Use of social media tools by library staff at the University of the Western Cape, South Africa and the National University of Science and Technology, Zimbabwe.

By

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A mini thesis submitted in partial fulfilment of the requirements for the degree of MLIS in the

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DECLARATION

I Rangarirai Moira Mabweazara, declare that the thesis entitled: **Use of social media tools by library staff at the University of the Western Cape (South Africa) and the National University of Science and Technology (Zimbabwe)** 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.

STUDENTS SIGNATURE: _____

SUPERVISOR SIGNATURE: _____

DATE: 14   NOVEMBER 2014

DEDICATION

This thesis is dedicated to my loving parents, Smart and Judith Enita Mabweazara as well as my brother Dr Hayes Mawindi Mabweazara, whose undying love, inspiration, support and guidance has enabled me to fulfil my potential.

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ABSTRACT

Academic libraries in the economically developed countries have taken the lead in adopting and appropriating various social media platforms to enhance services offered to their patrons. However, there are many unanswered questions on how libraries in the economically developing countries of the South, Africa in particular, are using social media in their service delivery, as well as in the personal lives of their librarians. Against this backdrop, this study investigated how librarians at the University of the Western Cape (UWC), South Africa and the National University of Science and Technology (NUST), Zimbabwe deploy and appropriate social media technologies. It examined the familiarity, benefits, challenges as well as the factors shaping and constraining the use of social media by academic librarians in the two institutions. In doing so, the study adopted the Technology Acceptance Model (TAM) by Fred Davis (1989) as its conceptual framework. Methodologically, the study deployed a Web-based questionnaire (administered via e-mail) with 59 academic librarians at UWC and 40 academic librarians at NUST. To ensure the validity of the study the questionnaire was pretested among a few librarians at the NUST. The findings of the study show that UWC librarians are more adept at appropriating social media applications than NUST librarians. The study further revealed that UWC librarians are directly in charge of managing social media whereas at NUST the Information Technology (IT) department is responsible for managing the applications. Similarly, while UWC Library largely uses social media for marketing their services, NUST library uses the platforms for reference services. The study also notes that there is a thin line between personal and professional uses of social media. In particular, personal uses of the platforms have a direct influence on their use in work-related contexts. Some of the motivating factors for the use of social media by librarians across both universities are: patron demand, low cost, ease of use and functionality. The study also highlights the factors militating against the effective use social media and recommends that library management for both institutions should put in place supportive policies to encourage their effective use for the benefit of service users.

KEYWORDS: Social media tools, Academic libraries, Academic librarians, Zimbabwe, South Africa, Technology Acceptance Model (TAM), University of the Western Cape (UWC), National University of Science and Technology (NUST)
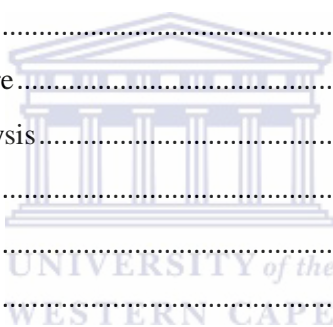
LIST OF ACRONYMS

CILIPS   Chartered Institute of Library and Information Professionals in Scotland

EMIS   Educational Management Information System

ICT   Information Communication Technology

IT   Information Technology

LIS   Library and Information Science

NUST   National University of Science and Technology

SANReN   South African National Research Network

SLIC   Scottish Library and Information Council

SPSS   Statistical Package for Social Sciences

TAM   Technology Acceptance Model

TENET   Tertiary Education and Research Network of South Africa

UWC   University of the Western Cape

ZULC   Zimbabwe University Libraries Consortium

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CHAPTER 1

INTRODUCTION AND CONCEPTUAL FRAMEWORK

1. Introduction

This study investigated the use of social media platforms by academic librarians at the University of the Western Cape (UWC), South Africa, and at the National University of Science and Technology (NUST), Zimbabwe. Based on a yearlong work experience at the NUST library (as a library and information science undergraduate student), as well as a postgraduate user of the UWC library, the researcher examined the way librarians deploy and appropriate social media platforms as part of their service delivery routines. The potential embedded in social media platforms has led to a focus on the adoption and use of social media tools by library professionals across different types of libraries. In particular, these social media tools, as well as the wider and ever changing technological environment, has forced academic librarians to 'play catch up' in keeping with the changing forms of information access and demand by library service users.

In summary, this research sought to explore the following interrelated issues:

- Familiarity of library staff with social media tools;
- The use of social media by academic librarians for work-related purposes (amongst librarians and between librarians and patrons) as well as in general everyday life;
- The benefits for effectively using social media tools;
- The challenges faced by academic librarians in effectively using social media tools; and
- The factors influencing the use and non-use of social media tools by academic librarians.

1.1. Background and motivation

The focus of the study was on academic libraries, which are viewed as the heart and soul of higher education institutions, especially universities as they support research and knowledge exchange activities that underpin the very existence of the institutions. By definition academic libraries are described as the learning community providing a place for students, researchers and the faculty to do their research and advance their knowledge (Curzon & Quiñónez-Skinner, 2009:17). Moreover, Moran and Leonard (2009:2) mention that university libraries are indispensable to the functioning of the universities and the achievement of their academic missions. In order to achieve this, most academic libraries are incorporating new technologies.

The dawn of new technologies provides librarians with opportunities to keep pace by exploiting information to develop their profession. Accordingly, academic librarians are expected to acquire knowledge in use of these technologies, as this has become part of their skills requirements. This raises a central point that use of social media tools for work purposes and its integration in all aspects of life has become a critical issue of concern amongst librarians. Hence, the good timing of this study which focused on two academic libraries in South Africa and Zimbabwe.

1.1.1. South Africa as information and learning society

The South African government has made some significant initiatives towards ensuring access to the Internet within the country. Technology is the driving force of a knowledge-based society. Due to this, the country is striving to achieve excellent information and learning society by providing fast access to information (Kotecha, 2012:80). Internet connection is provided through submarine communication cables (fibre optic cables). According to World Wide Worx (2014), in South Africa WhatsApp currently has the highest mobile penetration, followed by Facebook and thirdly Blackberry Messenger. Other popular social sites in the country are LinkedIn, Twitter and Google +.

Also Internet access is offered through mobile phones and is largely dominated by the younger generation. Mobile phones ensure quick access to information through wireless connection which is offered for free and due to this there is an increased number of Internet users. According to the World Internet Stats (2013) eight million five hundred people are using the Internet. Worth

noting is that, according to Baro, Ebiagbe and Godfrey (2013:17) almost every university in South Africa subscribes to wireless Internet connection. This supports the educational demands of tertiary institutions.

1.1.1.1. Higher education system in South Africa

South Africa has a vibrant higher education sector, which has attracted people from all walks of life to choose the country as an educational destination. The South African higher education sector falls under the Department of Higher Education and Training. This department has assisted in transforming the higher education system by supporting the incorporation of technology (Kotecha, 2012:78). It has been noted that the potential held by the Internet can help maximise the use of information by students in their educational achievements. The country is putting emphasis on research hence the need for higher education to implement technologies. The Tertiary Education and Research Network of South Africa (TENET) operates a South African National Research Network (SANReN) which ensures affordable, first preference and efficient Internet access amongst public universities in South Africa.

Dube (2011:32) states that universities in South Africa have been charged with the responsibility of producing graduates who will contribute meaningfully to the new social economic order. The higher education seeks to redress the skills divide that has resulted from the fragmented higher education system. This is seen through the enrolment of students in all universities without segregation of race or colour. As a result this has ensured bridging the gap of the information divide and working towards an information and learning society. More than a million students are enrolled in the country's 21 public universities and 15 technikons now called universities of technology.

1.1.1.2. The University of the Western Cape (UWC) Library

The UWC is one of the public universities in South Africa which has been playing a distinctive academic role in the development of the country through offering degrees in seven faculties, 51 departments and 20 institutes, schools and units. The university was established as a college in 1959 and gained full university status in 1980 (Ntshuntshe-Matshaya, 2013:4). The university is focusing on offering equal higher education opportunities to the previously disadvantaged

individuals and ensuring building research output. It receives funding from the government which is meant for research. This extensively exposes the greater need for use of new technologies such as social media applications within the university library.

The UWC library's mission is "to support and enrich the university's mission in its commitment to teaching, learning, research and community outreach by providing relevant resources, staff and an environment conducive to clients exploring and acquiring knowledge" (Ntshuntshe-Matshaya, 2013:41). There are fifty-nine library staff members both professional and administrative support staff. The library has an institutional repository which is meant to offer freely accessible scholarly materials. This allows for open access to journals and research conducted by individuals across different faculties within the university. The library is directly linked to other South African university repositories thereby fully supporting research amongst universities. Additionally, the library has iPads which are used for teaching and learning in the library, an iPad laboratory and e-readers which are available for patrons to borrow.

1.1.2. Zimbabwe as information and learning society

Brain drain is the main cause of skills crisis in Zimbabwe. According to Kotecha (2012:117) brain drain has accelerated in the last five years in the country with most professionals relocating to countries such as Britain, Australia, New Zealand, Canada, South Africa and Botswana. It is estimated that more than 1, 5 million Zimbabweans are outside the country with 500 000 being professionals (Kotecha, 2012:117). Universities have a challenge of retaining highly qualified lecturers by improving their salaries and conditions of service.

Despite these effects, Zimbabwe boasts one of the highest literacy rates in Sub-Saharan Africa. Education, knowledge and technology are harnessed to improve the lives of all and eradicate poverty through striving to achieve an information and learning society. There is a sustained drive for the computerisation and networking of tertiary institutions through the Educational Management Information System (EMIS). The country is moving towards a computer based higher education system (Kotecha, 2012:118). The recent appointment of Information Communication Technologies (ICTs) ministry has resulted in the implementation of technology in schools and tertiary institutions. The Information Communication Technologies (ICTs) include government support through National ICT policy, and access to networked libraries.

Zimbabwe has promulgated an ICT national policy and an ICT strategic plan 2012-2015 which seek to realise the goal of total digitisation in all aspects (Chisita, 2012:10).

This means the government is convinced that for higher education to make optimum contributions to national development, integration of ICT is an essential ingredient. Internet connectivity in the country is mainly facilitated by the telecommunications with three mobile operators using GSM. Additionally, Zimbabwe relies on fibre optic links for international Internet traffic which was installed in May 2011. The country also has hotspots (Wi-Fi connectivity) in specific areas. According to the World Internet Stats (2013) 18.5% of the population is using the Internet everyday for different purposes. Given the fact that technology has impacted the quality and quantity of teaching, learning and research, it follows that the higher education system will not be spared by the tide.

1.1.2.1. Higher education in Zimbabwe

As Internet connectivity is increasingly becoming a strategic resource for university education, a robust campus network with good Internet connectivity is no longer a luxury to universities. Internet connectivity is critical for any university to participate effectively in the global knowledge society. Chisita (2012:18) states that Facebook, Flickr including quicker and cheaper platforms of communication, like WhatsApp, MXit, and Twitter have penetrated Zimbabwe. The use of such technologies is high amongst the young generation unlike amongst adults. The social media technologies have also been embraced by educational and research institutions which now can be accessed from online sites. This includes universities, colleges, research centres and meteorological services. The presence of social media tools in universities is inevitable, particularly for libraries.

Social media platforms are transforming the library landscape through provision of an enabling platform that transcends the traditional services. There are 15 universities in Zimbabwe ten of which are public universities and five private universities. Thirty one percent of the national budget is allocated to higher education although currently, universities heavily rely on student fees.

1.1.2.2. The National University of Science and Technology (NUST) Library

One of the public universities in Zimbabwe is the National University of Science and Technology (NUST) and is the second oldest university. It was established in 1991 consisting of 6500 students and approximately 750 members of staff (National University of Science and Technology, 2012:20). The university was established to cater for the science and technology requirements in the country. To contribute effectively towards research the university created the Zimbabwe Journal of Science and Technology through the Information Communication Technology Systems (ICTS) Department. The university library is then obliged to support the mission of the university through adoption and use of new technologies. The NUST library was established in 1992 and is currently situated off campus with 40 staff members. Both the university and library are located in Bulawayo the second largest city of Zimbabwe.

The vision of the library is "to be one of the top class academic libraries in the country, utilising new and emerging technologies in the provision of service and information to the university community" (Kujenga, 2011:3). Its mission is "to provide all staff and students with information resources using state of the art tools and methods in support of the university's mission". The library has a digital library on Greenstone and an institutional repository running on DSpace. The library subscribes to electronic resources through the Zimbabwe University libraries Consortium (ZULC). Like other libraries in Africa the NUST Library has implemented social media tools to try and explore its benefits.

Conceptual analysis and Theoretical framework

This section discusses key concepts underpinning the study, namely social media tools, academic librarianship and Technology Acceptance Model (TAM) by Davis (1989) which is the theoretical framework for the research.

1.1.3. The concept of social media

Social media applications are powerful technological tools for communication loosely summed up as technologies used for interacting, creating and sharing information all built on the ideological and technological foundations of Web 2.0 (Kaplan & Haenlein 2010: 61). According

to Rogers (2009:8) social media is an instrument for communication which allows democratisation of knowledge by transforming people from content consumers to content producers. The term "Social media" is usually used interchangeably with "Web 2.0" technology. Rogers (2009:2) provides clarity to the difference between the two concepts stating that Web 2.0 refers to the actual applications available to Internet users, whilst social media refers more broadly to the concepts of how these applications are used. However, Cormode and Krishnamurthy (2008) state that Web 2.0 emanates from the enhancement of Web 1.0 which never allowed an interactive and collaborative aspect. For example, Web 1.0 in a library setting meant that patrons acted as consumers of information without any contribution thereby resulting in a one-way communication. There is an array of social media tools which include Twitter, WhatsApp, Blogs, Facebook, Wikis and YouTube. In this present study social media tools are used interchangeably with Web 2.0. Worth noting is that social media applications are divided into different types. Table 1 below shows different forms of social media.

Table 1: Forms of social media applications

Social networking applications	Instant Messaging (IM)	Websites	Multimedia applications	Social Bookmarks
Facebook	Google chat/talk	Blogs	YouTube	Delicious
Twitter	Talkback	Wikis	Flickr	Diigo
LinkedIn	WhatsApp		Picasa	StumbleUpon
Google +	WeChat			
	Blackberry Messenger			

Social media in the library context is referred to as Library 2.0. Patridge, Lee and Munro (2010) defined this concept as a change in the interaction between the patrons and libraries in a new culture of participation catalysed by social web technologies. Library 2.0 is described as a notion which represents change in form of a revolution which may transform the library profession including rebranding it and in form of an evolution which may enhance user-centred services (Kwanya, Stilwell & Underwood, 2009).

Social media applications' incorporation in academic libraries has been advocated because of the following characteristics that they command according to Maness (2006:10).

- They are user-centred since users participate in the creation of the content and services. Stephens (2007) maintains that users are involved in planning library services, evaluating those services and suggesting improvements in an open conversation.

- They provide a multi-media experience. Both the collections and services of social media tools contain video and audio components. For instance, by using YouTube users are able to view and listen to video presentations.

- They are socially rich. The library's Web-presence includes users' presence. There are both synchronous (e.g. Instant Messaging allowing on the spot communication through Google talk) and asynchronous (e.g. Wikis allowing collaborative production of content) ways for users to communicate with one another and with librarians. Via online communities users can opt in to share their library use, current check-outs, favourites, interests (Stephens, 2007).

- They are communally innovative. They rest on the foundation of libraries as a community service, but understand that as communities change, libraries must not only change with them, and they must allow users to change the library. They seek to continually change services, to find new ways to allow communities to seek, find, and utilise information. Stephens (2007) revealed that experience and a sense of discovery afford the library staff a chance to learn, make mistakes and celebrate successes and new initiatives.

1.1.4. The concept of academic librarianship

By definition academic librarianship is the profession practiced by those working in libraries associated with institutions of higher education such as colleges and universities (Moran & Leonard, 2009). The primary responsibility of academic librarians is to support the teaching, learning, and research efforts of the parent institution's faculties and students. Academic librarians achieve their mission through undertaking processing such as selecting, acquiring, organising, providing access to, and preserving the library's collection. Most academic librarians

work in one of the three major areas found in almost all academic libraries: technical services (acquisitions, cataloguing and classification), client services (charging in and out of books, reservations) and information technology services (library website maintenance, social media tools maintenance). In smaller academic libraries, there are fewer employees in each functional area, leading to less specialised job responsibilities (Moran & Leonard, 2009). For example, in a small academic library, all librarians, regardless of what library department they work in, may be assigned the additional duty of serving as liaisons to one or more academic departments. Meanwhile, in a large academic library, liaison work is often given only to individuals in client services, who are then focused on a single subject or department, serving for example, as the Pharmacy Librarian (Moran & Leonard, 2009).

Curzon and Quiñónez-Skinner (2009) noted that there are skills and traits demanded of all library professionals regardless of their functional area. Firstly, library professionals are both recipients and distributors of information because of this they are required to possess effective communication skills. Teamwork and committee work across library units and across campus all lead to a need for effective communication skills. Secondly, librarians are required to be computer literate and have the ability to use any variety of e-mail programmes and word processing software. Library professionals are also expected to have Internet search skills and to be able to use many types of computer programmes to support their work. Many librarians have very sophisticated knowledge of information technology and spend the majority of their time working with systems or online databases. Thirdly, librarians should have the ability to change, learn and grow. Considering that libraries are learning organisations, and as they become more complex and as competition for patrons' attention becomes more intense, librarians must be able to respond proactively and creatively. In order for change to occur, academic libraries must support innovation and the librarians must be given time and resources to pursue their ideas. Fourthly, librarianship is a collegial profession, which demands librarians to work with other professionals through being part of professional bodies and creating discussion forums within the organisation. Academic librarians are more likely than ever to consult with their patrons in a bid to create and adapt the necessary collections and services, hence the need for collaboration and team work skills. Lastly, academic libraries are being increasingly assessed and evaluated to

justify the expenditures needed to provide library services. Correspondingly, librarians are required to have the assessment and evaluation skills.

1.1.5. The need for social media tools in academic libraries

Proponents of social media argue that these technologies can increase the quality of operations in academic libraries. For example, the Scottish Library and Information Council (SLIC) and the Chartered Institute of Library and Information Professionals in Scotland (CILIPS) believe that social media have great potential to enhance the delivery of library services and to contribute to the professional development of library staff. They also note that these tools present new opportunities for large-scale professional collaboration and cooperation.

A study conducted by Penzhorn and Pienaar (2009:69) at the University of Pretoria Library revealed that the non-use of social media tools by reference librarians had a negative impact on the quality of services. As a result the library management implemented social media tools for reference services since they noted that these tools could go a long way in terms of improving their services. This was initiated on the reference services because they are on the front line of library services.

These technologies are being used by librarians to market their services (Collins & Quan-Haase, 2012:2). Social media tools are also being used largely for reference purposes since they enable on-the-spot answers and dialogue between the inquirer and the librarian. These tools have resulted in good work relations amongst academic librarians through ensuring collaborative work. For example, in the Technical Services Department this involves cataloguing and classification. These are procedural processes which require teamwork and sharing of ideas. Through the use of these technological tools librarians have jointly created innovative services for their libraries. Khan and Bhatti (2012:6) argue that social media can create professional connections: for example, YouTube can be used to share videoconferences and workshops.

In spite of the rich benefits that are brought about by these technologies, it appears their incorporation and use by African academic libraries remains disappointing (Baro, Ebiagbe & Godfrey, 2013:16). Factors such as inadequate training opportunities, lack of knowledge, privacy

and identity theft, slow speed of Internet and electricity failure are some of the problems that hinder the adoption and application of social media tools in academic libraries (Thanuskodi, 2012:80). Rogers (2009:6) raises a point that many authors have neglected. He states that the most common problems associated with library administrators' inability to accept and use social media tools are lack of knowledge and fear of change.

Due to some of the problems identified above many authors such as Aharony (2012:364) have concluded that it is advisable to recruit librarians who have a positive attitude towards social media as well as offer training to those librarians who are already serving the library. This is quite a contentious issue as Collins and Quan-Haase (2012:2) suggest that academic librarians need to ensure they do not misallocate personnel and technical resources to an ever-evolving group of technologies that are largely used for entertainment purposes. While Collin and Quan-Haase's sentiments may be plausible, the researcher strongly feels that a closer study is necessary to verify a number of issues surrounding the use and non-use of social media tools in academic libraries.

Given the opportunities stated above, use of social media applications is inevitable hence librarians need to be flexible and open to the opportunities that these technologies offer. It then makes sense for every academic librarian to take advantage of these tools as they help respond to the rise in demand of user requirements and changing role of the library.

The academic libraries have always been at the forefront in implementing emerging technologies to enhance the delivery of services. Social media tools as well as the ever-changing technological environment have forced academic librarians to move with the pace. The rapid increase in demand from diverse library users has seen the inevitable adoption and use of social media tools in libraries. There is therefore need for librarians to have knowledge on the use and application of these tools. Against this backdrop, the study explored the use of social media tools by university librarians.

1.1.6. The Technology Acceptance Model (TAM)

The study was underpinned by a key theoretical model known as the Technological Acceptance Model (TAM) propounded by Fred. D. Davis in 1989. This theory is widely used to investigate intention of use and adoption of technology amongst individuals. The TAM has also been employed for predicting employee acceptance of different kinds of technologies. This made it relevant and useful to the demands of this study since it is well-accepted and validated in the literature. Importantly, this theory allowed the researcher to identify areas that warrant further study. The TAM theory explains that, when users are presented with new technology, different variables influence different decisions over whether and how they use it.

The TAM theory consists of two variables the *Perceived usefulness* and *Perceived ease of use* of the relevant technology. Davis (1989:320) notes that there are two determinants for acceptance and rejection of technologies: perceived usefulness and perceived ease of use. The diagram bellow illustrates the TAM theory showing clearly how the two variables influence intention to use a particular technology.
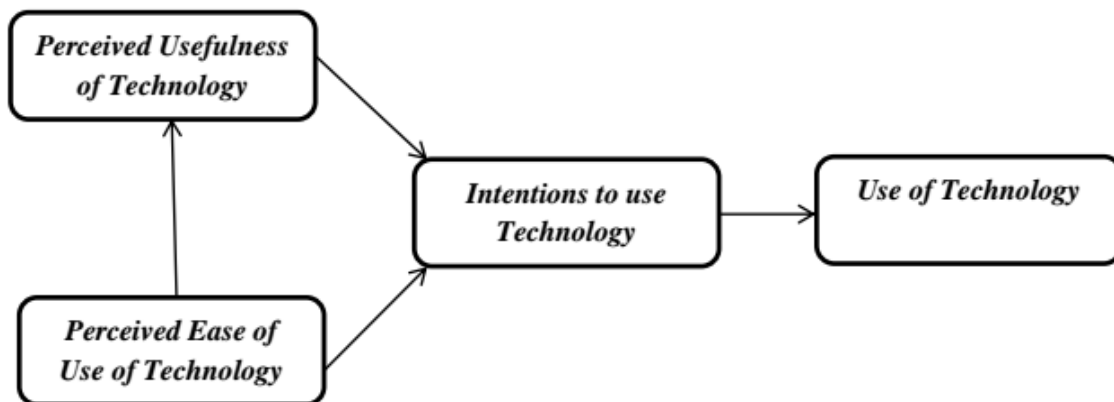
Figure 1: Technology Acceptance Model (TAM) by Davis (1989: 320)

1.1.6.1. Perceived usefulness

Perceived usefulness is defined as the degree to which a person believes that using a particular system would enhance his or her job performance (Davis, 1989). For example, to which extent will the use of social media tools enhance job performance of library staff? In the context of social media usage, usefulness is defined as the extent to which librarians believe that these applications would provide access to useful information at work, easy communication with clientele and help them connect socially.

1.1.6.2. Perceived ease of use

This refers to the degree to which a person believes that using a particulars system would be free of effort. Ease of use also represents the degree to which an innovation is easy to understand and operate (Spacey, Goulding and Murray, 2004:557). If library staff perceive the social media tools as easier to use, they are likely to use them.
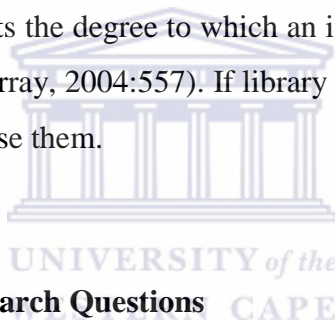
1.2. Problem Statement and Research Questions

The rapid permeation of social media technologies amongst academic libraries is on the constant rise. This has led to the improvement of the services offered by librarians and the enhanced efficiency in their personal lives. Lwoga (2011: 29), for example, observes that in order to improve the quality of library services, African universities should take advantage of innovative and emerging technologies such as Facebook, Twitter, Blogs and Instant Messaging to improve their service delivery to their clients.

However, academic libraries face several impeding factors that cripple the maximum usage of these tools amongst librarians. The researcher, as one of the users of UWC Library, has observed that the librarians appear not to be effectively using these new technologies. For example, despite the library having a Blog, Facebook and Twitter accounts, these are not regularly updated. Similarly, from the researcher's experience as an intern at the NUST Library, it was observed that although the library has adopted and embraced various social media tools, there seemed to

be no clear picture on how exactly the technologies were being used by staff in the library. For example, instead of using instant messaging in reference services the staff still used face-to-face interaction.

Against this backdrop, this study sought to investigate how UWC and NUST library staff use social media in their work routines and general everyday life. Specifically, the study sought to answer the following questions:

- How familiar are the library staff with social media and which tools do they use mostly?
- For what purposes do library staff use social media tools?
- What are the advantages and disadvantages of using social media tools?
- What factors shape and constrain library staff's use of social media tools?

1.3. Significance of the study

The researcher believes that social media is a fundamental component of the library realm given the wider range of opportunities they have. Charnigo and Barnett-Ellis (2007) noted that librarians consider social media within the purview of professional librarianship. Accordingly, a potential contribution of this study is to conduct research that can be readily received and used by library managers as well as librarians themselves. It was expected that this study would provide insight amongst library managers to find ways of motivating their staff to optimally harness social media. Ultimately, the findings of this study should help curb any of the barriers in using social media amongst information professionals.

1.4. Limitations of the study

The limitation of the study was that it only focused on two academic libraries. Each library could not be claimed to represent all the libraries of its country. But on the other hand, the investigation threw up interesting points of comparison and contrast. Additionally, the study only used a Web-based questionnaire to collect data. This never allowed a closer interrogation of respondents, to probe more some of their comments made in the questionnaire. On a positive note, the Web-based questionnaire worked to the advantage of the researcher through reducing travel costs,

since the research was based at two universities libraries situated in different countries. The researcher further verified some of the opinions through scanning both libraries' websites (see Appendices 8 and 9).

1.5. Ethical statement

The researcher adhered to the ethical guidelines of the Research Committee of the University of the Western Cape. The researcher also sought permission from the UWC and NUST libraries' authorities to conduct the study. Informed consent was obtained from the respondents based on the project information before sending through the Web-based questionnaire. Anonymity and confidentiality of respondents was granted by the fact that they were never required to provide their names. Additionally, collected data was strictly used for academic purposes only. The researcher further explained to respondents that participation was voluntary and they could withdraw anytime.
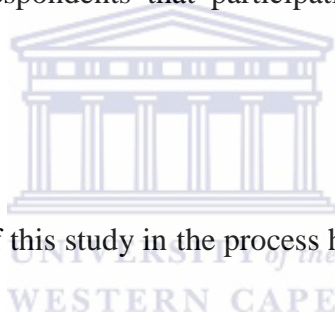
1.6. Outline of Chapters

Chapter 1: outlines the main gist of this study in the process highlighting the rationale behind the study.

Chapter 2: discusses and analyses various literature suggestions paying particular attention to the familiarity of academic librarians with social media, factors influencing the use and non-use of social media tools by academic librarians. The chapter, further, focuses on the purposes of using these tools and advantages and disadvantages for using social media tools.

Chapter 3: provides a full description of the research design and methodology adopted in this study.

Chapter 4: presents and interprets data collected using a Web-based questionnaire.

Chapter 5: provides a detailed discussion and further analysis and interpretation of the findings. The synthesis in this chapter is underpinned by the TAM, scholarly views, researcher's personal work experience and scanning the library's website.

Chapter 6: Conclusions and Recommendations to both the UWC Library and NUST Library are provided with reference to the findings. Further areas of study are also highlighted.

1.8 Conclusion

The chapter has highlighted a well-detailed explanation of the basis of the study. It gave a clear description of the research problem. Particular attention was given to the background and motivation of the study, conceptual analysis and theoretical framework, significance of the study and limitations of the study, ethical statement and the outline of the whole study. The next chapter provides a review of empirical research in line with this study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter serves to provide a rigorous and critical evaluation of scholarly perspectives in relation to the use of social media applications by academic librarians. It sets the current study within the context of previous research through identifying gaps, justifying methodology and theoretical framework adopted in this study. Neuman (2007:70) states that the literature review is based on the assumption that knowledge accumulates and that researchers learn from and build on what others have done. A review of the literature on the use of social media by library staff reveals various threads worth noting:

- Familiarity of academic library staff with social media and mostly used tools.
- Purposes of social media tools in academic libraries
- Advantages and disadvantages of using social media tools
- Factors affecting the use or non-use of social media tools in academic libraries
- Debates surrounding the use of social media in academic libraries

These themes are consequently, discussed in this chapter. The chapter reviewed literature from countries based in Africa, Asia and Europe, as well as from the USA, Canada, and New Zealand.

2.2 Familiarity of academic library staff

Since the introduction of social media in academic libraries, researchers have been researching common social media applications and the level of use of these technologies amongst library staff. A study conducted by Nguyen (2008) analysed 47 university library websites in Australia using content analysis to find out the level of employment and use of social media tools. The author found that there was low implementation of web tools since only RSS (Real Simple Syndication), Blogs, IM (Instant Messaging) and Podcasts were being used. RSS was the most used tool because the study revealed that patrons use aggregators to read library updates. IM was the least used because in order to use this application, it required librarians to constantly stay

online to support users and due to inadequate staff, some libraries did not employ these social media tools. In a survey conducted by Tripathi and Kumar (2010) it was shown that on an international landscape most academic libraries are experiencing the greater benefits of using social media tools whilst just a few had not adopted these tools. This study further revealed that RSS, IM and Blogs are the most popular social media tools amongst librarians. The study concluded that librarians should utilise social media tools to enhance services in an innovative manner and address the information requirements of the techno-savvy patrons. Using a Web-based questionnaire Arif and Mahmood (2012) revealed that the most popular social media tools, which were adopted by librarians in their professional and personal lives, were IM, Blogs and Wikis. In all these studies it is evident that IM and Blogs are the most commonly adopted applications. The reason for increased adoption and use of IM applications may be because they offer on the spot communication. Blogs are popular amongst libraries because they do not require HTML language, thus are easy to create.

Research conducted by Kim and Abbas (2010) provides a clear comparison on the use of social media tools between the librarians and users. The study presents the idea of whether social media is mostly appreciated by librarians or by library users. This was achieved using questionnaires which were sent to 184 academic library users from two different universities in the Midwest of America. The findings reveal that 73% of the surveyed academic libraries offer RSS whilst 10.8% of the patrons use this tool. Twenty seven percent of the selected university libraries provide podcasts but only 4.3% of the users utilise this tool. Twenty two percent of the surveyed academic libraries offer a bookmark function while 42.5% of the patrons use it.

The study showed therefore that there is very low usage of social media tools amongst library users since bookmarking was the only tool that was being fully utilised. It was noticeable that there was a mismatch in terms of what libraries offer and what the patrons preferred to use. This mismatch demonstrated a need for librarians to articulate their purpose, through taking their time to strategically market these tools amongst the library users. At the same time, Burgert and Nann (2014) comment that user opinion is much more important in ensuring a successful adoption of social media. Their study established that there was a higher level of use of RSS by male librarians as compared to female librarians. Along the same lines of thinking, Thanuskodi (2012) exposes that 70% of the male LIS professionals were aware of social media tools as opposed to

only 30% of females. In the light of these results it appears that males are more comfortable with using these technologies than females.

Gerolimos and Konsta (2011) conducted a study on the use of social media tools by sending an online questionnaire to 69 academic librarians in North America, 32 academic librarians in Asia and 82 academic librarians in Europe. The study concentrated on Blogs, Tags, RSS, IM, YouTube, Facebook and Twitter. The results of the study show that Facebook and Twitter were the most used tools amongst the European academic librarians while Asian librarians had largely implemented Tags. Tags are keywords generated by Internet users on a social platform, for example a Blog (Kaplan & Haenlein, 2010). Tags provide a quick view into how users perceive an idea shared on a social platform and also help users quickly locate information. The study further shows that librarians in Europe and Asia had lower levels of social media usage compared to the academic librarians in North America who had two university libraries using a majority of social media tools. The study concluded that while librarians in North America were actively using social media, librarians in Europe and Asia were still deeply rooted in the use of Web 1.0.

The study by Collins and Quan-Haase (2012) was carried out over a period of a year to examine the adoption and usage patterns of social media tools by academic libraries in Canada. The study examined 21 academic libraries which are members of the Ontario Council of the University Libraries (OCUL). The authors focused on Facebook, Twitter, YouTube and Flickr as these were perceived as the most popular social media tools in Canada. The findings revealed that adoption and use of social media tools were higher in the South Western Ontario whilst in the Eastern and Northern Ontario libraries adoption and use were low. The main reasons for limited use in these areas were identified as the absence of training and funding, lack of interest or skills amongst the library staff and poor technological infrastructure. Interestingly, the researchers report that geographical location of an academic library as well as the size of the university affected the uptake and use of social media tools. The study additionally revealed that Twitter was the most used social media tool amongst the academic libraries and was followed by Facebook. YouTube was the least used whilst Flickr was not used at all. Researchers attributed the low use of these social media tools to the librarians' tendency of infrequent personal use of some social media applications thereby rendering the tools irrelevant in a library setting.

From the reviewed literature above, it is clear that there is not much variance in the types of social media tools used by library staff across the world. Also low usage was attributed to inadequate library staff, infrequent personal use of social media tools by librarians, the preference for traditional methods of service delivery by some librarians and a mismatch in terms of what is offered by the library and what is preferred by the patrons.

2.3. Purposes of social media tools in academic libraries

Scholars have long pondered the state of libraries, user expectations, and the future of library service. Social media tools have brought along a lot of opportunities and they are being used for various purposes within the library realm. Stephens (2007) maintains that every librarian strives to utilise these new tools in innovative and creative ways to ensure delivery of quality services. The researcher presents three major uses of social media in academic libraries identified in the literature.

2.3.1. Marketing and promotion of information services

Chu and Meulemans (2008) applied an online survey questionnaire amongst first year students at the California State University San Marcos to find out how students use MySpace and Facebook. According to the findings 90% of the students mentioned that they use these platforms for both social and academic purposes. In addition, the researchers set up a focus group discussion to find out students' opinions about the two social networking sites. The study concludes that social networking sites are popular among the students and could be used in university libraries for information literacy programmes, reference services and outreach programmes.

Furthermore, Rogers (2009) surveyed how American libraries use social media technologies for public relations to attract new users. The study revealed that librarians perceived social media applications as tools for marketing library services and that Blogs, online video (YouTube) and Instant Messaging are the most effective tools. However, the researcher firmly suggests that librarians should understand the benefits of social media for public relations and marketing. The study points out that it has become important for librarians to change and adapt to the needs of customers through taking new tasks available on social media in order to effectively market libraries in today's environment.

Similar findings are reported in a research study conducted in South Africa by Penzhorn and Pienaar (2009). This study was done over a period of two years to investigate the use of social media tools for innovative services at the University of Pretoria Library. The researchers interviewed the library staff in the first phase and then sent online questionnaires which targeted reference librarians and the users at the University of Pretoria. It revealed that Facebook, Blogs, YouTube, Wiki, Gaming and Skype increased the quality of service delivery at the University of Pretoria library. The library placed various videos on YouTube for marketing and creating awareness. Additionally, the special collections section hosts a "Book of the month" Blog which ensures that users are constantly updated about new books. Also Skype was uploaded to every computer within the library for reference purposes thus the librarian can answer queries from patrons through the facility. A Wiki was created as a way of promoting the Library 2.0 initiative by the Electronic Service Committee of the library. The library has a Facebook page which is used for communicating with other librarians, students and the faculty staff.

According to a study conducted by Breeding (2010) the use of Twitter and Facebook as marketing tools has propelled activity toward the organisation's web presence and strategic services. The key challenge involves encouraging library staff interest in social networking sites that can be leveraged for marketing and promoting. He ranked RSS as one of the top technologies for distributing content. The study further suggested that librarians should think of RSS as a syndication service to distribute content as well as an advertising ploy to lure potential users to visit the library website. To reinforce this viewpoint, Chan (2012) states that using social media offers a reduced cost towards advertising library services.

Using content analysis to determine the presence of social media tools in 30 Chinese University libraries Si, Shi and Chen (2011), found that 15 libraries were using RSS for news or notification on new acquisitions, customised subject information and availability of reservations. Fourteen (14) of the surveyed libraries used an IM tool for the reference services. Only 3 academic libraries had Blogs and they used them to display specific information for particular departments within the university. The Wiki was only adopted by one particular academic library and was used in the cataloguing department consisting of information about cataloguing rules, work logs and staff responsibilities with members' personal details on the homepage.

Makori (2011) carried out a study to examine the extent to which university libraries in Africa are using social media technologies for bridging the information gap. The researcher found that RSS feeds are being widely used as communication tools. This implies that instead of clients going to the library to check on the 'traditional' notice boards about what the library wants to communicate to them, it is becoming a norm for librarians to tweet or post on their Facebook page thereby instantly reaching as many clients as possible. The study highlights how social media tools have helped university libraries to provide, expand, promote, support and post information services to the patrons.

A later study by Baro, Ebiagbe and Godfrey (2013) in their comparative research used a survey questionnaire to collect data from university libraries in Nigeria and South Africa. The study revealed that there are differences among the librarians in Nigeria and South Africa concerning the purposes for which the librarians use social media tools. It found that 86.1% of the librarians in South Africa use the social media tools for announcing library news or events to users. While only 28.1% of the librarians in Nigeria use the social media tools for library news or events. Even with these differences the study concluded that librarians use the social media tools such as Facebook, Twitter, Blogs, IM, RSS feeds, Wikis and YouTube to render library services and communicate library news and events to their users.

It is evident that the wider adoption and use of social media tools in marketing library services is being carried out in order to remain viable in the environment of competition from other information sources such as the Internet and the web-based libraries. In other words academic libraries are doing this to make strong connection with the academic community, anticipate trends and use new concepts in service promotions.

2.3.2. Online interaction

Instant interaction between a librarian and a client is one of the many reasons that academic libraries have stepped up to integrate social media tools in their daily work. Xu, Ouyang and Chu (2009) surveyed 81 academic libraries in New York State to examine applications and implications of social media technologies. The results of the study reveal that IM was the most popular social media tool and was mainly used for reference services since it provides an instant and interactive communication between a librarian and a user. The study further reports that

Blogs were used for making announcements through posting information and receiving comments. It was discovered that the use of RSS and Tagging on the Blog allows for more user participation than when it is in a stand-alone mode. Simply put, instead of organising face-to-face orientation programmes, academic libraries are increasingly using RSS feeds, Podcasts and Vodcasts to deliver audio and video commentaries and instructions to users remotely.

Chu and Du (2013) studied the use of social networking tools in academic libraries. The study adopted a survey questionnaire for data collection which was sent to 140 libraries. According to the study it was apparent that through the use of social media librarians have been able to establish a degree of engagement with their colleagues. This has ensured that they keep up to date with the new trends within their profession. The findings report that social media tools such as Facebook, Instant Messages as well as Wikis are popular for online collaboration, communication and sharing of information among librarians. Also highlighted is that librarians are able to connect with other librarians on LinkedIn making it easy for ideas to flow and bringing professionals closer together.

According to recent research done by Sun and Puterbaugh (2013), social media applications proved to be indispensable in an international online collaboration between a university librarian from the United States of America and another university librarian from China. Sun from the Shandong university of Arts Library and Puterbaugh from the Eastern University Libraries collaborated to develop an information tool (Libguides) that could be used by Faculty and students at both institutions. The study establishes that the two librarians used tools such as Instant Messaging, Facebook and Skype to communicate. It is emphasised that it was Skype more than any other social media tool that made the online collaboration possible. It was concluded that social media allows librarians at various institutions to create something larger than either could create alone.

Judging from the foregone review social media technologies present new opportunities for large-scale professional collaboration and cooperation. The essence of collaborative projects is the joint effort of many librarians, which results in a more innovative and higher quality outcome than any one librarian could achieve individually. Applications such as LinkedIn, Skype, IM and Facebook are being used to facilitate online interaction. Adding to this, librarians are using IM

for reference services as well as Podcasts and Vodcasts to offer library orientation services to library patrons.

2.3.3. Support of open and distance learning (ODL) and Information Literacy programmes

E-learning is becoming increasingly prominent in tertiary education, with universities using virtual learning environments and more students signing up. Academic library staff has a significant role to play in supporting universities offering e-learning courses by deploying social media technologies. Nfila (2010) conducted a study based on how academic libraries support e-learning, a case study of Botswana university libraries. The study concretely states that an academic library is the central hub for implementing technologies which support the demands of faculty and students. It reports that the University of Botswana Library plans to take advantage of social media simplicity through producing podcasts to record course lectures, tutorials, course materials and post them on the library Blog so that students registered in e-learning programmes can download and use them.

The University of South Africa (UNISA) library is already using social media tools to promote and extend library and information services to open and distance library users. Hough and Neuland (2012) indicate that 80% of UNISA programmes are delivered using social media technologies. Makoe (2010) conducted a study based on the use of MXit to enhance learning through social interaction at UNISA. The results showed that there is a great need to use this social media tool as it enables collaborative learning amongst distance learners. This study highlighted the low cost factor of MXit which makes it very attractive for its use to communicate with students since they are known to be financially constrained.

Commensurate with the inference of the above study, is research conducted by Van Rooyen (2012). The research investigated use of instant messaging for the second year accounting course at the University of South Africa. Van Rooyen emphasised that, when deciding on the use of various social media technologies in learning, students' preferences should be considered, bearing in mind that an Open University caters for students from different countries with diverse technological backgrounds. The findings highlighted that social media tools such as Instant Messaging (WhatsApp, Blackberry Messenger and MXit) are preferred by most South African students because they are familiar with these messaging platforms. Most importantly, it was

found that these tools could be used for communicating with students because they offer reduced communication costs since most of these students are financially constrained. It is further exposed that distant learners from Germany appreciated the use of MXit and Facebook group discussion which made learning easier and much more engaging for them.

Besides open and distance learning (ODL) librarians are also incorporating these applications in Information Literacy (IL) programmes. Luo (2009) employed a survey questionnaire followed by semi-structured interviews. The scholar examined the use of social media in IL instruction. The findings reflect that librarians actively used three levels. Firstly, librarians used social media tools amongst themselves. Secondly, for facilitating delivery of content to students, for example, through publishing content for students to access and by involving students to complete course work collaboratively. Thirdly, librarians used certain features of various social media technologies to illustrate IL concepts. In a study conducted at the University of Pretoria by Penzhorn (2013), efforts were made to infuse social media into the IL course. The study revealed that using social media applications such as Blogs, Wikis, social networking, RSS feeds, Flickr, and YouTube in the IL course, can be seen as a unique enhancement of the e-learning environment (Penzhorn, 2013). Due to this, many scholars have concluded that the ability to use social media tools is part of being information literate (Farkas, 2012; Fernandez-Villavicencio, 2010).

The purpose of social media tools in academic libraries seems common across the globe. Three purposes are identified from the literature which includes concerted efforts to use social media applications in order to market and promote library services, interact online and boost the wisdom of students in offering ODL programmes and IL programmes.

2.4 Advantages and disadvantages for using social media tools

It is indisputable that social media platforms are becoming prevalent and their value is recognised. Scholars have identified some of the benefits that come with the use of social media tools in academic libraries. It is useful to consider why there might be reason to have such high expectations for social media tools. Social media applications are effective in information management that is capable of creating future prospects, opportunities and hope for library users, and information and library professionals. A huge benefit of social media services is that they are

designed for broad appeal and are, therefore, very easy to use, even to those with little or no technical expertise (Scottish Library and Information Council (SLIC) & the Chartered Institute of Library and Information Professionals in Scotland (CILIPS). Previously, use of web technologies required an individual to have intensive skills and knowledge of HTML (Fitcher, 2003), for example, in order to create a website but this has been simplified by the birth of social media technologies such as Blogs.

These tools have also been widely commended for having the power to allow innovative library services (Penzhorn & Pienaar, 2009). Social media tools such as Blogs and Wikis allow librarians to go straight to the user with news and up to date information related to new services, materials or service developments. Some libraries have produced promotional videos for YouTube, which are inexpensive to make and could appeal to difficult to reach groups. As such, these tools can enrich the information services with multimedia experience (Hosseini & Hashempour, 2012).

Kwanya, Stillwell and Underwood (2012b) found that Kenyan librarians mentioned that social media tools enhance interactivity between users and librarians in the process facilitating seamless communication and feedback. Xu, Ouyang and Chu (2009) make similar conclusions that social media tools can enable collaboration, they offer improved section management through allowing instant communication, and also improve accessibility and integration of cataloguing resources for cataloguing departments.

In contrast with the above-mentioned benefits that come with the use of social media in academic libraries, several challenges have also been identified in the literature. Concerns have been raised by library management who mentioned that use of social media tools is a waste of time and resources (Cohen, 2011 and Collins & Quan-Haase (2012:2). It has also been noted that other major obstacles in the use of social media tools include inadequate ICT infrastructure such as low bandwidth amongst others (Hosseini & Hashempour, 2012; Arif & Mahmood, 2012). One other visible disadvantage mentioned was that some librarians lack technical skills to make the best use of the tools. Luo (2009) states that there is learning curve for mastering technology. Some of the social media tools can be quite technical and require a substantial amount of time

from librarians in learning about them (Boxen, 2008). For example, a respondent mentioned that Wiki has unique formatting rules, and she has to remind herself of how to do Wiki formatting every time she needs to update the content on the Wiki.

It is imperative for academic libraries to know about the advantages and disadvantages of using social media tools, this allows them to make informed decisions on how to maximise usage of tools.

2.5 Factors affecting the use or non-use of social media

Librarians have been familiarising themselves with the Internet since its inception, mainly by using the e-mail network. With the proliferation of Internet tools such as social media and the ever-growing importance accorded to them, librarians across different types of libraries have increased their use. This has influenced many researchers to intimately look at the indicators that might disturb or encourage librarians to use Internet and social media tools.

Spacey, Goulding and Murray (2004) employed the Technology Acceptance Theory (TAM) as a measurement model to explore the attitudes of the public library staff towards Internet use. A survey questionnaire was sent to 963 librarians working in 14 libraries in England. They concentrated on measuring how perceived usefulness and perceived ease of use, behavioural intention, subjective norms and attitude influenced respondents in the use of the Internet. The study reports that librarians in England are convinced that Internet technologies make their job easier by allowing efficient communication amongst staff and their library users and they consequently overwhelmingly use them. It also appears it helped them collaborate with other librarians within England and other countries through emails and other online chats.

However, network failure frustrated librarians from using the Internet as those who solely relied on it for some activities could not work when the Internet was down. Other barriers mentioned by the library staff include the use of passwords which sometimes required them to first consult the information technology administrator before access, the slow response time of the Internet and firewalls. These were a huge hindrance to providing effective assistance to users thereby making the whole process of the reference service difficult. The study reveals that those

librarians who had necessary Internet skills easily used it whereas those who lacked such skills found using the Internet a complicated process hence, never adopted it. On subject norm, library staff was greatly encouraged to use the Internet by their immediate supervisors and workmates. Most importantly, the study specifies that TAM did reveal that the intention to use the Internet is interlinked with attitude since most library staff felt that the Internet was easy to use hence they find no reason not to use it in their work spaces.

Aharony (2009) investigated the use of social media technologies in three types of libraries; namely school librarians, public librarians and academic librarians. Survey questionnaires were sent to 168 librarians, using the big five model of personality proposed by Tupes and Christal in 1992. The scholar examined if personality characteristics (extroversion, change and empowerment), computer expertise, motivation, importance and capacity had effects on studying and integrating different applications of social media. It was found that resistance to change can be a huge barrier towards use of social media amongst librarians since they fear exploring new technologies.

According to the study library managers are more comfortable with using these technologies than their subordinates (librarians) and they are willing to introduce these tools in their libraries. This can, as a result, lead the library managers to encourage their subordinates to use these tools since they already understand their usefulness. The study further reveals that the lack of social media skills demotivated library staff from using these technologies and this prompted the librarians to recommend that computer training was necessary for librarians to use social media tools. Additionally, the results show that extroverted librarians understand the advantages of utilising social media tools in their workplace. Thus extroverted librarians are always ready to explore and learn how to use new technologies. The authors observed that knowledge, familiarity and ability in the use of computers were key factors that could motivate library staff to use social media technologies.

Interestingly, Aharony (2013) carried out a recent study to explore factors affecting the adoption of Facebook by librarians in Israel. Contrary to Spacey, Goulding and Murray's (2004) study which only applied TAM, and Aharony's study (2009) which used the big five model of personality as theoretical framework, Aharony's (2013) study merged the two theories. The Facebook platform was used to send the questionnaires to Library and Information professionals'

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discussion group within the country. The findings highlighted that those librarians who found Facebook easy to use were frequent users of the social site. This means that extroverted librarians were more open to use this tool. It was noted as well that age had influence on adoption and use of Facebook since the younger librarians had no problem in doing so whilst the older librarians complained that this tool is not easy to use. According to the findings TAM and personal characteristics are two measures inseparable for an individual to fully adopt and use social media tools. In other words an individual's personal character coupled with attitude and beliefs could lead to the maximum use of these tools, both personally and for work purposes. It was recommended that library management should explain to their library staff that Facebook is not a complicated platform and as such they should take advantage and use it for work purposes.

Besides the TAM theory there are other theoretical frameworks that have been used to study adoption and use of technologies amongst librarians. Neo and Calvert (2012) investigated the adoption and non-adoption of Facebook amongst librarians in New Zealand. The study was informed by the Rogers' Diffusion of Innovations (DoI) theory propounded in 2003. It was revealed that librarians were influenced by relative advantage, compatibility and complexity to adopt Facebook. These factors measure costs and benefits of using Facebook and it was found that the application is economic as they are no cost involved. Using the same theory, a study was conducted by Rutherford (2008) to find out the implementation of social media tools amongst librarians. The study revealed that the major factor for adoption of social media tools was acceptance amongst librarians. It was shown that librarians were well acquainted with use of Blogs, as such they were actively using them for work purposes. Using Rogers' DoI model allowed the two studies to analyse the entire process of social media adoption and use from the moment a potential user becomes aware of the technology to their decision about whether to adopt or to reject it, to how they implement it, and final confirmation of having made the correct decision or not.

Based on the above, there appears to be a plethora of theoretical frames which have been used to study the adoption and use of technology. It is noticeable that Spacey, Goulding and Murray (2004) applied the TAM theory to measure use of Internet amongst public librarians. On the other hand, Aharony (2013) employed the TAM theory in conjunction with the big five theory of personality to measure adoption and use of only Facebook. For the purposes of this study, the

TAM theory is used to measure the deployment of an array of social media applications by academic librarians in two institutions based in the Southern African countries.

Banda (2011) conducted a survey on the use of social networking tools by librarians in three public universities which are the University of Zambia, Copper-belt University and the Mulungushi University. The study concluded that social networking tools are hardly used for work related activities by librarians in Zambia. It clearly exposed that the Information Technology Department restricted them on particular Web-based facilities they can access. Other challenges include bandwidth constraints, lack of time by librarians to use social media, lack of knowledge among librarians on the use of social media and lack of interest of librarians preferring to do things the traditional way. Much as librarians may have the drive to use social media, there are so many factors that may block them from effective use of these tools. Hosseini and Hashempour (2012) also found that lack of knowledge in use of social media tools was a major impeding factor amongst librarians in Iran.

A research study was carried out by Thanuskodi (2012) in India to explore the awareness and factors that affected the use of library 2.0 applications amongst Library and Information Science (LIS) professionals at the Annamalai University. A questionnaire was distributed to 60 respondents. The research shows that 80% of the respondents said that factors such as training and awareness of social media tools affected the use and uptake of these applications. Librarians with necessary computer skills were increasingly using these technologies whereas those lacking such skills shunned the technologies. Other factors cited included knowledge and skills of staff with 66%, equipment and infrastructure, that is computers and the Internet facility 58% and staff commitment and cooperation 56%. Very few librarians indicated that willingness to change; time availability, proper planning and library and user collaboration had any effect on their use of social media tools.

Ezeani and Igwesi (2012) provide challenges that affect the use of social media in Nigerian libraries. Lack of awareness amongst the library professionals in Nigeria has heavily contributed to the non-use of social media in the library environment since the usefulness of these tools is not yet fully appreciated. The authors note that the issue of poor bandwidth affects online participation amongst library staff. They add, stating that technophobia is a contributing factor to non-use of these tools since most librarians and users are afraid to use computers, as such they do

not embrace change. Another impeding factor identified is that most librarians lack the 21st century skills which are required for them to utilise social media.

Kwanya, Stilwell and Underwood (2012b) studied the application of social media tools by libraries in Kenya. The study found that the highest rate of adoption was amongst academic libraries where five out of seven (71%) have adopted the tools. The study makes firm suggestions that the adoption and use of social media tools seem to have been largely influenced by: the size and composition of user community, perceived demand by the users for quality services and the size and nature of budgetary provisions. Chisenga and Chande-Mallya (2012) conducted research to explore use of social media tools amongst librarians based in the Southern African Development Community (SADC) region. Using a survey method the scholars found that factors influencing adoption amongst librarians included: the need to connect with professional colleagues, the affordability of most social media tools, the belief that social media tools enhance one's visibility in the profession and the encouragement from their superiors at work.

One notable factor that discourages individuals from using social media is the effect of age. Blank and Reisdorf (2012) gave an in-depth explanation to this aspect, through mentioning that older people are less likely to use social media because of confidence and technical skills. Also older people may not be comfortable with supplying their personal data required to maintain, for example, a Blog. The scholars further explain that despite the simplicity of social media, ability remains very important.

The pace of technological change is ever-increasing, and librarians can find themselves sometimes overwhelmed by all of the new tools and new discussions playing out at library conferences, on discussion lists, and in the professional literature. In a different study by Kwanya, Stilwell and Underwood (2012a) the results of pressures that arise from the use of new technologies are illustrated as techno-lust and techno-stress; in the process the scholars suggested some coping mechanisms amongst academic librarians in Eastern and Southern Africa. Coping mechanisms which were identified include: work load reduction, training, independence and self- sufficiency from technology.

It is apparent from the review above, that lack of skills and poor infrastructure (bandwidth constraints and limited equipment) were the major impeding mentioned in most of the studies.

2.6 Debates surrounding use of social media tools in academic libraries

Researchers expressed some major well-founded concerns why some libraries have discontinued use of social media technologies, have not bothered to implement them and are not planning to do so in future. Some of these concerns are as follows:

2.6.1. Entertainment tools

Collins and Quan-Haase (2012:2) suggest that academic libraries need to ensure they do not misallocate personnel and technical resources to an ever-evolving group of technologies that are largely used for entertainment purposes. With a resonating view Flanagin and Metzgen (2008:19) mention that these tools are largely used for leisure and because of the credibility concerns of information posted on social media sites it may be impossible to deploy these tools in university libraries. This means that these tools may distract individuals from work related activities. This is quite a contentious issue as Gerolimos and Konsta (2011:8) attest that social media technologies were not developed to be used in libraries but they have been successfully incorporated and librarians should think about these tools as an extension to an automated library environment. It is then crucial to socialise library services with great emphasise on committing time, energy and money to get the best out of these tools.

2.6.2. Time consuming

It was expressed by Chu and Du (2013:68) that the most pressing issue was that social media tools were time consuming. This was exhibited by librarians who believed that social media tools are too technical. As such, they do not find time to learn, explore and implement these tools since they will be busy with their work demands. The authorities also noted that the librarians complained about the issue of regular updates of social tools as time consuming. They articulated that it takes too much time to monitor and maintain too many social media tools. Echoing the view that social media tools are time consuming is Ezeani and Igwesi (2012:5) who state that the Internet can be frustratingly slow which then makes the use of social media extremely time

consuming. The authors suggest that in such circumstances it is useless or even senseless to adopt and implement these tools. In light of this premise, it makes it difficult to determine if social media is worth the librarians' time. Contradicting these two views are Dickson and Holley's (2010:472) view which mentions that these tools do not require any technical expertise as no HTML language is involved hence they are easy to use. The authors go on to state that librarians should not hide behind bandwidth problems as such issues may be overcome through the installation of satellite based connectivity. This has been achieved by some academic libraries in developing countries. Matching this notion is Aharony (2013) who recommends that library management should enlighten librarians on how user-friendly social media tools such as Facebook are.

2.6.3. Privacy and security issues

There are threats and dangers that might contribute to some academic library staff's reluctance to use social media tools. According to Mathews (2007:11) most individuals fear identity theft or stalking because of the increased number of online predators. The author mentions further that academic librarians make follow up reference interviews so as to offer good services to their patrons. This is achieved through tracking student blogs that mainly focus on the library or assignments. Some students have launched complaints referring to this as encroachment of their privacy. This seems to mirror Dickson and Holley's view (2010:473) which states that academic librarians are seen as authority figures within the university community, and students resist friending the library because they fear that their personal information will be visible to university officials.

2.6.4. Policy issues and Legal implications

The issue of both restrictive and non-existent policies is another major concern that has been identified by many scholars. In a study conducted by Kooy and Steiner (2010:60) it was found that 82% of the surveyed academic libraries had no social media policies. Most of these libraries preferred to formulate their social media policies organically from situations as they arose. This means that 18% of the academic libraries had their policies formulated due to three main reasons identified in this study. Ten percent (10%) of the academic libraries created their social media

policies because of librarian interest. Also 5% of the academic libraries crafted their social media policies in response to inappropriate student behaviour. Some librarians have experienced patrons posting illegal material such as hate speech, and this has led to restriction of user-generated content within these academic libraries. The remaining 3% of the academic libraries formulated their social media policies after being exposed to a lawsuit. It has been inferred that social media tools promote laziness where individuals copy and paste information without synthesising and acknowledging it. This has, however, led to copyright infringement which is a great offense within the academic world.

On another note, Johnson and Burclaff's (2013:404) survey unravels the issue of restrictive social media policies. The study revealed that policies provided by the surveyed academic librarians were restrictive in nature. Rather than encouraging participation in social media use, the policies were risk-averse. They reminded employees of appropriate behaviour and gave rules for creating and monitoring social media accounts in different departments. This included properly citing content posted and respecting copyright law. Moreover, the authors mentioned that some of these policies even went to the extent of blocking patrons from sharing content and only allowed library professionals to share content with patrons.

2.7 Conclusion

Much as the reviewed studies have been conducted in different places across the world, most scholars emphasise that social media tools bring a wide range of benefits to academic libraries hence the need to promote their integration and use in library services. In this regard, the literature indicates the:

- Familiarity and awareness with specific social media in different academic libraries;
- Various ways in which social media are being utilised by academic libraries in different environments;
- Barriers that discourage academic library professionals from using social media;
- The relevance of adequate knowledge and skills amongst library staff;
- Potential factors shaping the use or non-use of social media; and
- Debates surrounding the use of social media in academic libraries.

This chapter revealed different theoretical frameworks adopted by other studies in examining adoption and use of social media tools by librarians. The theoretical frameworks include the TAM propounded by Fred Davis (1989), the big five model of personality crafted by Tupes and Christal (1992) and the DoI proposed by Rogers (2003). With regards to this study the TAM theory was employed and a detailed description of this theory is provided in Chapter 1. Furthermore, the chapter has shown that methods such as online survey questionnaires, interviews, longitudinal studies and content analysis have been used by many scholars to gather meaningful data. These studies informed the use of a Web-based questionnaire for data gathering in this study. This is discussed in-depth in Chapter 3.

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CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter chronicles how the research was carried out. It discusses both the design and methods employed to gather data which assisted in answering the research questions. O'Leary (2004) defines a research methodology as an analysis of the principles of methods and rules employed in a discipline of study. Provided in this chapter is a detailed account of the purpose of the study, the research questions, Web-based questionnaire design, data presentation, interpretation and analysis. It specifically, gives insight into the reasons for considering the research design and methods applied for answering research questions.

3.2 Purpose of the study

O'Leary (2004:18) opines that the purpose of the study is mediated by protocol, theory and methods. Tashakkori and Creswell (2007:207) maintain that the purpose of the study shapes the research questions which in turn inform the methods and the design of research. In other words, a clearly defined purpose of the study guides procedures and methods to be employed in a particular research. However, it is germane to carefully craft a vivid and concise description of the aim of the study so as to avoid contaminating or distorting results.

Against this backdrop, this study's main objective is to investigate how UWC and NUST library staff use social media tools in their work routines and general everyday life. Specifically, this study aims at focusing on the following questions:

- How familiar are the library staff with social media and which tools do they use mostly?
- For what purposes do library staff use social media tools?
- What are the advantages and disadvantages of using social media tools?
- What factors shape and constrain library staff's use of social media tools?

3.3 Research design and Methodology

The study used a case study research design, defined as a method of studying elements of the social through comprehensive description and analysis of a situation, for example a detailed study of a group or event (O'Leary, 2004:23). Case studies are particularly useful for offering in depth insights. As such, this study made a closer interrogation of two cases paying particular attention to how librarians at NUST and UWC libraries use social media technologies.

The choice of the two sites was greatly hinged on the fact that the two universities are already exploring the use of new technologies. It is important to state this as Flyvbjerg (2006:223) emphasises that the strategic choice of site should be considered. The two libraries share common grounds in that they are both university libraries which are aiming at providing technological services to support research development in their countries. This then made the two more relevant to this study. The fact that these libraries are situated in different environments with different socio-economic conditions, the research generated interesting results that led to drawing plausible conclusions. Given the one year background experience at the NUST library and as a postgraduate student and user at the UWC library, made the two libraries accessible for the researcher.

The case study allows the use of theory as knowledge base (Yin, 2003:16). As such, results can be well developed especially where the object is to test or compare theories against empirical evidence. Since this study used the Technology Acceptance Model (TAM) as a guiding theory this worked well with the case study approach to bring out the plausible results.

This research adopted a predominantly quantitative driven approach. The quantitative method is a numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect (O'Leary, 2004:115). For instance, what factors influence the use and non-use of social media tools by academic library staff? This kind of question can be successfully answered using quantitative methods and several statistical techniques (Likert scale) can help predict scores on the factors. Most importantly, a quantitative approach involves the use of closed ended questions requiring a choice amongst a number of given answers. This aspect in a way guides the respondents on the kind of answers to be provided.

Conversely, the qualitative approach entails the use of open-ended questions to collect data with primary intent of acquiring opinions and attitudes on a specific topic (Creswell, 2003:11). Open-ended questions allowed the researcher to probe more from the respondents and they were given a platform to construct answers in their own words. In this study the qualitative approach made it possible for the researcher to find out from librarians about the advantages and disadvantages for using social media tools in their work and personal spheres.

Mixing the two methods was useful to capture the best of both quantitative and qualitative approaches. This led to neutralising and cancelling the biases of both approaches thereby strengthening the study's findings. This permitted the researcher to develop a detailed view of the meaning of using social media tools amongst academic librarians at the UWC and NUST libraries. Collecting both closed ended quantitative data and open ended qualitative data ensured a clear understanding of the research problem which led to respondents giving a bit of some explanation of their answers. Mason (2006:18) strongly advocates for a mixed method approach through proposing that social experience and lived realities are multi-dimensional and may be inadequate if we view these phenomena only along a single dimension. To be more explicit, as part of this research advantages and disadvantages were questioned using open ended questions while the rest of the other questions where closed ended. These procedures and methods opened perspective to provide reality on the ground of what was taking place at UWC and NUST libraries, in terms of social media tools usage.

In light of the reasons for mixing methods stated above several strategies and procedures for mixing methods were developed. With significance to this study, the qualitative method has been nested within the quantitative method to aid in generating useful and meaningful data. This means that the questions used are largely closed ended (12 questions) while only a few (2 questions) are open ended questions. This study merged two procedures namely, the transformative and concurrent procedures. According to Creswell (2003:16) the transformative procedure is one where the researcher uses a theoretical lens as over-arching perspective within a design that contains both quantitative and qualitative approaches. The author further mentions that within this lens could be data collection methods that involve a concurrent procedure. In the case of a concurrent procedure the researcher converged quantitative and qualitative data in order to provide a comprehensive analysis of the research problem (Creswell, 2003:16). In this

procedure the investigator collected both forms of data at the same time during the study and then integrated the information in the interpretation of the overall results. This research study adopted both procedures which allowed the researcher to collect both quantitative and qualitative data, using theory concurrently within one questionnaire. This gave the research a base on which to optimally answer the research problem.

3.3.1. Sampling frame and Sampling method

A study population is the whole group that constitutes the realm of applicability for the research results (O'Leary, 2004:153). In this study, the target population was the library staff. A total of fifty nine librarians at UWC and forty librarians at NUST which makes the total number of study population a ninety nine. This study targeted the full population. It focused on both professionals and para-professionals (LIS field work students) in both libraries. Professional librarians represented those individuals with a librarianship qualification whilst para-professionals consisted of student assistants (trainee).

Fox, Murray and Warm (2003:173) argued that for a small population less than 200 the general rule of thumb is that there is no need to apply any sampling method. They further state that in such circumstances the researcher needs to acquire at least 50% of the population response rate. Barlett, Kotrlik and Higgins (2001:44) assert that quantitative methods have the ability to use smaller groups of people to make inferences about larger groups that would be prohibitively expensive to study. On the basis of the two arguments stated above, this research had a target population of ninety-nine librarians in both libraries. Peil (1995:27) suggests that one of the most important tasks in a quantitative approach is to formulate a sample frame which provides the means of identifying the units of the population, and this may be in the form of a list or table. The Table 2 (UWC) and 3 (NUST) below clearly demonstrate the number of librarians divided by their job titles in both libraries.

Table 2: Number of librarians at UWC (Ntshuntshe-Matshaya, 2013:20-21)

UWC LIBRARIANS BY JOB TITLE	NUMBER
Library director	1
Assistant directors	2
Faculty librarians	11
Head of department librarians	3
Head of section librarians	8
Senior library assistants	2
Assistant librarians	9
Library assistants	23
TOTAL NUMBER	**59**

Table 3: Number of librarians at NUST: (National University of Science and Technology, 2012:61)

NUST LIBRARIANS BY JOB TITLE	NUMBER
Head Librarian	1
Deputy librarian	1
Sub-librarians	2
Assistant librarians	8
Chief library assistant	6
Senior library assistants	20
Information technology personnel	2
TOTAL NUMBER	**40**

3.3.2. Web-based questionnaire

The research employed a Web-based questionnaire for data collection amongst the academic librarians. The Web-based questionnaire adopted a quantitative driven approach, comprising mainly closed questions with two open ended questions. A questionnaire has been defined by

O'Leary (2004: 115) as an online instituted set of questions used to collect people's opinions and attitudes on a specific topic.

This instrument was relevant to the demands of this research since it allowed individuals to fill in their own spare time, thereby ensuring the participation of staff members with busy schedules (O'Leary, 2004:116). A Web-based questionnaire has the ability to provide high level of anonymity which increases self-esteem whilst reducing social anxiety amongst respondents (Fox, Murray & Warm, 2003:170). Therefore in this study, the confidential nature of this instrument resulted in respondents providing truthful and reliable information. This tool allows targeting of minority and specialised populations which may otherwise be difficult to access (O'Leary, 2004:118). Consequently, a Web-based questionnaire was applied because it conformed to the demands of this study which involved distributing to academic librarians based in Zimbabwe and South Africa. Additionally, Web-based questionnaires have reduced cost, ease and speed of administration. There were no costs incurred in administering the questionnaires as there was no printing involved as compared to the traditional paper based questionnaire. Since every librarian in both universities has an e-mail address this was considered an appropriate platform for distributing the questionnaires. Most importantly, in both the libraries every librarian has access to Internet with wireless connectivity and institutional computers. Basically, both the academic libraries have adequate Internet presence to allow the administration of Web-based questionnaire. One of the major setbacks of a Web-based questionnaire is that responses may delay or take longer than expected (Marsden & Wright, 2010:539). The researcher managed to overcome this setback by sending regular reminders to the respondents. The researcher also kept track of responses as they came through using a readily available facility on the Google form.

3.3.2.1. Questionnaire design

Using a Google drive form which is free online, a questionnaire was created. This was a very convenient way of developing a questionnaire for this study as it guaranteed the researcher several options for sending the questionnaire. That is, the use of e-mail, Facebook, Google+ and Twitter. Apart from that, it provided a spreadsheet for analysis; this meant that as the questionnaires were submitted they were directly sent to the spreadsheet. It is important to note that all questions were well informed by the Technological Acceptance Model (TAM)

propounded by Fred. D. Davis in 1989. The TAM factors (perceived ease of use and perceived usefulness) were conceptualised and measured to suit the context of the study. These constructs are integrated into the questionnaire through, for example, all questions under Section B (familiarity of librarians with social media; and ease of use). Additionally, all questions under Section C (purposes), D (advantages and disadvantages) and E (factors for use and non-use) measure the usefulness of social media. The layout of questions should be developed to encourage the respondent to complete and maintain interest in the questionnaire (Creswell, 2003:21). A Web-based questionnaire for this study was presented logically. To achieve this, the researcher used different sections to arrange the questions.

Section A was based on questions which provide personal information of responses and it consisted of three questions. It provided information on gender, level of education and job title. *Section B* comprised three questions based on the familiarity of librarians with social media tools. It had questions requiring librarians to identify which social media tools they are aware of, the time length of use, places they usually access these social media tools and frequency of using social media tools. *Section C* constituted two questions requiring librarians to choose the purposes for which they used social media tools. The questions required the librarians to choose different personal and work purposes for which they use social media tools. *Section D* covered two questions constructed using open ended questions. In this section, questions required the librarians to state the advantages and disadvantages of using social media tools in their own words. Lastly, *Section E* consisted of two questions based on the factors affecting the use and non-use of social media tools by librarians. The questions asked librarians to choose factors which influence their use or non-use of social media tools.

3.3.3. Likert Scale

Barlett, Kotrlik and Higgins (2001:45) defined the Likert scale as an ordinal scale, which means the answers can be categorised to a hierarchical order. This is commonly used to measure attitude providing a range of responses to a given question or statement. The Likert scale is one of the most popular scales to use when testing attitude because of its user and respondent friendly qualities, but as any research method it has its limitations. Creswell (2003:18) argues that the Likert Scale misses out on important behavioural components of people's attitude. This research

dealt with this by using factors from the TAM theory and additional factors affecting the use or non-use of social media tools. This research adopted a five scale model because it was enough for the extent of this research. The five scale model adopted for this research is made up of the following factors *Strongly Disagree= 1, Disagree=2, Neutral=3, Agree=4, Strongly Agree=5*,

3.3.4. Pre-testing the questionnaire

To ensure validity of this study the Web-based questionnaire was pretested amongst a few librarians at an academic library. Creswell (2003:20) mentioned that it is important to test all versions of the questionnaire on typical respondents long before data collection begins. This was done to verify whether instructions were clear, questions were easy to understand and how respondents felt about the appearance of the questionnaire. The questionnaire was revised accordingly and as a result the researcher managed to collect accurate and useful data.

3.3.5. Data presentation and analysis

Data analysis involves summarising the data and interpreting their meaning in a way that provides clear answers to questions that initiated the study (Fox, Murray & Warm, 2003:178). Data presentation was done using graphs, percentages and tables. Collected quantitative data was analysed using Statistical Package for Social Sciences (SPSS) software and Excel. The qualitative data was analysed by means of text analysis, specifically the thematic text analysis for open-ended questions.

Mason (2006:18) defines text analysis as a method of data analysis that closely examines either the context and meaning of texts or their structure and discourse. Textual analysis is a term used to identify the correct interpretation of a text, but is also used to identify what interpretations are possible and likely (O'Leary, 2004:196). Texts are polysemic and they have multiple and varied meanings. However, meaning is derived from codes, conventions, themes of the text and its ideological context which work together to convey a preferred reading of the text. In this study, a close and detailed scrutiny of text has provided rich discussion as it allowed the researcher to group texts according different themes. One example of the themes used in this study is academic purposes. The themes were generated through exploration of word repetition and their context and usage with reference to the study.

Central to the quantitative method is the fact that it attempts to verify theory which moderates and interprets results (Tashakkori & Creswell, 2007:208). In compliance with this view, the researcher interpreted data using the Technology Acceptance Model (TAM), related literature and researcher's personal experience.

3.4. Scanning the library Websites

To crosscheck the data obtained from the questionnaire, follow-up checks were conducted on the websites of the two libraries. The researcher chose the two library websites as the central reference points because this is a natural place which offers an integrated approach, with a single entry point to all of the social media services that libraries use (Scottish Library and Information Council (SLIC) & the Chartered Institute of Library and Information Professionals in Scotland (CILIPS). Specifically, the researcher visited each website by examining its homepage (see Appendices 8 and 9) to locate any indications of social media applications. This was conducted as a way of verifying some opinions provided by respondents in the questionnaire. O'Leary (2004:61) opines that verifying a finding provides some guarantee that the finding is not a product of chance but that the phenomenon is consistent. This revealed some relevant pointers which assisted in finding consistencies and inconsistences which contributed to data interpretation and discussion. This process allowed the researcher to confirm the accuracy of findings and conclusions drawn from the collected data and in the process ensured validity.

3.5. Conclusion

This chapter has described the methods used to collect and analyse the data. It explains the reasons for the choice of method and research design used. It further presented the case study research design and how it fitted well with the methods applied to collect data. A Web-based questionnaire mixed methods approach was used and it collected rich information. A detailed explanation on questionnaire design, analysis, presentation and interpretation of collected data, and data verification through website scanning was discussed in this chapter. The following chapter will capture in detail the summary and analysis of gathered data.

CHAPTER 4

DATA PRESENTATION AND INTERPRETATION

4.1. Introduction

This chapter presents and interprets data generated from UWC and NUST library staff using a Web-based questionnaire. The key objective of this study was to investigate the use of social media tools by library staff at UWC and NUST in personal and work spaces. Against the background of the foregoing objective, this chapter will present responses to the following broad categories of questions; familiarity of academic library staff with social media tools, purposes of social media tools in academic libraries, advantages and disadvantages of using social media tools and factors affecting the use and non-use of social media tools in academic libraries. For data analysis and presentation the researcher used SPSS and Excel. Data interpretation was supported by the Technology Acceptance Model, related literature and personal experience of the researcher. As a way of verifying some of the facts pointed out by librarians the researcher scanned both libraries' websites. The researcher sent a Web-based questionnaire to 40 NUST librarians and 29 responded representing a response rate of 72.5%. Fifty-nine (59) Web-based questionnaires were sent to the UWC librarians and 43 (72.8%) responses were received.

4.2. Personal information for library staff

This section gathered data about gender, educational qualification and job title or position of respondents. Specifically, it interprets the demographic trends that emerged both at the UWC and NUST libraries.

4.2.1. Gender

There were 15 (51.7%) males and 14 (48.3%) females who participated in the study from the NUST library. Conversely, at the UWC library there were nine (21%) male librarians and 34 (79%) female librarians who answered the questionnaire. It is clear that librarianship is attractive for males in Zimbabwe. Contrary to this, in South Africa librarianship is female dominated. This

finding is supported by Hoskins's (2013:258) study which mentions that women have consistently made up a large majority of librarians in South Africa.

4.2.2. Levels of qualification

Of the 29 respondents at NUST, 11 (37.9%) were degree holders, eight (27.6%) were diploma holders and only five (17.2%) were holders of master's degrees. Five (17.2%) librarians mentioned other qualifications which included LIS certificates and Ordinary Level certificates. There were no PhD holders amongst the respondents. At UWC, it was revealed that 23 (53.5%) librarians were bachelor's degree holders, 11 (25.6%) were diploma holders, eight (18.6 %) were masters' degree holders and only one (2.3%) had a PhD. See Figure 2.

Once employed at the NUST library, employees are only allowed to upgrade their qualifications after serving for three years hence, the low number of librarians with bachelors' degrees and masters' degrees. The library was thus dominated by holders of diplomas and certificates. However, the situation seems different in South Africa, as the system appears to be more flexible in terms of allowing librarians to upgrade their educational qualifications as evidenced by the higher number of librarians who had bachelors and masters degrees.
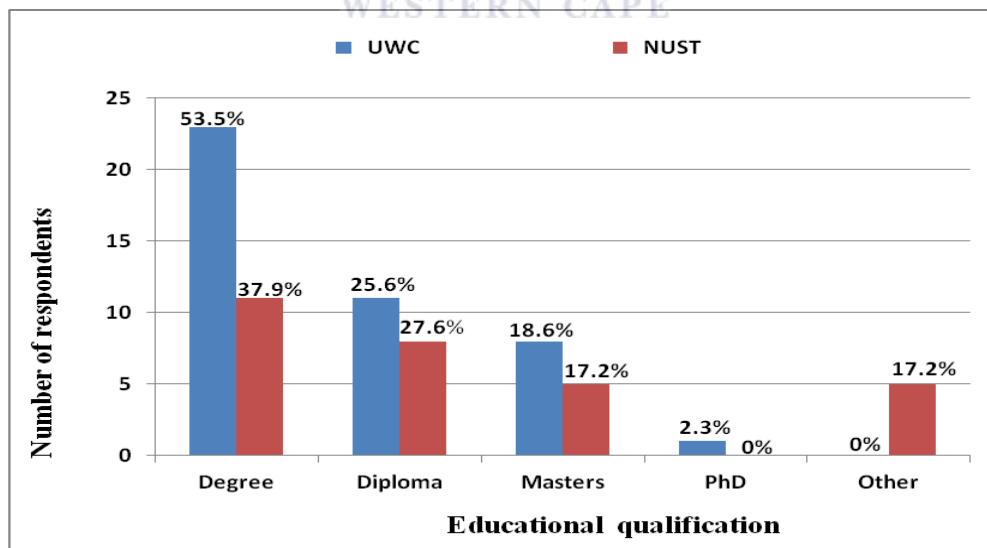

Figure 2: Levels of qualifications NUST (N=29) and UWC (N=43)

4.2.3. Job Titles

Respondents were asked to state their job titles and Figure 3 below reveals that at the NUST library, nine (31%) are Assistant Librarians, five (17.2%) are Senior Library Assistants and four (13.8%) are Library Assistants. Figure 3 shows further that other job titles have a score of three (10.3%) or less.
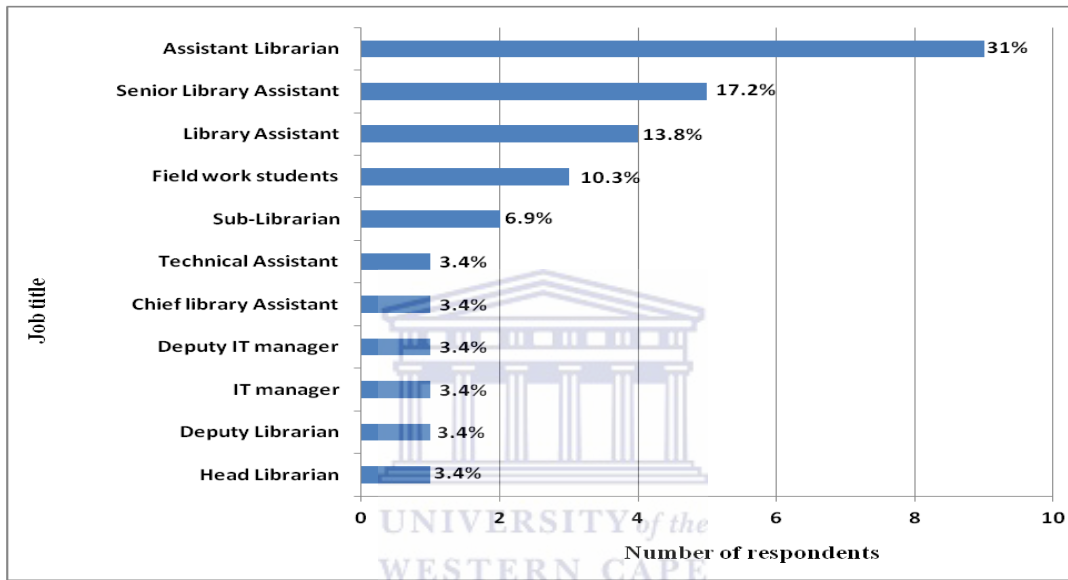

Figure 3: Job title NUST (N=29)

Conversely, Figure 4 below shows that at the UWC library, there are 11 (25.6%) Faculty Librarians and Library assistants respectively, seven (16.3%) Assistant Librarians, four (9.3%) Senior Library Assistants and two (4.7%) Assistant Directors. Figure 4 also displays that there is only one (2.3%) for each of the following job titles: Director, Deputy Director, Reference Librarian, Head of Periodicals, Knowledge Commons Manager, Head of Circulation, Head of Cataloguing and Research Repository Manager.
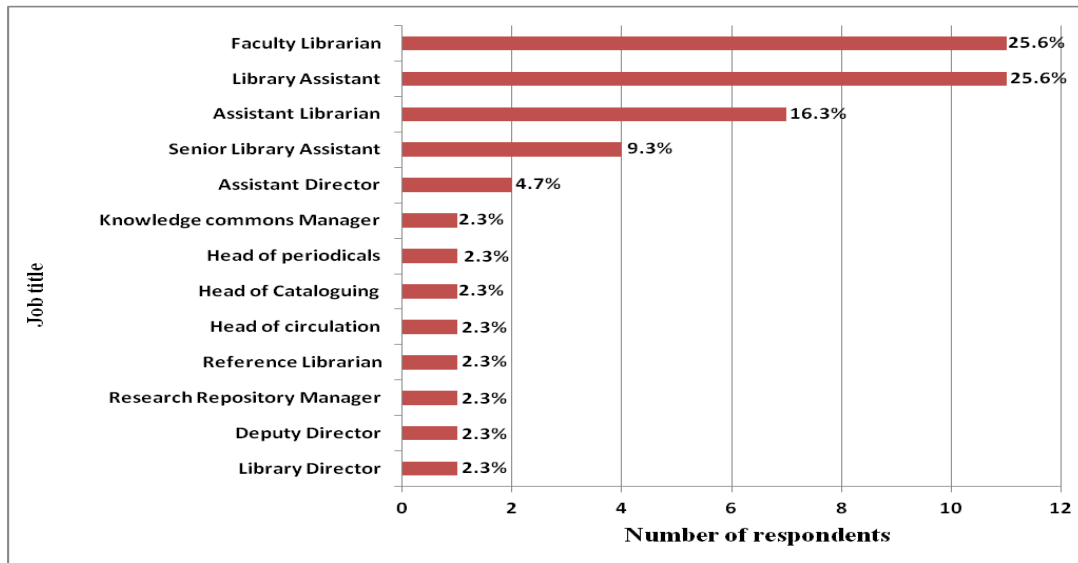
Figure 4: Job title UWC (N=43)

It is evident that at the UWC Library, most job titles are predominantly held by specialist librarians as compared to the NUST Library which has general positions. This difference may exist because "Currently, Library and Information Science training in Zimbabwe is premised on a generalist paradigm with limited or no opportunities for specialisation" (Chisita & Mataranyika, 2013:6) whereas in South Africa, Ocholla and Shongwe (2013:41) report that there has been significant growth in the number of job titles representing strong specialist elements in the Library and Information Science profession.

4.3. Familiarity with social media tools

This section sought responses from librarians in relation to their awareness and familiarity with social media tools. Four questions gathered data about social media tools librarians were aware of, the time period they have been using social media, places where they access these tools and the frequency of using social media.

4.3.1. Familiar social media tools

A list of various social media tools was provided to NUST and UWC librarians to choose the ones they were aware of. The choice of the social media tools was based on their prevalence in the literature (Baro, Ebiagbe & Godfrey, 2013; Chu & Du, 2013). As shown in Figure 5 (see also Appendix 1 for the exact values) below, all 29 (100%) NUST librarians were aware of Facebook, WhatsApp, Google chat and LinkedIn. Figure 5 shows further that 19 (65.5%) librarians or more were aware of Wikis, Twitter, YouTube, Skype, and Blogs. Conversely, a few librarians ranging from six (20.7%) to 11 (37.9%) were aware of Delicious, Flickr, Picasa, Podcasts and Tags whilst only three (10.3%) librarians were aware of MXit and Viber. Only one librarian at NUST mentioned "other" and listed tools such as Yokoos, Talkback, Evernote, WeChat and MySpace.
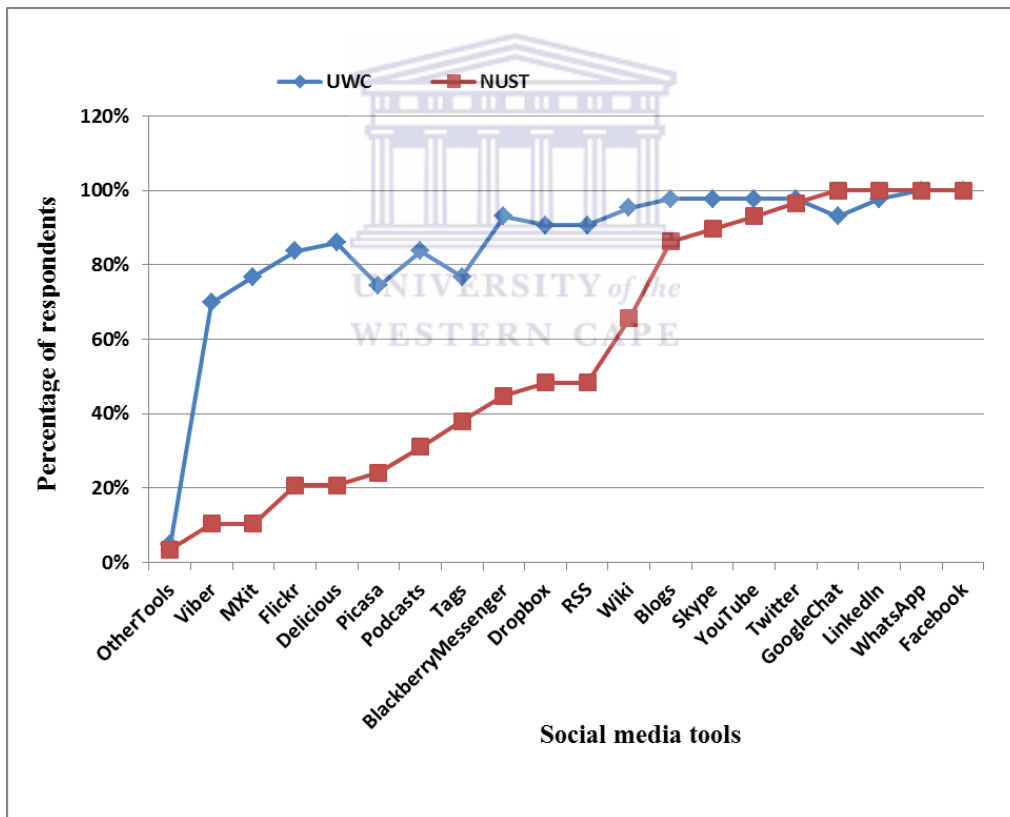

Figure 5: Familiarity with social media NUST (N=29) and UWC (N=43)

Interestingly, Yokoos is a common chat social media tool amongst Zimbabweans since its access is easily facilitated by a leading mobile network in the country. Talkback is an instant messaging facility used by the NUST library to facilitate their online reference services and it was introduced in 2011 (Kujenga, 2011). It is thus surprising that other librarians did not mention this social media tool. As already mentioned in Chapter 3, this study used a questionnaire for data collection which did not give allowance for the researcher to make a closer interrogation as to why other librarians never mentioned it. Evernote is used for archiving documents, whilst WeChat was introduced mid-2013 and is increasingly becoming popular since it has the same options as WhatsApp (Vermeulen, 2013). MySpace has a strong music emphasis and is well liked in America.

At UWC, all 43 (100%) librarians were aware of Facebook and WhatsApp as observed in Figure 5 (see also Appendix one for the exact values). Other tools such as, Viber, Picasa, MXit, Tags, Podcasts, Flickr, Delicious, RSS, Dropbox, Blackberry Messenger, Google chat, Wiki, LinkedIn, Twitter, YouTube, Skype and Blogs were also widely known by between 30 (69.8%) and 42 (97.7%) respondents. Aside from the list provided, other tools mentioned by UWC librarians were Webinar, Evernote, Google Docs, Stumbleupon, Foursquare, Instagram and 2GO. Webinars are used at the UWC library to offer orientation programmes to first year students. Google Docs is one of the Google applications which is meant for storing electronic documents and it allows group sharing of documents and it allows individuals to co-edit well. Stumbleupon is a discovery web search engine that finds and recommends web content to its users (Vermeulen, 2013). Foursquare is an application meant to locate places for recreation near your location; it also provides information on whether it is expensive, reasonable and affordable. Instagram is an online photo and video sharing application that allows users to share on other social networking sites such as Facebook. 2GO is a new chat application which is struggling to gain popularity.

The findings suggest that unlike NUST librarians, librarians at the UWC were aware of most social media tools. The possible reason could be that at UWC, the library has adopted mobile technologies such as iPads and e-readers as reported by UWC website (UWC, 2014). On the other hand, NUST librarians may not have known most social media tools because there are too many, they are ever-changing and emerging social media technologies. This point is supported

by Collins and Quan-Haase (2012:2) and Cohen (2011) who state that social media is constantly evolving and its uses are changing and expanding. Whilst Viber is popular in South Africa, it is a very new social media tool in Zimbabwe. It is worth noting that the only technologies that the NUST librarian slightly outnumbered their UWC counterparts in, in terms of awareness, included Google chat and LinkedIn.

4.3.2. Duration of using social media tools

A question required respondents to select from a list how long they had been using each of the social media tools. Figure 6 displays the NUST librarians' responses and 7 the UWC librarians' responses. At the NUST Library, the social media tools that librarians used "for many years" or "for a year" with percentages ranging from 65.5 to 100 included Facebook, Google chat, LinkedIn, YouTube, Twitter, Blogs, Skype, WhatsApp and Wiki. However, there were several tools such as RSS, Podcasts, Blackberry Messenger, Tags, Dropbox, Picasa, Flickr, Delicious, Viber and MXit that had been used for only a month, a week or never. At NUST only two (6.9%) librarians used Delicious and 13 (44.2%) had used RSS for "many years" or for a "year". A closer analysis of the results revealed that the individuals who used these social media tools were the IT Manager, the Deputy IT Manager and Assistant Librarians. This is so probably because the IT personnel are responsible for managing all social media tools that the library has adopted, whilst the Assistant Librarians are responsible for offering reference services. See Appendix 2(a) for exact figures for the NUST Library.
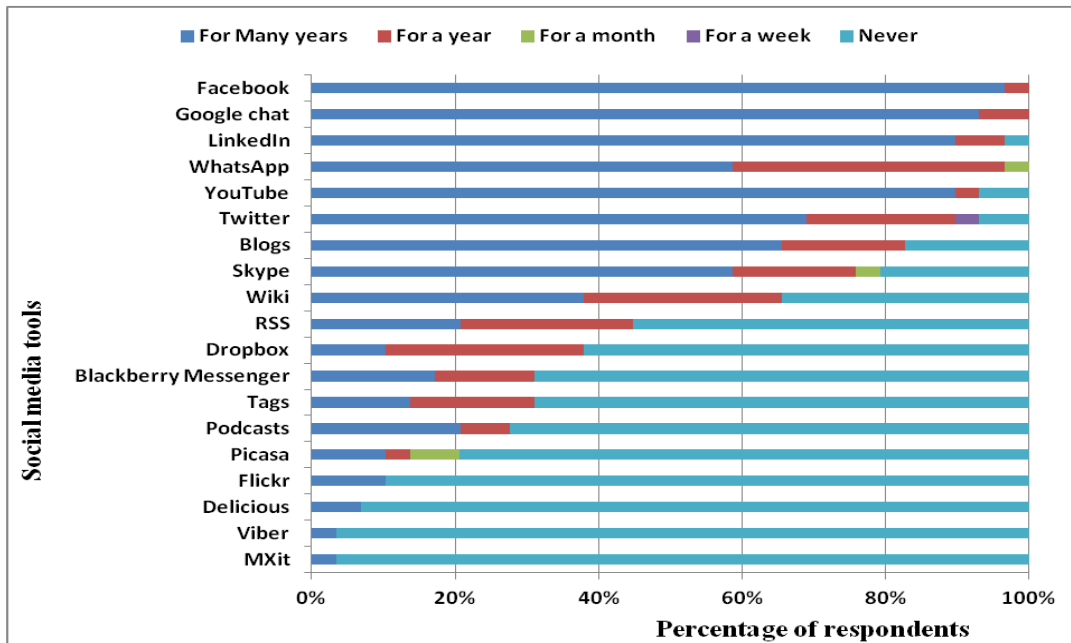
Figure 6: Duration of using social media at NUST (N=29)

At the UWC Library, Figure 7 displays that most responses were dominated by the categories of "for many years" or "for a year" followed by "never" thereby differing from the NUST Library where responses were dominated by "never" followed by "for many years" or "for a year. This finding implies that most UWC librarians have been using social media for a longer period of time than their NUST counterparts who largely have never used some of the tools. This disparity may exist because some applications are new and it takes time for technology to be accepted within a given environment. The TAM theory explains that individuals only accept new technology once they find it easy to use and useful in their personal and work spheres. Particularly, between 27(62.8%) and 42(97.7%) librarians used YouTube, Facebook, Google chat, Blogs, WhatsApp, LinkedIn, Twitter, Blackberry Messenger, Skype and Wiki. Figure 7 shows further that only 17(39.5%) librarians or fewer used RSS, Podcasts, Dropbox, Viber, Picasa, MXit, Tags, Flickr and Delicious. See Appendix 2(b) for precise figures for the UWC Library.
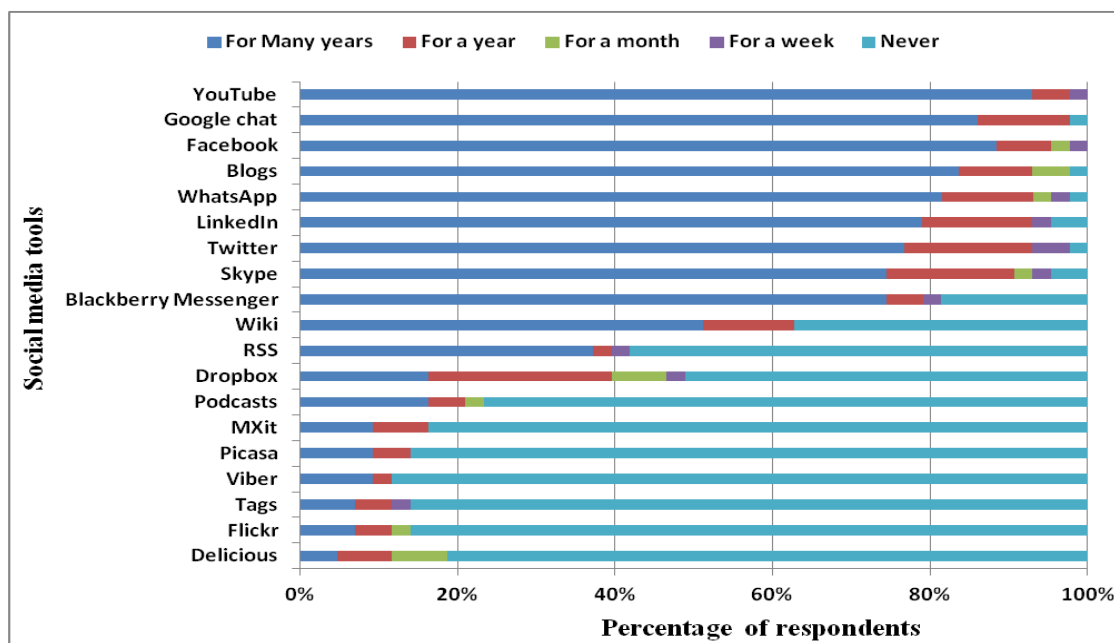
Figure 7: Duration of using social media at UWC (N=43)

Generally, results suggest that more librarians at UWC than at NUST have used most social media tools for a year or more. The technologies which were used by librarians from both libraries for many years or for a year at least included YouTube, Facebook, Google chat, Blogs, WhatsApp, LinkedIn, Twitter, Skype and Wiki. However, only Blackberry Messenger was used by UWC librarians for a year or more thereby confirming the views expressed by World Wide Worx (2014) that Blackberry used to dominate all social media applications in South Africa because of its availability to other Android mobile phones but now WhatsApp has taken the lead. Accordingly, Vermeulen (2013) indicated that 94% of South Africans are using Blackberry Messenger due to the affordable data bundles made available by mobile network providers offering unlimited use of this application. On the other hand, the Zimbabwe National Chamber of Commerce (2014) reports that WhatsApp was introduced in Zimbabwe in 2012 and has remained one of the most popular social media tools in that country. Additionally, mobile network providers introduced affordable monthly subscription for data bundles specifically meant for WhatsApp. Thus, it is not surprising that the findings of the present study show that 28 (96.5%) librarians at the NUST Library have used this social media tool for a year or for many years.

4.3.3. Places for accessing social media tools

The aim of the item was to solicit data about the places where respondents accessed social media tools. At the NUST Library 26 (89.7%) librarians accessed these tools at home, 25 (86.2%) at work/in office and 15 (51.7%) at the library. Only 10 (34.5%) respondents indicated that they accessed social media tools at the Internet cafe and two (6.7%) librarians accessed these technologies at the NUST campus which has faster and more reliable Internet speed than the library which is located off campus. When respondents at the UWC Library were asked to indicate the places where they accessed social media tools, all 43 (100%) accessed them at home, 42 (97.7%) at work/in office and 41 (95.3%) at the library. Three (7%) respondents accessed the tools at an Internet cafe. One librarian mentioned "other" and specified anywhere via the phone. Figure 8 summarises the findings.
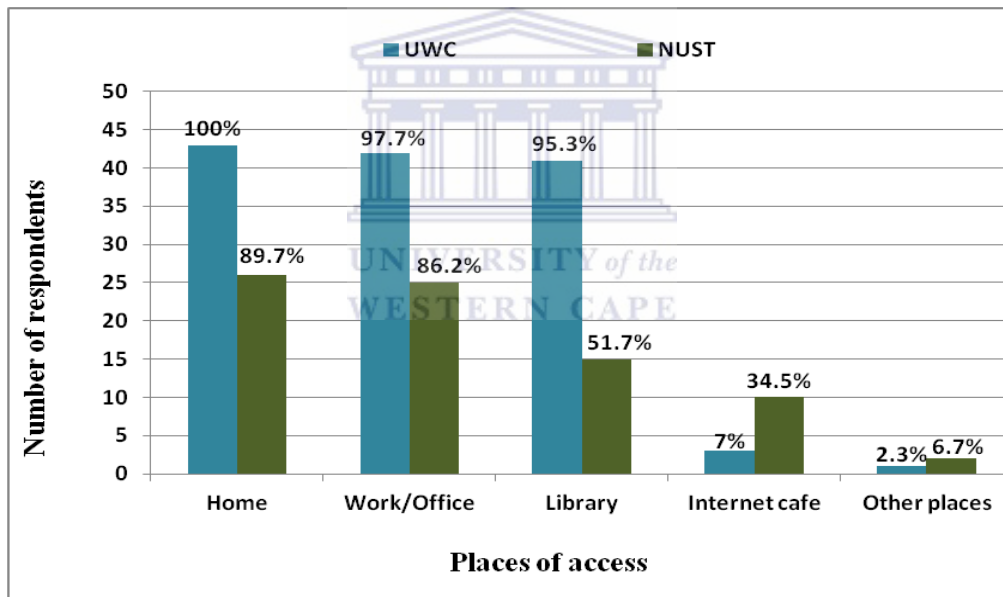

Figure 8: Places for access NUST (N=29) and UWC (N=43)

Considerably fewer librarians at NUST accessed these tools at the library compared with the UWC librarians for three possible reasons. According to the researcher's experience, unlike at the NUST campus where there is a robust campus wide Wi-Fi, the NUST Library which is located off the university campus the Internet is not reliable meaning that there is sporadic Internet access. Secondly, people in Zimbabwe including librarians rely much on Internet cafés because they are service oriented as such they offer quality services in terms of Internet speed

and they are open 24 hours. Thirdly, the UWC Library opens for longer hours, that is, 15 hours per day (UWC, 2014) whereas the NUST Library opens 12 hours per day (NUST, 2014).

4.3.4. Frequency of use of social media tools

This section solicited data on how often librarians used social media tools. Data displayed in Figure 9 show that most NUST librarians mentioned that they accessed the tools "many times a day" or "once a day" followed by "never". All 29 (100%) NUST librarians used Google chat, Facebook and WhatsApp. Twenty five (86.2%) librarians used LinkedIn, 24 (82.8%) librarians used YouTube and 21(72.4%) used Twitter. Figure 9 also shows that at NUST librarians' tools such as Blackberry Messenger, Blogs, Dropbox, RSS, Skype, Wiki, Podcasts, Tags, Picasa, Flickr, Delicious, MXit, and Viber were used once a week, once a month or never. Appendix 3(a) provides exact figures for the NUST library.
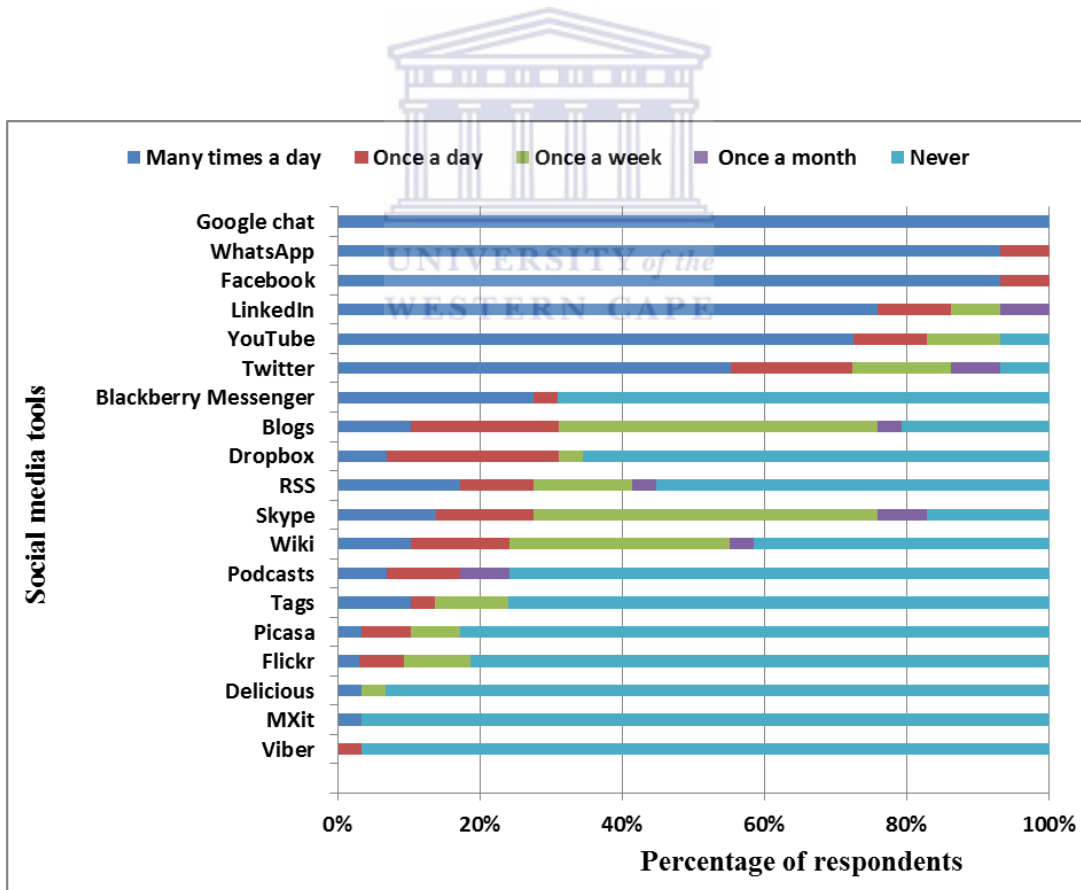

Figure 9: Frequency of using social media tools at NUST (N=29)

As can be seen in Figure 10, 31(72.1%) UWC librarians or more used WhatsApp, Google chat, Facebook, YouTube, Twitter, LinkedIn, Blackberry Messenger and Blogs "many times a day" or "once a day". Tools such as Skype, Dropbox, Wiki, RSS, Viber, Podcasts, Flickr, Delicious, Tags, Picasa and MXit were only used once a week, once a month or never. Appendix 3(b) provides exact figures for UWC libraries.
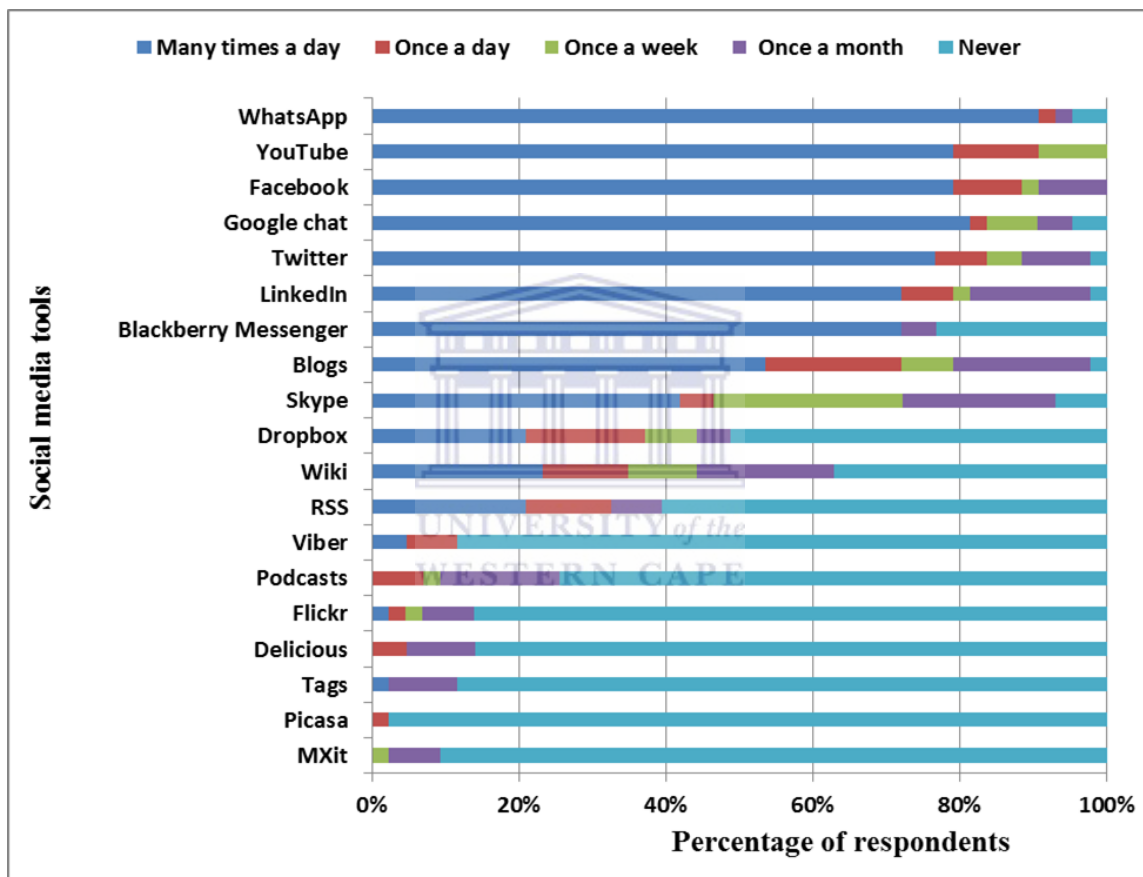

Figure 10: Frequency of using social media tools at UWC (N=43)

Results show that the social media tools that were frequently used by both, NUST and UWC librarians include Google chat, Facebook, WhatsApp, LinkedIn, YouTube and Twitter. An in-depth analysis of the results showed that the only two (4.7%) respondents who said they were using Delicious were the IT personnel, which the researcher confirmed is one of the social media tools on the library website (NUST Library, 2014). Many librarians may not have been able to use these tools probably because as reported in section 4.3.1, most of them were not aware of it

and that the IT staff may not have oriented them on the use these tools. At UWC, librarians did not use some of tools that they were aware of. For example, although it was revealed in section 4.3.1 that 30 (69.8%) librarians or more knew about the existence of Skype, Dropbox, Wiki, RSS, Viber, Podcasts, Flickr, Delicious, Tags, Picasa and MXit, only 20 (46.6%) librarians or fewer used these tools. Thus, the results suggest that being aware of the technologies does not imply one is able or willing to use them. The findings support an observation by Thanuskodi (2012) who said that, despite the fact that librarians may be aware of certain technologies, they may not necessarily use them.

4.4. Purposes for using social media tools

Data gathered in this section was about the personal and work activities that the staff performed using social media tools. Closed- and open-ended questions gathered this information. These questions were asked in order to find out if there were any disparities and similarities in the purposes for using social media at NUST and UWC libraries.

4.4.1. Purposes for using social media tools in personal activities

Respondents were provided with a list of activities from which they were required to select the ones they performed using social media tools. The list of activities was adopted from Baro, Ebiagbe and Godfrey (2013). Figure 11 illustrates results from the NUST Library whilst Figure 12 displays findings from UWC Library. All 29 (100%) librarians at NUST either "strongly agreed" or "agreed" that they use tools for entertainment and to communicate with friends and family. Twenty-six (89.7%) librarians either "strongly agreed" or "agreed" that they used the tools for keeping abreast of current news, 25 (86.2%) librarians for acquiring information, 23 (79.3%) librarians for academic purposes and 19 (65.5%) librarians used the tools for archiving personal information. Refer to Appendix 4(a) for exact figures for the NUST.

Data presented in Figure 12 reveal that 40 (93%) UWC librarians either "strongly agreed" or "agreed" that they use tools to keep abreast of current news and acquiring information. A total of 38 (88.4%) respondents used tools for academic purposes and communicating with friends and family. Thirty-seven (86%) respondents used the tools for entertainment and 35 (81.4%)

librarians used tools for archiving personal information. Refer to Appendix 4(b) for exact figures for UWC Library.
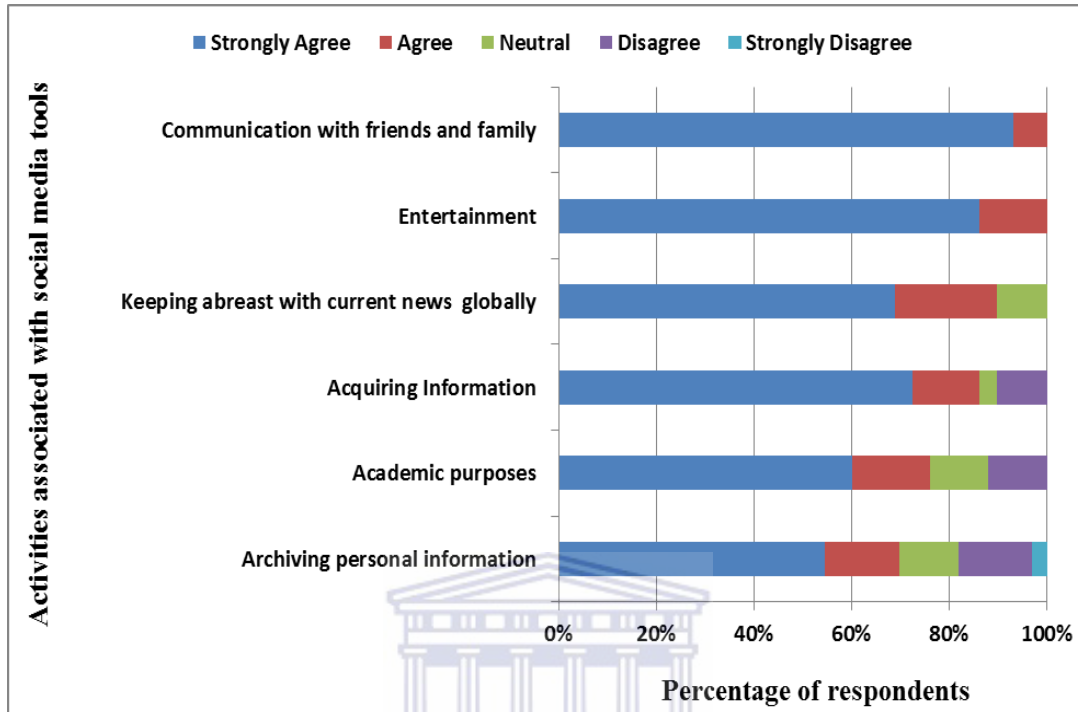

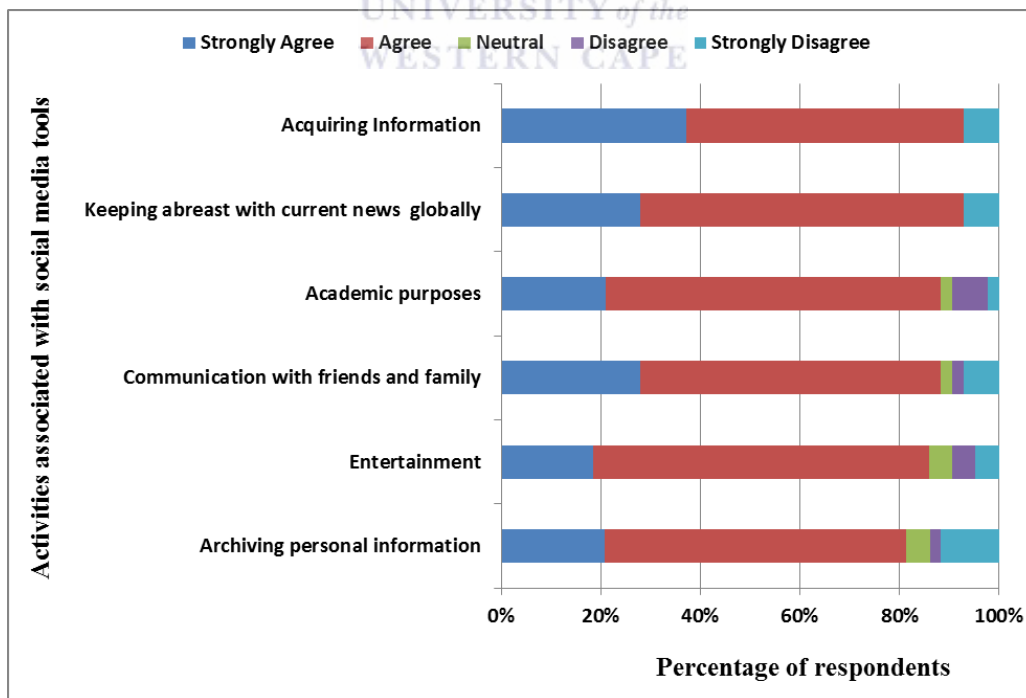**Figure 11: Use of social media tools in personal spaces at NUST (N=29)**

Figure 12: Use of social media tools in personal spaces at UWC (N=43)

Results show that librarians in both libraries used these tools for the purposes which were listed. It is surprising that most 19 (65.5%) NUST and 35 (81.4%) UWC librarians mentioned that they use social media tools to archive their personal materials yet it was revealed in section 4.3.2 that only 11 (37.9%) and 17 (39.6%) NUST and UWC librarians' respectively had used Dropbox for many years or for a year. Section 4.3.4 also revealed that only 9 (31%) NUST librarians and 16 (37.2%) UWC librarians used Dropbox "many times a day" or "once a day". The inconsistency may be as a result of the fact that there are so many tools to use; hence librarians might have been using other tools such as Google Drive and Evernote. Librarians might have preferred to use Google Drive and Evernote because these tools are easy to use and useful in storing their documents, as explained by the TAM theory. However, it is clear that the higher number of librarians at NUST used these tools for leisure and communication whilst at UWC, librarians mainly used these tools for keeping up with the latest news and acquiring information. The results are not surprising because Olasina (2011) notes that social media tools such as YouTube are powerful tools for entertainment amongst individuals and likewise, Si, Shi and Chen (2011) comment that tools such Wikis and RSS Feeds are mostly used for searching for information and following current events respectively.
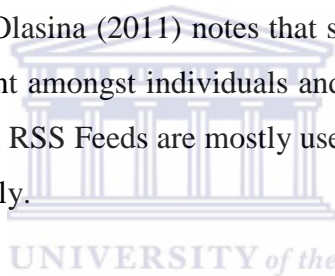
Respondents were asked to mention personal activities not listed but which they performed using social media tools. At NUST, the librarians' responses included: "following influential people on Twitter" and "creating group chats with colleagues and family". Some of the purposes were more specific and they included: "acquiring health information", "checking the weather forecast" and "finding out about resort areas". The fact that most librarians mention "creating group chats with colleagues and family" validate findings in section 4.3.1 where it was noted that all 29 (100%) NUST librarians were aware of Facebook, WhatsApp and Google chat. It was also revealed in section 4.4.2 that all 29 (100%) NUST librarians accessed these same tools "many times a day" or "once a day". In fact, these technologies allow users to create groups in which they can share information and interact.

At UWC, the librarians' responses included: "e-learning through UNISA", which is a specific example of academic purposes. The rest of the librarians provided responses which were specific examples of acquiring information and entertainment purposes and these included: "checking the weather forecast", "Facebook birthday reminders", "sharing recipes on Facebook groups",

"checking latest online magazines" and "watching documentaries, music and movies on YouTube". The comments made by one of the UWC librarians who uses the tools for e-learning at UNISA are confirmed by Hough and Neuland (2012:35) who indicate that 80% of UNISA programmes which are certified by many African governments and institutions are delivered using social media technologies.

4.4.2. Purposes for using social media tools in work spaces

Librarians were asked to express their views about the activities that they accomplished using social media tools at their work places. Figure 13 demonstrates findings from the NUST Library and Figure 14 illustrates findings from the UWC Library. A total of 28 (96.6%) librarians at NUST either "strongly agreed" or "agreed" that they used these tools for reference services, interacting with the users, sharing work related ideas with colleagues and offering information literacy programmes. Figure 13 reveals further that a total of 27 (93.1%) librarians used these tools to collaborate with colleagues in other libraries, keep track with professional current trends and offer collaborative delivery of services with colleagues. Additionally, 26 (89.7%) librarians communicated with faculty staff using these tools and only 17 (58.6%) librarians used tools for announcing library news/events. See also Appendix 5(a) for a tabulated presentation of figures for NUST Library.

A closer analysis of the results revealed that the majority of the librarians who indicated that they used these tools to communicate with faculty staff were all librarians working in the acquisition department and were all Assistant Librarians (Subject Librarians). The results do not surprise the researcher because from her personal experience as a former employee at the NUST Library, librarians in the acquisitions department and Subject Librarians are usually in touch with the faculty staff gathering information about their information resources that they need. Similarly, Si, Shi and Chen (2011) comment that it is the duty of the Acquisitions Librarians to conduct the needs assessment exercise with faculty staff. The findings reveal that 28 (96.6%) either agreed or strongly agreed that they use social media tools to interact with users whilst only 11 (37.9%) either agreed or strongly agreed that they alert users about availability of booked materials. This contradiction might be as a result of librarians using these tools largely for reference service delivery.
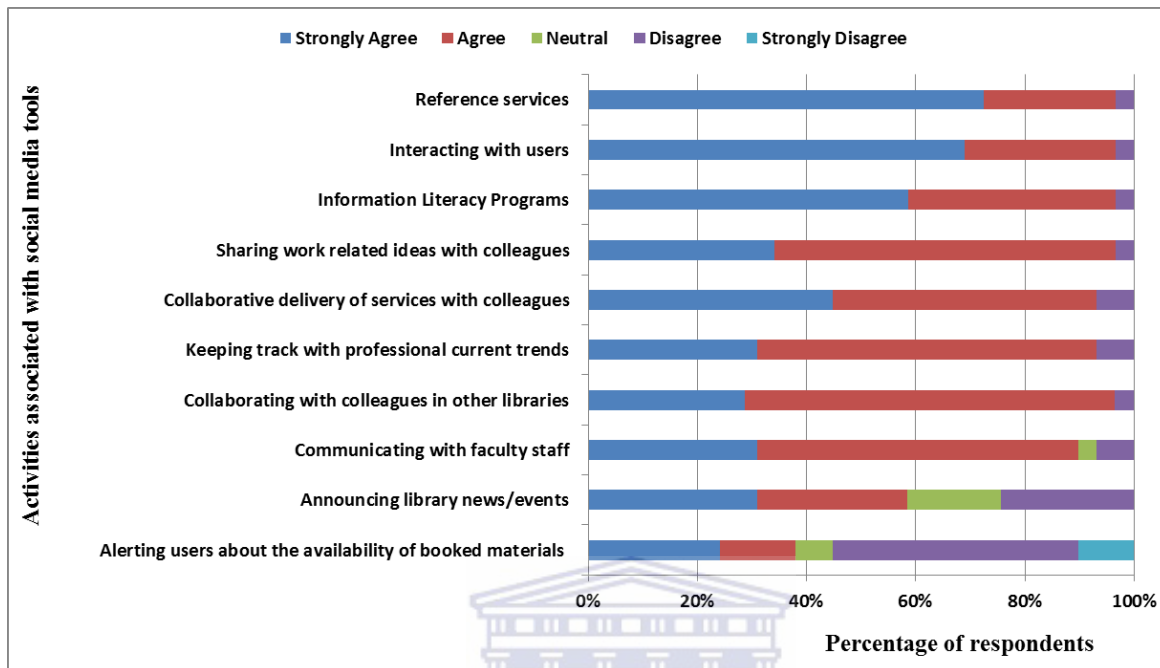
Figure 13: Use of social media tools in work spaces NUST (N=29)

With reference to the UWC Library, Figure 14 shows that 40 (93%) librarians used social media tools to keep in touch with other professionals, 39 (90.7%) librarians used these tools to alert users on reservations, to share work related ideas with colleagues and to offer reference services. Thirty eight (88.4%) librarians said they used these tools to announce library news, 37 (86%) librarians used them for collaborative service delivery, offer information literacy programmes and to interact with users and finally, 36 (83.7%) librarians either strongly "agreed" or "strongly agreed" to have used these tools to collaborate with colleagues from other libraries and to communicate with faculty. See also Appendix 5(b) for a tabulated presentation of figures for UWC Library. Even though a greater number of librarians mentioned that they used these tools for communicating with faculty, by scanning the library website the researcher noticed that there were only telephone and e-mail contact details for librarians suggesting that the communication is basically through telephoning and e-mailing. However, it may also be argued that despite it not being explicitly stated on the library website, the librarians may be sending private messages using Twitter, BBM, Facebook and other tools.
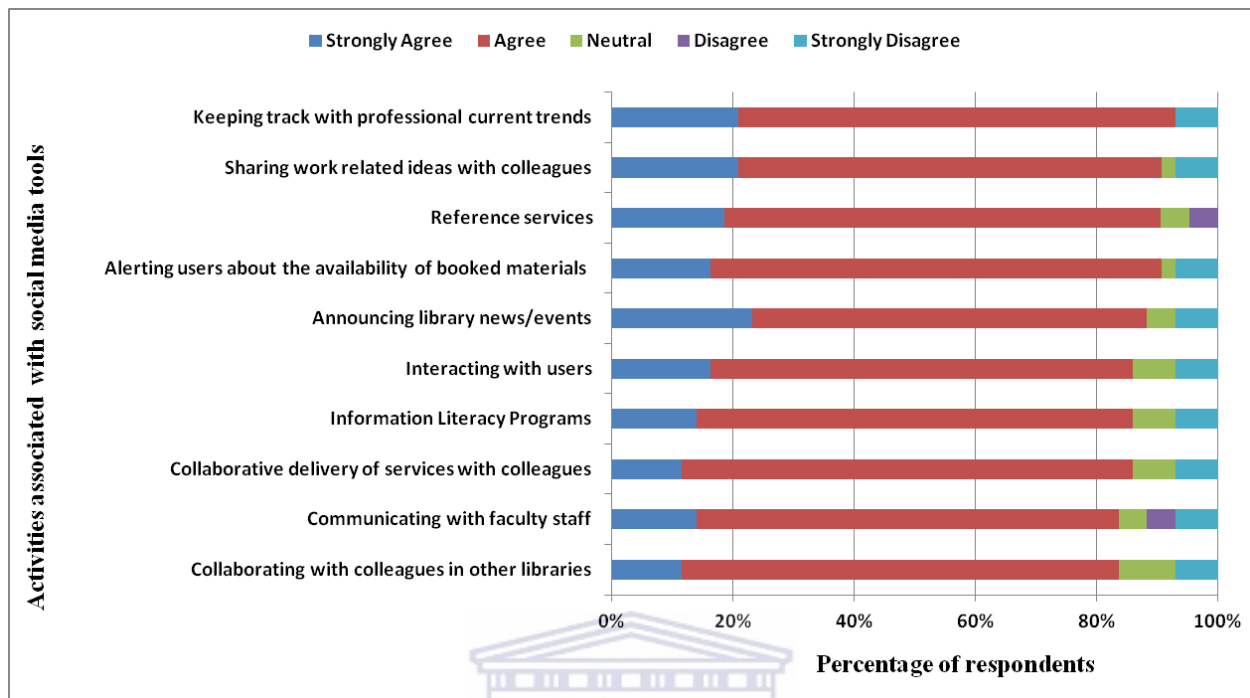
Figure 14: Use of social media tools in work spaces at UWC at UWC (N=43)

These results at both libraries confirm observations made by Charnigo and Barnett-Ellis (2007) who argue that social media tools enhance awareness of students' cultural and social interests, and how they interact online and they may help older generations of academic librarians to better connect with students. However, there is a noticeable difference in terms of announcing library news/events at UWC and NUST library. Whilst the UWC Library mostly used these tools for marketing its services, the NUST Library mainly used these tools for reference services. The situation at UWC Library confirms the findings from a study conducted by Baro, Ebiagbe and Godfrey (2013) which found that 86.1% of the librarians in South Africa use the social media tools for announcing library news or events to users. However, the situation seems totally different in Nigeria where Baro, Ebiagbe and Godfrey (2013) report that only 28.1% of the librarians in Nigerian university libraries use the social media tools for library news or events.

An open-ended question was asked and it required librarians to mention other purposes for using social media tools in work spaces. Each library had its own unique purposes. Answers provided at the NUST library were "video tutorials for students' instruction", "Skyping with software

developer for instruction", "Wikis for keeping and sharing work records", "Google group mailing list for staff communication" and "RSS feeds for staff regular updates".

When asked to mention other activities performed using social media tools at work, respondents at UWC provided responses such as "knowledge sharing", "marketing library's e-resources", "patron orientation through Webinar and YouTube videos", "conveying library rules", "following other librarians through Twitter", "launching new services" and "library evaluation (surveys, monitoring usage patterns)".

The statements made by some UWC librarians that they use social media tools for knowledge sharing confirm assertions by Hosseini and Hashempour (2012) that there is a rise in fostering the use of social media in sharing of tacit knowledge amongst academic librarians because tools are easy to use and they facilitate speedy communication with users and colleagues. A closer assessment of one of the findings shows that the management is using social media tools for library evaluation.

4.5. Advantages and disadvantages of social media tools

This section collected data on the benefits and drawbacks of social media tools in personal and work spaces. Open-ended questions were used in this section to gather diverse opinions from librarians on the use of social media tools. These questions were asked in order to obtain a clear perspective of librarians' level of appreciation for social media tools personally and professionally.

4.5.1. Advantages and disadvantages of social media tools in personal spaces

The researcher asked respondents to express their views about the advantages and disadvantages of using social media tools in their personal life. Responses are presented below.

In terms of the advantages about the use of social media tools in personal life, librarians from both libraries gave similar views which included: "tools offer quick response" , "tools allow dynamic communication" , "offer diverse ways of sharing information e.g. pictures, videos and audio" , "tools allow group chats", " provide wider networking", "tools are highly flexible", "information is available at your fingertips", "time saving regardless of physical barriers" and

"regular updates on social circles". Additional advantages included "cheap communication with friends and family", "conducting work surveys for free", "tools offer greater visibility", "improve technological skills", "they have taught me to be more critical and argumentative" "encourage multi-tasking" and "archiving of personal materials on Evernote and Dropbox".

Tools were said to be highly flexible. This point to the TAM theory which maintains that perceived ease of use can encourage use of social media tools. This then implies that librarians found social media tools easy to use. The views expressed by librarians that these tools offer "cheap communication with friends and family" echo suggestions made by Van Rooyen (2012) who noted that social media tools reduce communication cost. Distinctive opinions were provided to express how social media has played an educative role in sharpening librarians' personal skills, for example, improve their technological skills, "they have taught me to be more critical and argumentative". These views call to mind Mahmood's (2011:38) notion that social media allow librarians to think outside the box and broaden their perspective.

With regards to disadvantages of using social media tools for personal reasons, both NUST and UWC librarians raised almost similar concerns which included: tools are addictive and time consuming", "becomes time-consuming if not managed", "multi-tasking becomes a daunting process", "too much information can be annoying" and that "they are a fad as many come and get extinct". Librarians also faulted these technologies because there is "absence of privacy and security", tools encourage use of abusive materials" and "tools may lead to infidelity" and that there is a generation gap in terms of social media usage through mentioning that "younger people dominate these platforms", "information can easily be distorted on social media tools", "non-physical interaction may lead to misunderstanding of information" and finally, "you have to be connected to the Internet all the time to access these tools".

A thorough analysis of results can reveal that some of the advantages provided above have been provided as disadvantages by the same respondents. For example, librarians have indicated that these tools are addictive and time consuming. One of the librarians provides a hint of what this means by stating that social media "becomes time-consuming if not managed". This is to say that much as the technologies may save time, they can cost one's time if time is not well managed when it comes to their use.

In summary, based on these results, it can be stated that much as the social media tools come along with many advantages, they are not short of controversy.

4.5.2. Advantages and disadvantages of social media tools in work places

Respondents were also asked to mention the positive and negative sides of using social media tools in their work places and their responses are presented below.

There were a series of advantages that librarians at both libraries mentioned and they include "tools allow for harmonious sharing of ideas", "interaction leads to fusion of ideas helping the library to grow", "improve working relations amongst librarians through team work", "tools offer a good communication model amongst librarians", "tools can reach out to a large number of patrons", "good for marketing library services because they reach a greater audience", "improve current awareness and outreach programmes", "subject librarians are visible to the clientele", "reach out to our distance students", "tools offer focused and streamlined information literacy programmes", "tools offer an improved feedback mechanism", "connects the faculty and the library which previously had limited contact", "saves time, paper and responses to queries are dealt with quicker" and "libraries will be forced to introduce mobile technologies as a way of complimenting and increasing the use of these tools". Additional advantages include "no technical skills required, "keep individuals updated about what is happening in other departments" and "the absence of social media tools policies might lead to people abusing these tools".

From the responses, it is clear that the advantages fall under two broad categories that come along with the use of social media tools in work places: interaction amongst librarians and improved or quality library service delivery. The results realised in this section confirm the findings in 4.4.2 which showed that most librarians were using these tools to accomplish work related activities such as delivering reference services, interacting with the users, sharing work related ideas with colleagues, offering information literacy programmes, announcing library news/events just to mention a few.

Other studies also found that social media tools were found useful in facilitating online collaboration, communication and sharing of information amongst librarians (Chu & Du, 2013; Sun & Puterbaugh, 2013) and social media tools help develop innovative library services. These

findings echo Penzhorn and Pienaar (2009) who argued that social media tools help develop innovative library services.

When asked to state the disadvantages of using social media tools in work places, respondents pointed out the following drawbacks: "distorted information can spread fast", "privacy and security is limited", "hacking or distortion of work records", "people can use these tools for the wrong reasons" and "absence of social media tools policies might lead to people abusing these tools". Other drawbacks mentioned include "tools are time consuming" and "one has to be familiar with the tools personally to effectively use them otherwise they can be useless at work", "tools are too informal".

Similarly, other researchers noted that librarians sometimes do not adopt these technologies because they fear intrusion in their personal and work spheres, librarians complain that social media tools are too technical, they are largely used for leisure because of the credibility concerns on information posted on the social media sites (Chu & Du, 2013:68; Dickson & Holley, 2010; Mathews, 2007).

The findings of the present study revealed that librarians have vast knowledge in the potential held by social media tools. In other terms, librarians from both libraries find the tools useful both personally and professionally. This recalls the TAM theory which holds that perceived usefulness of technology leads to adoption and use. It explains that if individuals find technology useful in their work spaces they will definitely use it.

4.6. Factors influencing use and non-use of social media tools

Items in the last section of the questionnaire collected data about the reasons that influenced librarians to use or not use social media tools. The aim was to identify factors which contribute towards adoption and use of social media amongst librarians and those that discourage them from using the tools.

4.6.1. Factors for use of social media tools

When asked to indicate what motivated them to use social media tools, all 29 (100%) respondents at the NUST Library either "strongly agreed" or "agreed" that they were motivated by ease of use, 28 (96.6%) librarians "strongly agreed" or "agreed" they used these tools because they were useful, 22 (75.9%) indicated they were motivated by their own commitment, cooperation and patron demand. Twenty one 21 (72.4%) librarians indicated that they used these tools because of they are self-willing to change. Figure 15 summarises the findings for the NUST responses. Appendix 6(a) provides a tabulated version for the NUST Library results.
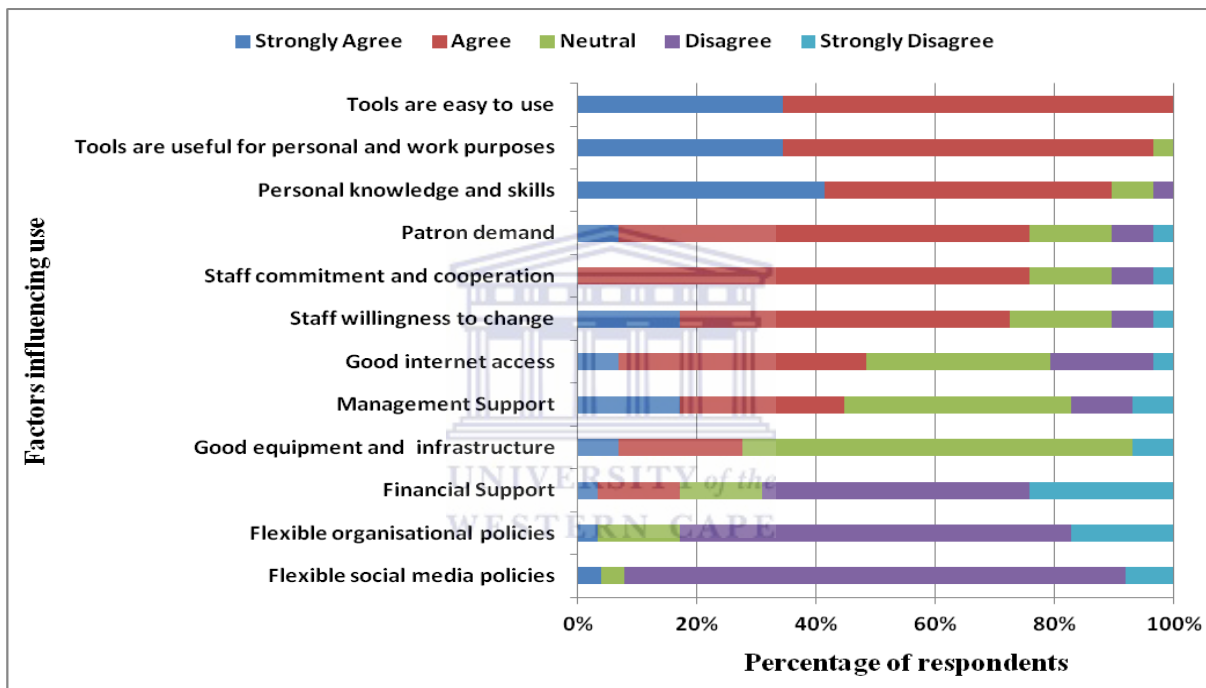

Figure 15: Factors influencing the use of social media tools at NUST (N=29)

At the UWC Library, 41 (95.3%) librarians either "strongly agreed" or "agreed" that they were motivated by good Internet access and ease of use of tools, 40 (93%) librarians "strongly agreed" or "agreed" that they were encouraged by the availability of good equipment and infrastructure, personal knowledge and skills and usefulness of tools in their personal and work spheres and 38 (88.4%) librarians were encouraged to use these tools by management support. A total of 37 (86%) respondents were encouraged by patron demand, 36 (83.7%) were encouraged by policies and their own commitment and cooperation, 34 (79.1%) librarians were encouraged by willingness to initiate change and 31 (72.1%) indicated they were encouraged by the availability

of funding. Figure 16 illustrates findings for the UWC Library. Appendix 6(b) provides a tabulated version for the UWC results.
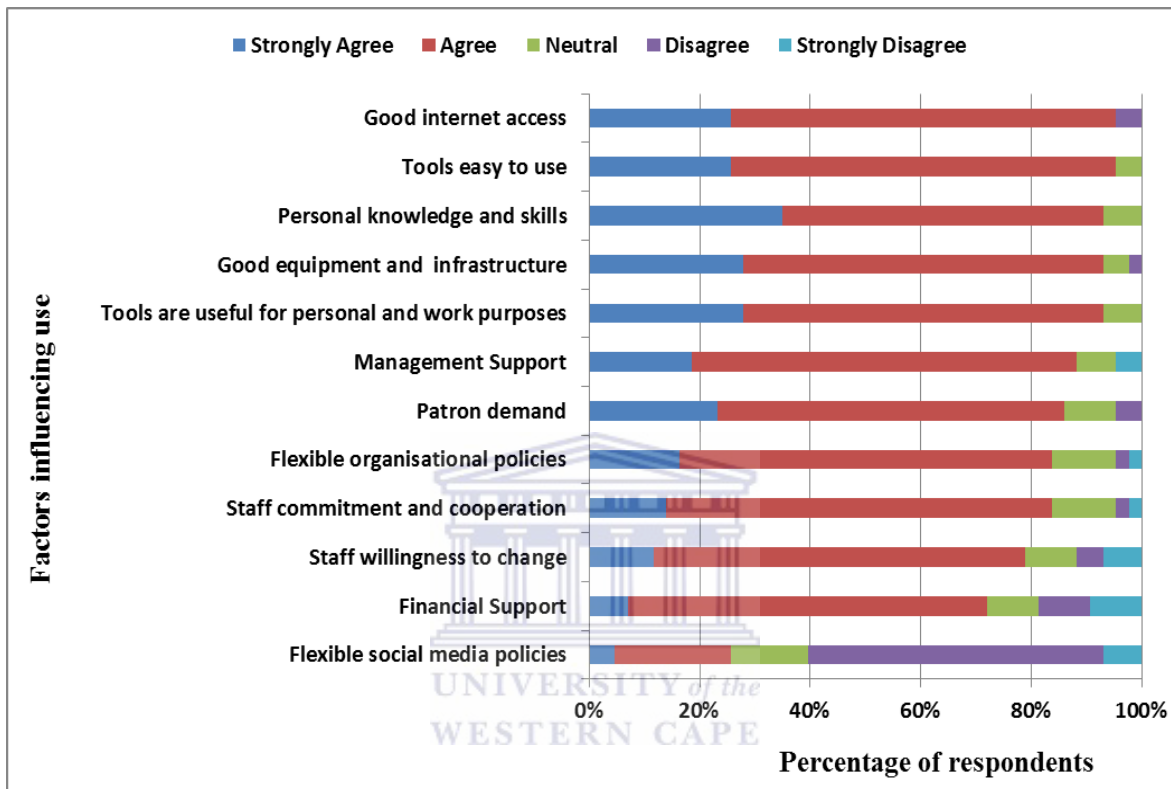

Figure 16: Factors influencing the use of social media tools at UWC (N=43)

Apart from the factors mentioned in Figure 15 and 16, respondents were asked to state other factors that encouraged them to use social media tools. There were three main responses from both libraries which were similar and supported each other and they mainly included: "personal drive", "zero cost" and "flexibility in use. In particular, librarians at NUST were also motivated by "band wagon" and "the library's vision statement". In contrast, UWC librarians were mainly motivated by the obligation to "keep pace", "improve quality of services", "availability of mobile technologies", "passion for sharing knowledge" and "encouragement from family members".

The results clearly show that at both libraries, ease of use and usefulness of tools in their personal and work spheres strongly encouraged librarians to use social media. The results

support findings in section 4.5.2 where most librarians mentioned that one of the advantages of the social media tools is that "no technical skills are required to use social media". The results further supports findings reported in section 4.5.1 where it was found that librarians in both libraries are encouraged by the fact that tools are cheap.

More importantly, these findings mirror the Technology Acceptance Model by Davis (1989) which is adopted in this study. In this model, Davis argues that an individual only accepts new technology once they find it easy to use and useful in their personal and work spheres. This is to suggest that librarians at both libraries used these tools because they found them easier to use and they added value to their work activities.

While the results categorically show that the robust Internet at UWC encouraged librarians to use these tools, poor Internet was a major impediment to the use of social media tools at NUST. The dissimilarities in Internet connectivity between the two countries might be resulting from the different economic status. In Zimbabwe university funding for Internet relies heavily on the students' fees whilst in South Africa, tertiary institutions are supported by Tertiary Education and Research Network of South Africa (TENET) through the South African National Research Network (SANReN) project which offer public universities with first preference, affordable and high speed networking (Wright, 2011).

4.6.2. Factors for non-use of social media tools

This item required respondents to select the factors that discouraged them from using social media tools. As depicted in Figure 17 at NUST 25 (86.2%) librarians either "strongly agreed" or "agreed" that they were discouraged by lack of financial support, 22 (75.9%) librarians were discouraged by the absence of social media policies, restrictive organisational policies and poor Internet access. At the UWC Library, 26 (60.5%) librarians agreed that the absence of social media policies was the only significant factor that discouraged them from using these tools, as can be seen in Figure 18 below. See also Appendices 7(a) and 7(b) for tabulated versions of the findings for NUST and UWC respectively.
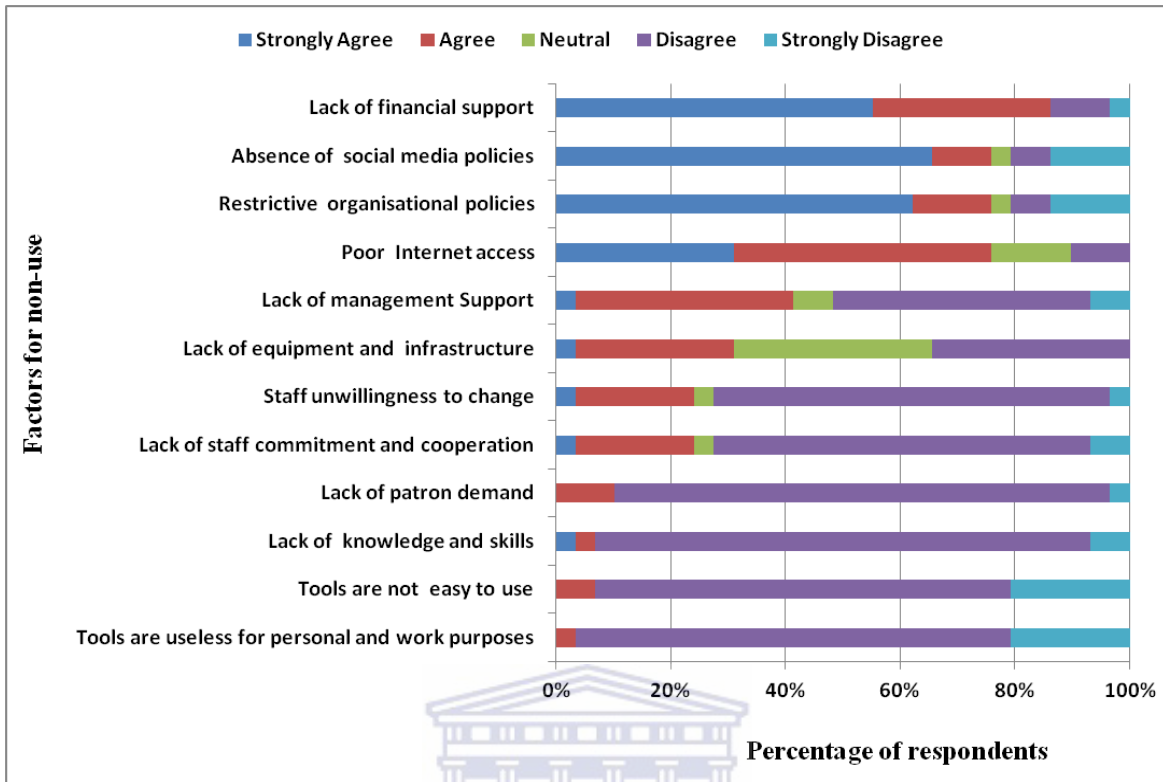
Figure 17: Factors influencing the non-use of social media tools at NUST (N=29)
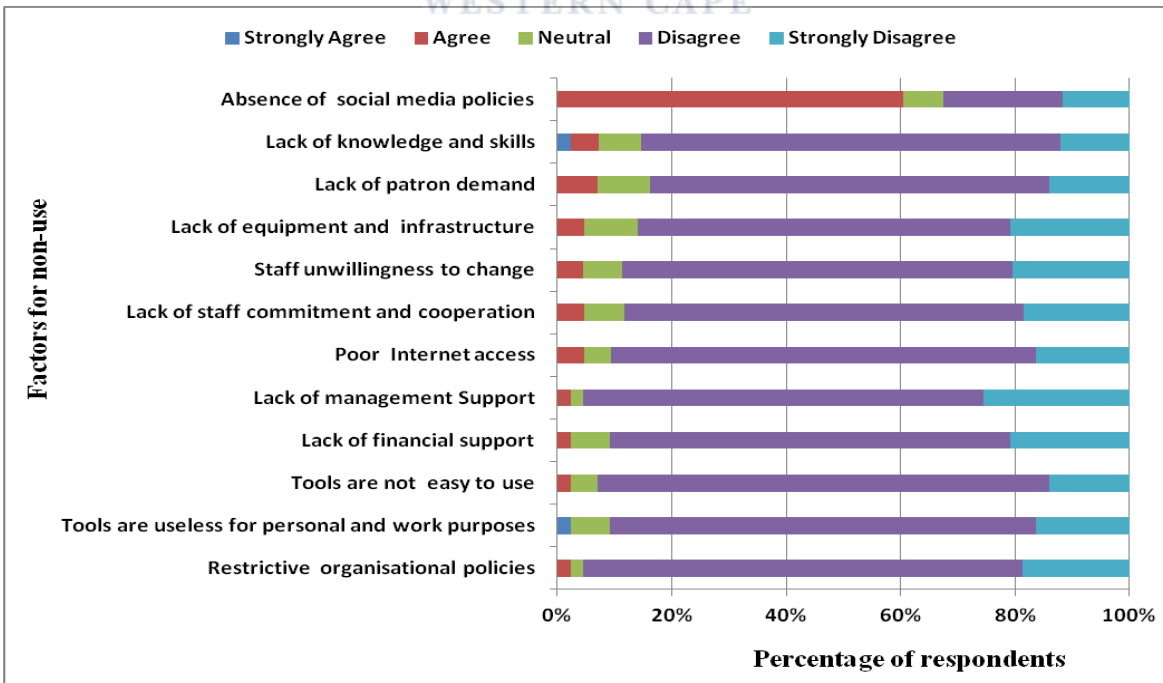

Figure 18: Factors influencing the non-use of social media tools at UWC (N=43)

Respondents were asked to state other factors that discouraged them from using social media tools. In both libraries it is evident that librarians were concerned that tools are "time consuming", "lack privacy and security" and "they are ever-changing and increasing".

The findings echo the findings reported in section 4.5.1 where it was reported that one of the disadvantages of these tools are that they are time consuming and there is no guarantee of privacy and security. A comprehensive analysis of the findings above shows that in section 4.3.3 Internet access seems to be a problem at the NUST library since it is situated off-campus and the results confirm results, reported in section 4.6.2 where the majority of NUST librarians stated that poor Internet access discouraged them from using social media tools. Additionally, at the NUST Library, lack of financial support discouraged librarians from using the tools. Lack of financial support in this case leads to poor infrastructure and poor Internet access since the library is sustained by limited funding acquired from the students' fees.

The results reveal that at both libraries, there were no social media policies. It appears that most academic libraries are yet to formulate policies that can guide the use of social media tools because Kooy and Steiner (2010:60) also note that most academic libraries do not have policies and they prefer creating them as situations arise.

4.7. Conclusion

This chapter has presented, summarised and analysed the findings collected through a Web-based questionnaire from the UWC and NUST libraries. The chapter has presented the data which was collected in relation to familiarity of academic library staff with social media tools, purposes of social media tools in academic libraries, advantages and disadvantages of using social media tools and factors affecting the use and non-use of social media tools in academic libraries. The interpretation was supported by the TAM theoretical framework, scholarly viewpoints, the researcher's personal experience and scanning the library websites of both institutions. The next chapter provides a discussion of the findings.

CHAPTER 5

DISCUSSION OF THE FINDINGS

5.1. Introduction

This study set out to investigate the use of social media tools by library staff at UWC, South Africa and NUST, Zimbabwe. This chapter discusses the study's findings, seeking in particular, to answer the following research questions which informed this study:

- How familiar are the library staff with social media and which tools do they use mostly?
- For what purposes do library staff use social media tools?
- What are the advantages and disadvantages of using social media tools?
- What factors shape and constrain library staff's use of social media tools?

The chapter draws on the Technological Acceptance Model discussed earlier in Chapter 1 as well as in the literature reviewed in Chapter 2. The discussion makes reference to the social media content gleaned on the library websites of both universities. In the words of Neuman (2007:352) the chapter provides a candid discussion of interpreted findings and in the process gives alternative explanations of the findings. As such, the chapter develops and reflects on the data presented in Chapter 4. It also draws attention to the unique findings of the study. The discussion will follow the logic suggested by the research questions above.

5.2. Library staff's awareness and appreciation of diverse social media

This section highlights the following key findings based on familiarity and most used social media platforms at the UWC and NUST libraries. The study found that firstly, UWC librarians were aware of most social media tools unlike the NUST librarians. Secondly, many UWC librarians have used most social media tools for a longer period of time compared to the NUST Library staff. Thirdly, there were similar social media applications which were frequently used by library staff in both institutions and these will be discussed in detail. Fourthly, at the NUST Library there is centralised control of social media applications since they are managed by non-LIS professionals (IT personnel), whilst librarians at UWC are in charge of managing these tools.

Common social media tools are identified in the literature and they include Facebook and Twitter for librarians in England and Tags, IM, Blogs, Facebook and Wiki for librarians in Asia (Gerolimos & Konsta, 2011:9; Arif & Mahmood, 2012), RSS and Bookmarks for librarians in Midwest of America (Kim & Abbas, 2010:214), Twitter, Facebook and YouTube in Canadian librarians (Collins & Quan-Haase, 2012). The present study found that similar social media tools are common amongst NUST and UWC libraries as discussed below.

Nearly all of the librarians involved in this study revealed that they were familiar with several social media applications. Of particular note, all 29 (100%) NUST librarians were aware of Facebook, WhatsApp, Google chat and LinkedIn. In addition, other social media tools which were widely known include Wikis, Twitter, YouTube, Skype, and Blogs. Some applications were, however, less familiar among NUST librarians. Only a few NUST librarians were aware of tools such as Viber, Picasa, MXit, Tags, Podcasts, Flickr, Delicious, RSS, Dropbox and Blackberry Messenger. In contrast, all 43 (100%) librarians were aware of Facebook and WhatsApp and most of them were also aware of Viber, Picasa, MXit, Tags, Podcasts, Flickr, Delicious, RSS, Dropbox, Blackberry Messenger, Google chat, Wiki, LinkedIn, Twitter, YouTube, Skype and Blogs. Librarians from both universities were aware of Facebook, WhatsApp, Google chat, LinkedIn, Wikis, Twitter, YouTube, Skype and Blogs. With reference to UWC, the findings align with those reported by Penzhorn and Pienaar (2009) who found that most librarians were very aware of Facebook, Blogs, YouTube, Wiki and Skype. Similarly, in Zimbabwe, Zanamwe, Rupere and Kufandirimbwa (2013) report that Facebook, LinkedIn and Twitter were very popular in higher learning institutions.

The findings show that in terms of places of access, 26 (89.7%) NUST and 43 (100%) UWC librarians accessed these tools at home. The higher number of librarians accessing these tools at home implies that they mostly use these tools for personal reasons rather than for work reasons. However, we cannot rule out the possibility that they were using these tools for work purposes because there is a thin line between personal and professional use. Also 25 (86.2%) NUST and 42 (97.7%) UWC librarians accessed these tools in the office.

The study further established that although librarians from both universities were aware of the existence of wide-ranging social media technologies, they were selective in their use of some technologies. Specifically, over 21 (72.4%) NUST librarians used Google chat, Facebook and

WhatsApp, LinkedIn, YouTube and Twitter. Similarly, 31 (72.1%) UWC librarians used WhatsApp, Google chat; Facebook, YouTube, Twitter, LinkedIn, Blackberry Messenger and Blogs many times a day. Thus, it can be stated with certainty that Google chat, Facebook, WhatsApp, LinkedIn, YouTube and Twitter were mostly used by librarians in both libraries. Library staff had a high level of engagement with these tools because they were used multiple times a day and librarians have been using them for a long period of time. In this line of reasoning, the TAM theory describes that individuals effectively use technology if they perceive it to be useful and easy to use. Blackberry Messenger and Blogs were only mostly used by UWC librarians. Blackberry Messenger is a common application within the South African society with 94% user penetration (Vermeulen, 2013). With reference to the UWC library website (refer to Appendix 9) it is evident that the library owns a Blog that it why this platform was highly utilised amongst UWC librarians (University Western Cape Library, 2014).

At the NUST Library most librarians were less familiar with tools such as Blackberry Messenger as a consequence of not owning a Blackberry smart phone and the high usage of WhatsApp mobile application. One other tool mentioned was Yokoos, a social media tool developed in African countries and its use is widespread within the Zimbabwean society since its access is coordinated by a network provider (Econet Wireless) within the country. This trend is explained by one respondent who mentioned that they use social media applications due to "band wagon hopping", that is, everyone else is using them. People are able to influence or encourage one another to use popular social media tools in a given society.

Gerolimos and Konsta (2011) found in their study that Facebook and Twitter are predominantly used by European academic librarians. However, Ezeani and Igwesi (2012:6) report that social media such as Facebook, Twitter and YouTube are increasingly being used amongst librarians and patrons in Nigerian academic libraries. In both libraries in the present study tools like Flickr and Picasa are never used owing to the high usage of Facebook which may also be used for photo storage and sharing purposes. This is important to mention as Chisenga and Chande-Mallya (2012) who argues that some social media tools share similar functions; hence, individuals may not see the need for having several dedicated accounts on such applications, for example, Facebook and Flickr. For this reason, librarians may have found these tools useless in

their personal and work spheres, as described by the TAM theory that perceived usefulness of technology encourages individuals to use technology.

Nguyen (2008) found that the unpopularity of MXit was due to the inadequate library staff since this tool requires them to be constantly online. Meaning that, there is a rise in need of good Internet connectivity in order to effectively use social media. Collins and Quan-Haase's (2012) study attribute low usage of social media tools such as YouTube and Flickr to infrequency of personal use of these tools which leads to them being rendered irrelevant in a library setting. Yet, librarians at UWC were exceptionally acquainted with a wide variety of social media platforms. South Africa is at a more advanced stage of technology use which is shaped by their good economy, support for good Internet access for higher education from South African National Research Network (SANReN) and Tertiary Education and Research Network of South Africa (TENET), and has a well maintained and bigger infrastructure compared to Zimbabwe. This finds support in studies by Collins and Quan-Haase (2012) and Kwanya, Stilwell and Underwood (2012b) who postulate that the geographical location as well as the size of the university has direct implications on the use of social media applications. This view is associated with Moran and Leonard (2009) who comment that in smaller academic libraries, there are fewer employees in each functional area, leading to less specialised job responsibilities than in larger academic libraries. The findings of this study revealed that UWC librarians are dominated by specialised job responsibilities compared to the NUST Library staff.

With this view in mind, one of the key distinguishing factors on how these applications are used is that UWC librarians are themselves directly in charge of social media platforms whereas at the NUST Library all platforms are overseen by the Information Technology (IT) personnel. Librarians at UWC are much more knowledgeable and skilled because they have specialist skills unlike the NUST librarians. While there are differences in the levels of familiarity between the two libraries, it is equally apparent that the period of using these tools, the convenient accessibility of these tools at home and work, and the frequency of using these tools throughout the day had a significant thrust towards the librarians' familiarity. Having discussed the familiarity of social media applications amongst librarians, the next section shifts focus to highlighting personal and work purposes.

5.3. The uses of social media by library staff

The study established that the personal uses of social media at both libraries were mainly for entertainment, communicating with friends and family, keeping abreast with current news, academic purposes, and archiving personal information. Social media such as Twitter, Facebook and WhatsApp were mainly used for communication and entertainment. Google Apps were mainly used for archiving information whereas YouTube was singled out to be used for entertainment. At NUST, librarians use these social media applications to acquire health information, to check the weather conditions, and to find out about resorts areas whereas at UWC, librarians used these tools for e-learning, birthday reminders (Facebook), sharing recipes on Facebook groups and checking latest online magazines. These findings find support in, Trubitt and Overholtzer's (2009) view that librarians have woven these applications into their daily routines, using Facebook, Twitter, LinkedIn, online gaming environments, and other tools to build and maintain complex webs of professional and personal relationships.

Quintessentially, Tripathi and Kumar (2010) strongly bid for library professionals to use social media tools in offering traditional services in an innovative manner and addressing the information requirements of the techno-savvy. As noted in Chapter Two, the appropriation of social media in academic libraries has become common across the globe. Three key uses were identified from the literature as follows:

- Marketing and promotion of information resources (Harinarayana & Raju; 2010:75; Kwanya, Stilwell & Underwood 2012b:5; Makori, 2011:344; Rogers, 2009:3).
- Online collaboration (Makoe, 2010; Makori, 2011:347; Munatsi, 2010:6, Stephens, 2006:10; Xu, Ouyang & Chu, 2009:328).
- Support of open and distance learning (Chu & Du, 2013; Makori, 2011: 342; Nfila, 2010).

With regards to the present study, the results replicate most of these uses since over 17 (58.6%) NUST and 36 (83.7%) UWC librarians use these tools to offer reference services, to interact with the users, to share work ideas with colleagues, to deliver information literacy programmes and tools to collaborate with colleagues in other libraries. Additional uses were: to keep track with

professional current trends, offer collaborative delivery of services with colleagues, to announce library news/events and market their services.

Both the UWC and NUST Libraries used these tools to market their services and to announce library news/events thereby signifying the importance of these applications in an academic library. For example, the following Tweet by the UWC Library is a typical example of how this library is marketing and communicating to its users using social media:

"UWC Library has TRIAL access to JAPEE database until 31-12-2014 via http://www.jaypeedigital.com.ezproxy.uwc.ac.za/default.aspx this is very relevant for Dentistry and Nursing" (@UWC Library, 2014). Instead of spending time moving from one faculty to the other telling patrons of the services on offer, social media tools such as Twitter and Facebook are increasingly used for this purpose. Kwanya, Stilwell and Underwood (2012b:5) reinforce this point in their view that most of the library users are already using social media in their personal lives, expanding services to these platforms will take the services to where they already are and is likely to enhance the use of the library. Similarly, Harinarayana and Raju (2010:75) note that social media technologies are increasingly becoming popular as marketing strategy by academic libraries. Makori, 2011: 344 adds that "social media tools have helped university libraries to provide, expand, promote, support and post information services to the patrons". In the USA, Rogers (2009) observes that it is becoming a routine for academic libraries to use social media applications such as social networks and Blogs to promote and market library services. The flexibility of these technologies makes them ideal for such a purpose. Thereby exposing the usefulness of these applications amongst librarians and this is explained by the TAM theory.

Importantly, the findings show that librarians at both institutions used these tools to conduct online or collaborative activities within or outside the library. Social media tools such as Facebook, Twitter and Google Drive have good qualities that usually make virtual collaboration a reality. Google Drive for example, accords librarians an opportunity to create and share a documents with colleagues on which they can work together without necessarily requiring them to meet physically. Similarly, other studies have reported the same findings in Africa and Europe. In Tanzania, social media tools such as YouTube, MySpace, Facebook, Twitter and Flickr are popular for online collaboration, communication, and sharing of information among

librarians (Makori, 2011:347) and instant messaging (IM) provides the ground work for librarians to interact with their patrons (Munatsi, 2010:6).

Academic library staff are now able to directly and instantly interact amongst themselves and with users by remotely providing assistance such as virtual reference services (Stephens, 2006:10) and to provide the latest information to students and researchers (Xu, Ouyang & Chu (2009:328). Social media tools are also increasingly being used in the workplace, for example, Wikis as intranets, blogs for marketing, podcasts for customer education, web conferencing for meetings, and social networking groups for campaigns, and for conducting surveys (Penzhorn, 2013:65). Thus at the UWC library, instead of organising face to face orientation programmes, the librarians are able to use webinars to deliver audio and video commentaries and instructions to users remotely. These findings relate to the researcher's personal experience at NUST, where YouTube video tutorials were used for student instruction.

Notably, results show further that both libraries are not stating explicitly that they are using social media tools to enhance distance learning. Several scholars have indicated that this is one of the purposes which academic libraries across the globe are embracing. Makori (2011:342) submits that university libraries are making concerted efforts to use social media to address the information needs, demands, desires and wisdom of students in open, distance and e-learning programmes. Makoe (2010) reports that the University of South Africa (UNISA) library is already using social media tools, particularly MXit which is cost-effective and appealing in communicating with distance learners most of whom are financially constrained. Similarly, in Botswana, Nfila (2010) reports that the University of Botswana Library is taking advantage of the simplicity of producing Podcasts to record course lectures, tutorials, course materials and to post them on the library Blog so that students registered in e-learning programmes can download and use them. The UWC Library and the NUST Library may not be utilising this opportunity because they serve the learning, teaching and research activities of the undergraduate and postgraduate students who are mostly registered as full time and have daily face-to-face lectures.

Unlike most studies reviewed in Chapter Two, this study finds one more important purpose: the librarians used social media tools to share knowledge. Tools such as Twitter, Facebook, Google chat and Blackberry Messenger which are used by most librarians involved in this study, can

facilitate sharing important information and knowledge amongst librarians. Posting of important information on forums, Twitter and Google chat may have significantly assisted librarians in sharing valuable information. More specifically, at the NUST library the staff share information on platforms such as Google group mailing lists and RSS feeds and at the UWC they use Facebook, Twitter and the Blog.

This study also revealed marked distinctions between job titles, qualifications, responsibilities and seniority in the use of social media. This explains why the use of social media at NUST for work purposes was only confined to the IT personnel and Subject Librarians while at UWC librarians' use differed with one's job position. Some of the uses were specific to particular librarians. For example, one respondent at UWC reveals that library evaluation (surveys, monitoring usage patterns) was conducted by the Deputy Director of the library which is a senior management position.

The study showed that personal use had a determining effect on the use of social media tools at work, that is, if an individual does not use them personally it becomes difficult for them to use them at work. As one librarian expressed: "one has to be familiar with the tools personally to effectively use them otherwise they can be useless at work". In relation to the present study librarians in both libraries have adopted and are using social media tools in their personal and work spheres. However, the pervasiveness and permeation of these applications into librarians' everyday lives has resulted in blurred boundaries between their work and private lives, as these tools may be used anywhere and anytime. Reinforcing these findings is Olasina (2011) who argues that there is a thin line between uses of social media professionally and personally. Hence, this has led to management employing restrictive measures against the use of these tools at work. The next section provides the pros and cons of using social media in personal and work spheres.

**5.4. Advantages and disadvantages of appropriating social media**

Although some scholars maintain that social media platforms are an innovative method of improving library services, others argue that use of these tools by academic librarians is a waste of valuable time and effort (Sekyere, 2009). This study found that on the positive side of using social media tools, librarians from both universities reported that "tools are cheap" and they "offer diverse ways of sharing information through the use of videos, audio, pictures and texts". Social media are seen as an affordable means of instant communication. They also cut the cost of communication amongst individuals and institutions, provide a wide variety of ways of communicating depending on what one prefers; text, audio, video and/or pictures.

Librarians further mentioned that social media have improved their technological skills as, they have "learnt to be critical and argumentative" and "multitasking" through being constantly connected. This shows the power that social media tools have in sharpening librarians' personal skills, thus it carries an educative role. This finding calls to mind Chisenga and Chande-Mallya (2012) and Luo (2009) who commented that the avalanche of information flowing out there, calls for librarians to promote critical thinking, creative research skills and well informed librarians. Following a similar line of argument Mahmood (2011) submits that academic librarians are required to think outside the box and broaden their perspective. In the light of these views, one can thus proffer as Farkas, (2012) and Fernandez-Villavicencio (2010) puts it, that to become truly information literate it is also essential to have the ability to use social media in a meaningful manner.

In the work environment librarians believe that social media allows for "focused and streamlined Information Literacy programmes". It has been proven beyond doubt that these tools can improve Information Literacy programmes through allowing collaboration and interactive learning. For example, as noted earlier, UWC offers orientation through Webinars and at NUST they offer Information Literacy programmes using YouTube. This result is in line with Luo's (2009:32) assertion that accessibility and functionality of social media tools have made them appealing as instructional vehicles and they can support interaction-oriented pedagogical approaches such as active and social learning by providing environments and technologies that foster and promote these interactions. Social media can thus, be seen as a unique enhancement of

this Information Literacy learning environment since they offer a variety of powerful information sharing and collaborative features (Penzhorn, 2013:65).

The study has also revealed that librarians are using social media for knowledge sharing. Given the pressures arising from the ever-changing needs of the users as well as the general information environment academic libraries are encouraging collaboration and nurturing of a team-oriented environment. As the librarians involved in the study pointed out, that they use the technologies for "harmonious sharing of ideas through teamwork". It is clear that, in their own ways, both libraries are not taking any chances. The notion of digital divide also explains the disproportionate access and ability to effectively use of social media between the two countries. NUST librarians are sharing information using Google Group mailing list and RSS feeds whereas at UWC librarians are sharing information using Twitter and the Blog. This finding confirms the view that social media are increasingly being used for knowledge sharing because of their speed and ease of use (Sarrafzadeh, Hazeri & Alavi, 2011:233; Hosseini & Hashempour, 2012). In this sense, we can argue that social media carry an array of benefits with immense power to enhance academic library services.
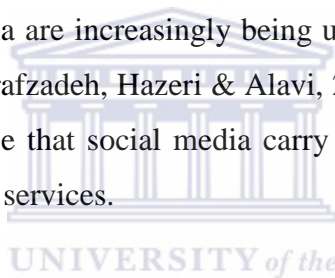
Despite the foregoing benefits, however, there are challenges that librarians have to overcome in their adoption and use of social media (Luo, 2009:37). This study found that the negative sides of using social media included, applications being rendered addictive and absence of privacy and security. NUST Library staff noted that platforms "encourage use of abusive materials" and "younger people dominate these platforms". This strongly highlights the difference in preferences between the older generation and younger generation. This trend explains the fact that older users do not appreciate these tools as they perceive them as promoting access to abusive materials and tools being too technical. This view is attested to Aharony's (2013) findings which states that age influences adoption and use of Facebook since the younger librarians had no problem in doing so whilst the older librarians complained that this application is not easy to use.

A significant number of staffers in both libraries complained that these tools were also said to be a fad as many appear and then disappear quickly. In connection to this view, Kwanya, Stilwell and Underwood (2012a) argue that the emerging technologies have resulted in techno-stress and techno-lust. For these scholars, techno-stress refers to mental pressure caused by working with multiple and rapidly changing technology, and mediating between these technologies and the demands of one's work and personal life. Techno-lust is the continuous desire to have the latest and flashiest technological tool available even when it is not necessary.

Additionally, some scholars have provided views which impede the use of social media tools in academic libraries. Collins and Quan-Haase (2012) and Cohen (2011) argue that academic libraries need to ensure they do not misallocate personnel and technical resources to an ever-evolving group of technologies that are largely used for entertainment purposes. For this reason, it may be impossible to deploy these tools in university libraries (Flanagin & Metzgen, 2008:19). Similarly, one respondent argued that these "tools are too informal" because librarians largely use them for entertainment and communicating with friends and family. Despite these challenges, librarians still use these technologies as generally noted in this study. The next section examines the factors influencing diverse appropriations by the librarians.

5.4. Factors influencing library staff's use and non-use of social media

Social media use by academic librarians has resulted in professional advancement. Yet, there are several obstacles which impede the effective use of these platforms. Several factors on the use or non-use of social media applications have been raised and must be considered by any academic library currently using these tools (Dickson & Holley, 2010). It emerged in this study that librarians from both universities were motivated to use social media applications by "ease of use and "usefulness of the tools" as well as "personal drive". These trends reflect the TAM theory which states that individuals can use technological tools if they find them useful (adding value to their job) and easy to use. Arif and Mahmood (2012) and Hosseini and Hashempour (2012) similarly concluded that perceived ease of social media tools' use has significant effect on the frequency of use.

The study further revealed that in both libraries patron demand motivated librarians to use and adopt social media tools. Due to high use among library patrons, many academic librarians

advocate using these new social media platforms to reach out to student populations (Farkas, 2007; Milstein, 2009). This matches Kwanya, Stilwell and Underwood's (2012b) finding about librarians in Kenya who were influenced by perceived demand for quality services by the users. Burgert and Nann (2014) emphasise that user opinion is far more important and plays a major role in influencing adoption and use of social media tools amongst librarians. The 21st century library users have been termed "promiscuous" in that they can find alternative sources of information hence, librarians should strive to keep them from shunning the library.

Moreover, the low cost of using social media is seen as encouraging librarians from both universities. Librarians noted that these tools are cheap and affordable hence their adoption in academic libraries in order to support the student user group who are financially constrained (Van Rooyen, 2012). Unfortunately, the TAM theory does not measure this factor, as it only considers two aspects, which are perceived ease of use and perceived usefulness of technology. Rogers' Diffusion of Innovations (DoI) theory proposed in 2003 measures the aspect of cost using the following attributes: relative advantage, compatibility, complexity, observability, and trialability. Even though librarians at NUST mentioned that tools are cheap as one of the factors which encouraged them to use social media tools, they also noted that lack of financial support discouraged them from using these tools. There is a visible contradiction between the two findings. A possible explanation for this inconsistency is that librarians were referring to lack of funding for purchasing up-to-date equipment and increasing the band-width to ensure fast Internet speed. Additionally, NUST Library's vision statement maintains that "To be one of the top class academic libraries in Zimbabwe, utilising new and emerging technologies in the provision of service and information to the university community" encouraged librarians to use social media tools. It shows how librarians at NUST are oriented towards the institutional goals.

"Owning mobile technologies" is another motivating factor for librarians to support this finding. The UWC library offers mobile technologies such as e-readers and iPads as shown on the library website (University of the Western Cape, 2014). Comparably, although it is not clear whether the NUST Library has adopted mobile technologies, a spot check on their website (refer to Appendix 8) revealed that the library owns a mobile site which provides a compatible format for users to access library services on their personal mobile technologies (National University of Science and Technology Library, 2014). Mobile technologies accelerate the adoption and use of social media

tools hence the two work hand-in-hand. In line with this, one librarian suggested that "libraries will be forced to introduce mobile technologies as a way of complimenting and increasing the use of these tools". These findings are well connected to Chisenga and Chande-Mallya (2012:16) who concluded that social media applications are best and effectively used when accessed using mobile (Smart phones and Tablet PCs) and wireless Internet technologies.

Social media use by academic librarians is not, however, without controversy. Librarians from both libraries were demotivated by "tools being time consuming". This concern was perceived as emanating from mismanagement of these tools, thereby compromising work time. The issue of time constraints is predominant in this present study's findings, hence making this one of the major impeding factors amongst librarians in both universities. Chisenga and Chande-Mallya (2012:16) concluded that librarians' lack of time to make effective use of social media tools is a global concern (Banda, 2011). This resonates with conclusions made by Chu and Du (2013) in their study which found that librarians complained about tools being too technical therefore, they did not have time to explore and implement them because of work commitments. Boxen (2008) provides a different explanation through stating that lack of librarian time is also a concern, particularly with social media games that are frequently time consuming. With similar findings, Luo (2009) maintains that some of the social media tools can be technical and require a substantial amount of time from librarians in learning about them. For example, a respondent in Luo's study mentioned that Wiki has unique formatting rules, and every time she needs to update the content she has to remind herself.

In both libraries it was found that they do not have social media policies, this is not a surprise as Kooy and Steiner (2010) found that 82% of the surveyed academic libraries preferred to formulate their social media policies as situations arise. This is a serious danger to the institutions as one librarian argued that "the absence of social media tools policies might lead to people abusing these tools". This finding confirms suggestions made by the researcher in Chapter One, in the research problem section that social media tools are not being effectively used in both libraries, as there are no governing policies which guide librarians on how to use these tools. Johnson and Burclaff (2013) noted that most of social media policies are risk-averse as this trend was aptly explained by one librarian who pointed to the fact that information shared should be strictly "no profanity, obscenity, illegal or unprofessional content".

Another major concern highlighted by librarians was that lack of privacy and security discouraged them from using these tools. Librarians were concerned about the issue of not being able to build limits in the use of these tools, as they claimed that it invades their private life. This too mirrors Mathews' (2007) standpoint that most individuals fear identity theft or stalking because of the increased number of online predators.

As much as both libraries had similar concerns, one major impeding factor amongst NUST librarians was poor Internet. The findings have shown that NUST Library is situated off-campus and has sporadic Internet access. This confirms Chitanana's (2012:62) results which revealed that despite considerable investment in bandwidth, Zimbabwean universities are still finding themselves not having reliable, usable Internet access for their students and staff. This finding is comparable to Onyaoku, Orakpor and Ezejiofor (2012:31) who concluded that inadequate Internet connectivity affected the use of social media in Nigerian libraries. In contrast, the UWC library is situated within the campus and has good Internet access. This is supported by the SANReN project which is initiated by TENET to ensure that the tertiary institution gains access to fast and reliable Internet.

5.5. Conclusion

To sum up, the discussion was underpinned by the Technological Acceptance Model (TAM) and different scholarly perspectives. The researcher also makes reference to the two libraries' websites (Appendices 8 and 9) to verify some facts. The discussion exposes that most of the findings in this study are reinforcing what has already been found in literature but at the same time it provides some unique findings. The findings from both universities have shown some recurring thoughts noted by librarians and these include complaints over issues of privacy and security, tools being time consuming, absence of social media tools and their ever increasing and fading nature. In line with the TAM theory, this chapter has highlighted that tools are easy to use and useful both personally and at work. The next chapter provides conclusions and recommendations of the study.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1. Introduction

Based on the findings discussed in Chapter 5, this chapter seeks to draw conclusions and make recommendations on the following research questions:

- How familiar are the library staff with social media and which tools do they use mostly?
- For what purposes do library staff use social media tools?
- What are the advantages and disadvantages of using social media tools?
- What factors shape and constrain library staff's use of social media tools?

This chapter concludes the thesis by giving a critical assessment of the study's findings in relation to the questions it sought to investigate. It recapitulates and evaluates the significance of the study's findings and attempts to show its wider implications through pointing to areas of possible further investigations suggested by the study.

6.2. Conclusions

This section provides an overall judgment based on the discussion made in the previous chapter (Chapter 5). It summarises the findings under each of the study's research questions. There is a recognisable disparity between the two libraries in terms of familiarity with social media. The gap is created by South Africa's relative good economy, well maintained and bigger infrastructure, support from Tertiary Education and Research Network of South Africa (TENET) as well as knowledge and skills of UWC librarians. This reflects a digital divide between the two countries. The deployment of the social technologies by librarians is thus largely shaped by the socio-economic environment in which they operate, including the sociality and shared aims of a particular institution, which foster effective use of social media applications. If a society within which a librarian operates finds a particular social media tool easy to use and useful that application is bound to be used by everyone within that environment through hopping on the social media band wagon. In the same line of thinking, it was revealed that familiarity with social media tools is hinged on place of access, duration of use and frequency of use. The study has

further shown that there is a relationship between awareness and use of tools because most librarians who were not aware of, for example, Blackberry Messenger never used it. The study concludes that both libraries are familiar with Google chat, Facebook, WhatsApp, LinkedIn, YouTube and Twitter since they were mostly used by both libraries.

Overwhelmingly, social media tools are inextricably built into the daily routines which set the standards by which NUST and UWC librarians serve their patrons. This study established that there are blurring boundaries between personal and professional use amongst librarians and personal use has influence on use at work. The major purposes of use personally at NUST Library were for entertainment and communicating with friends and family whilst at UWC they were used for keeping abreast with current news and acquiring information. At work the NUST librarians used these tools mainly for reference services whereas at UWC for marketing. It is important to keep in mind that the use and adoption of social media applications in these Southern African countries cannot be overemphasised, as it is clear that academic librarians are still striving to make effective use of these tools. At the same time, this study concludes that socialising library services is no longer a developed countries' concept.

Librarians are aware of the benefits that come with the use of social media tools and how much it can do for them personally and professionally. They were well aware of the controversies that they have to confront while using these tools. The study established that social media technologies facilitate dynamic communicative processes and play a significant role in helping librarians to move beyond the confines of traditional methods of services. For example, the practice of knowledge sharing, including offering streamlined information literacy programmes and 'group chatting' functions, are all significant in complementing established forms of practising librarianship. The study also showed that librarians, like other professions, face a number of contextual challenges in effectively deploying social media applications, these include: the differences in preferences between the younger and older generation amongst librarians, social media is ever-changing, applications are addictive, privacy and security is an issue and applications being perceived as informal.

More than anything the Technology Acceptance Model (TAM) theory proved useful in interpreting findings. It revealed that librarians from both universities were motivated by ease of

use and usefulness of social media tools. Librarians were also motivated to use social media by its affordability and the demand to meet patrons' needs and expectations. The absence of social media policies in both libraries may be seen as that which epitomises non-effective use of social media at work in both libraries. Since the study concluded that there is a thin line between use in personal and work spheres, it is important to design social media policies which govern the use at work. Major impeding factors such as poor Internet connectivity, absence of social media policies, time constraints and the issue of privacy and security have affected the effective use of these tools by librarians.

A shortcoming of this study needs to be added here. Although a case study design was used, the study applied a questionnaire and verified data on library websites (Appendices 8 and 9), the data collection tools did not allow the researcher to probe some inconsistences. For example, the librarians claimed that they used social media for communicating with the Faculty but their profiles on the library websites have no Skype details or Twitter details. Perhaps conducting interviews as well would have allowed for closer interrogation.
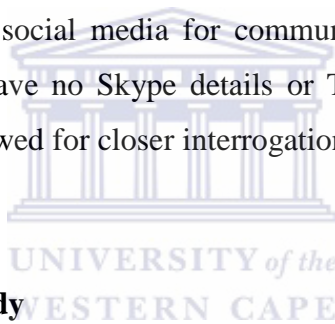
6.3. Recommendations of the study

Based on the findings and conclusions of the study the following recommendations are made in order to assist the library management in both academic libraries to ensure effective use of social media:

- Both library managements should craft supportive social media policies to encourage effective use of social media tools. These should be designed in a way that governs, controls and allows creative minds to contribute to the growth of the libraries. Organisational policies should not be rigid but they should allow freedom of innovativeness amongst librarians.
- Both library managements should encourage their staff to constantly update their skills through staying in touch with current technological trends. This can be achieved through allowing their employees to attend workshops, conferences and up grading their skills

academically. For example, at NUST the IT personnel can orient or train the library staff on how to manage social media technologies.

- The NUST Library should extend the management of social media tools to non-library professionals such as IT personnel. Even though Subject Librarians are actively using these tools, if every librarian is not included this reduces the meaningfulness of effective adoption and use. The NUST Library should make a mandate to assign library professionals to operate and monitor social media tools.

Future studies are recommended to explore the following:

- The current study's theoretical framework (TAM) measured two factors (perceived ease of use and perceived usefulness). It might be interesting for other studies to apply other theories to measure other factors which influence, use and adoption of social media tools amongst academic librarians. For example, the Rogers' DoI theory propounded in 2003 and the big five model of personality proposed by Tupes and Christal in 1992. Refer to Chapter 2 for detailed explanations of these theories.

- Furthermore, this study focused on two university libraries based in the southern part of Africa and each library could not claim to represent all the libraries of its country. Future studies should investigate more than two university libraries in one country, in order to make reasonable conclusions about libraries in a specific country.

- This study only investigated use and adoption amongst librarians, it might be revealing for future studies to include library patrons (students, lecturers and other non-academic staff) as well.

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APPENDICES

Appendix 1: Familiarity with social media NUST (N=29) and UWC (N=43)

Social media tools	Library			
	UWC		NUST	
	f	%	*f*	%
Facebook	43	100	29	100
WhatsApp	43	100	29	100
LinkedIn	42	97.7	29	100
Google Chat	40	93	29	100
Twitter	42	97.7	28	96.6
YouTube	42	97.7	27	93.1
Skype	42	97.7	26	89.7
Blogs	42	97.7	25	86.2
Wiki	41	95.3	19	65.5
RSS	39	90.7	14	48.3
Dropbox	39	90.7	14	48.3
Blackberry Messenger	40	93	13	44.8
Tags	33	93	13	44.8
Podcasts	33	87.7	13	44.8
Picasa	32	74.4	7	24.1
Delicious	37	86	6	20.7
Flickr	36	83.7	6	20.7
MXit	33	76.7	3	10.3
Viber	30	69.8	3	10.3
Other Tools	2	4.7	1	3.4

Appendix 2(a): Duration of using social media at NUST (N=29)

Social media tools	Duration									
	For Many years		For a year		For a month		For a week		Never	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*
Facebook	28	96.6	1	3.4	0	0	0	0	0	0
Google chat	27	93.1	2	6.9	0	0	0	0	0	0
LinkedIn	26	89.7	2	6.9	0	0	0	0	1	3.4
WhatsApp	17	58.6	11	37.9	1	3.4	0	0	0	0
YouTube	26	89.7	1	3.4	0	0	0	0	2	6.9
Twitter	20	69	6	20.7	0	0	1	3.4	2	6.9
Blogs	19	65.5	5	17.2	0	0	0	0	5	17.2
Skype	17	58.6	5	17.2	1	3.4	0	0	6	20.7
Wiki	11	37.9	8	27.6	0	0	0	0	10	34.5
RSS	6	20.7	7	24.1	0	0	0	0	16	55.2
Dropbox	3	10.3	8	27.6	0	0	0	0	18	62.1
Blackberry Messenger	5	17.2	4	13.8	0	0	0	0	20	69
Tags	4	13.8	5	17.2	0	0	0	0	20	69
Podcasts	6	20.7	2	6.9	0	0	0	0	21	72.4
Picasa	3	10.3	1	3.4	2	6.9	0	0	23	79.3
Flickr	3	10.3	0	0	0	0	0	0	26	89.7
Delicious	2	6.9	0	0	0	0	0	0	27	93.1
Viber	1	3.4	0	0	0	0	0	0	28	96.6
MXit	1	3.4	0	0	0	0	0	0	28	96.6

Appendix 2(b): Duration of using social media at UWC (N=43)

Social media tools	For Many years		For a year		For a month		For a week		Never	
	f	%	f	%	f	%	f	%	f	%
YouTube	40	93	2	4.7	0	0	1	2.3	0	0
Google chat	37	86	5	11.6	0	0	0	0	1	2.3
Facebook	38	88.4	3	7	1	2.3	1	2.3	0	0
Blogs	36	83.7	4	9.3	2	4.7	0	0	1	2.3
WhatsApp	35	81.4	5	11.6	1	2.3	1	2.3	1	2.3
LinkedIn	34	79.1	6	14	0	0	1	2.3	2	4.7
Twitter	33	76.7	7	16.3	0	0	2	4.7	1	2.3
Skype	32	74.4	7	16.3	1	2.3	1	2.3	2	4.7
Blackberry Messenger	32	74.4	2	4.7	0	0	1	2.3	8	18.6
Wiki	22	51.2	5	11.6	0	0	0	0	16	37.2
RSS	16	37.2	1	2.3	0	0	1	2.3	25	58.1
Dropbox	7	16.3	10	23.3	3	7	1	2.3	22	51.2
Podcasts	7	16.3	2	4.7	1	2.3	0	0	33	76.7
MXit	4	9.3	3	7	0	0	0	0	36	83.7
Picasa	4	9.3	2	4.7	0	0	0	0	37	86
Viber	4	9.3	1	2.3	0	0	0	0	38	88.4
Tags	3	7	2	4.7	0	0	1	2.3	37	86
Flickr	3	7	2	4.7	1	2.3	0	0	37	86
Delicious	2	4.7	3	7	3	7	0	0	35	81.4

Appendix 3(a): Frequency of using social media tools at NUST (N=29)

Social media tools	Frequency									
	Many times a day		Once a day		Once a week		Once a month		Never used	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*
Google chat	29	100	0	0	0	0	0	0	0	0
WhatsApp	27	93.1	2	6.9	0	0	0	0	0	0
Facebook	27	93.1	2	6.9	0	0	0	0	0	0
LinkedIn	22	75.9	3	10.3	2	6.9	2	6.9	0	0
YouTube	21	72.4	3	10.3	3	10.3	0	0	2	6.9
Twitter	16	55.2	5	17.2	4	13.8	2	6.9	2	6.9
Blackberry Messenger	8	27.6	1	3.4	0	0	0	0	20	69
Blogs	3	10.3	6	20.7	13	44.5	1	3.4	6	20.7
Dropbox	2	6.9	7	24.1	1	3.4	0	0	19	65.5
RSS	5	17.2	3	10.3	4	13.8	1	3.4	16	55.2
Skype	4	13.8	4	13.8	14	48.3	2	6.9	5	17.2
Wiki	3	10.3	4	13.8	9	31	1	3.4	12	41.4
Podcasts	2	6.9	3	10.3	0	0	2	6.9	22	75.9
Tags	3	10.3	1	3.4	3	10.3	0	0	22	75.9
Picasa	1	3.4	2	6.9	2	6.9	0	0	24	82.8
Flickr	1	3.4	2	6.9	3	10.3	0	0	26	89.7
Delicious	1	3.4	0	0	1	3.4	0	0	27	93.1
MXit	1	3.4	0	0	0	0	0	0	28	96.6
Viber	0	0	1	3.4	0	0	0	0	28	96.6

Appendix 3(b): Frequency of using of social media tools at UWC (N=43)

Social media tools	Frequency									
	Many times a day		Once a day		Once a week		Once a month		Never	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
WhatsApp	39	90.7	1	2.3	0	0	1	2.3	2	4.7
YouTube	34	79.1	5	11.6	4	9.3	0	0	0	0
Facebook	34	79.1	4	9.3	1	2.3	4	9.3	0	0
Google chat	35	81.4	1	2.3	3	7	2	4.7	2	4.7
Twitter	33	76.7	3	7	2	4.7	4	9.3	1	2.3
LinkedIn	31	72.1	3	7	1	2.3	7	16.3	1	2.3
Blackberry Messenger	31	72.1	0	0	0	0	2	4.7	10	23.3
Blogs	23	53.5	8	18.6	3	7	8	18.6	1	2.3
Skype	18	41.9	2	4.7	11	25.6	9	20.9	3	7
Dropbox	9	20.9	7	16.3	3	7	2	4.7	22	51.2
Wiki	10	23.3	5	11.6	4	9.3	8	18.6	16	37.2
RSS	9	20.9	5	11.6	0	0	3	7	26	60.5
Viber	2	4.7	3	7	0	0	0	0	38	88.4
Podcasts	0	0	3	7	1	2.3	7	16.3	32	74.4
Flickr	1	2.3	1	2.3	1	2.3	3	7	37	86
Delicious	0	0	2	4.7	0	0	4	9.3	37	86
Tags	1	2.3	0	0	0	0	4	9.3	38	88.4
Picasa	0	0	1	2.3	0	0	0	0	42	97.7
MXit	0	0	0	0	1	2.3	3	7	39	90.7

Appendix 4 (a): Use of social media tools in personal spaces at NUST (N=29)

Activities associated with social media tools	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*
Communication with friends and family	27	93.1	2	6.9	0	0	0	0	0	0
Entertainment	25	86.2	4	13.8	0	0	0	0	0	0
Keeping abreast with current news globally	20	69	6	20.7	3	10.3	0	0	0	0
Acquiring Information	21	72.4	4	13.8	1	3.4	3	10.3	0	0
Academic purposes	18	62.1	5	17.2	3	10.3	3	10.3	0	0
Archiving personal information	15	51.7	4	13.8	4	13.8	5	17.2	1	3.4

Appendix 4(b): Use of social media tools in personal spaces at UWC (N=43)

Activities associated with social media tools	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
Acquiring Information	16	37.2	24	55.8	0	0	0	0	3	7
Keeping abreast with current news globally	12	27.9	28	65.1	0	0	0	0	3	7
Academic purposes	9	20.9	29	67.4	1	2.3	3	7	1	2.3
Communication with friends and family	12	27.9	26	60.5	1	2.3	1	2.3	3	7
Entertainment	8	18.6	29	67.4	2	4.7	2	4.7	2	4.7
Archiving personal information	9	20.9	26	60.5	2	4.7	1	2.3	5	11.6

Appendix 5(a): Use of social media tools in work spaces at NUST (N=29)

Activities associated with social media tools	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*
Reference services	21	72.4	7	24.1	0	0	1	3.4	0	0
Interacting with users	20	69	8	27.6	0	0	1	3.4	0	0
Information Literacy Programmes	17	58.6	11	37.9	0	0	1	3.4	0	0
Sharing work related ideas with colleagues	10	34.5	18	62.1	0	0	1	3.4	0	0
Collaborative delivery of services with colleagues	13	44.8	14	48.3	0	0	2	6.9	0	0
Keeping track with professional current trends	9	31	18	62.1	0	0	2	6.9	0	0
Collaborating with colleagues in other libraries	8	27.6	19	65.5	0	0	1	3.4	0	0
Communicating with faculty staff	9	31	17	58.6	1	3.4	2	6.9	0	0
Announcing library news/events	9	31	8	27.6	5	17.2	7	24.5	0	0
Alerting users about the availability of booked materials	7	24.1	4	13.8	2	6.9	13	44.8	3	10.3

Appendix 5(b): Use of social media tools in work spaces UWC (N=43)

Activities associated with social media tools	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
Keeping track with professional current trends	9	20.9	31	72.1	0	0	0	0	3	7
Sharing work related ideas with colleagues	9	20.9	30	69.8	1	2.3	0	0	3	7
Reference Services	8	18.6	31	72.1	2	4.7	2	4.7	0	0
Alerting users on reservation	7	16.3	32	74.4	1	2.3	0	0	3	7
Announcing Library news/events	10	23.3	28	65.1	2	4.7	0	0	3	7
Interacting with users	7	16.3	30	69.8	3	7	0	0	3	7
Information Literacy Programmes	6	14	31	72.1	3	7	0	0	3	7
Collaborative delivery of services with colleagues	5	11.6	32	74.4	3	7	0	0	3	7
Communicating with faculty staff	6	14	30	69.8	2	4.7	2	4.7	3	7
Collaborating with colleagues in other libraries	5	11.6	31	72.1	4	9.3	0	0	3	7

Appendix 6(a): Table: 9 Factors influencing the use of social media tools at NUST (N=29)

Factors	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*	*f*	*%*
Tools are easy to use	10	34.5	19	65.5	0	0	0	0	0	0
Tools are useful for personal and work purposes	10	34.5	18	62.1	1	3.4	0	0	0	0
Patron demand	2	6.9	20	69	4	13.8	2	6.9	1	3.4
Staff commitment and cooperation	0	0	22	75.9	4	13.8	2	6.9	1	3.4
Staff willingness to change	5	17.2	16	55.2	5	17.2	2	6.9	1	3.4
Personal knowledge and skills	12	41.4	14	48.3	2	6.9	1	3.4	0	0
Good Internet access	2	6.9	12	41.4	9	31	5	17.2	1	3.4
Management Support	5	17.2	8	27.6	11	37.9	3	10.3	2	6.9
Good equipment and infrastructure	2	6.9	6	20.7	19	65.5	0	0	2	6.9
Financial Support	1	3.4	4	13.8	4	13.8	13	44.8	7	24.1
Flexible organisational policies	1	3.4	0	0	4	13.8	19	65.5	5	17.2
Flexible social media policies	1	3.4	0	0	1	3.4	21	72.4	6	6.9

Appendix 6(b): Factors influencing the use of social media tools at UWC (N=43)

Factors	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%
Good Internet access	11	25.6	30	69.8	0	0	2	4.7	0	0
Tools are easy to use	11	25.6	30	69.8	2	4.7	0	0	0	0
Personal knowledge and skills	15	34.9	25	58.1	3	7	0	0	0	0
Good equipment and infrastructure	12	27.9	28	65.1	2	4.7	1	2.3	0	0
Tools are useful for personal and work purposes	12	27.9	28	65.1	3	7	0	0	0	0
Management Support	8	18.6	30	69.8	3	7	0	0	2	4.7
Patron Demand	10	23.3	27	62.8	4	9.3	2	4.7	0	0
Flexible organisational policies	7	16.3	29	67.4	5	11.6	1	2.3	1	2.3
Staff commitment and cooperation	6	14	30	69.8	5	11.6	1	2.3	1	2.3
Staff willingness to change	5	11.6	29	67.4	4	9.3	2	4.7	3	7
Financial Support	3	7	28	65.1	4	9.3	4	9.3	4	9.3
Flexible social media policies	2	4.7	9	20.9	6	14	23	53.5	3	7
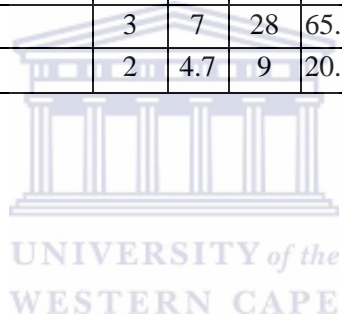
Appendix 7(a): Factors influencing the non-use of social media tools at the NUST (N=29)

Factors	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	f	%	f	%	f	%	f	%	f	%
Lack of financial support	16	55.2	9	31	0	0	3	10.3	1	3.4
Absence of social media policies	19	65.5	3	10.3	1	3.4	2	6.9	4	13.8
Restrictive organisational policies	18	62.1	4	13.8	1	3.4	2	6.9	4	13.8
Poor Internet access	9	31	13	44.8	4	13.8	3	10.3	0	0
Lack of management Support	1	3.4	11	37.9	2	6.9	13	44.8	2	6.9
Lack of equipment and infrastructure	2	3.4	8	27.6	10	34.5	10	34.5	0	0
Staff unwillingness to change	1	3.4	6	20.7	1	3.4	20	69	1	3.4
Lack of staff commitment and cooperation	1	3.4	6	20.7	1	3.4	19	65.5	2	6.9
Lack of patron demand	0	0	3	10.3	0	0	25	86.2	1	3.4
Lack of personal knowledge and skills	1	3.4	1	3.4	0	0	25	86.2	2	6.9
Tools are not easy to use	0	0	2	6.9	0	0	21	72.4	6	20.7
Tools are not useful for personal and work purposes	0	0	1	3.4	0	0	22	75.9	6	20.7

Appendix 7(b): Factors influencing the non-use of social media tools at UWC (N=43)

Factors	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	f	%	f	%	f	%	f	%	f	%
Absence social media policies	0	0	26	60.5	3	7	9	20.9	5	11.6
Lack of knowledge and skills	1	2.3	2	4.7	3	7	29	69.8	8	11.6
Lack of patron demand	0	0	3	7	4	9.3	30	69.8	6	14
Lack of equipment and infrastructure	0	0	2	4.7	4	9.3	28	65.1	9	20.9
Staff unwillingness to change	0	0	2	4.7	3	7	29	69.8	9	20.9
Lack of staff commitment and cooperation	0	0	2	4.7	3	7	30	69.8	8	18.6
Poor Internet access	0	0	2	4.7	2	4.7	32	74.4	7	16.3
Tools are not easy to use	0	0	1	2.3	2	4.7	34	79.2	6	14
Tools are useless for personal and work purposes	1	2.3	0	0	3	7	32	74.4	7	16.3
Restrictive organisational policies	0	0	1	2.3	1	2.3	33	76.7	8	18.6
Lack Management Support	0	0	1	2.3	1	2.3	30	69.8	11	25.6
Lack of financial Support	0	0	1	2.3	3	7	30	69.8	9	20.9

Appendix 8: NUST Library website

Appendix 9: UWC Library website

Appendix 10: Web-based questionnaire

University of the Western Cape
Faculty of Arts
Department of Library and Information Science
Private Bag, X17, Bellville, 7535, Cape Town, South Africa

Dear Respondent

My name is Rangarirai Moira Mabweazara. I am pursuing a Masters degree in Library and Information Science at the University of the Western Cape. I am carrying out a study on the use of social media tools by academic library staff at the University of the Western Cape (UWC), South Africa and the National University of Science and Technology (NUST), Zimbabwe. The research project aims at examining familiarity, purpose of use, factors affecting use and non-use of social media, benefits and challenges of using these technologies amongst academic librarians at both universities.

A questionnaire for this study is enclosed. I therefore solicit your assistance by providing answers to the set of questions provided. In case you have any questions and wish to have a detailed account of this study please contact Dr Sandy Zinn at the University of the Western Cape at szinn@uwc.ac.za; tel: 021 9592349.

· You will be anonymous and all answers will be confidential.

· Information obtained through this exercise will be strictly used for academic purposes.

· Your participation is voluntary and you are free to withdraw at any time without giving any reason.

If you agree to take part in the above mentioned study please fill in the questionnaire and click SUBMIT once you finish.

Section A: Please fill in your personal information

1. What is your gender?

○ Female

○ Male

2. What is the level of your qualification?

○ Diploma

○ Degree

○ Masters

○ PhD

○ Other: [_____]

3. What is your job title/ staff position?

[_____]

4. Which library do you work for?

○ UWC

○ NUST

Section B: Familiarity of librarians with social media tools

5. Which social media tools are you aware of? [You may select more than one]

- ☐ Facebook
- ☐ Blogs
- ☐ Twitter
- ☐ YouTube
- ☐ Flickr
- ☐ RSS
- ☐ Skype
- ☐ Wiki
- ☐ WhatsApp
- ☐ LinkedIn
- ☐ Google chat
- ☐ MXit
- ☐ Blackberry Messanger
- ☐ Tags
- ☐ Podcasts
- ☐ Delicious
- ☐ Viber
- ☐ Picasa
- ☐ Dropbox
- ☐ Other: _____

6. How long have you been using each of the following social media tools?

	for a week	for a month	for a year	for many years	Never
Facebook	○	○	○	○	○
Twitter	○	○	○	○	○
Blogs	○	○	○	○	○
Youtube	○	○	○	○	○
Flickr	○	○	○	○	○
RSS	○	○	○	○	○
Skype	○	○	○	○	○
Wiki	○	○	○	○	○
LinkedIn	○	○	○	○	○
Google chat	○	○	○	○	○
WhatsApp	○	○	○	○	○
MXit	○	○	○	○	○
Blackberry Messanger	○	○	○	○	○
Tags	○	○	○	○	○
Podcasts	○	○	○	○	○
Delicious	○	○	○	○	○
Viber	○	○	○	○	○
Picasa	○	○	○	○	○
Dropbox	○	○	○	○	○

7. Where do you access these social media tools? [You may select more than one]

☐ At home
☐ At the library
☐ In an Internet Cafe
☐ At Work/Office
☐ Other: _____

8. How frequently do you use each of the following social media tools?

	Many times a day	Once a day	Once a week	Once a month	Never
Facebook	○	○	○	○	○
Blogs	○	○	○	○	○
Twitter	○	○	○	○	○
YouTube	○	○	○	○	○
Flickr	○	○	○	○	○
RSS	○	○	○	○	○
Skype	○	○	○	○	○
Wiki	○	○	○	○	○
WhatsApp	○	○	○	○	○
LinkedIn	○	○	○	○	○
Google chat	○	○	○	○	○
MXit	○	○	○	○	○
Blackberry Messanger	○	○	○	○	○
Tags	○	○	○	○	○
Podcasts	○	○	○	○	○
Delicious	○	○	○	○	○
Viber	○	○	○	○	○
Picasa	○	○	○	○	○
Dropbox	○	○	○	○	○

Section C: Purposes of using social media tools by library staff

9(a). What are the purposes of using social media tools in your personal spaces?
1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

	1	2	3	4	5
Acquiring information	○	○	○	○	○
Academic purposes	○	○	○	○	○
Entertainment	○	○	○	○	○
Communicating with friends and family	○	○	○	○	○
Keeping abreast with current news globally	○	○	○	○	○
Archiving personal information	○	○	○	○	○

9(b) Please specify other purposes of using social media tools in your personal spaces?

10(a). What are the purposes of using social media tools in your work spaces?
1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

	1	2	3	4	5
Announcing Library news/events	○	○	○	○	○
Reference services	○	○	○	○	○
Information Literacy programs	○	○	○	○	○
Alerting users about the availability of booked materials	○	○	○	○	○
Collaborative delivery of services with collegues	○	○	○	○	○
Interacting with users	○	○	○	○	○
Keeping track with professional current trends	○	○	○	○	○
Communicating with the faculty staff	○	○	○	○	○
Sharing work related ideas with colleagues	○	○	○	○	○
Collaborating with colleagues in other libraries	○	○	○	○	○

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10(b).Please specify other purposes of using social media tools in your work spaces?

[   ]

Section D: Advantages and disadvantages of using social media tools

11(a). What do you think are the benefits of using social media tools in your personal spaces?

[   ]

11(b). What do you think are the benefits of using social media tools in your work spaces?

[   ]

12(a). What do you think are the disadvantages of using social media tools in your personal spaces?

[   ]

12(b). What do you think are the disadvantages of using social media tools in your work spaces?

[   ]

Section E: Factors influencing use or non-use of social media tools amongst library staff

13(a). What factors influence you to use social media tools?
1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

	1	2	3	4	5
Management support	○	○	○	○	○
Personal knowledge and skills	○	○	○	○	○
Good equipment and Infrastructure	○	○	○	○	○
Staff willingness to change	○	○	○	○	○
Financial support	○	○	○	○	○
Patron demand	○	○	○	○	○
Staff commitment and cooperation	○	○	○	○	○
Good Internet Access	○	○	○	○	○
Tools are easy to use	○	○	○	○	○
Tools are useful for personal and work purposes	○	○	○	○	○
Flexible organisational policies	○	○	○	○	○
Flexible social media policies	○	○	○	○	○

13(b).Please specify other factors which influence you to use social media tools?

14(a). What factors influence you not to use social media tools?

1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

	1	2	3	4	5
Lack of management support	○	○	○	○	○
Lack of knowledge and skills of staff	○	○	○	○	○
Lack of equipment and Infrastructure	○	○	○	○	○
Staff unwillingness to change	○	○	○	○	○
Limited budgets	○	○	○	○	○
Lack of response from users	○	○	○	○	○
Lack of staff commitment and cooperation	○	○	○	○	○
Poor Internet Access	○	○	○	○	○
Tools are not easy to use	○	○	○	○	○
Tools are useless in personal and work spaces	○	○	○	○	○
Restrictive organisational policies	○	○	○	○	○
Absence of social media policies	○	○	○	○	○

14(b).Please specify other factors which influence you not to use social media tools?

!!THANK YOU FOR YOUR TIME!!

Submit

Never submit passwords through Google Forms.