and Information Science*, 71 (1): 64- 74.
- Bottles, K. & Sherlock, T. 2011. Who should manage your social media strategy? *Physician Executive*, 37 (2), 68.
- Bradley, P. 2011. *Which social media network should I use as a librarian?* [Online] <http://www.philb.com/articles/whichtsocialnetwork.htm> (Accessed 16 July 2018).

- Breeding, M. 2007. Librarians face online social media. *Computers in Libraries*, 27 (8): 20- 32.
- Breeding, M. 2010. Taking the social web to the next level. *Computers in Libraries*, 30 (7): 28- 30.
- Burke, S C. & Snyder, S L. 2008. YouTube: An innovative learning resource for college health education courses, *International Electronic Journal of Health Education*, 11 (1): 39- 46.
- Cadell, L. 2013. Socially practical or practically unsociable? A study into social media policy experiences in Queensland cultural heritage institutions. *Australian Academic and Research Libraries*, 44 (1): 3- 13.
- Carlson, N. 2010. At Last - The full story of how Facebook was founded. *Business Insider*. [Online] <http://www.businessinsider.com/how-facebook-was-founded-2010-3#we-can-talk-about-that-after-i-get-all-the-basic-functionality-up-tomorrow-night-1> (Accessed 01 April 2017).
- Castro-Romero, O. 2014. Social media as learning tool in higher education: The case of Mexico and South Korea. *Sinectica*, No 44 [Online] http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1665-109X2015000100011 (Accessed 08 November 2018).
- Cele, P.C. & Lekhanya, L.M. 2014. The research output level at Durban University of Technology (DUT) in South Africa: Contributing Factors and Their Implications. *Problems and Perspective in Management*, 12 (4): 465- 474.
- Chan, C. 2012. Marketing the academic library with online social network advertising. *Library Management*, 33 (8/9): 479- 489.
- Charnigo L and Barnett-Ellis P. 2007. Checking out facebook.com: The impact of a digital trend on academic libraries. *Information Technology and Libraries*, 26 (1): 23- 34.
- Choi, K. J. & Yang, S. C. 2009. *Internet social media and journalism*. Seoul: Korea Press Foundation.
- Chol, C. 2012. *Is your library ready for a social media librarian?* [Online] http://alia.org.au/alia2012/papers/18_crystall.choi.pdf (Accessed 07 June 2018).
- Chu, M. & Meulemans, Y.N. 2008. The problems and potential of Myspace and Facebook usage in academic libraries. *Internet Reference Services Quarterly*, 13 (1): 69- 85.
- Chu, S. K-W. & Du, H. S. 2013. Social networking tools for academic libraries. *Journal of Librarianship and Information Science*, 45 (1): 64- 75.
- Church, K. & de Oliveira, R. 2013. What's up with WhatsApp? Comparing mobile instant messaging behaviours with traditional SMS. *Proceedings of the 15 international conference on human-computer interaction with mobile devices and services*. ACM. 352- 361.

- Clough, P. & Nutbrown, C. 2012. *A student's guide to methodology*. London: Sage.
- Collins, G & Quan-Haase, A. 2014. Are social media ubiquitous in academic libraries? A longitudinal study of adoption and usage patterns. *Journal of Web Librarianship*, 8 (1) 48-68.
- Collins, G. & Quan-Haase, A. 2012. *Social media and academic libraries: Current trends and future challenges*. [Online].
<http://onlinelibrary.wiley.com/doi/10.1002/meet.14504901272/abstract>.
 (Accessed 17 May 2017).
- Connell, R.S .2009. Academic libraries, Facebook and Myspace and student outreach: *A survey of student opinion portal libraries and the academy*, 9 (1): 25- 36.
- Creswell, J. W. 2009. *Research design*. 3rd Edition. Thousand Oaks, CA: Sage Publications.
- Creswell, J.W. 2003. *Research design: Qualitative, quantitative and mixed methods approach*. 2nd ed. London: Sage Publications.
- Creswell, J.W. & V.L. Plano-Clark. 2007. *Designing and conducting mixed methods research*. Thousand Oaks, California: Sage.
- Davis, F.D. 1989. Perceived usefulness, perceived ease of use and user acceptance of information technology. *Management Information Systems Quarterly*, 13 (3): 319- 340.
- De Rosa, C, Cantrell, J, Havens, A, Hawk, J, Jenkins, L, Gauder, B, Limes, R. & Cellentani, D. 2007. *Sharing, privacy and trust in our networked world: A report to the OCLC membership*, OCLC: Dublin.
- De Villiers, R. 2010. *Academic use of a group on Facebook initial findings and perceptions*. Informing sciences and IT education conference, Gauteng: University of South Africa.
- De Vos, A.S, Strydom, H, Fouche, C.M, & Delport, C.S.L. 2011. *Research at grass roots: for the social sciences and human service professions*. Pretoria: Van Schaik
- Department of Arts and Culture. 2010. *The demand for and supply of skills in Library and Information Services, Archival services and Records Management*. Final Report. [Online]
<http://www.dac.gov.za/sites/default/files/Demand%20for%20and%20Supply%20of%20Skills%20in%20Library%20and%20Information%20Services%2C%20Archival%20Services%20and%20Records%20Management.pdf> (Accessed 13 September 2018).
- Dickson, A. & Holley, R.P. 2010. Social networking in academic libraries: The possibilities and concerns. *New Library World*, 111 (11/12): 468- 479.
- Ellison, N.B, Steinfield, C, & Lampe, C. 2007. The benefits of Facebook 'friends': social capital and college students' use of online social network sites, *Journal*

- of *Computer-Mediated Communication*, 24 (4): [Online] <http://jcmc.indiana.edu/vol12/issue4/ellison.html> (Accessed 28 June 2018).
- Ezeani, C. N & Igwesi, U. 2012. Using social media for dynamic library service delivery: The Nigeria experience. *Library Philosophy and Practice* (e-journal). Paper 814 [Online] <http://digitalcommons.unl.edu/libphilprac/814> (Accessed 28 March 2018).
- Farkas, M. 2012. Participatory technologies, pedagogy 2.0 and information literacy. *Library Hi Tech*, 30 (1): 82- 94.
- Fishbein, M, & Ajzen, I.1975. *Belief, attitude, intention and behaviour: An introduction to theory and research*, London: Addison-Wesley Publishing Company.
- Fusco, S.J, Michael, K, Aloudat, A, & Abbas, R. 2011. Monitoring people using location-based social networking and its negative impact on trust: an exploratory contextual analysis of five types of “friend” relationship. ISTAS 2011: *IEEE International symposium on technology and society*. Chicago, Illinois: IEEE.
- Garcia, M. R, Norton, H.F, & Tennant, M.R. 2012. The presence of academic health sciences libraries on Facebook: The relationship between content and library popularity. *Medical Reference Services Quarterly*, 31 (2):171- 87.
- Gillen, Paul. 2008. New media, new influencers and implications for public relations. *The Society for New Communications Research*. [Online] <http://snrcr.org/wp-content/uploads/2008/08/new-influencers-study.pdf> (Accessed 10 April 2017).
- Glaser,B.G & Strauss, A.L. 1967. *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine Publishing.
- Gray, B. 2004. Informal learning in an online community of practice. *Journal of Distance Education*, 19 (1): 20- 35.
- Greenhow, C. G, Robelia, B, & Hughes, J. 2009. Learning, teaching, and scholarship in a digital age Web 2.0 and classroom research: what path should we take now? *Educational Researcher*, 38 (4), 246- 259.
- Griffey, J. 2010. Social networking and the library. *Library Technology Reports*, 46(8): 34.
- Grosseck, G. 2009. To use or not to use Web 2.0 in higher education? *Procedia Social and Behavioural Sciences*, 1 (2): 478- 482.
- Harrison, A, Burrell, R, Velasquez, S, & Schreiner, L. 2017. Social media use in academic libraries: A phenomenological study. *The Journal of Academic Librarianship*, 43 (3): 248- 256.
- Hendrix, J., Chiarella, D., Hasman, L. Murphy, S., & Zafron, M. 2009. Use of Facebook in academic health sciences libraries. *Journal of Medical Library Associations*, 97 (1) 44- 47.

- Hoskins, R. 2013. The gender profile of library and information science (LIS) academics in South African Universities. *Alternation*, 20 (2): 257- 275.
- Hosseini, E. & Hashempour, L. 2012. The status of librarians' knowledge sharing by the usage of Web 2.0 tools: a case study of central libraries of Tabriz governmental universities. *Communications in Computer and Information Science*, 317: 128- 137.
- Hough, J. & Neuland, E. 2012. Comparison of Web 2.0 online usage by on campus and distance learning students. [Online] https://pdfs.semanticscholar.org/7ec1/84c472c1eabd464332157c14eb288486da18.pdf?_ga=2.82156816.703133677.1562914918-1020739793.155110730 (Accessed 26 August 2018).
- Hunsinger, J & Senft, T. 2014. *The social media handbook*. New York: Routledge.
- Jim, H. 2006. *Surprise! There's a third YouTube co-founder*. *USA Today*, [Online] <http://www.educause.edu/ir/library/pdf/ELI7018.pdf> (Accessed 18 December 2017).
- Jolly, D, Scott, M, & Pfanner, E. 2013. *twitter's I.P.O. plan has on International Focus*. [Online] <https://www.nytimes.com/2013/10/05/business/Twitters-ipo-plan-has-an-international-focus.html> (Accessed 13 May 2017).
- Jones, H. and Soltren, J.H. 2005. *Facebook: Threat to privacy* [Online] www.swiss.ai.mit.edu/6095/student-papers/fall05-papers/facebook.pdf. (Accessed 07 June 2018)
- Julien, H, Gross, M. & Latham, D. 2018. Survey of information literacy instructional practices in US academic libraries. *College & Research Libraries*, 79 (2): 179.
- Karpinski, A. & Duberstein, A. 2009. *A description of Facebook use and academic performance among undergraduate and graduate students*. San Diego, California: American Educational Research Association.
- Kaur, J. 2015. Social media: Preceding the human life. *International Journal of Social Science and Humanities Research*, 3 (3): 142- 151.
- Khan, A.M.K & Ansari, A. 2014. Role of social networks in library and information services in India: A case study of efficiency and effectiveness. *Library Hi Tech News*, 31(5): 11- 13.
- Khan, S.A. & Bahatti, R. 2012. *Application of social media in marketing of library and information services: A case study from Pakistan*. [Online] <http://www.webology.org/2012/v9n1/a93.html> (Accessed 08 September 2018).
- Kim, Yong-Mi. & Abbas, J. 2010. Adoption of library 2.0 functionalities by academic libraries and users: A knowledge management perspective. *The Journal of Academic Librarianship*, 36(3): 211 – 218.

- Kooy, B. K, & Steiner, S. K. 2010. Protection, not barriers: Using social software policies to guide and safeguard students and employees. *Reference and User Services Quarterly*, 50(1), 59-71.
- Kumar, R. 2011. *Research methodology: a step-by-step guide for beginners*. 3rd Edition. London: SAGE publication Ltd.
- Kwanya, T, Stilwell, C, & Underwood, P.G. 2012. *Techno-stress and techno-lust: coping mechanisms among academic librarians in Eastern and Southern Africa*. [Online]. www.globdev.org/files/ICTM2012_Proceedings.pdf (Accessed 22 August 2014).
- Laura S. 2011. *Doing social media so it matters: a librarian's guide*. Chicago: IL American Library Association
- Leedy, P.D. & Ormrod, J.E. 2015. *Practical research: planning and design*. 9th Edition. Cape Town: Pearson.
- Leetaru, K.H, Wang S, Cao, G., Padmanabhan, A. & Shook, E. 2013. Mapping the global twitter heartbeat: The geography of Twitter, *First Monday* 18, (5/6), [Online] <https://firstmonday.org/article/view/4366/3654> (Accessed 12 December 2018).
- Lemeul, J. 2006. Why I registered on Facebook. *Chronicle of Higher Education*, 53 (2): 113.
- Li, L. 2009. *Emerging technologies for academic libraries in the digital age*. Oxford: Chandos publishing.
- Light, B. & McGrath, K. 2010. Ethics and social networking sites: A disclosive analysis of Facebook. *Information Technology and People*, 23 (4): 290-311.
- Lu, J, Yu Chun-Sheng, Liu C & Yao, J. 2003. Technology acceptance model for wireless internet. *Journal of Internet Research*, 13 (2): 206- 222.
- Luo, L. 2009. Web 2.0 integration in information literacy instruction: an overview. *The Journal of Academic Librarianship*, 36 (1): 32- 40.
- Lum, L. 2006. The power of podcasting. *Diverse Issues in Higher Education*, 23 (2): 32
- Lwoga, E. 2011. E-learning and Web 2.0: Transforming higher education in Africa. *Development and Learning in Organisations*, 26 (5): 28- 31.
- Mabweazara, R. M. 2014. *Use of social media tools by library staff at the University of Western Cape, South Africa and the National University of Science and Technology, Zimbabwe*. Dissertation: University of Western Cape.
- Mack, D, Behler, A, Robert, B. & Rimland E. 2007. Reaching students with Facebook: Data and best practices. *Electronic Journal of Academic Special*

- Libraries*, 8 (2) [Online]
http://southernlibrarianship.icaap.org/content/v08n02/mack_d01.html
 (Accessed 28 September 2018).
- Makori, E.O. 2011. Bridging the information gap with the patrons in university libraries in Africa: The case for investments in Web 2.0 systems. *Library Review*, 61(4): 340- 350.
- Maloney, E. 2007. What Web 2.0 can teach us about learning? *Chronicle of Higher Education*. 53 (18), 26- 57.
- Manchester, A. 2007. *How to use SM to engage employees: strategies to improve communication and collaboration*. Chicago: Melcrum Publishing.
- Maness, J.M. 2006. Library 2.0 Theory: Web 2.0 and its applications for libraries. *Webology*, 3 (2) [online] <http://www.webology.org/2006/v3n2/a25.html>
 (Accessed 29 July 2018).
- Maree, K. 2007. *First steps in research*. Pretoria: Van Schaik.
- Maree, K. 2012. *First steps in research*. 11th Edition. Pretoria: Van Schaik.
- Mason, J. 2006. Mixing methods in a qualitatively driven way. *Qualitative Research*, 6 (1): 9-25.
- Mathews.B. 2009. *Marketing today's academic library*. Copyright 2009 by the American Library Associations.
- Mazman, S.G. & Usluel, Y.K. 2010. Modelling educational usage of Facebook. *Computer in Education*, 55: 444- 453.
- Mbatha, B.T. & Manana, K. P. P. 2012. Students' perception on the use of Facebook in an ODL landscape. *Progression*, 34 (1): 13- 26.
- Mertens, D.M. 2005. The inauguration of the international organization for cooperation in evaluation. *American Journal of Evaluation*, 26 (1): 124- 130.
- Mitchel, S. 2008. Easy Wiki hosting, Scott Hanselman's blog, and snagging screens, *MSDN Magazine*, [Online]
<https://www.tib.eu/en/search/id/BLSE%3ARN231744111/Easy-wiki-hosting-Scott-Hanselman-s-blog-and-snagging/> (Accessed 19 November 2018).
- Moran, B.B. & Leonard, E. 2009. Academic librarianship. 3rd Edition. *Encyclopaedia of Library and Information Sciences*. New York: Taylor& Francis.
- Mundt, S. 2013. Evaluating the marketing success of libraries' social media presences. *Paper presented at: IFLA World Library and Information Congress, 17 - 23 August 2013, Singapore*. [Online]
<http://library.ifla.org/id/eprint/196> (Accessed 08 March 2016).

- Murphy, M. 2013. Elseviers library newsletter. I am a (social) librarian infographic-free download? [Online] <http://ow.ly/nxvix#sthash.ptezdngu> (Accessed 20 November 2018)
- Nfila, R. B. 2010. *Academic libraries support for e-learning: initiatives and opportunities the case of University of Botswana Library*. [Online] http://www.ais.up.ac.za/digi/docs/nfila_paper.pdf (Accessed 04 March 2016).
- Ngulube, P. 2009. *Research methods in Information Science: only guide for HINKMEL*. Pretoria: UNISA Press.
- Nguyen, L. 2004. Online network created by Harvard students' flourishes. *The Tufts Daily* (Medford, MA). [Online] en.wikipedia.org/wiki/History_of_facebook (Accessed 12 March 2017).
- O'Leary, Z. 2017. *The essential guide to: Doing your research project*. 3rd Edition. London: Sage.
- Penzhorn, C. & Pienaar, H. 2009. The use of social networking tools for innovative delivery at the University of Pretoria Library. *Innovation*, 36 (1): 66- 77.
- Penzhorn, C. 2013. The use of social media in teaching a campus-wide information literacy course. *Mousaion*, 31(3): 57- 73.
- Pickard, A.J. 2007. *Research methods in information*. London: Facet Publishing.
- Pietkiewicks, I & Smith, J.A. 2012. A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Czasopismo Psychologiczne*, 18 (3): 361- 369.
- Punch, K.F. 2006. *Developing effective research proposals*. 2nd Edition. London: Sage
- Purkayastha, N. & Chanda, A. 2018. WhatsApp as a means of sharing information among LIS professionals of North-East India. *International Journals of Research in Applied*, 6 (9): 69- 82.
- Ramadani, V, Demiri, A, & Saiti-Demiri, S. 2014. Social media channels: The factors that influence the behavioural intention of customers. *International Journal of Business and Globalisation*, 12 (3): 297- 314.
- Rana, R & Singh, N. 2014. The use of social networking in academics: Benefit and opportunity. *International Journal of Science and Research*, 3(6): 136- 139.
- Remler, D.K. & Van Ryzin, G.G. 2015. *Research methods in practice: Strategies for description and causation*. 2nd Edition. London: Sage.
- Reuben, R. 2008. The use of social media in higher education for marketing and communications: A guide for professionals in higher education. [Online]

<http://www.fullerton.edu/technologyservices/resources/pdf/social-media-in-higher-education> (Accessed 17 February 2017).

- Riza- Ayu, A. R. & Abrizah, A. 2011. Do you Facebook? Usage and applications of Facebook page among academic libraries in Malaysia. *The International Information & Library Review*, 43 (4): 239- 249.
- Rodwell, J. 2008. Dangerous Liaisons? Defining the faculty liaison librarian service model: Its effectiveness and sustainability. *Library Management*, 29 (1/2): 116- 124.
- Rogers E.M. 1995. *Diffusion of innovations*. 4th Edition. New York: The Free Press
- Rogers, C.R. 2009. *SM, libraries and Web 2.0: how American libraries are using new tools for public relations and to attract new users*. [Online].
http://dc.statelibrary.sc.gov/bitstream/handle/10827/7271/SCSL_Social_Media_Libraries2011.pdf?sequence=1 (Accessed 26 August 2018).
- Rubin, R. E. 2010. *Foundation of library and information science*. 3rd Edition. New York: Neal- Schuman publishers.
- Sadeh, T. 2007. Time for change: news approaches for new generation of library users. *New library world*, 108 (7/8): 307- 316.
- Schram, T.H. 2006. *Conceptualizing and proposing qualitative research*. 2nd Edition. Upper Saddle River, NJ: Pearson Education.
- Sekyere, K. 2009. Too much hullabaloo about Facebook in libraries: Is it really helping libraries? *Nebraska Library Association Quarterly*, 40 (2): 25- 37.
- Selwyn, N. 2009. Face working: exploring students' education-related use of Facebook. *Learning Media and Technology*, 32 (2): 157- 175.
- Shin, D. 2010. Analysis of online social networks: A cross-national study. *Online Information Review*, 34 (3): 473- 495.
- Smith, S. D, Salaway, G, & Caruso, J. B. 2010. The ECAR study of undergraduate students and information technology. Boulder, CO: EDUCAUSE centre for applied research. [Online]
<http://www.educause.edu/ecar/> (26 November 2018).
- Snelson, C. 2008. *YouTube and beyond: Integrating Web-based video into online education*. Chesapeake: AACE.
- Somech, B. & Lewin, C. 2011. *Theory and methods in social research*. 2nd Edition. London: Sage Publications.
- Spacey, R, Goulding, A, & Murray, I. 2004. Exploring the attitudes of the public library staff to Internet using the TAM. *Journal of Documentation*, 60 (5): 550- 564.

- Strauss, A.1987. *Qualitative analysis for social scientists*. New York. Cambridge University Press.
- Sysomos. 2014. Inside Twitter: An in-depth look inside the twitter world. [Online] <https://sysomos.com/wp-content/files/Inside-Twitter-BySysomos>. (Accessed 17 April 2019).
- Tancer, B. 2008. *Click what millions of people are doing online and why it matters*. 1st Edition. Hyperion: New York.
- Taylor & Francis. 2014. *Use of social media by library: current practices and future opportunities*. New York: Taylor & Francis group. [Online] <http://www.tandf.co.uk/journals/access/white-paper-social-media.pdf> (Accessed 27 May 2017)
- Tiernan, P. 2013. A study of the use of twitter by students for lecture engagement and discussion. *Journal of Educational Information Technology*, 10(1007) [Online] <http://doras.dcu.ie/17840/> (Accessed on 21 February 2017)
- Tripathi, S. 2014. *Factors influencing the technology acceptance of social media in India: A literature review and research agenda for future*. Krishi Sanskriti Publications, 1 (3): 43- 47.
- Tu, C.H, Mclsaac, M, Sujo-Montes, L, & Armfield, S. 2012. Is there a mobile social presence? *Educational Media International*, 49 (4): 247-261.
- UL Strategic Plan. 2014. Quality enhancement project: Council on higher education. [Online] https://www.che.ac.za/sites/default/files/institutional_audits/UL%20QE%20Institutional%20Submission%202014 .(Accessed 27 November 2018)
- UNESCO. 1998. World declaration on higher education for the twenty-first century. [Online] http://www.unesco.org/education/educprog/wche/declaration_eng.htm (Accessed 08 November 2017).
- Ventura, R & Quero, M. J. 2013. Using Facebook in University teaching: A practical case study. Turkey, Elsevier. *Social and behavioural sciences*, 83: 132- 138
- Welman, C, Kruger, F. & Mitchell, B. 2005. *Research methodology*. 3rd Edition. Cape Town: Oxford press.
- Western, M.D, Dwan, K, Makkai, T, Del Mar, C. & Western, J. 2001. *Measuring IT use in Australia general practice*. Canberra: General practice computer group [Online]

<https://www.racgp.org.au/afpbackissues/2003/200303/20030301western>.
(Accessed 12 September 2017).

- Willems, J, Adachi, C, Bussey, F, Doherty, I, & Huijser, H. 2018. Debating the use of social media in higher education in Australia: Where are we now? *Australian Journal of Educational Technology*, 34 (5): 135- 149.
- Will Wai-kit, M, Anderson, R, & Streith K.O. 2005. Examining user acceptance of computer technology: An empirical study of student teachers, *Journal of Computer Assisted Learning*, 21: 387- 395.
- Xia, Z. D. 2009. Marketing library services through face book groups. *Library Management*, 30 (6/7): 469- 478.
- Xu, C. Ouyang, F & Chu, H. 2009. The academic library meets Web 2.0: applications and implications. *The Journal of Academic Librarianship*, 35 (4): 324- 33.
- Yeboah, J. & Ewur, G.D. 2014. The impact of WhatsApp messenger usage on students' performance in tertiary institution in Ghana. *Journal of Education and Practice*, 5 (6): 157- 164.
- Yi, Z. 2014. Australian academic librarians' perception of effective Web 2.0 Tools used to market services and resources. *Journal of Academic Librarianship*, 40: 222- 227.
- Zohoorian-Fooladi, N & Abrizah, A. 2004. Academic librarians and their social media presence: A story of motivations and deterrents. *Information development*, 30 (2): 159- 171.

APPENDIX 1 Interview schedule

1. Demographic information of the participants

Gender	Male			Female		
Age	Below 25	26 - 35	36 – 45	46 – 55	Above 56	
Highest Qualification						
Experience	Less than 8 years	Between 09 – 16 years	Between 17 – 25	Above 26 years		

2. What does your job involves

3. Which SM do you personally use?

4. How would you regard yourself in terms of the usage of SM tools? Please answer “YES” or “NO” in each of the following

Novice user of SM tools_____

Ordinary user of SM_____

Excessive user of SM tools_____

5. Did you receive any formal training on the use of SM in your library? If yes, what kind of training? If yes, what SM were you trained on?

6. Which SM are being used by University of Limpopo library?

7. Out of the SM tools mentioned above or those you know of, which one do you think is the most effective for use in academic library and why?

8. For what purposes are SM that you mentioned are used in the University of Limpopo library?

9. Which activities and tasks do you think SM can help the library to execute?

10. Out of the above tasks, which one do you think would be more desirable when done or achieved through the use of SM and why?

11. What are factors that determine and impede the use of SM in the library? UL

12. What is your take with regard to the use of SM in libraries?

13. Do you think SM tools can be useful in the provision of library and information services? Motivate your answer.

14. Do you have anything to say about the use of SM in academic libraries?

15. Who is responsible for posting library matters on SM in you library?

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APPENDIX 2: Letter to library management

08 May 2018

The Executive Director
Library and Information Services
University of Limpopo
Private Bag x 1106
Sovenga

Request to conduct research by student

The following is our registered Masters student in the Programme of Information Studies working under my supervision for conducting research:

Mr Mogale MG

His research topic is “**SM and the provision of library and information services at the University of Limpopo Library**”. It is against this background that your most kind assistance to this student to collect data from targeted library staff for continuation of this research project will be most sincerely appreciated. Please also find attached the ethical clearance certificate from the Turfloop Research Ethics Committee.

Kindly allow them to conduct interviews with all Faculty and School librarians as well as Library User Education Librarian and the Head of Reader Services section in your library.

For more clarity on this request, please call me at 015 268 4015. My e-mail address is solomon.bopape@ul.ac.za

Yours collegially

Prof S.T. Bopape: HOD: Communication, Media and Information Studies

APPENDIX 3: ETHICAL CLEARANCE CERTIFICATE



University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 3935, Fax: (015) 268 2306, Email: Anastasia.Ngobe@ul.ac.za

TURFLOOP RESEARCH ETHICS COMMITTEE CLEARANCE CERTIFICATE

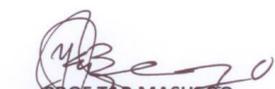
MEETING: 06 April 2018

PROJECT NUMBER: TREC/47/2018: PG

PROJECT:

Title: Social Media Networks and the Provision of Library and Information Services at the University of Limpopo Library.

Researcher: MG Mogale
Supervisor: Dr ST Bopape
Co-Supervisors: N/A
School: Languages and Communication Studies
Degree: Masters of Arts information studies


PROF. TAB MASHEGO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: REC-0310111-031

Note:

- i) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.
- ii) The budget for the research will be considered separately from the protocol.
PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.

APPENDIX FOUR: CONSENT FORM

UNIVERSITY OF LIMPOPO

ETHICS COMMITTEE

PROJECT TITLE: SM and the provision of Library and Information services at the University of Limpopo library

PROJECT LEADER: Mr M.G. Mogale and Prof S.T. Bopape (Supervisor)

CONSENT FORM

I, _____ hereby voluntarily consent to participate in the following project: *(it is compulsory for the researcher to complete this field before submission to the ethics committee)*

I realise that:

1. The study deals with _____ (eg. effect of certain medication on the human body) *(it is compulsory for the researcher to complete this field before submission to the ethics committee)*
2. The procedure or treatment envisaged may hold some risk for me that cannot be foreseen at this stage;
3. The Ethics Committee has approved that individuals may be approached to participate in the study.
4. The experimental protocol, ie. the extent, aims and methods of the research, has been explained to me;
5. The protocol sets out the risks that can be reasonably expected as well as possible discomfort for persons participating in the research, an explanation of the anticipated advantages for myself or others that are reasonably expected from the research and alternative procedures that may be to my advantage;

6. I will be informed of any new information that may become available during the research that may influence my willingness to continue my participation;
7. Access to the records that pertain to my participation in the study will be restricted to persons directly involved in the research;
8. Any questions that I may have regarding the research, or related matters, will be answered by the researchers;
9. If I have any questions about, or problems regarding the study, or experience any undesirable effects, I may contact a member of the research team;
10. Participation in this research is voluntary and I can withdraw my participation at any stage;
11. If any medical problem is identified at any stage during the research, or when I am vetted for participation, such condition will be discussed with me in confidence by a qualified person and/or I will be referred to my doctor;
12. I indemnify the University of Limpopo and all persons involved with the above project from any liability that may arise from my participation in the above project or that may be related to it, for whatever reasons, including negligence on the part of the mentioned persons.

SIGNATURE OF RESEARCHED PERSON

SIGNATURE OF WITNESS

SIGNATURE OF PERSON THAT INFORMED

SIGNATURE OF PARENT/GUARDIAN

THE RESEARCHED PERSON

Signed at _____ this ____ day of _____ 2018