



Investigating the library research support services in the Faculty of
Education, University of Namibia (UNAM): a Hifikepunye Pohamba Campus
focus

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COMPULSORY DECLARATION

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

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Dedication

This work is dedicated to my late parents, my dearest daddy Matheus Aipinge and ever caring mommy Helman Shikambe – Aipinge. Both could not live to this date to witness my progress.

This is in memory of their morals and values which they instilled in me. I am grateful to them for teaching me to be humble and committed towards any type of work, be it traditional or academic.

May their soul Rest in eternal peace.

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Equally important is my gratitude to my host institution, the University of Cape Town and in particular, the Centre of Libraries and Information Studies for giving me an opportunity to study with such a prestigious university. Thank you to my supervisor, Michelle Kahn for her unwavering support, coaching and towards my work.

Last but not least, a big thank you to my family for encouraging and believing in me and in doing so, enhanced my self-esteem. I bare more gratitude for this note from my beloved daughter Ndapandula, she wrote to me in 2015 when I went to pursue my postgraduate studies:

2015
Diary

Dear Mom

You are my role model, my mentor and my rock. You encourage me to be the best that I can be and I am proud to call you my mom.

I pray that I may one day make you proud too.

You are living proof that hard work and determination is the only key to success.

Never give up, follow your dreams and be happy always.

Love you. And remember...

"If it is not your best work, it isn't complete".

Abstract

This study investigated the library research support services in the Faculty of Education at Hifikepunye Pohamba (HP) Campus, University of Namibia. The research problem is that UNAM has an interest in growing its research, but the library does not have strong research support services; these needed to be investigated, along with researchers' support needs.

The study explored the research support services currently in place at HP campus in order find out to what extent the campus' library services meet the needs and expectations of the researchers and academic staff. The study further examined how the research support service at the HP campus library could be re-conceptualised. The results of the study aimed at guiding librarians on what research related services should be offered to researchers in order to improve research outputs. The study was guided by the Research Librarianship conceptual approach which provided direction and ideas on an ideal research support service which responds to country, institution and individual research needs and changes in scholarly communication.

A mixed methods approach was used to collect and analyse both quantitative and qualitative data. Data was collected using two sampling methods. They are: a census which was conducted for academics and convenience sampling for emerging researchers. Questionnaires were distributed to academic (established researchers) and postgraduate students who are referred as emerging researchers in the study.

The findings are that the HP campus library does provide research support services, but they are not really core activities of the research support services as the concept would suggest. Many researchers felt their needs were being met but the current services are not specifically research-related activities and therefore do not help improve on research outputs as much as more targeted research services would. The findings indicated that there is a need to advance the campus' traditional library services by adding activities which respond to research needs.

The study therefore recommended that the library at the HP campus should enhance the research support services by responding to new trends in an academic library which fit into the new higher education teaching environment. Furthermore, the library should develop awareness programmes of the library research support services for academics. It is also recommended that the library should integrate IT skills into library training and that new set of skills such as research and subject-related skills are required by academic librarians. Therefore, staff development should be a continuing programme for UNAM librarians to constantly adapt to new trends and ensure library services are on par with the changes in research.

The main recommendation is that the librarians should adapt to new trends and ensure that the library services remain relevant by contributing to research outputs. This will mainly be made possible if librarians have relevant qualifications to enable them to have the competence and skills in research-related activities.

List of acronyms and abbreviations

ACRL	Association of College and Research Libraries
ARL	Association of Research Libraries
GDP	Gross Domestic Product
HP	Hifikepunye Pohamba
ICT	Information and Communications Technology
ILS	Integrated Library System
IR	Institutional Repository
NCRST	Namibian National Commission for Research, Science and Technology
R&D	Research and Development
RDM	Research Data Management
RIN	Research Information Network
OA	Open Access
OECD	Organisation for Economic Co-operation and Development
UNAM	University of Namibia
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UK	United Kingdom

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Chapter 1

1. Introduction to the study

Research is of growing importance in academic institutions. It improves the quality and standard of education in the institution, it also contributes to innovation which leads to socio-economic development of a country. Research enhances visibility and prestige of the institution. As the importance of research increases, there is a need for research support services to assist researchers with necessary tools to increase research output and contribute to the achievement of the institutional research agenda.

The importance of research support services has come to light as a vital pillar in academic libraries to assist researchers produce more and quality research outputs (Hart and Kleinveldt, 2011). Higher education institutions have realised that the library can be a source of research support, thus contributing to the productivity of research in their institutions (Association of College and Research Libraries [ACRL], 2016a). Changing higher education pedagogy has had an impact on the transformation of library services (Raju and Schoombee, 2014:28) in that the library found itself in circumstances in which it has to work in new and cooperative ways in higher education in providing research-related services (ACRL, 2018). This is one of the reasons why librarians have had to develop a new role by offering support services to researchers. This role should include activities which reflect changes in higher education to ensure that the library services remain relevant.

The new services should be in line with top trends in academic libraries as well as changes in scholarly communication. According to the Association of College and Research Libraries (ACRL), top trends which affect libraries in higher education and that relate to research are as follows: In 2016, the ACRL acknowledged research data management; digital scholarship and repositories for sharing data; Open Access (OA) and research data services; collection assessment trends and altmetrics; and evidence of learning and new directions for Information Literacy Framework as services that could support the research process (ACRL, 2016a). In 2017 and 2018, the ACRL

recognised the publisher and vendor landscape; access to research datasets; policies and funds regarding OA initiatives; and promotion of information literacy to fight fake news as trends which affect research libraries (ACRL, 2018).

Traditional library services have been providing support for researchers. However, by providing just traditional services, such as information resources, literature searches, and help on how to access library databases as well as on referencing styles and citations, libraries may not be able to respond adequately to the needs of a research community. There is a need to adjust the library role by providing services such as those mentioned by the ACRL's annual top trends to enable libraries to contribute to the achievement of research in higher institutions.

Many libraries, especially in developed countries and some developing countries such as South Africa, have embarked on the initiative of introducing research support services for their academics and research students. These academic libraries have responded in a proactive way in research production by revamping their research support (Dunlap, 2008:132). It is important for the library to provide research support services to researchers to help them increase research output.

The study by De Jager, Nassimbeni, and Crowster (2016:286) indicated that there is "a need to enrich" librarians' understanding of the research process by means of their participation in research. They should be encouraged to engage with researchers and advance their ability to support research in their own libraries. Doing that will contribute to the achievement of the research agenda of their institution and demonstrate the value of the library's position within the institution. According to Bell and Shank (2008), librarians need to rethink their roles and position within the research communities in which they are serving. The concept of 'research librarianship' advocates for a new role for librarians regarding research support services where offerings meet expectations of researchers and help the institution achieve its research goals.

1.2 Background to the study

1.2.1 The University of Namibia

The University of Namibia (UNAM) was established by the act of the National Assembly, number 18 of 1992 (University of Namibia Act, 1992). Forsman, Ndinoshiho and Eija (2012) indicated that at its inception UNAM's focus was on undergraduate degree programmes, but from 2005 it extended the degree programmes to a postgraduate level in some courses, including education. Currently, UNAM has 12 campuses and seven Regional Centres throughout the country. Among these campuses, six of them fall under the Faculty of Education. They are Windhoek, Southern Campus, Hifikepunye Pohamba (HP) Campus, Rundu Campus, Katima Mulilo Campus and Khomasdal Campus (UNAM, 2016a). HP and the Windhoek main campuses train student teachers up to secondary education and postgraduate levels. The remaining campuses offer training from pre- and lower primary education to upper primary education levels at an undergraduate level only.

UNAM recognises the importance of research production, hence the formation of the following two centres to promote research production: The Centre of Research and Publications (CRP) responsible for providing directions and administration services in support of research activities. Through the CRP, the university promotes research in order to enhance the institutional role in creation and dissemination of new knowledge and further contributing to the development of the country (UNAM, 2016b). By promoting research, the centre will be able to increase research outputs for the institution to be more visible. The second centre is the Multidisciplinary Research Centre (MRC) which aims to conduct research according to national priority areas. The MRC is also responsible for collaborative research partnerships with local and international partners in order to have quality research processes and outputs (UNAM, 2016c). The support that researchers receive from the two centres is more about administration and conducting research. For example, the CRP concentrates on logistical activities, facilitating collaboration in research, articulating research focus areas of the institution as well as that of the country, while the MRC concentrates on conducting research. There is a

need for research services from the university's library to complement the support that is offered by the Centres.

1.2.2 The University of Namibia Library

As an academic library, the UNAM Library's mission statement is to support academic research, study and teaching activities (UNAM, 2016d). It creates an appropriate environment for its users by responding to research needs in the form of providing access to information resources. In addition, Subject and Reference Librarians are responsible for providing information literacy (IL) instruction to all library users; that is, students, academics, and researchers (UNAM, 2016d). According to Forsman, Ndinoshiho and Eija (2012: 193), the UNAM Library activities at the time of their study were more of a traditional type of library service. That means the UNAM Library had not responded to new trends and was still using an 'old school' approach to supporting research.

1.3 Research Problem

Research support services can play an important role in increasing the research productivity of an institution. Studies have shown that in order for a university to have a competitive advantage regarding its research outputs and so to improve its prestige and visibility there is a need for strong library support services (Bourg, Coleman & Erway 2009:1). Forsman, Ndinoshiho and Eija (2012) found that UNAM's traditional library services were not responding to the top trends in academic libraries as the services at the time of their study did not include most of the recommended set of services which are believed to contribute to research success. While traditional library services are still relevant in supporting researchers, they are not the only activities needed to improve research outputs.

According to Noden (2011:10), research and publication outputs are valuable indicators of research progress. They are one of the indicators used to determine a rating during the evaluation of the status of a particular university. UNAM could increase its research outputs if there are strong support services for research and the library is in a good position to provide the services.

Statistics show that the Faculty of Education is the biggest faculty at UNAM (UNAM, 2016f), but that its contribution to the institutional repository (IR) is small compared to other faculties such as the Faculty of Economics and Management Science (UNAM, n.d.). The number of papers published by an institution's faculty serves as a useful measure of its research productivity (Sambatur, Beena and Sequeira, 2013). It was further revealed through the library customer satisfaction user surveys, LibQUAL - which is an internationally recognised library survey tool to measure users' opinions about the value and quality of library service - that there is a lack of support regarding subject-specific research at UNAM, specifically at Windhoek and HP campus libraries, which are among the campuses which belong to the Education Faculty. Another finding of the LibQUAL survey was that UNAM Library lacks librarians with expertise in specific disciplines and research focus areas (UNAM, 2016e).

Although the provision of research support services is a new concept for Namibian higher education libraries, it is necessary and vital for an academic institution such as UNAM to consider them. It is imperative that the UNAM Library should be on par with other academic libraries in the belief that these services offer immense enhancement to academic research outputs. There has not been much interest in the investigation of these services at UNAM, in particular in the Faculty of Education, which needs to increase its research production. This study therefore undertook an investigation of the library research support services at the University of Namibia, Hifikepunye Pohamba Campus (known as HP campus). The campus is under the Faculty of Education.

1.4 Objectives of the study

In order to investigate the library research support services being offered at HP campus, the following objectives have been identified for this study.

- i. To discover the research support services currently in place at Hifikepunye Pohamba Campus Library, under the Faculty of Education.

- ii. To investigate the extent to which the campus' library services meet the needs and expectations of the researchers.
- iii. To re-conceptualise the research support service at the HP campus library to better support researchers.

1.5 Research Questions

In response to the above objectives, the research questions are as follows:

- i. What are the library research support services currently in place at the UNAM HP campus, Faculty of Education?
- ii. To what extent do the library research support services meet the needs and expectations of the researchers at this campus?
- iii. What is required in library services to better support the researchers?

1.6 Rationale of the study

This study is essential in the library and in an academic environment, as well as in contributing to the development of Namibia as a whole. This type of study will help not only UNAM Library but other departments and research institutions about the necessity of offering research support services. It is important that librarians recognise the necessity to support researchers in order to meet the expectations in higher education. This contributes to the prosperity and transformation of academic institutions. The re-conceptualisation of the research support services being offered at HP campus library will demonstrate the benefit and the effectiveness of the librarian in support of research at the campus.

According to the Association of College and Research Libraries (ACRL, 2015), library services need to be re-oriented in order to stay in line with the evolving technologies, models and trends that are affecting the scholarly communication process. Thus, it is important for the study to investigate its support services in this regard.

As for the Faculty of Education, specifically, it is one of the oldest faculties at UNAM. The HP campus offers training up to the secondary level and also postgraduate students at Master and PhD degree level. It is therefore

important for this study to investigate how research at this campus is being supported. Furthermore, this study is important to the librarians themselves in that it will guide them to interpret how and what should be provided in terms of research support services. The outcome of this study could lead to the improvement of the UNAM Library services as a whole and the development strategies of the library's research support services, as it will provide recommendations to guide librarians regarding needed research support activities.

1.7 Limitations of the study

According to Du Plooy-Cilliers, Davis and Bezuidenhout (2014: 275), limitations of a study are factors which are beyond the researcher's control but do not have a big influence on the result of the study. These are for example: funds, time, access to participants and limited information (Du Plooy-Cilliers, Davis and Bezuidenhout, 2014). The main limitation of this study is its narrow focus on researchers at the HP campus. Researchers include academics and postgraduate students, and the latter are referred to as emerging researchers in this study. The intention had been to include researchers from the Windhoek campus and to interview librarians as well. This was not possible because of the delay for eight months by the UNAM Research and Publication Officer to issue a clearance certificate for the study. Their procedures about responsibilities of the subcommittee at the Campus level under the Centre for Research and Publication were not clearly laid out. Consequently, the application for ethical clearance had been exchanged between the Campus subcommittee and the Central Office and only after some time did the Campus Committee for Research and Publication attend to the application and recommend it to the Central Office for approval. They recommended that the study be limited to HP campus only and should exclude librarians (see Appendix E1). Since this study was a minor dissertation and time had been lost already, the committee's recommendation could not be disputed. Nonetheless, the study remains worthwhile and was carried out according to established methods. Data collected was adequate to answer the research questions.

1.8 Research report outline

Chapter One introduces the purpose of the study. It gives the background to the study and clearly states the problem of the study with its questions and objectives.

Chapter Two covers the conceptual framework chosen to guide the study. The concept then provides direction throughout the literature review to assist in identifying possible library activities for research support services.

Chapter Three presents the approach taken in conducting the study and the research methodology for tools and techniques involved in collecting and analysing data.

Chapter Four presents the results from data which was collected in order to answer the research questions.

Chapter Five is the discussion of the findings, recommendations and conclusions of the study.

1.9 Summary

This study was conducted to investigate the research support services at Hifikepunye Pohamba Campus in the Faculty of Education of the University of Namibia. It was done by exploring the research support services which are in place and to what extent they meet the needs of the researchers. Then, the study looked at what services are required to be added in order to support researchers further. The study is guided by the concept of Research Librarianship. This study therefore aimed to find out whether the UNAM Library provides support which contributes to research production and the achievement of the institution's research mission. It is noted that the research landscape of a country or institution and changes in scholarly communication play a big role in research production. Thus, it is of importance to investigate how the UNAM Library in the Faculty of Education supports researchers to aid the production of better research.

Chapter 2

2. Literature Review

2.1 Introduction

This chapter presents the conceptual framework that guides the study and the review of the literature which is related to the study. The main purpose of a literature review is to create an accurate representation of knowledge on a topic, including identifying gaps in the literature and describing previous research findings concerning the problem at hand (Leedy and Ormrod, 2010: 66). In order to organise related literature better, this chapter is divided into themes consistent with the research objectives of this study and which, at the same time, are related with the study's guiding framework. After a discussion of the study's conceptual framework, traditional academic library services which provide the background to the study are discussed. Then, factors which influence research and thus the provision of research library services are reviewed. Finally, this chapter looks at the needs and expectations of researchers with respect to libraries. It then highlights how research support services benefit educationists (the population of this study).

2.2 Conceptual framework: Research Librarianship

Research Librarianship is the concept that frames this study and guides this literature review. The concept presents changes to the traditional way of providing library support services, taking into consideration changes in the higher education environment and the research agenda of the institution or country, as well as researchers' changing needs.

A research support service is more than a traditional library service (Parker, 2012: 6) and enables academic libraries to remain relevant in the research process (Raju and Schoombee, 2014: 27). Academic libraries support learning, teaching and research in the institution, contributing to the achievement of the institution's mission. A research librarian develops and manages services with the focus on the needs of the country, institution and researchers in order to improve research (Brown, Wolski and Richardson,

2015: 226). The research librarian supports cooperation and collaboration between the library and researchers and therefore should have “an understanding of the library in the context of higher education and the needs of researchers” (The Research Information Network [RIN] and Research Libraries UK [RLUK], 2011:40).

Hart and Kleinveldt (2011) said that Research Librarianship is, nevertheless, still concerned with traditional library tasks such as literature searches, responding to reference queries, providing access to information resources and involvement in IL training in which referencing style and copyright are part of the content. To add to those traditional services are subject-based information expertise and the ability to manage institutional repositories of digital information, teach information literacy at the advanced level (Hart and Kleinveldt, 2011: 40) and be able to manage datasets for e-research (Brown and Swan, 2007:41 in Hart and Kleinveldt, 2011: 40). As a result of shift in scholarly communication, research librarianship presents additional activities to the traditional way of providing library services for researchers specifically. The concept of Research Librarianship entails the supporting of faculty and postgraduate researchers through all stages of the research process. This kind of support will be attainable once there is stronger collaboration between librarians and researchers as “true research partners” in order to demonstrate the value of academic libraries in their institutions (Monroe-Gulick, O’Brien, and White, 2013:384). Hence, it is important for research librarians to attend conferences to familiarise themselves with research papers, be introduced to new findings and participate in the development of government policies affecting research (ACRL, 2016a).

The core services of research librarianship are the provision of research support services that contribute to research production after empowering researchers with the necessary skills to adapt to changes and new developments in the research landscape (Kennan, Corral and Afzal, 2014). The concept of Research Librarianship anticipates that librarians should offer services to researchers from the beginning of the research process (Raju and Schoombee, 2014) and throughout the process. However, research needs are

also influenced by the expectations of an institution as well as by the disciplines being researched there (Gannon-Leary, Bent and Webb, 2007); research support services vary from institution to institution according to research agendas and disciplinary differences. The research librarian's role thus depends on the direction of the institution and the research agenda of a country, as well as on the disciplines of researchers at the institution. Services which are provided to support researchers, especially emerging researchers, are to help them cope with changing trends and survive in the competitive research environment (Rubbia et al., 2014).

A research librarian must provide services and facilities which reflect changes in scholarly communication. Webster (2002) stated that libraries are in a continuing state of change, and they should see opportunities in any trend and turn challenges into chances for improvement. Also according to Webster (2002), librarians need to engage researchers, not only to familiarise with what challenges they are facing, but to inspire them regarding the library's ability to help. For example, the research librarian should be able to provide such services as to help with research funds and grant writing; research data services; research data management; research output evaluation; and support for OA publishing (RIN and RLUK, 2011). These services are believed to enable the library to help achieve research goals in the institution as well as at a national level by aiding in increasing research production.

To sum up, Research Librarianship as a concept aims to support the research agenda of a country and an institution. Research librarians are aware of the research landscape of the country and institution and the need to improve research outputs. They understand the research process in general as well as the knowledge requirements of particular disciplines and are able to address the needs of researchers in those disciplines. They are up to date with the changes in scholarly communication. They strive to be more active within the research community, working alongside other research units.

In this chapter, aspects mentioned in this section are expanded upon in the sections that follow.

2.3 Traditional functions of academic libraries

Traditionally, as stated by Saha (2009), the library service is accountable for the library contents, including the selection, processing and organisation of information resources. Thereafter, it plays a vital role in the delivery of information; providing instructional training and loan services to meet the needs of its users (Abubakar, 2011:136). In a nutshell, the traditional services of academic libraries have been more to ensure a physical place where users can go to use facilities, providing adequate collection of resources and ensuring easy access to information resources (Raju and Schoombee, 2014).

This function has been further extended to the organisation of information in web domains and portals to provide access to electronic information resources such as e-journals and citations (Akeroyd, 2001). Information and Communications Technology (ICT) changed the way academic libraries preserve and provide access to knowledge and information (Abubakar, 2011). These changes came with modifications in information needs of users. This brought about new roles for the librarian on how to manage and mediate access to information that may exist in electronic form (Saha, 2009). At this point, academic libraries had to reinvent traditional services and establish new services to respond to emerging needs of library users who wanted access to electronic resources (Goetsch, 2008).

2.4 Librarians and the research process

Research libraries should provide services that respond to the needs of researchers throughout the research process, not only when they require resources and assistance in using them. If librarians are to provide support services to researchers, they should be involved in the entire research process (Rothfritz and Strecker, 2018) and establish trust with researchers in the process (Carlson and Kneale, 2011) rather than only limit themselves to information provision (De Jager, Nassimbeni and Crowster, 2016). The research process consists of idea discovery; application for funding and grants; carrying out the research; and the dissemination of research results (RIN and RLUK, 2011). De Jager, Nassimbeni and Crowster (2016) recommend that getting involved in the research process enables research

librarians to have an understanding of the research areas and gives them the ability to provide necessary support to help meet the needs of researchers at all stages.

Bourg, Coleman and Erway (2009) explained that it is the norm for study results to be published in order to be disseminated to the research community and hence produce new ideas for further research. It is understandable that the discovery of ideas starts from the library, whereby researchers use the library information resources and many a times they need assistance from librarians who are experts in the subject fields (Rothfritz, and Strecker, 2018). The library is crucial for the discovery stage of research, but it must also expand its services across the research cycle.

The report by Research Libraries UK (RLUK) and Research Information Network (RIN) (2013) explained how the library can provide support during the research process in different ways to different categories of users and stakeholders; which are researchers, publishers and ICT services (RLUK, 2013:15). Services ranged from procuring research materials; facilitating and promoting access and discovery of research materials; offering a physical space to researchers to work; and inductions and training programmes to develop research skills. Wang (2013:2) supports that librarians can be involved in teaching research skills, in addition to providing reference services. Some more services mentioned by the report are: advice on where to publish, on copyright, open access and citations; assistance in the grant proposal process; validation and checking of metadata; finding full text articles; assisting with submitting articles to the repository; and digitising important research collections. All these mentioned activities are very important during the research process (RLUK and RIN, 2013).

2.5 Libraries responding to the research agenda

The research agenda of a country or institution plays a big role in the establishment of library services that support research. Research agenda is a collection of themes of inquiry that shape the direction of future research in an institution as well as in a country (Association of College and Research Libraries, 2007). Countries or institutions can have a research agenda when

they recognise the importance of research in order to have well-informed public policies that bring about innovation and thus development (Certain, Terry and Zicker, 2015). According to Baker (2011), research is a tool for building knowledge and new discoveries. The author further mentioned that the purpose of research is to inform action: through research, people find answers to problems; to gaps in knowledge and improve the way in which things have been done (Baker, 2011).

The International Development Research Centre (IDRC) (2011) indicated that countries are interested in producing research because research provides evidence to strengthen and conduct informed policy-making and decision-making. According to the Organisation for Economic Co-operation and Development (OECD) (2012), research is of great significance and the key to a knowledge-based, or an innovation-driven, economy.

However, there are powerful factors in the research landscape which influence the process of research. Abubakar (2011) mentioned that the research landscape is ever changing and this implicates the library services in support for researchers. In addition, researchers should be familiar with the institutional research agenda and be conscious of the research landscape in which they are operating (Kaniki, 2012). The research landscape provides the strategic vision and objectives that direct the functions of a research library as well as a research librarian (Kaniki, 2012).

The main factor that influences the research landscape is funds. In order to encourage research and innovation, countries need to provide funding for research activities. The United Nations Development Programme (UNDP), through its Sustainable Development Goals, emphasised the importance of national investment in research and development (United Nations, 2015). However, funds being allocated to research by countries are limited. The OECD has indicated that only around 17,6% of the global research and development (R&D) expenditure is spent by developing countries (OECD, 2017). The World Bank Group (2017) indicated that Namibia spent 0.14% of the country's Gross Domestic Product (GDP) on research and development in 2010; this is the highest percentage spent on R&D in the country from 2000

to 2014. Most developed countries are however reported to spend more than 2.0% of their GDP on research and development (World Bank, 2017)

Many countries have established research commissions to support the government's mission of promoting research. The Namibian National Commission for Research, Science and Technology (NCRST) is one such commission. The main aim of this commission is to facilitate the awarding of funds and grants to researchers. They regulate criteria and policies to control the allocation of the funds (The Namibian National Commission, 2015). Since the funds are limited, there are assessment criteria to identify eligible individual researchers or projects. The allocation of research funds is also done according to the country's prioritisation of fields and disciplines. For example, in Namibia, the priority fields for research at the time of this study are science and technology. Bloch, Graversen and Pedersen (2014) indicated that there is a high level of competition for research grants. It is difficult for individual researchers to receive a grant if they do not meet the required criteria.

Institutional support entities, such as libraries, can be of assistance if they are informed about national research priorities. The RIN and RLUK report (2011) indicated that research librarians should provide help to researchers who are applying for research grants and contracts. The report further stated that librarians have a chance to use their abilities to help researchers advance the quality of applications for research funds, and as a result contribute to the visibility of the institution (RIN and RLUK, 2011) and to the development of the country.

Studies by Smith and Katz (2000) and Harley et al. (2010) mentioned that educators and policy makers have recognised the importance of collaboration to secure research funds. Research collaboration across research institutions and national borders is considered important and has the following benefits, according to Ubfal and Maffioli (2010:6): that collaboration improves scientific knowledge and fosters the development of human capital; that during the process, the skills, ideas, labour and resources that different team members bring into collaboration, contribute more in value and professional growth;

that collaboration can accelerate the research progress and enhance the quality of the work through sharing of knowledge, techniques and expertise.

The Faculty Development and Instructional Design Center at Northern Illinois University further detailed that collaboration also allows effective communication, stable partnerships and large networks between academics to share information, new approaches and resources. That is why funding agencies, such as governments and private foundations, are now encouraging collaboration in order to suggest diverse viewpoints, knowledge, experience, and skills that can result in innovative methods to problem-solving (Faculty Development and Instructional Design Center, 2005). Borrell-Damian, Morais and Smith (2014) explained that research collaboration has been a key issue in improving regional and national economic development.

Ultimately, academic institutions' strategies promote research in that they want to improve their organisations' research output, which contributes to the visibility of the institution and improves the prestige of the institution while also adding to the economic development of the nation. Namibia too has recognised "the importance of research, science and technology as an instrument of economic growth and development, hence the enactment of the Research Science and Technology Act", (Research Science and Technology Act no 23 of 2004). The objectives of the Act are:

"to ensure the co-ordination, monitoring and supervision of research, science and technology in Namibia; to promote and develop research, science and technology in Namibia; to promote common ground in research, scientific and technological thinking across all disciplines, including the physical, mathematical and life sciences, as well as human, social and economic sciences; to encourage and promote innovative and independent thinking and the optimum development of intellectual capacity of people in research, science and technology; to ensure dedicated, prioritised and systematic funding for research, science and technology application and development in Namibia; to promote linkages between Namibia and international institutions and

bodies on the development of research, science and technology” (Research Science and Technology Act no 23 of 2004).

Research is important worldwide and in Namibia as well, as it provides an opportunity to expand knowledge and discover new ideas in order to contribute to sustainable development and improve people’s lives. As stated above, Namibia aims to encourage research through the Research Science and Technology Act, 2004 (Act no 23 of 2004). However, the priority is on specific disciplines including the physical, mathematical and life sciences, as well as human, social and economic sciences; which are currently more important to the development of the country. That is why the NCRST was established in terms of section 4 of Research Science and Technology Act, 2004 (Act no 23 of 2004). It aims to facilitate the development of Research, Science, Technology and Innovation towards socio-economic advancement for Namibia (NCRST, 2016). With reference to the Research Science and Technology Act no 23 of 2004, it is clear that the criteria by NCRST research funds and grants are assigned according to the national priority.

The research librarian must have the competencies and skills to deliver information and knowledge to the scholarly community (ACRL, 2016a) in relation to the research landscape. The Association of Academic and Research Libraries (2007) reported that libraries occupy a crucial position in higher education institutions and play an essential role in supporting higher education’s core missions of research and teaching.

2.6 Libraries responding to the changes in scholarly communication

Warner (2016) argued that if academic libraries provide research support throughout the research process, the accessibility of research outputs should not be left behind. Research support services are influenced by changes in scholarly communication (Klain-Gabbay and Shoham, 2016). The Association of Research Libraries (ARL) (2016a) defines scholarly communication as the system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community and preserved for future use. Scholarly communication is ultimately about sharing knowledge which is produced through research within the scholarly

community. Traditionally, the sharing of knowledge has been done through scholarly journals, monographs, conferences and workshops. However, technology enables new ways of sharing knowledge through networks, open repositories, open science, e-research, open data, blogs and social media (Klain-Gabbay and Shoham, 2016; Troyano, 2013).

One concern about scholarly communication is the exorbitant price of journal subscriptions (Webb, Gannon-Leary and Bent 2007). Researchers and their institutions do not have access to their own published articles if they do not have money to subscribe to the specific journals in which they are published. This traditional model for scholarly publishing has a huge financial impact on institutional budgets, as libraries have to subscribe in order to provide access to published academic articles. As institutions cannot afford to subscribe to all relevant journals, researchers are dissatisfied with access to research. The public (even if it is their money that has funded the research) is also denied access to reliable peer-reviewed research findings (Woszczyński and Whitman, 2016).

Webb, Gannon-Leary and Bent (2007:12) emphasised that it is best to disseminate scholarly publications via OA journals and by depositing a copy into an institutional repository. Institutional repositories are “services that a university offers to the members of its community for managing and disseminating scholarly outputs which are created by the institution and its community members in a digital form” (Lynch, 2003:329). They allow research outputs to be accessed, hence reach a much wider audience; potentially that publication will be cited more often and elevate the profile of the author and institution (Jain, 2012).

OA is a movement whereby “scholarly literature is made freely available on the internet, so that it can be read, downloaded, copied, distributed, printed, searched, text-mined or used for any other lawful purpose, without financial, legal or technical barriers” (Budapest Open Access Initiative, 2005). Research librarians should co-operate with scholars by encouraging the use of these new models in scholarly communication (ACRL, 2016a).

Jain (2012) mentioned that since the librarians' role is to provide access to information, they bear a responsibility towards the development of repositories for documentation, curation and preservation of research data and output. The other challenge is management of research data. There is a need to integrate Research Data Management (RDM) into support services that can greatly assist researchers to manage their data. Subsequently, researchers will be able to fulfil funding agencies' and journal publishers' requirement of sharing data. Librarians are in a better position to lead RDM (Yu, Deuble, and Morgan, 2017). Davidson (2013:5) stated that in the United Kingdom (UK), libraries are prominent in the development and distribution of research data management services. The handling, "sharing and curating of research data" is very significant for data reuse, thus libraries are in a better position to play a role in enabling data discovery and reuse (Davidson, 2013:5).

For as long as scholars have been publishing their research, there has been interest in determining the impact of their publications (O'Neill, 2000:105). Thus, research evaluation has become a popular trend in scholarly publishing. Countries and research institutions with a research agenda also want to evaluate research outputs. This is done in order to find out the way that one scholarly entity may influence other scholarly entities positively through the creation of knowledge (Roemer and Borchardt, 2015). The metrics used to evaluate research outputs are altmetrics and bibliometrics. Bibliometrics is "a range of techniques used for assessing quality, dissemination and content of publications and patents" (Guthrie et al., 2013:3). It uses quantitative analysis to measure patterns of publication and citation typically focusing on journal papers (Guthrie et al., 2013). Types of bibliometrics are citation analysis, impact factor and h-index.

In the past, scholarly outputs were in the form of academic journal publications and that is why scholarly impact has been measured using bibliometrics. Agarwal et al. (2016) stated that today academic research output has expanded beyond journal publications to include online presentations, slides and data sets. While bibliometrics has attempted to

capture the impact of traditional academic publications in a print form, it was not designed to cope with measuring the impact of these emerging media. It also lacks the ability to measure the impact of scholarly outputs in non-traditional avenues, such as blogs, Twitter, Facebook and other social media. Thus, other tools and methods such as altmetrics to measure the impact of an individual or their scholarship are useful, according to United Nations Educational, Scientific and Cultural Organization (UNESCO), (2001). Altmetrics is a measurement of individual scholarship such as online activity, gathered from social media or downloaded and viewed through other online tools (Kumar, 2009).

Researchers are required to be aware of how research outputs are evaluated. This knowledge will help them to make an informed decision on where to publish their articles in order to have higher citations, establish collaboration in research and have knowledge of accessing author impact which can be used for curriculum vitae (Agarwal et al., 2016). Agarwal et al. (2016) emphasised that this information is also relevant and needed when applying for research grants, job promotion and vacancies. Academic libraries have subscribed to various citation indexes and have access to bibliometrics databases, therefore librarians are knowledgeable in these resources (Roemer and Borchardt, 2015). The most popular databases to which academic libraries are subscribed for research evaluation are Web of Science, Scopus and Google Scholar (Delasalle, 2011).

Research librarians can assist academics to understand and cope with scholarly communication processes (ARL, 2016a). The provision of research support services by librarians should thus reflect scholarly communication practice (Auckland, 2012). Research librarians should actively engage in awareness of current scholarly communication issues (Wright, 2013).

2.7 Research support services in academic libraries

The role of academic libraries is to support the teaching and research of their parent institutions (Auckland, 2012). The support that the library provides should be in line with factors which were mentioned before in this study.

These include traditional library services, research processes, the research agenda and scholarly communication (Auckland, 2012; Ball and Tunger, 2006). There have been many studies in defining library research support services. One of the definitions by Raju and Schoombee (2014:29) is that research support is “the proactive engagement of the librarian with the researcher”. Raju and Schoombee (2014:28) further agreed with Parker (2012) that research support consists of a new and extended set of services such as research data management, curation and preservation, facilitating of open access and bibliometric analysis.

Libraries in the developed world are adjusting to practices which meet the needs of researchers through “academic liaison, collection development, information literacy (IL) and repository management” (Kroll & Forsman, 2010; Corral, 2012). Kesselman and Watstein (2009) noted that librarians have introduced new services in “areas of integrated IL instruction” and scholarly communication in order to meet the needs of their researchers. For libraries to be able provide the mentioned research support services, “a new set of skills is required by academic librarians” (Kesselman and Watstein, 2009). Auckland (2012) recognised a variety of skills which are required by librarians in the process of scholarship. These include: bibliometric analysis, digital curation and data mining. Sinclair (2009) foresees a blended librarian who possesses both traditional and IT skills to respond researchers’ needs in the 21st century.

Richardson et al. (2012: 258) emphasised that “university libraries worldwide are reconceptualising the ways in which they support the research agenda in their respective institutions”. They include research support activities that respond to the needs and expectations of researchers. A study by Kennan, Corral and Afzal (2014) mentioned that the aim of the research support service is to support the growth and the development of research activities by promoting issues concerning scholarly communication and the dissemination of research outputs

A study by Akeroyd (2001) stated that academic libraries’ support for research is in response to developing research resource collections and data

repositories, while information literacy frameworks can be adjusted to cover research literacy training. In addition, the ACRL top trends (2016, 2017 and 2018) emphasised the need to improve the roles of library instruction, and reference services; moreover, information literacy frameworks should be adjusted to respond to researcher's current needs. Jain (2012) further indicated that librarians develop policies and act as advocates creating awareness and offering training regarding OA, research data services and repository policies. The library should be a fundamental partner in the research process and demonstrate its value and impact on research by providing services to meet researcher needs (Neal, 2014). The following are some of the services that libraries can offer to support research:

- RIN and RLUK (2011) mentioned that libraries help researchers to win grants and contracts, for example, by supporting researchers in dealing with grant applications. Libraries can also play a role and advocate for change in the funding landscape, for example, by lobbying decision makers to change criteria for providing research funds and grants (RIN and RLUK, 2011). A study by Richardson et al. (2012) revealed that Queensland University Libraries provided support to researchers in respect of providing information on how to complete and where to find grant applications to major funding bodies. Kingsley (2014: 263) expressed how payment of publications has increasingly become an issue in a scholarly publishing landscape. Hence, there is need among some researchers to understand how and where to get funds for publishing.
- The library can also adopt new information literacy frameworks to meet different IL needs related to research (ACRL, 2016b). A study by Keller (2015) explained that many Australian libraries developed specific information literacy programs and support services for research students. They included research training workshops, a research seminar series and advanced information literacy training. According to Richardson et al. (2012: 261), libraries commonly provide research skills training and workshops to support research. Topics can include

“advanced information retrieval, assistance with writing literature reviews, using bibliographic management software, cited reference searching, current awareness services, creating publication strategies, monitoring research impact, research data management, and tools to facilitate collaboration” (Richardson et al., 2012: 270).

- RDM and research data services are important trends in academic libraries. RDM is the process of storage, making accessible and safeguarding of data through curation activities (Albert, 2006). Tenopir et al. (2014: 89) said that libraries should provide RDM services to ensure that data is preserved in the long term and that it can be reused. Management of data is a new concept for libraries, which requires teamwork from researchers and librarians to ensure long-term preservation and access to research data throughout the research cycle for better accessibility and future use (Sallans and Lake, 2014:87). RDM is part of good scientific practice and many funders require that research data be shared and be open for reuse and validation (Sallans and Lake, 2014:89). Helsinki University Library established RDM services in order to support researchers with all questions related to data management in a smooth and user-friendly manner (Kaiponen and Nykyri, 2016).

Research data services provide unique opportunities for academic libraries to become even more dynamic contributors in the knowledge creation cycle in their institution (Tenopir, Birch and Allard, 2012). Corral, Kennan and Afzal (2012) further pointed out that the development of national research policy and networked data-driven science have awakened libraries to respond to e-research. That is why libraries are grappling with the emerging role of supporting research data services and believe that it should be the role of the library to ensure access to published knowledge, including data (Brown, Wolski and Richardson, 2015:225). Brown, Wolski and Richardson (2015:225) warned that if the library is not offering these services, another unit will provide it and it will contribute to the diminishing of the library’s contribution to the research process.

- New offerings from publishers, such as membership schemes and mega journals, are making an impact on the research landscape (Research Council UK, 2017). According to the Research Council UK (2012), mega-journals publish only online and make their articles available on the open web rather than just to subscribers. These journals support this process by charging article-processing charges rather than subscriptions. Academic libraries are responsible for subscriptions and, with the introduction of alternative publishing methods, must ensure that OA publishing is well promoted to researchers (Sanjeeva and Powdwal, 2017:472).

With the growing research support needs of researchers and corresponding library services, it is useful to examine the top trends in academic libraries as published by the ACRL Research Planning and Review Committee to supplement the list from the literature (as described above). The following top trends (2016-2018) are associated with research and, in this study, are seen to be necessary for UNAM researchers because they would enable the university to improve research output and better compete with international research institutions. They are listed below and are believed to be practical for research librarians to incorporate into research support services:

- Research Data Services (RDS)

In agreement with Tenopir et al. (2014), Corral, Kennan and Afzal (2012) and others, the ARL has identified RDS as important. The services are important because research funding bodies are now requesting researchers to preserve research data. The Council on Library and Information Resources (2013) hence emphasised that librarians should advocate for research data services.

- Digital scholarship

This research service supports scholars using digital tools in their research, also called e-research (ACRL, 2016a). According to Borgman (2013), digital scholarship may make use of multimedia, database technology, digital text and images, digital music or art, and data sets (Borgman, 2013). The library should provide advice and guidance to

researchers regarding digital scholarship and further provide the services that support e-research activities (Hensley and Bell, 2017).

➤ Collection assessment trends and Integrated Library System (ILS) content provider mergers

The collection assessment and ILS are to ensure the library collection is responding to the institutional research and curriculum needs. The library critically analyses its collection to determine how well it is supporting the mission of the university. The collection assessment is important in the accreditation process of the institution and promotes the library's visibility in the institution (Henry, Longstaff and Kampen, 2008). Thus, relevant and adequate information resources are provided for research. The ILS and content provider mergers trend has shown that vendors are increasingly merging, and it is affecting the operation of the ILS. Thus, the possibility for the library to come up with an interoperability data system to support learning and research can be explored for researchers to be able to exchange and share documents within a single digital library.

➤ New directions with the ACRL Framework for Information Literacy

The new ACRL Framework for Information Literacy for Higher Education (ACRL, 2015) required a different approach to IL instruction which is relevant to research (Exner, 2014). It is essential that IL integrates different abilities from the discovery of information to how information is used to create new knowledge (ACRL, 2016a), making it relevant to research. The Framework still needs to be tested and, as such, the ACRL notes this as an area to monitor for activity and knowledge growth.

➤ Altmetrics

Altmetrics is an important new service in research that academic libraries can offer. Roemer and Borchardt (2015:31) explained that metrics have been used by librarians in collection assessment. Librarians are already familiar with bibliometrics and therefore libraries can continue being responsible for altmetrics (alternative metrics),

including training people on how to use related tools. The library is in a good position to advocate for altmetrics and incorporate it into repositories, databases and electronic journals (Fernández-Villavicencio, Aroca, Rehecho and Hernández, 2015).

➤ Emerging roles

This ARL trend entails that library professionals keep abreast of emerging technologies such as data analysis and visualisation, and geographic information systems. For librarians to be competent in emerging areas, they should possess relevant technological skills and knowledge to be able to provide whatever necessary support is in line with modern library services (ACRL, 2016a).

The above top trends have a connection to some of the following 2015 trends: collaboration within the higher education in categories of data management, evolving openness in higher education, research evaluation (bibliometrics), and digital humanities (ACRL, 2015). In order to remain relevant, libraries refer to the ACRL trends and align their services with them, where relevant. Library support services responding to some of these trends at UNAM (for example, reference style training, support with data analysis tools (SPSS), information literacy training, training on measuring research impact) are probed in this study.

2.8 Research support services and the needs and expectations of researchers

The needs and expectations of researchers influence the provision of research support services (Poll, 2012). Support for researchers' information needs is crucial because they are influenced by the research environment, expectations of their institutions and their disciplines (Gannon-Leary, Bent and Webb, 2007). Researchers need support to be able to conduct research, publish research findings, raise research funds and get promoted (Auckland, 2012)). Similar sentiments were shared by the report, *Research Support Services in UK Universities* (RIN, 2010): that the research process is one in which researchers need support. The report listed the areas in which researchers in their study needed support as: research grants and contracts,

research skills and training, resource discovery and management, open scholarship, and research data services. It is important for librarians to find out the needs of researchers so that they can offer them appropriate research support. The demand for certain services will also help librarians to develop specific skills which meet the needs of their changing research environments (Auckland, 2010:76).

2.9 Research support for education researchers

Research support needs differ according to discipline. This study focuses on the research support services at a Faculty of Education, hence it is necessary to review research support needs related to teacher educators. In the Faculty of Education at UNAM, researchers support the faculty research agenda which contributes to the bigger vision of the institution.

A study by Smith (2015) indicated that, in higher education institutions, teacher educators should be research-based to enable them to have up-to-date information to complement the content of what they are teaching. Bleijenbergh, Korzilius and Versuchen (2011) explained that research must be relevant to the practice field in order to support decision-making and develop new knowledge. Hence, research contributes to high quality teacher education for professional development as well as school improvement (Cochran-Smith, 2004; Willemse and Boei, 2013). Cochran-Smith (2004); and Willemse and Boei, (2013) further mentioned some of the benefits of research in education. They are:

- Help to connect teaching staff to sources of information and professional support which will enable them to perform in classrooms. Research further enables them to have up-to-date information regarding curriculum and pedagogy to be able to make informed decisions.
- It is also emphasised that teacher educators who are employed in institutions of higher education are promoted according to research and publication (Smith, 2015). However, a study by British Educational Research Association (BERA) (2014) at the Universities of Applied Sciences (UAS) in the Netherlands revealed that for

many teacher educators, research is a new challenge, hence the need for research support in areas such as collaboration, improving their research skills and contributing to the body of knowledge in teacher education. According to BERA (2014), there is a need for teacher educators to be equipped with the skills to conduct research; either, individually or collectively.

2.10 Summary

Reviewing of the related literature for this study has confirmed that there is a need for research support services in academic libraries. There are a number of library services that can be considered as research support. These range from traditional services such as an adequate collection of research materials, access and discovery of research materials, and referencing, copyright and citation support (Abubakar, 2011; Raju and Schoombee, 2014; RLUK and RIN, 2011) to services related to research data, open access, institutional repositories, digital scholarship and altmetrics, as examples (ACRL, 2016a). The concept of Research Librarianship entails adding services which respond to research agendas and the trends in higher education which affect academic libraries as well as to the changing patterns in scholarly communication. It also requires librarians to be knowledgeable about research and partner with researchers and other research support services in the institution. Lastly, it requires a knowledge of the needs and expectations of researchers when it comes to their use of the library.

Chapter 3

3. Research Design and Methodology

3.1 Introduction

This chapter describes the methods used in the study and includes the approach, design, size of population and sampling method. It further explains the instrument which was used to collect the data, including the methods to maintain validity and reliability of the instrument as well as how the collected data was analysed. The study was intended for researchers in the Faculty of Education at Hifikepunye Pohamba and Windhoek Campuses because the Faculty of Education is one of the oldest faculties in the university and still the biggest compared to other faculties. It was further planned to include librarians because they are the providers of the research support services. However, on applying to the University of Namibia Research and Publication Committee (RPC) for permission to collect data from the two population groups, this was no longer possible. The application for Ethical Clearance first was submitted to the Campus Research Committee. The Committee recommended that the study should be limited to one campus, Hifikepunye Pohamba, and should exclude librarians (see Appendix E1 for correspondence). These recommendations had to be agreed to before the UNAM Research and Publication Committee would issue the approval certificate (Appendix E2). As a result of the change in the study population, modifications to the intended research methods had to be made. This is explained in detail under the headings, sampling methods and data collection instruments.

3.2 Research design

This study used a mixed methods approach. This is a research approach whereby researchers collect and analyse both quantitative and qualitative data within the same study (Creswell and Plano Clark, 2011). A mixed research method is an incorporation or connecting of the two components of data. According to Berman (2017) the incorporation can be done at many

levels of a study, such as at the design level, at the methods level or at the interpretation level. It is also done in diverse ways, either by connecting, building, merging, or embedding data (Berman, 2017; Creswell and Plano Clark, 2011). Even though some authors such as Creswell and Plano Clark (2011) identified up to six types of mixed research methods, there are three more common types of mixed method designs which are described below.

The three common types are as follows: The first one is exploratory design which is comprised of collecting qualitative data and analysing it before following up with quantitative data collection and includes a final phase of incorporating or connecting data from the two separate components (Creswell and Plano Clark, 2011). It can be better explained as sequential in that it has two distinct stages where by qualitative data is collected and analysed in the first stage, followed by the second stage of quantitative data collection and analysis (Ngulube, Mokwatlo and Ndwandwe 2009). The second type of mixed methods design is called explanatory design which starts with quantitative data collection and analysis, and uses the study results to follow up with qualitative data collection (Creswell and Plano Clark, 2011). The third type is convergent concurrent, whereby data is collected and analysed using both qualitative and quantitative methods in a single stage through, for example, a questionnaire that consists of closed and open-ended questions (Ngulube, Mokwatlo, and Ndwandwe, 2009). According to Creswell and Plano Clark (2011), this type of mixed method is used when collecting and analysing data with a single instrument in a single study.

A mixed methods design was selected for this study because it is flexible and helps to answer research questions using both numbers and words in order to provide a better understanding and explanation of the findings (Creswell and Plano Clark, 2011). It was further decided that mixed methods was necessary for this study as it provided more evidence and value which may not be possible by using either a qualitative or a quantitative approach. Because the study was limited to just one data collection method, both statistics and opinions needed to be collected simultaneously in order to be able to provide fuller answers to the research questions. Thus, the convergent

concurrent mixed methods approach was used. This was necessary because the convergent type of mixed methods is more flexible compared to other types. It offers many options on how to mix the data collection and analysis which the investigator feels necessary to understand the research problem. Both quantitative and qualitative data are believed to have value to respond to the research problem. Data was collected at the same time with one single questionnaire consisting of both closed and open-ended questions, collecting both quantitative and qualitative data, and the results were merged during interpretation, as recommended by Creswell and Plano Clark (2011).

The analysis of data was influenced by the fact that quantitative questions require statistical analysis (Bertram and Christiansen, 2014: 138). Creswell (2014:04) explained that quantitative research "tests objective theories by examining the relationship among variables" on a bigger sample size which makes it possible to generalise the findings of a study to the whole population, whereas qualitative types of questions are an inductive and exploratory "way of seeking to establish the meaning of phenomena from the perspective of the participants" (Creswell, 2013:19). The qualitative element in this study responded to the research question through open-ended questions in order to understand the views and opinions of the respondents on the matter being investigated. The investigator analysed each question following the order of the questionnaire in order to make a logical interpretation of the results (Creswell and Clark, 2011).

3.3 Research methods

This section stipulates the tools and techniques involved in collecting data. It also explains issues of the population, sampling and how the data collection instrument was designed.

Kumar (2011) explained that research methods are tools used to collect data in order to answer the research questions. Examples of tools are questionnaires, interviews, observations, document reviews, focus group discussions and experiments (Kumar, 2011). This study used a questionnaire to collect data. The reason being that with a questionnaire, the study would

be able to reach a larger population. This study used mixed methods research which required a large sample for quantitative analysis (Kumar, 2011). The researchers which were targeted by this study were relatively small in number and so it was more practical to distribute questionnaires to them. A questionnaire was beneficial to the study as it was easy to administer, and simple to analyse (Bertram and Christiansen, 2014). The instrument was distributed in hard copy. Based on other studies carried out at UNAM, the researcher was made aware that paper-based questionnaires would get a better response rate compared to those carried out online. Although the printing cost was high, a large number of people was reached on time because the population was small and lived in the same location. There was no need to recruit other persons to assist in the distributing process (Lavrakas, 2008). The paper-based questionnaire was beneficial to those who might not have the know-how in technology to use an online questionnaire.

The disadvantages of questionnaires, according to Bertram and Christiansen (2014), is that they cannot convey changes of emotions, behaviour and feelings of participants. The authors further state that questionnaires lack validity because it is very difficult to tell how truthful a respondent has been. In addition, people may “read differently into each question and therefore their replies are based on their own interpretation of the question” (Bertram and Christiansen, 2014: 79). For example, “what is good to someone might be poor to the other” (Bertram and Christiansen, 2014; 78), therefore there is a level of subjectivity that is not acknowledged and can lead to skewed results.

Since the study used a paper-based questionnaire, a few challenges were experienced with printing. This included printing costs and errors during printing sometimes requiring replacement of pages. Regarding the analysis of data, it was a challenge to transcribe data from paper records to digital (Microsoft Excel). In order to ensure accuracy, double checking of data was done by a colleague, by comparing the paper records to the digital file. If online questionnaires were used, errors in transcribing would be caught and rectified more easily. The questionnaire was pre-tested in order to correct ambiguous questions so that the instrument could be as valid as possible. Participants

were asked mostly closed questions (where they had to select an answer from a list). Open-ended questions were included, in which qualitative data could be collected.

Initially, an interview instrument for librarians was prepared for the sake of triangulating data, however, librarians were excluded from this study by the Campus Research Committee (Appendix E1) and the instrument could not be used.

3.3.1 Population and sampling

According to Lavrakas (2008:590), population is defined as the target group that one intends to study. People in that population should share some characteristics that are related to the research questions (Du Plooy-Cilliers, Davis and Bezuidenhout, 2014). The population targeted by this study was going to be that of the University of Namibia's Faculty of Education, because as mentioned before, this faculty is one of the oldest at UNAM and it is one of the biggest faculties, split over six campuses around the country. In addition, as shown in Chapter 2, the Education discipline has teacher educators who need support to have up-to-date information to supplement the content of what they are teaching. The study ultimately targeted researchers including postgraduate students (in this study, postgraduate students are referred to as emerging researchers) based at the Hifikepunye Pohamba (HP) campus. The Faculty of Education has 288 academics and 60 postgraduate students, of which 80 academics and 50 master's students belong to HP campus as per the *UNAM Annual Report of 2016* (UNAM, 2016f).

3.3.2 Sampling methods

Sampling method is the procedure in which a few units are selected from the bigger defined study population. Additionally, in quantitative research which is part of mixed methods in this study, the population should be clearly defined and limited (Flick, 2011: 71) Two methods of sampling were planned for the study . Stratified random sampling was planned for researchers to ensure that the population was divided into strata (smaller groups) with similar characteristics (Bertram and Christiansen, 2014: 61). Purposive sampling was to select librarians based on characteristics of their job

description which could be linked to the objective of the study (Bless, Higson-Smith and Sithole, 2013: 172). The plan was, however, changed due to the restrictions of the study imposed by the data collection site. UNAM's Windhoek Campuses and all its librarians were excluded from the study. As a result, it was decided to use a census for all 80 academics at HP campus, and convenience sampling for all postgraduate students.

Bertram and Christiansen (2014: 59) stated that the size of the sample is selected in order to get information from knowledgeable respondents able to answer the research questions. The list of researchers according to departments was obtained from the Campus administration and the total number of population were included in the survey. With the postgraduate students, convenience sampling was used. Questionnaires were distributed to those who were in the library during the month of August.

- Researchers referred to in this study are academics who are involved in teaching, research and community engagement. The entire population of eighty (80) academics was selected.
- Emerging researchers referred to in this study are postgraduate students at master's level of their study. Thirty (30) questionnaires were distributed to Masters students.

3.3.3 Research instrument design

The format and the questions of the survey instrument were designed according to the study's research questions and objectives, using the concept of Research Librarianship as a guide. First of all, instructions to each question were clearly provided. The questionnaire is divided into sections from general to specific which depended on the objectives of the study as follows: personal information; research support services; benefits of research support; particular services and their benefits and challenges; and the general challenges of the research support services at UNAM Libraries (see Appendix C).

The question relating to challenges are placed last due to the fact that stating challenges may be a sensitive task to some respondents. Questions consist of

open-ended questions, multiple choice questions as well as checklist questions in order to measure objective and subjective perceptions of respondents (Struwig and Stead, 2013: 95). Kazi and Khalid (2012:514) have explained that the good design of a questionnaire is critical and should be done to ensure that valid responses to the questions are obtained. Thus the questionnaire was designed in a way that respondents were able to provide accurate information for the survey and, in this case, the language used was simple and easy to understand. Questions maintained relevance and the length of the survey was kept to a minimum to avoid survey fatigue on the part of the respondents.

3.3.4 Pretest of data collection instruments

Bertram and Christiansen (2015) stated that, in order to reduce errors and improve the quality of data, a pretest should be done on a small sample of participants from the targeted population. The authors further said that the aim of the pretest is to help detect any problem with the research instruments and find a solution (Bertram and Christiansen, 2015). The other purpose according to Bertram and Christiansen (2015:51), is to help identify the likelihood of ambiguous words and possible misinterpretation of questions by respondents. It also helps to minimize inability to answer the questions, and to determine if there will be any problem with administering of the survey. It will ensure that the researcher follows a correct procedure of data collection (Bertram and Christiansen, 2015). The pre-test for this study instrument was done at the HP campus among 15 academics with minor corrections afterwards. Students were not included in the pre-test because of the time constraint. Some items were found to be ambiguous and reflected different meaning to the respondents, so they were replaced with better or commonly understandable terms.

3.4 Data collection process and administration of research instrument

Ethical clearance certificates were obtained from the home institution, the University of Cape Town (Appendix D), as well as from the University of Namibia (Appendix E2), from where the data was collected.

To ensure that questionnaires were distributed to everyone intended for the study, the list of all academics at HP campus was obtained from the secretary. Firstly, the cover letter (Appendix A) and the informed consent form (Appendix B) were submitted to potential participants in their offices for them to understand what was being investigated and indicate their willingness to participate in the study. Self-administered questionnaires were handed to researchers who agreed to participate. Questionnaires were returned by depositing them in a small sealed box at the counter of the library.

The list of postgraduate students was received from the Office of the Registrar at the campus. Though the list was useful, postgraduate students were already well known by library staff at the counter, including the investigator of the study, and they received questionnaires upon visiting the library and returned them to the library counter by depositing them in the box. The postgraduate students completed the questionnaires while seated in the library and returned them before they left the library the same day. The data collection procedure was planned to take place within the course of one week, but researchers were busy with student examinations and could not return questionnaires immediately. Thus, data collection took 10 days from 20 August to 31 August 2018 excluding weekends for academics.

3.5 Data analysis

Data was analysed depending on the nature of each question – whether it was a qualitative or a quantitative question. Seeing that the questionnaires were printed out, data from them was manually entered into a worksheet. Questionnaires were assigned unique codes which were used to identify open-ended responses wherever necessary without identifying participants (academics were assigned the code A with a unique number and emerging researchers were assigned the code ER with a unique number). Responses to these questions were coded and categorised according to themes as per qualitative methods. The coding procedures included identifying the main themes that arose from answers, assigning codes to these themes and classifying the responses under the main theme (Kothari, 2004). Regarding

the quantitative data which was recorded from closed questions, Microsoft Excel was used to analyse the results in a quantitative way.

3.6 Reliability and validity of the study

Reliability refers to the consistency of findings over time and accuracy of representation of the total population under study. That means, the research instrument is considered reliable if, when the study is done a second time under a similar methodology, it will yield the same results (Golafshani, 2003: 599).

In terms of validity, the researcher of this study designed the instrument to measuring what is supposed be measured. Each question in relation to the objectives of the study was justified to ensure reliability (Kumar, 2011). In addition, the pretest done ensured clarity and flow of questions. Hence, the results of the study can be generalised beyond the research population as long as they have the same characteristics. For example, these study results could be generalised to academics at HP campus.

3.7 Ethical considerations

During this study, research ethics were highly considered because the study used human subjects. It was therefore important to ensure that ethics and codes of conduct were applied throughout the survey. Some of the basic principles of research ethics, according to Bertram and Christiansen (2014: 65), are honesty, objectivity, integrity, and confidentiality on the part of the person doing the research. The above-mentioned traits were employed in this study, starting with an application of ethical clearance to carry out the study. Ethical clearance certificates were issued from the host institution of study, the University of Cape Town (Appendix D), and the data collection institution, the University of Namibia. As mentioned before, the HP campus Committee for Research and Publications recommend that the study be limited to HP campus only and should exclude librarians (see Appendix E1). As a result, the Office of Research and Publication issues the approved (Appendix E2) according to the minutes of the campus committee. The UNAM condition was

integrated into the study given that the study was already approved by UCT and time was limited.

All participants voluntarily agreed to take part in the research by signing a consent form (Appendix B) at the beginning of the survey. Their rights were explained and they were ensured that their identities would be kept anonymous, which was done as agreed. It was also necessary to explain that the aim of the study was purely for scholarly purposes and not for measuring researchers or librarians' performance. Participants had an opportunity to withdraw from the study at any time without prejudice. There were no single questions nor answers which were found to be harmful to their dignity during the course of the study. Questionnaires were stored in a closed box throughout the data analysis with restricted access to the owner of the study only and ensured that responses were kept confidential and safe.

3.8 Limitations

As mentioned before, there were limitations regarding data collection for this study. Ultimately, the study was limited to HP campus only and excluded the planned interviews with librarians. Nevertheless, the study is deemed worthwhile and it was carried out according to established methods. Data collected is still able to be used to answer the research questions.

3.9 Summary

This chapter discussed the research design and method followed in this study. It started with explaining the mixed methods approach, and pointed out the type of mixed method selected for this study which is the convergent concurrent mixed method. The population and how the research instrument was designed and administered is explained in this chapter. The type of data collection methods used and procedure followed in collecting data as well as data analysis is also included in the discussion. Reliability and validity, ethical considerations and limitations of the study are all part of the discussion in this chapter.

Chapter 4

4. Data Analysis and Presentation of Findings

4.1 Introduction

This chapter represents the results of the study as analysed. This study used a mixed methods approach to analyse data. In other words, the analytic technique which is applied in this study integrated both quantitative and qualitative data concurrently (Creswell and Clark, 2011). Microsoft Excel was used for analysing statistics and for graphing. The qualitative set of questions was analysed by means of word coding using themes and subthemes. It is important to note that question 1.2 ‘At which campus are you based?’ was part of the questionnaire that went to participants, however, it is not necessary to analyse it because as mentioned before, due to the limitation posed by UNAM Campus Research Committee all participants belong to HP campus.

4.2 Participants’ profile

It is necessary to provide descriptions of the participants’ profile in order to understand the context of the study. The intended population for this study was researchers and librarians from the Faculty of Education, University of Namibia at the two campuses: Hifikepunye Pohamba (HP) and Windhoek Campus. Researchers include academics and emerging researchers (postgraduate students). Ultimately, however, the study had to be limited to researchers at HP campus as advised by the Campus Research Committee. Academics who participated in the study are involved in the teaching and supervising of both undergraduate and postgraduate students at the university. They are also required by the university to conduct research and do community engagement. Postgraduate students who participated in this study are emerging researchers who are studying towards their master’s degrees in the Faculty of Education at UNAM. A total of 110 questionnaires were distributed to 80 academics and to 30 emerging researchers (Masters students).

4.3 Response rate

In total, 60 completed questionnaires were returned. Of the 80 questionnaires distributed to academics in person at their offices, 40 questionnaires were returned by hand to the library. Of the 30 questionnaires distributed to emerging researchers as they walked into the library, 20 were returned in person at the library desk. This gives the total number of returned questionnaires to be 60 from a total of 110; that gives a response rate of 55%. According to Monnette, Thomas and De Jong (2010: 175), 50% is regarded as an acceptable response rate in social research surveys. Morton et al. (2012:107) also revealed that “some studies with low response rates, even as low as 20%, are able to yield accurate results”.

The breakdown of participants is shown in Figure 1 which shows that respondents were made up of 67% (40) academics and 33% (20) emerging researchers.

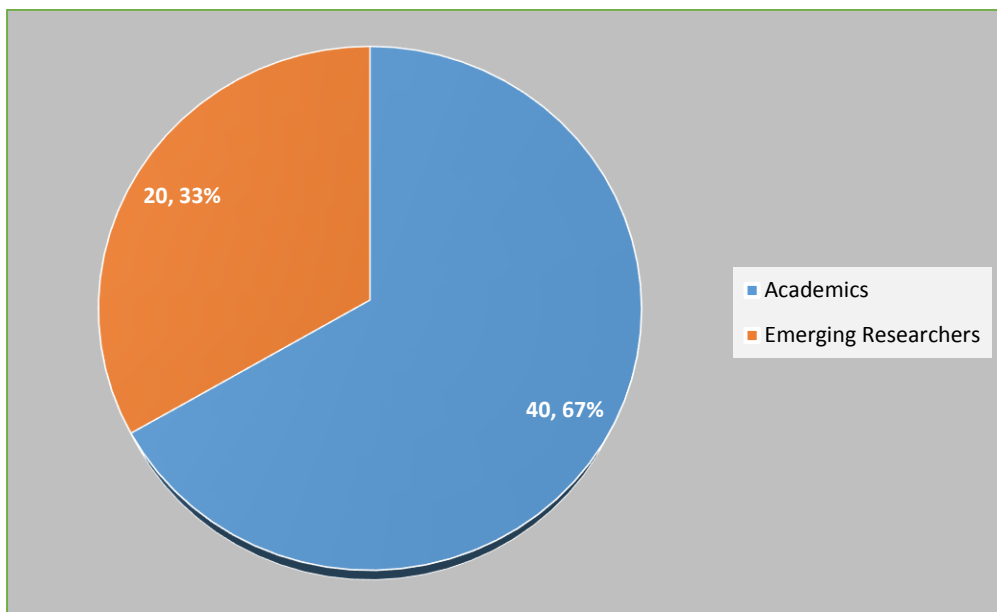


Figure 1 Respondents according to the groups of researchers

4.4 Research support services

Section B of the questionnaire was about the library research support services. The section has five questions related to the use of the research support services.

4.4.1 Frequency of library visit with research- related needs

Question 2.1 of this section aimed to establish how often participants use the library with their research-related needs. Respondents were asked to indicate the frequency of library use for this purpose. The data from responses is presented below.

Figure 2 shows the frequency of library usage by all respondents. The majority of respondents use the library at least weekly, with the highest number of 29 (48%) doing so. Those who use the library monthly are 25 (42%); and five (8%) respondents indicated that they use the library annually; while two (3%) respondents did not use the library at all.

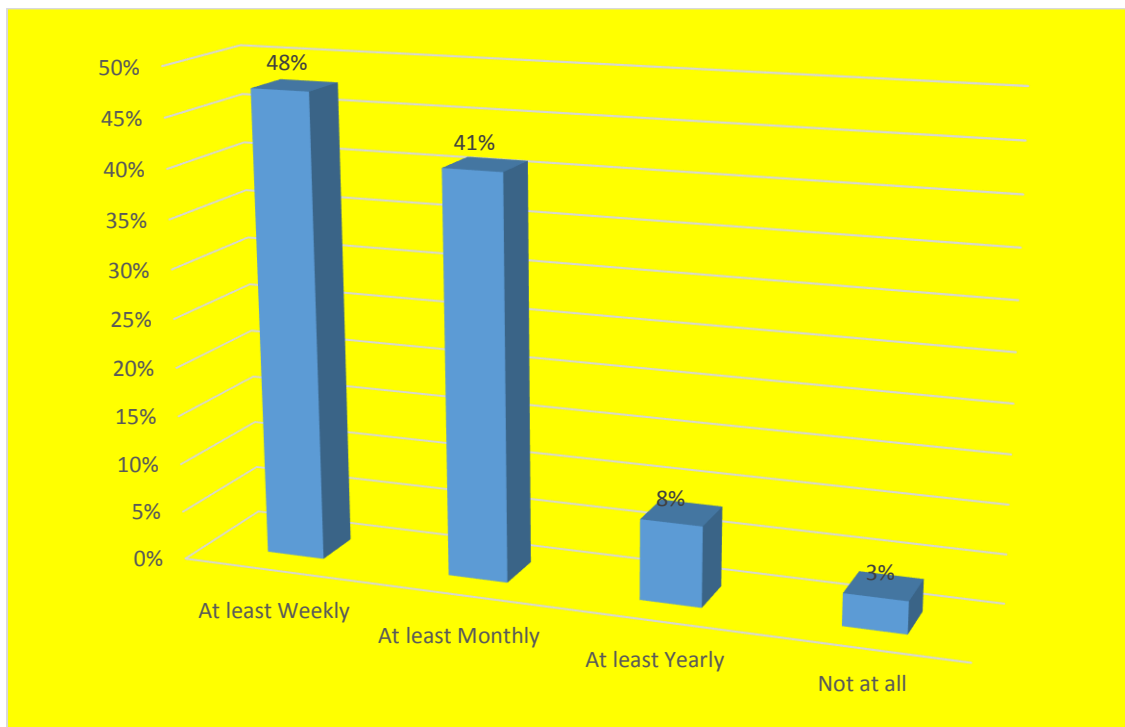


Figure 2 Usage of the library for research- related needs (n=60)

Table 1 below shows the comparison between academics and emerging researchers' use of the library for research-related needs. The below percentages are calculated according to the total number of respondents per group, which are 40 academics and 20 emerging researchers. Most emerging researchers are regular users of the library, visiting at least weekly for research-related needs, while academics use the library more on a monthly

basis, probably because they are busy with other professional duties such as teaching, supervision and community engagement. The results show that 75% (15) of emerging researchers use the library at least weekly compared to 32% of academics (13). Half the academics (20) use the library at least monthly compare to 25% (five) of emerging researchers. The results show that 13% (five) academics use the library only at least yearly and two (5%) do not use the library at all. There were no emerging researchers who indicated that they use the library only yearly or not at all.

Table 1 Comparison of groups according to their usage of the library research-related services (n=60)

	Academics		Emerging Researchers	
At least Weekly	13	32%	15	75%
At least Monthly	20	50%	5	25%
At least Yearly	5	13%	0	
Not at all	2	5%	0	
Total	40	100%	20	100%

4.4.2 Types of library services used that support research

Question 2.2 tried to determine which library services support participants' research. Participants were provided with the list of library research support services. They were allowed to select as many as they use for their research and results are presented in Table 2.

Percentages presented in the table are according to the total number of respondents (60).

Information literacy training, with 35 responses (58%) is the most-used library service, followed by literature searching assistance (20; 33%). Referencing style training and accessing information resources scored 15 (25%) each. Using searching tools and accessing electronic theses received a

score of 12 (20%) and 10 (17%) respectively. Other services such as support with data analysis (SPSS), training on measuring research impact, IR training, getting information on where to publish, and getting copyright advice each scored below 5. There was no respondent who selected RDM advice and there were no additional services mentioned by respondents under ‘Other’ either.

Table 2 Response rate of participants on the types of library services they used that support research (n= 60)

Use of library Services	Number of respondents	% of respondents
Reference style training	15	25%
Support with data analysis tools (SPSS)	3	5%
Information Literacy training	35	58%
Training on measuring research impact	2	3%
Access information resources	15	25%
Institutional Repository training	5	8%
Literature searching assistance	20	33%
Electronic Theses access	10	17%
Searching tools	12	20%
Research data management advice	0	0%
Information on where to publish	2	3%
Copyright advice	4	7%
Others	0	0%

4.4.3. Usefulness/effectiveness of the library training attended

Question 2.3 attempted to establish whether library training meets the needs of researchers. Participants were given the option to rate the usefulness of the library training which is offered (by choosing *Useful*, *Not useful*, or *No participation*). The calculation of percentages referred to below is done according to the total number of responses about each specific training.

Three library trainings were considered useful by most respondents: information literacy training (37; 67%), followed by training on how to access information resources (27; 53%) and training on using electronic journal

articles (21; 55%). Although information literacy training is considered useful library training by most, eight respondents (15%) indicated that information literacy training is not useful and 10 respondents (18%) indicated that they had not participated in this training. Five participants did not select any option for this particular part of the question.

Training on how to access information resources was useful for 27 (53%), not useful for eight (16%), with no participation by 16 (31%). Those left unanswered were nine. Training on using electronic journal was useful for 21 (55%), not useful for 3 (8%), while those did who did not participate were 14 (37%). There were training services which were not selected by a number of respondents, they are indicated under '*No answers*' in the table below. Library orientation to students is mentioned by one respondent under '*Others*' where respondents were asked to name other library training which is effective.

Table 3 Opinions about the usefulness/effectiveness of library training offerings.

List of services	Useful	Not useful	No participation	TOTAL	No answers
Referencing style training	15	6	19	40	20
Training on data analysis tools (SPSS)	3	4	25	32	28
Information Literacy training	37	8	10	55	5
Training on how to work out one's research impact	2	3	25	30	30
Training on how to access information resources	27	8	16	51	9
Training on how to upload documents into UNAM Institutional Repository	5	6	20	31	29
Training on using electronic journal articles	21	3	14	38	22
Training on how to use E-books	15	9	21	45	15
Postgraduate research support for proposal, these and dissertation writing	2	5	23	30	30
Guidance on where to publish	3	2	31	36	24
Guidance on copyright issues	4	3	34	41	19
Others: Orientation for students on library	1			1	59

Figure 3 below, shows different opinions among academic and emerging researchers about how they feel about the usefulness of a particular training on question 2.3. Just the 'useful' rating was compared here. The question allowed participants to select multiple responses. The results demonstrate that there is a difference between academics and emerging researchers about how they feel about some of the training offerings. Emerging students show more interest in information literacy, access to information resources and training on how to use e-books. This could mean that these library training services are those which meet emerging researchers' needs the most. Data indicates the following: that 18 emerging researchers find information literacy training useful, compared to 19 academics. Training on how to access information resources was considered useful by 17 academics compared to 10 emerging researchers. Training of electronic journal articles was considered useful by 10 academics compared to 11 emerging researchers. While training on how to use e-books was considered useful by 15 emerging researchers, no academic selected e-books as useful. Eleven (11) academics feel that training on referencing style is useful, compared to four emerging researchers. The following trainings were only selected by academics as useful: training on how to work out one's research impact (2); training on how to upload documents into UNAM Institutional Repository (5); guidance on copyright issues (4); training on data analysis tools (3); guidance on where to publish (3); postgraduate research support for proposal, theses and dissertation writing (2); and orientation for students on library (1). However, these trainings which were selected as 'not useful' by emerging students were never provided to HP students at all by the library, but to academics only, hence it can be concluded that emerging researchers are not really aware whether they are useful or not.

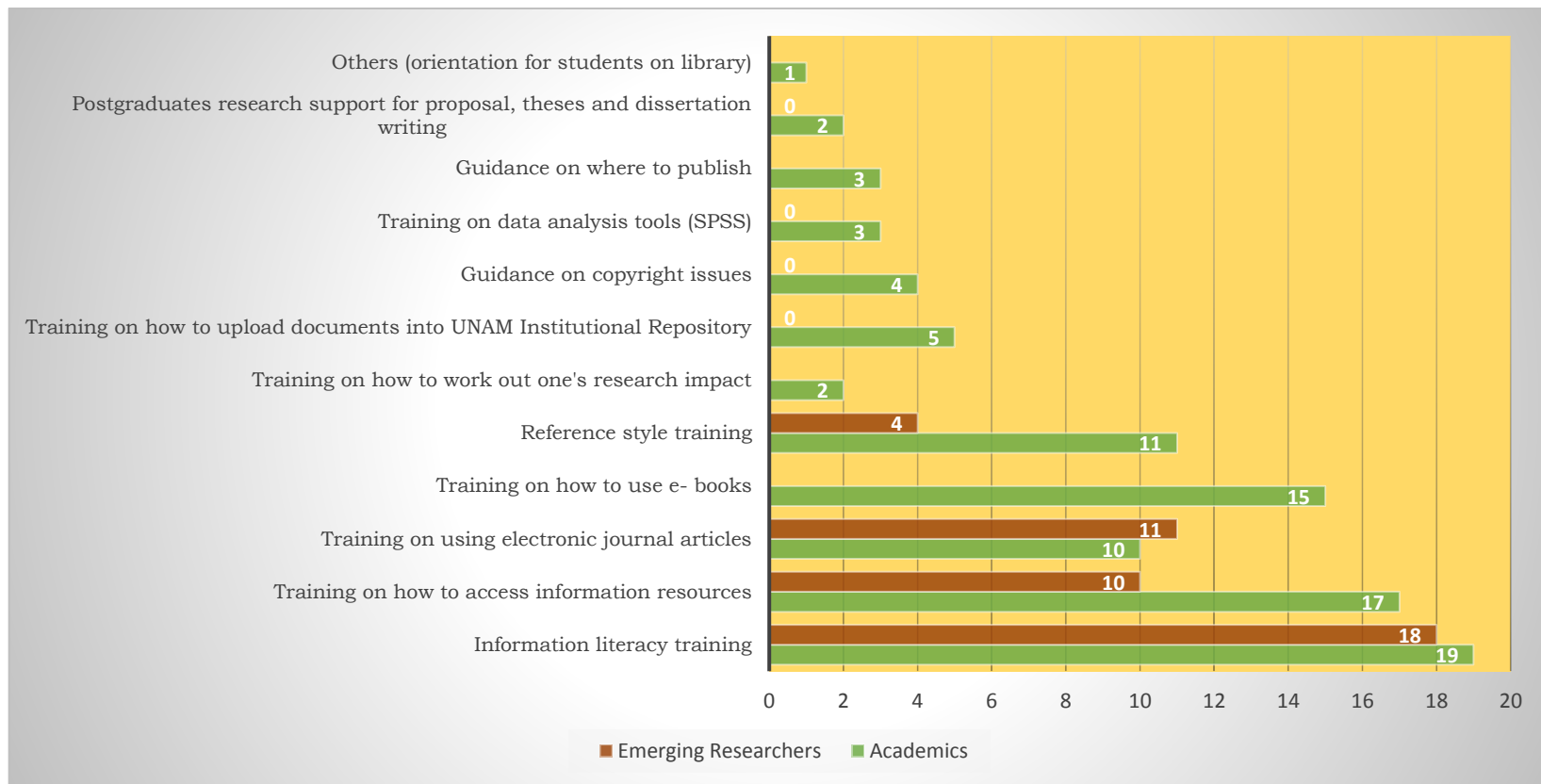


Figure 3 Comparison of academics and students' opinions about the usefulness of library training (n=60)

4.4.4 Skills improved after attending library training

Question 2.4 tried to establish whether participants have improved their research skills as a result of library training. Participants were asked to select from three options, which were: *Yes*, *No* and *I don't know*.

A total number of 54 participants responded to this question. The results in Figure 4 show that 31 participants (57%) indicated that their research skills have improved after attending library training; 21 (39%) participants indicated that their skills have not improved as a result of the library training they received; while two (4%) respondents indicated that they don't know whether their skills have improved after the library training.

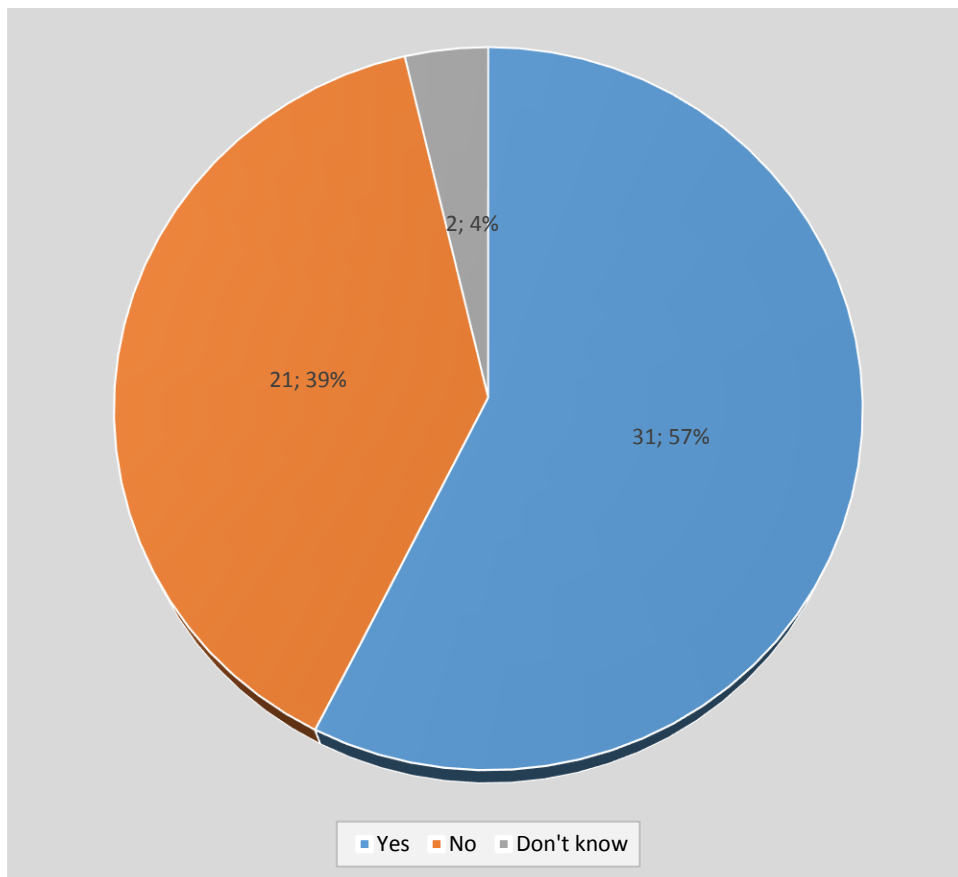


Figure 4 Opinion of participants on whether their skills improved after attending library training (n=54)

4.4.5 Other research support needed

In question 2.5, the study aimed to find out if there are other services that participants need as individual researchers. Respondents were provided with a free text field to indicate other types of support that they need from the library. Twenty-seven participants answered this question. Thirty-three left the text free. The results reveal respondents indicated that they need other types of services. However, there was some repetition of what respondents could have selected in question 2.2. This could be that participants want to emphasise that the current support services are inadequate and that they need more comprehensive support services. They further indicated reasons and explanations for why they required additional services. Responses can be grouped as follows:

a) Searching strategies

The findings revealed that 12 academics required skills in searching electronic resources. It was found that academics need to be equipped with skills on how to phrase searching terms and retrieve and download full articles for their research projects. It is realised that they are frustrated as they spend a lot of time searching for literature. They further indicated that there is a need for comprehensive training on searching for books in the library so that they can utilise the library effectively and be able to find books needed for their research. Some of the comments made were:

We need guidance on how to access and download articles (A5).

Guidance on searching for books, articles and journals in the library (A17).

I need training on how to phrase my searching terms for better results relevant to my topics (A26).

As for the emerging researchers, the study revealed that they also need regular training on how to search and access electronic resources. They have indicated that training sessions are often too short and do not happen frequently, thus they do not remember what they learned when they engage in research projects. Six emerging researchers provided an answer to this question. One of them said:

Regular training sessions are required because, one forgets if the training only happened once a time (ER8).

b) Access to full text articles

Twenty-one participants who responded to this question indicated that they require in-depth training on how to access full text articles. The study further revealed that respondents experienced problems with access to some articles, as some of the articles in which they are interested are not free and the library does not provide proper explanation about how to download them.

The study further revealed that most respondents are not aware of library databases which provide access to full text articles, as indicated by their comments below.

I do not know if I am the one who do not know how to search for information or it is the system which does not allow access to full articles (A2).

Electronic resources are not accessible and it is frustrating. It can be that I lack ICT skills (A7).

Sometimes one finds good articles online, but has no access to it (A40).

c) Referencing style

The results indicate that referencing style is also a required service by respondents. Data shows that 14 respondents indicated that referencing style training is required as a research support service. The study revealed that emerging researchers are struggling with how to reference different sources of information. Therefore, they deemed it necessary that researchers be provided with support on referencing styles.

I need support on how to reference because sometimes it is difficult to identify the source of the information I used (ER1).

It is important to know the correct ways of referencing style so as to avoid plagiarism (ER38).

d) Copyright issues

Copyright guidance came out as the additional service required by respondents. The study found six respondents who indicated that copyright issues is a service required by researchers. One comment was:

Guidance on copyright will help in knowing that someone's works should not be copied without their permission, e.g. book (ER8)

e) Measuring of research impact

The study revealed that two academics felt that they need support on how to measure their research impact. They indicated that they are aware of SciVal metrics. However, they do not have knowledge on how measuring of research impact is done.

4.5 The benefits of research support services

Section C of the questionnaire tried to establish from the participants what the benefits are to them of library research support services. This would give the investigator an idea of whether the library services actually helped researchers and the institution in their research agendas, for example improving research output quality and quantity.

4.5.1 The most valuable research support services

In question 3.1, participants were provided with a free text field for them to indicate the two most valuable research support services from those listed in question 2.3. Respondents who answered this question were 27 and the results are presented below.

The results in Figure 5 show the four research support services which were highlighted by respondents as most valuable. Information literacy training came out as the most valuable services required by respondents compared to others with 13 (48%) selecting it. Access to information resources scored eight (30%), while referencing style scored four (15%) and support with data analysis tools scored two (7%). There were no other services highlighted as most valuable.

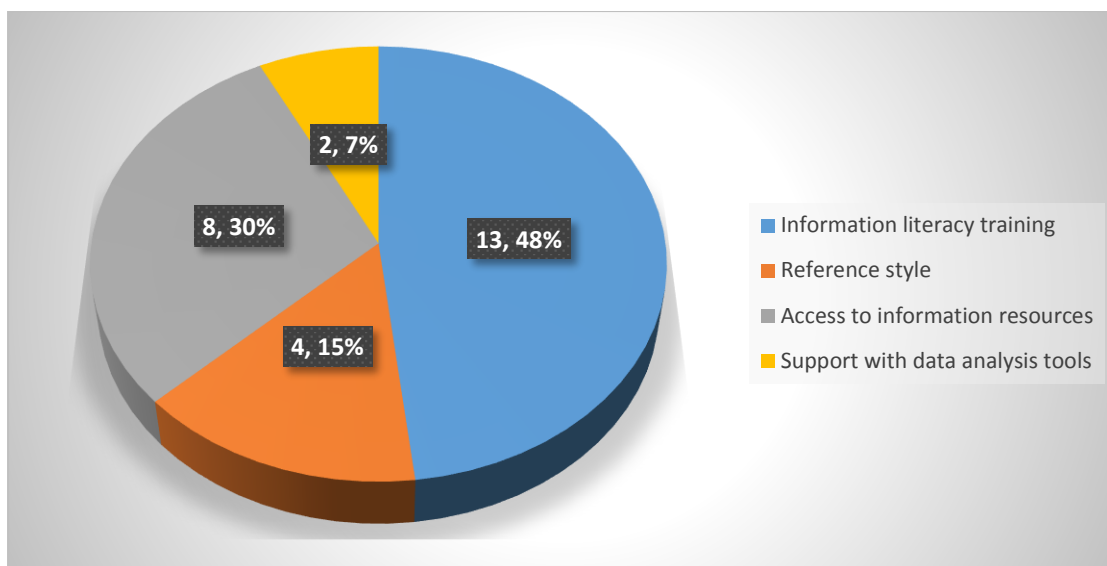


Figure 5 Most valuable library research support services (n=27)

4.5.2 Reasons as to why the mentioned support services are valuable

Question 3.2 intended to find the reasons for the choice of most valuable library support services which respondents mentioned in question 3.1. Participants were asked to provide a reason in the form of free text as to why they selected those services as valuable. Thirteen respondents who valued information literacy training mostly gave reasons such as that they learn a lot about what the library services offer, such as: rules and regulation and types of information sources available by the library. Comments further revealed that information literacy training provided insight on where to find relevant information for research. Some respondents, for example, were not aware of library databases for journal articles. Two of the responses were:

Information literacy training provides a lot of information which are helpful to understand the operation of the library. This range from library services, type of information resource by the library as well as producers in general (ER1).

Because of the training I got the insight knowledge and understanding of where to find relevant information to my research. The database to use. I never knew there were something like “database” (ER 19).

Respondents who indicated that training on access to information resources is most valuable stated it was because they could thereafter easily access

different sources such as e-books and journal articles for their research projects. Equally, data showed that respondents who indicated that training on referencing style is valuable said that, with it, they can avoid plagiarism. Those who valued data analysis tools training said that helped them to analyse research data, which is important in research.

4.5.3 Research support services contributing to the achievement of the Faculty research agenda

In order to find out whether the library research-related services help the Faculty achieve its research agenda, respondents were asked to indicate *Yes*, *No* or *I don't know* in question 3.3. Figure 6 shows that all participants answered this question and that 31 (52%) participants indicated that library research-related services are contributing to the achievement of the Faculty research agenda; 26 (43%) participants indicated that the library research support services does not contribute to the achievement of the Faculty research agenda; three (5%) participants do not know whether or not the library support services contribute to the achievement of the Faculty research agenda.

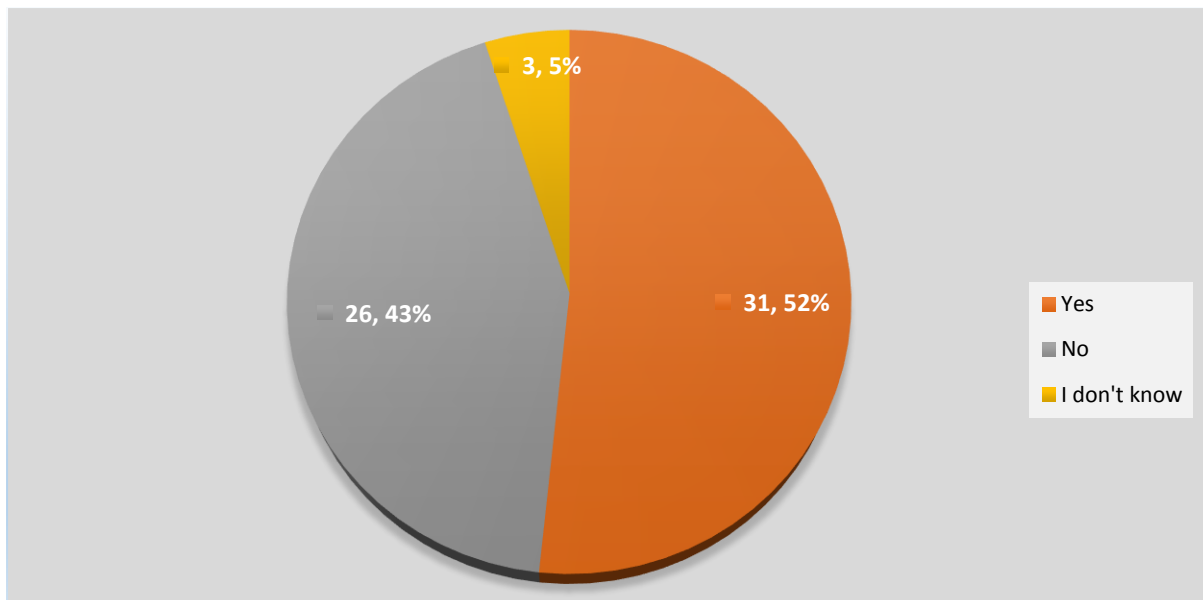


Figure 6 Opinions on whether research support services contribute to the achievement of the faculty agenda (n=60)

As it would be assumed that academics are more aware of the faculty research agenda, Figure 7 compares the data of academics and emerging researchers regarding their opinions on whether library research support services contribute to the achievement of the Faculty research agenda. As noted above, all 60 participants responded to this question.

Data shows that 25 out of 40 (63%) academics and five out of 20 (25%) emerging researchers believe library research support services contribute to the Faculty research agenda. It further reveals that 19 out of 40 (48%) academics and two out of 20 (10%) emerging researchers indicated that library research support services do not contribute to the Faculty research agenda. There were three out of 20 (15%) emerging researchers who indicated that they do not know if library research support services contribute to the Faculty research agenda, while six emerging researchers did not answer. That could mean emerging researchers are not familiar with the research agenda. There were no academics that select the ‘*I don’t know*’ option.

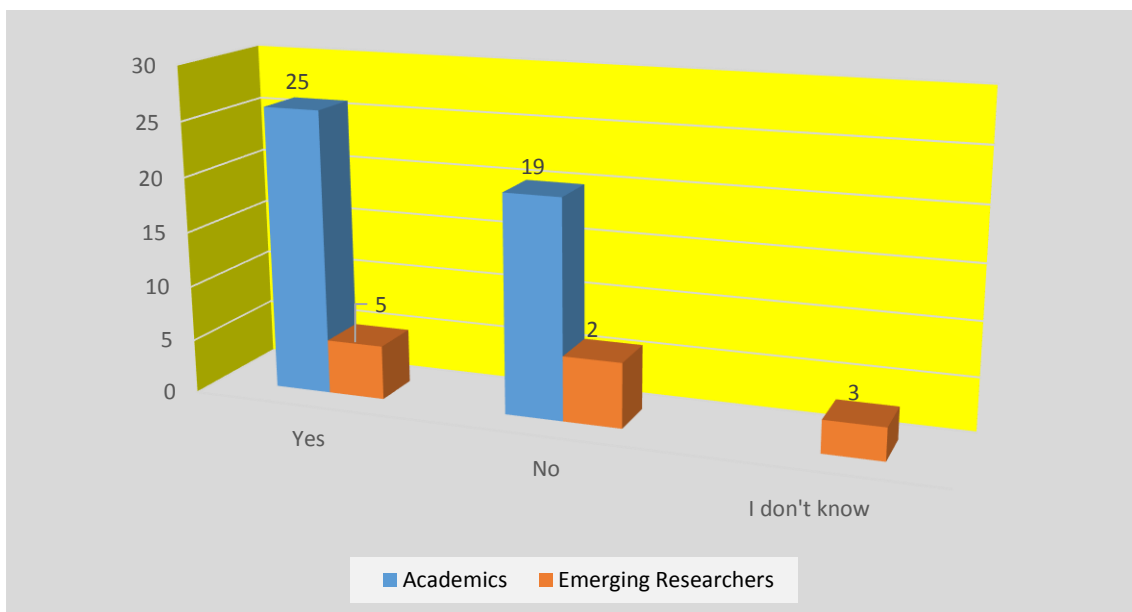


Figure 7 Comparisons of opinions of academics and emerging researchers on library research support services contributing to the Faculty research agenda (n=60)

4.5.4 The benefits that the institution receives as a result of library training

Question 3.4 asked respondents to tick the benefits to the institution and to themselves as a result of library research support. Participants were allowed

to tick more than one from the listed benefits. The results from respondents are presented in Figure 8. All participants responded to this question.

The data from this question reveals that 26 participants (43%) indicated that the institution benefits from the library support services because researchers can handle information resources better. This should be due to library training they received. It further indicated that 21 (35%) participants have improved competencies in searching for information, hence it benefits the institution because they can find better information quicker and thus improve the quality and speed of their research. Five (8%) participants indicated that the institution benefits because researchers gained knowledge on referencing style; four (7%) have a better understanding of OA, meaning that OA is not yet well known by researchers. This could be the reason why the faculty's contribution to the institutional repository is low compared to other faculties as indicated in chapter one. One is able to share their findings through the IR resulting in visibility of the institution. Three (5%) respondents indicated that there is no improvement which resulted from the library research training that can benefit the institution.

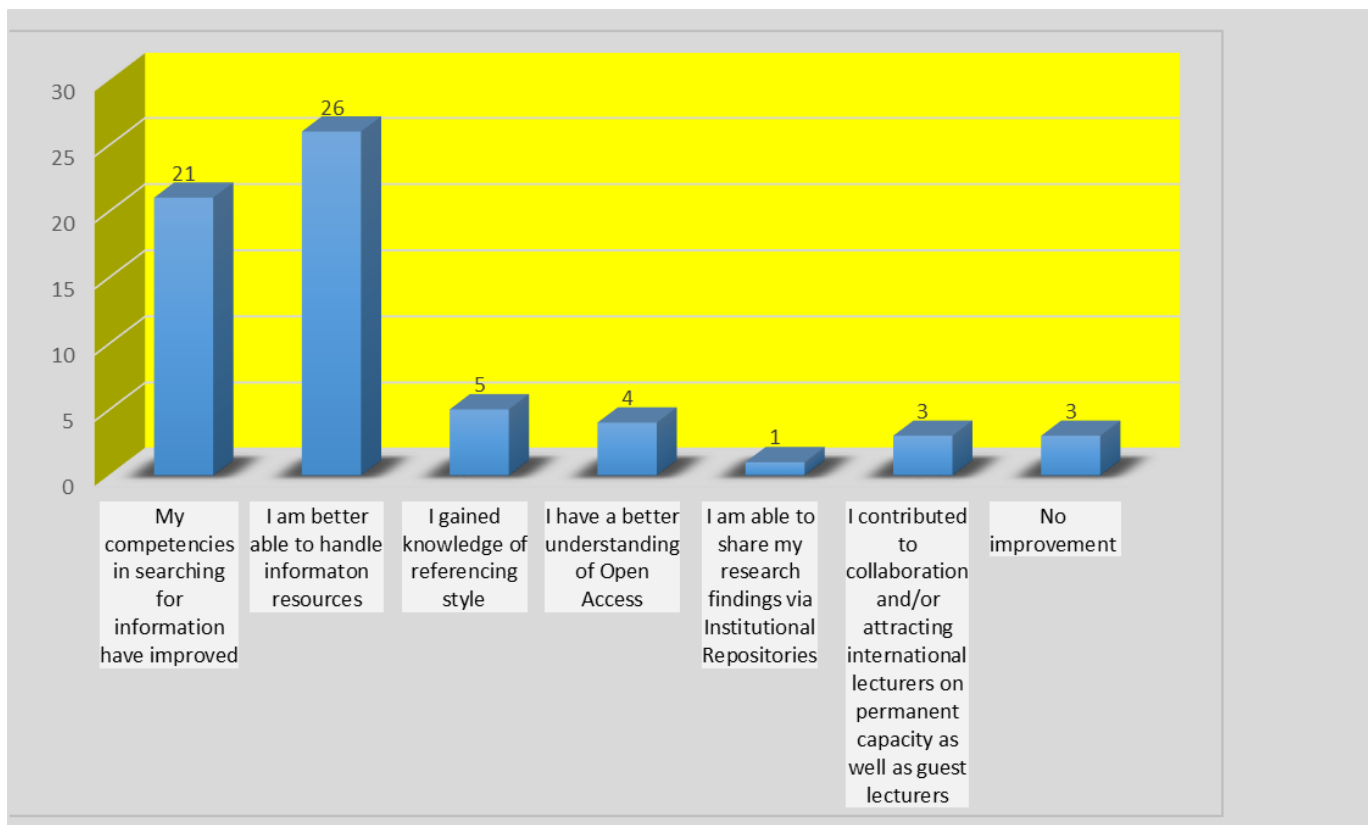


Figure 8 Benefits that the researchers and/or institution receives as a result of library training (n=60)

4.6 Benefits and challenges of particular services

Section D of the questionnaires was about particular library services and their benefits to researchers. These were information literacy training, access to e-resources and Institutional Repository. These services were chosen to interrogate more closely because they are the more traditional library services which are being provided by UNAM as far as research support services are concerned.

4.6.1 Information Literacy Training

In question 4.1, participants were requested to indicate whether information literacy training has an effect on them as researchers. Figure 9 shows that a high percentage of respondents (31; 52%), believed that information literacy training has an effect on them, while 19 (32%) respondents indicated that information literacy training did not have an effect on them. The remaining ten (17%) respondents indicated that they do not know if information literacy training had an effect on them or not. These responses can be compared to

earlier responses about IL which indicated that it is the most effective library training which respondents use.

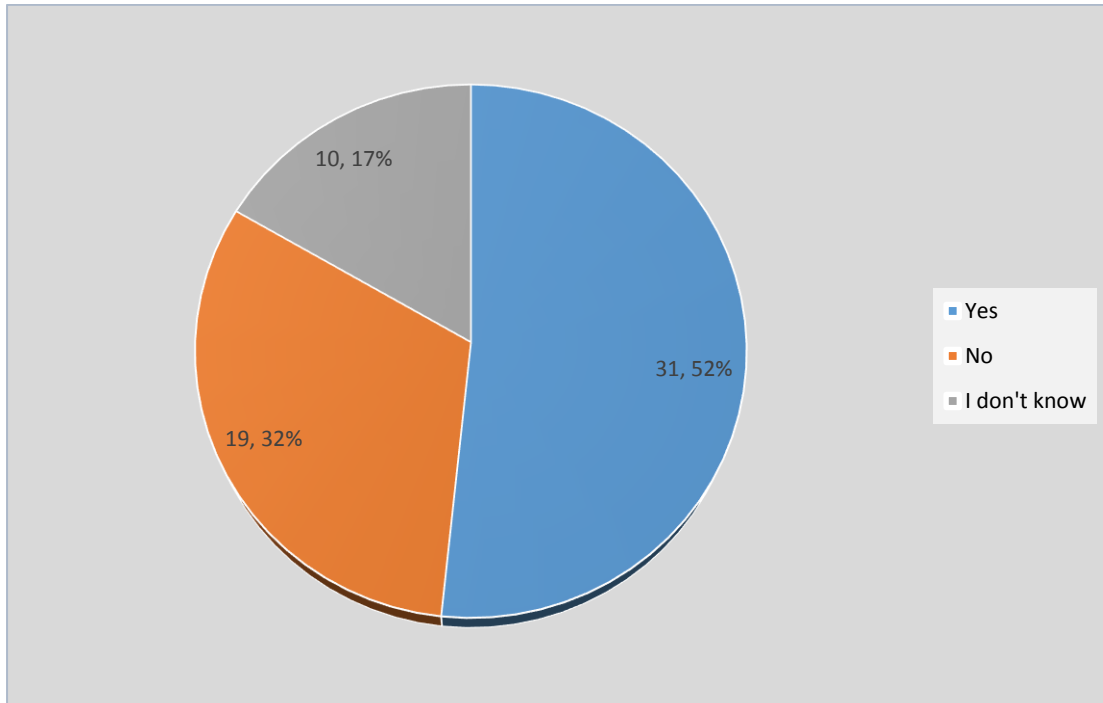


Figure 9 Has the Information Literacy training offered by the library had any effect on you as a researcher? (n=60)

In order to establish the actual benefits of the information literacy training, question 4.2 asked participants to elaborate how the Information literacy training benefited them. Out of 60 participants, 20 did not elaborate on why the specific services have or have no effect on them or not. For those who did answer (40; 67%), the data showed both positive and negative effects regarding the information literacy training.

On the positive side, the finding of this question is that 31 participants (78% of those who responded) indicated that they have benefited a lot from the training because after the training they could search for information resources and academic journal articles. Some gained a better understanding from the information literacy training on different information resources, hence they had improved searching skills and were able to find appropriate resources for their research projects. Others gained confidence in searching

for information and gained the ability to differentiate between subscribed academic databases and resources from the general internet. This could mean that information literacy training has benefited a number of respondents in a way that they can improve the quality of their research. They further indicated that after the training they could easily search the library's online catalogues for books that are available in their campus library or nearby campus libraries. One respondent wrote that:

This has empowered me to have confidence in guiding my students that are doing research (AC12).

On the negative side, there were comments by one emerging researcher on why the IL training did not benefit them. They indicated that, in one session, library staff were not well organised and it confused them. Nine (29%) out of 31 emerging researchers stated that some training sessions were short, and the contents thereof were more appropriate for first year students. From these comments, it shows that respondents were negatively affected because their needs and expectations were not met. For example, one comment was as follows:

It somehow confused me because the people that trained us did not organise their presentation well (ER1).

4.6.2 Library online resources

Question 4.3 tried to find out whether participants make use of the library website to access online resources. Figure 10 shows that 28 (47%) respondents use the library website to access online resources, 26 (43%) participants do not use the library website to access online resources, while 6 (10%) participants do not know about the library online resources. A lack of awareness of library online resources could have a negative impact on research.

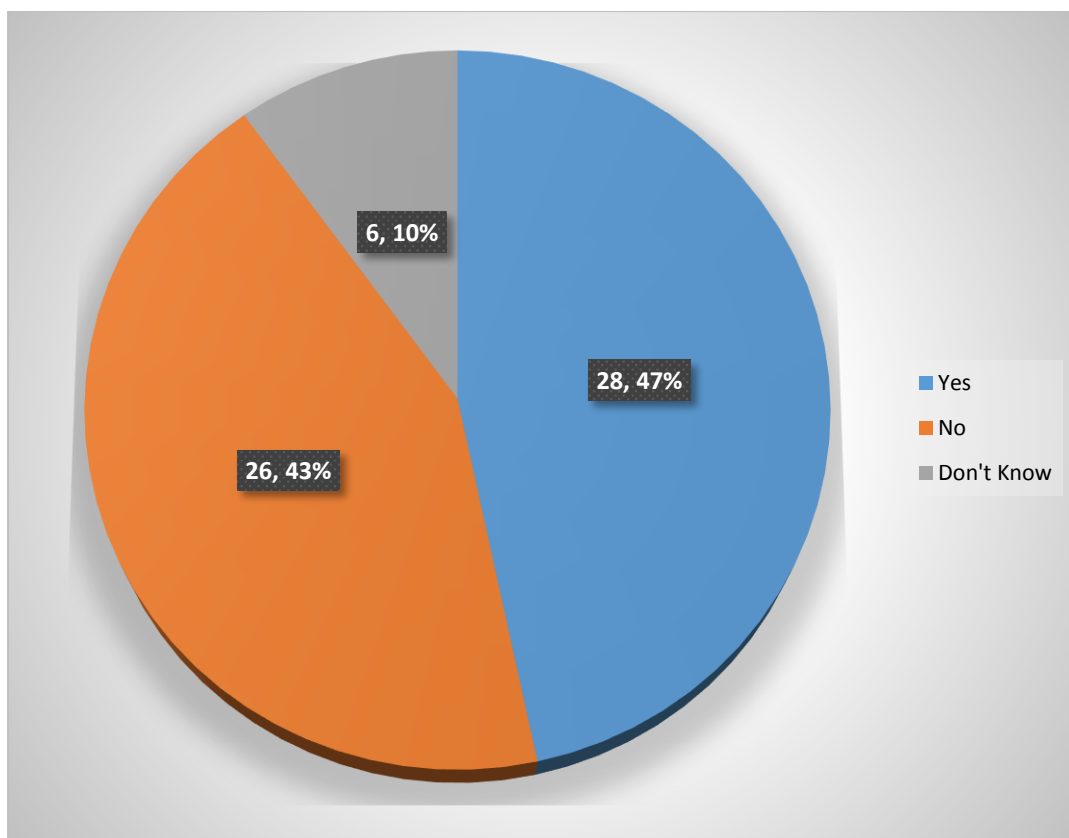


Figure 10 Use of library website to access online resources (n=60).

4.6.3 Elaboration on using the library website to access online resources

Question 4.4 asked respondents to elaborate in the free text field on their answer to question 4.3. Only 47% of the participants responded to this question, while 53% of the participants did not elaborate. Data showed that 15 respondents benefited from the library electronic resources in that they are able to go straight to the library website and select specific databases relevant to their discipline. They stated that this practice is far better than searching on the internet for relevant websites. Responses further revealed that respondents are able to access full text articles and download them which enables them to complete their research projects. Respondents are, therefore, happy with the library online resources because they are able to read e-books and e-journals to enrich their research and retrieve more relevant articles with less stress compared to an open internet search. Results further reveal that respondents realised that it is better to know how to search on their own instead of requesting articles from the librarian over email.

An interesting finding was that one respondent indicated that they can access online resources from the comfort of their office or home which saves them time and that they do not need to visit the library for hard copies which sometimes are found not to be available on shelves.

The librarian kindly supported and assisted me by training me on how to access the library online resources. This was more beneficial than just sending articles via email (A16).

However, responses also exposed some negative effects. Some participants pointed out that they experienced difficulties when searching for online resources. Data shows that one participant found online resources not always to be accessible. This could be due to poor network access or because respondents do not know how to access online resources through the library website.

I have tried so many times, but the web is inaccessible. It gives a message “click on allow”..... and nothing is opening up (A5).

Searching for articles is time consuming and stressful. If the library can have someone specifically assigned to research rather than sitting at the circulation desk and helping with photocopying (A1).

4.6.4 The use of UNAM Institutional Repository

Question 4.5 tried to find out the frequency of using the UNAM Institutional Repository (IR) to access UNAM scholarly outputs such as articles, theses and dissertations. Participants were asked to indicate according to the following options: *At least weekly, At least monthly, At least annually or Not at all*. Only nine participants (15% of total respondents) responded to this question. This could mean that many researchers at UNAM are not aware of the existence of an IR. Data shows that, of the nine respondents, three use the UNAM Institutional Repository at least weekly, while two respondents use the UNAM IR at least monthly and four respondents use the UNAM IR at least yearly. One said:

I did not used the UNAM Institutional Repository because I am not aware of its existence. (A5)

4.6.5 Frequency of deposit into UNAM Institutional Repository

Question 4.6 aimed to establish how often participants deposit publications into the UNAM Institutional Repository. Responses were as follows:

The number of participants who responded to this question were 26 and they are all academics. There were no responses from the emerging researchers in this question, possibly because they are not aware of the IR and have not produced any publications yet. Figure 11 shows there is no respondent who indicated that s/he deposited publications into the UNAM Institutional repository at least weekly (which makes sense because the number of education faculty publications in the IR is low). Two respondents deposit publications at least monthly and four (15%) deposit at least annually. Twenty respondents (77%) did not deposit publications into the UNAM Repository at all.

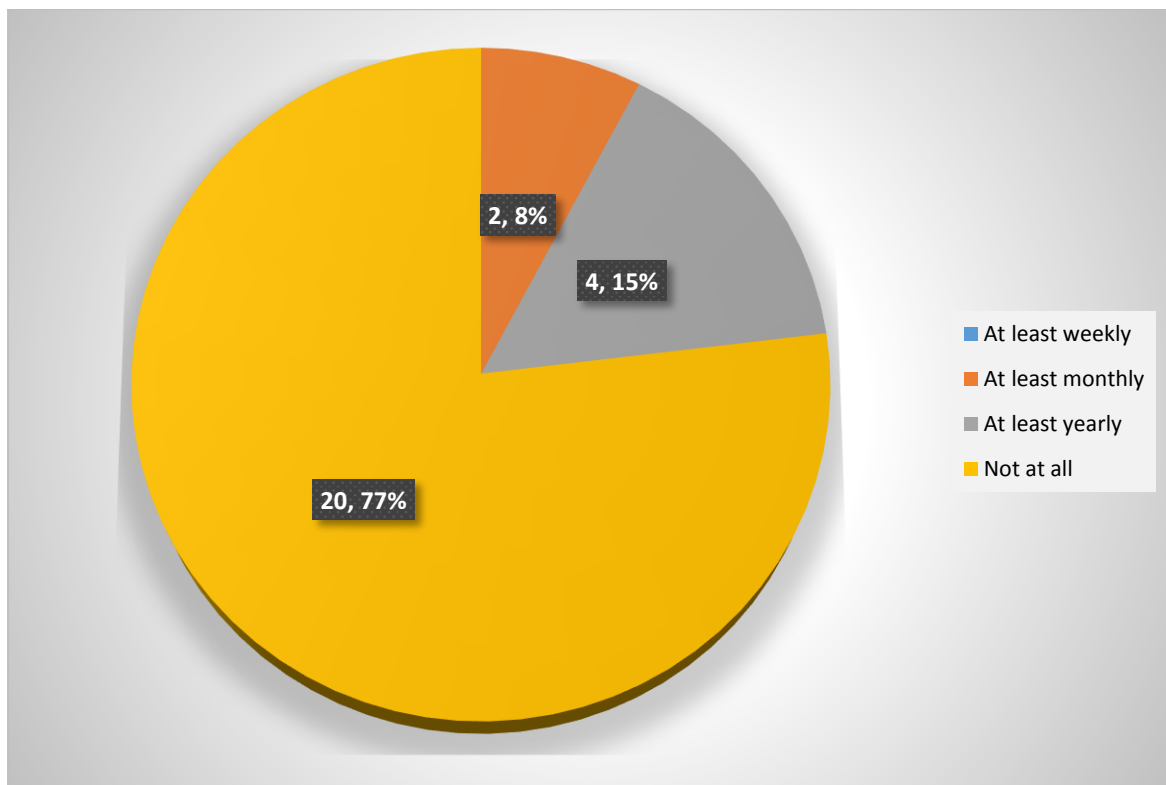


Figure 11 Frequency of depositing publications into the UNAM Institutional Repository (n=26)

4.6.6 Effect of the UNAM Institutional Repository on research

In question 4.7, in order to establish the benefit of the UNAM Institutional Repository, participants were asked to mention the effect the IR has on their research. Results are as follows:

Those who responded to this question (14; 23% of total) indicated that they are inspired by what colleagues published in the IR. Data also reveals that researchers are pleased to have the IR as a preservation of UNAM scholarly outputs:

I am happy that the university repository helps to store the UNAM publications (A16).

On the other hand, five researchers experienced difficulty using the IR as there are no options to search using one's own terms. Furthermore, it was stated that only some theses have abstracts. The difficulties show that researchers are negatively affected because they do not know how to search the IR effectively.

4.7 Challenges experienced in the process of research related to the library

Question 4.8 aimed to establish challenges experienced in the research process with which the library can assist. Using free text, participants were asked to indicate challenges they have experienced in the process of research. Respondents to this question were 22 (37% of total), and they fully expressed their challenges, while 38 participants left this question blank. The subheadings below are the groupings of challenges provided by respondents. They are presented in Figure 12.

4.7.1 Lack of searching skills

Lack of searching skills was found to be the most challenging by all 22 respondents. Respondents indicated that they got frustrated when their searches do not yield relevant results or when in some cases there are no results at all. The study revealed that participants sometimes use websites other than the library's to download articles which are not on OA repositories and which require subscription fees. It was further discovered that respondents have problems with accessing electronic resources in general, simply because of lack of skills and knowledge regarding electronic resources.

4.7.2 Lack of access to full articles

The study revealed that 16 respondents (72% of those who responded to this question) have challenges of accessing full text articles. This could result from lack of knowledge and awareness of library databases which provide full text articles.

4.7.3 Lack of ICT skills for using electronic resources

The study found out that 15 respondents (68% of those who responded to this question) indicated that they lack ICT skills for using electronic resources.

4.7.4 Inadequate information resources

Three respondents indicated that inadequate information resources in the library is a challenge. This affects their research because they cannot find enough literature for their projects.

4.7.5 Shortage of library professional staff

The results revealed that three respondents feel there are not enough professional librarians to attend to their research needs. They have pointed out that the library staff are mostly busy with circulation of library materials and assisting at the photocopy machines:

The library staff are too busy with borrowing, returning of books and assisting with photocopying/ printing related issues (A2).

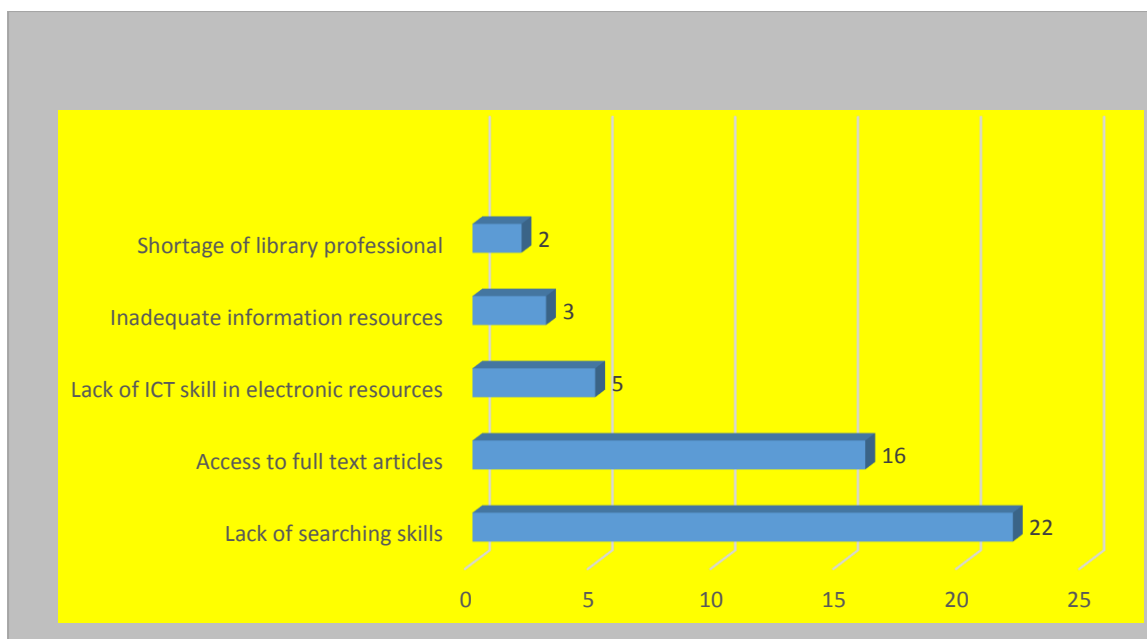


Figure 12 Challenges experienced in the process of research related to the library (n=22)

4.8 Additional support services which the library could provide

Question 4.9 intended to find out from respondents the ways in which they thought the library could improve. Participants were provided with free text to suggest services that the library could add to its offerings. There were 30 responses to this question and their recommendations are as follows:

Fourteen respondents (47% of those who responded to this question) suggested that the library should introduce more training on how to access information resources. Five respondents (17%) indicated that the library needs to engage in awareness of library information literacy training. In terms of information resources, one respondent indicated that the library needs more subject related textbooks (but this has little to do with research support). Lastly, two participants suggested that the library should provide ICT training to researchers. One respondent said:

I am not aware of the library training or research support services offered by the library. Could be that I was away when it was offered (A23).

4.9 Cross tabulation

This section compares data from different questions in order to find out the relationship between the results of two questions. The aim is to provide a fuller picture of the use of and need for library services. Hence it is relevant to compare the frequency of library visits with the use of library services.

4.9.1 Frequency of library visits and type of library services

This analysis aims at examining data from question 2.1 (How often do you make use the library with a research-related need?) and question 2.2 (What library services do you use that support your research?) to find out the relationship between the findings to the two questions. The results of the comparison in Figure 13 show that respondents who visit the library at least weekly are the most active users of some of the popular services, followed by those who visit the library at least monthly. For respondents who visit the library annually, their preferred library services were not the most popular.

IL training was found to be the most popular service for respondents who visited the library at least weekly. The IL training at HP includes sessions and consultations which is provided any time library users have queries. Researchers first consult library staff one-to-one on where and how to find information resources. Since IL is the library training which is provided at any time, either formally or non-formally, that could be the reason it is the most used service, at least weekly. Other services mostly used on a weekly basis were access to information resources and literature search assistance with 11 and 10 respondents doing so respectively. This make sense because these two services respond to the primary needs of researchers when they are at the first stage of research which is the discovery of ideas.

As for respondents who visited the library at least monthly (28), their preferred services are reference style training, information literacy training, literature search assistance and searching tools with seven scores each. Most of those who visited the library annually (18) preferred services that are less-popular services overall, with scores below five (the exception being information literacy training with seven respondents). They are reference style training, Information Literacy training, training on measuring research impact, access

to information resources, literature search assistance, electronic theses access, searching tools, information on where to publish, and copyright issues advice.

It is worth mentioning that one respondent who indicated not using the library services at all, prefers other services apart from those listed in the questionnaire, which is “information related to their teaching course”. The overall analysis revealed that information literacy training, and literature search assistance are the overall popular library services by most respondents who visit the library at all occasions.

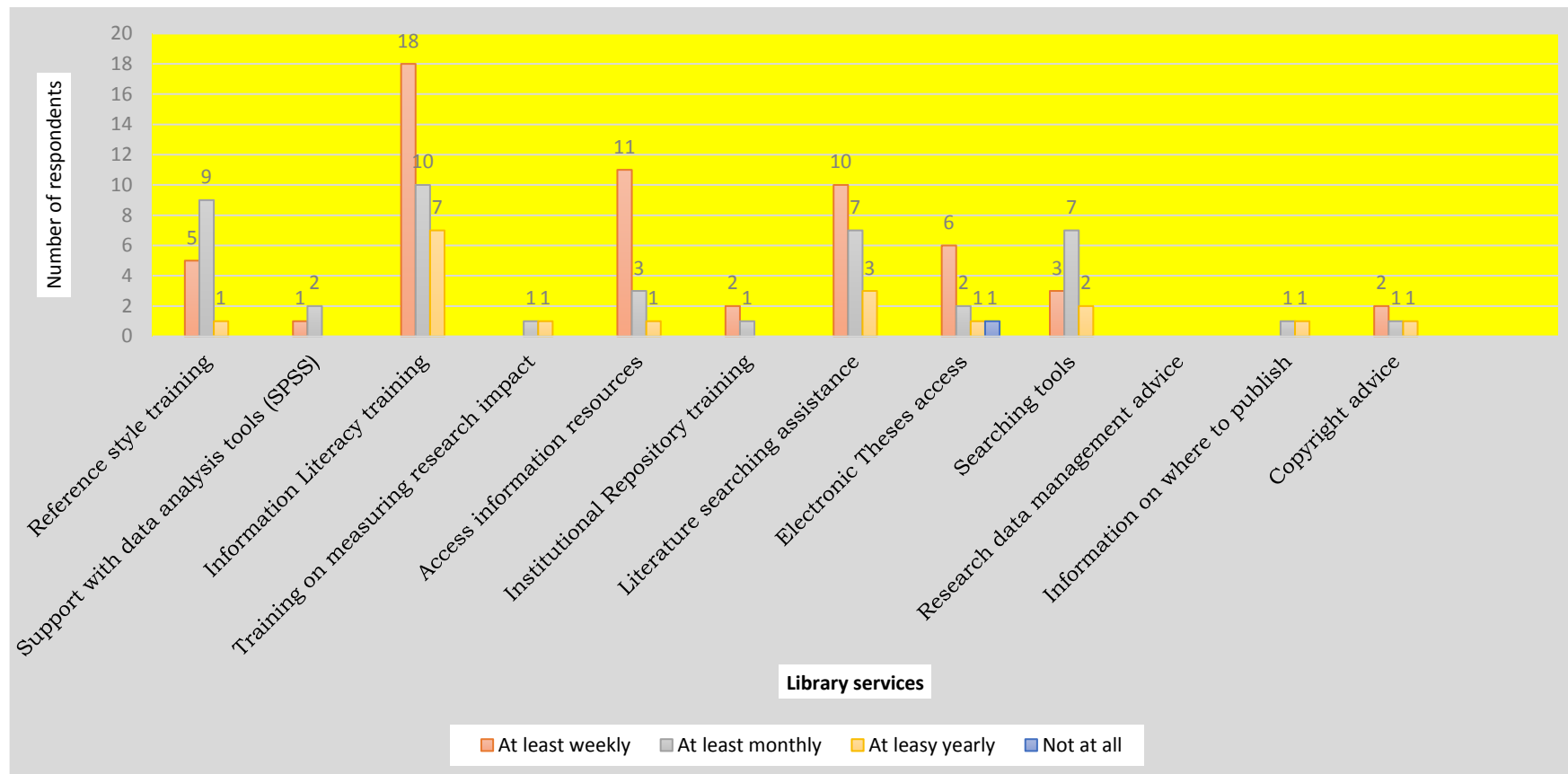


Figure 13 Frequency of library visits and type of library services most used

4.10 Summary

This chapter presented the findings of the study, which were collected from participants to evaluate the UNAM Library research support services at Hifikepunye Pohamba (HP) campus. The study investigated the current research support services being used at the UNAM Library at the HP campus, how the services meet the needs of the researchers and the effect of the research support services on researchers. The analysed data therefore gives a picture of which library services are being used by and are of benefit to researchers and could therefore be seen as valuable research support services in the context of a research library. The study further investigated respondents' inputs on how to add to the library research support services.

Chapter 5

5. Findings, Recommendations and Conclusion

5.1 Introduction

This final chapter discusses the main findings of the study. The study's objectives were to discover the research support services currently in place at Hifikepunye Pohamba (HP) Library, Faculty of Education; to investigate the extent to which these services meet the needs and expectations of the researchers; and to re-conceptualise the research support services at the HP campus library. The recommendations are done within the framework of Research Librarianship to come up with recommendations.

The chapter is divided into four sections, namely, the discussion of the findings in relation to three study objectives, suggestions for improvement at HP campus Library, recommendations for future studies and the conclusion.

5.2 Discussion of findings

5.2.1 Research support services at Hifikepunye Pohamba Campus Library

The first objective of the study was to discover the research support services currently in place in the Faculty of Education, University of Namibia, at the Hifikepunye Pohamba Campus Library. Since the library does not specify which of its services are specifically aimed at researchers, data was collected on the services that academics and postgraduate students used to aid their research. The data from the questions on the type of library services that researchers used to support their research revealed the following: information literacy training is the most highly used service and most valued; literature searching assistance came second. These were followed by: referencing style training and access to information resources training, both of which were rated equal as third-most used services. Searching tools and access to electronic resources followed at the fourth position. These are traditional services, according to, for example, Akeroyd (2001) and Abubakar (2011) and do not reflect newer trends in academic libraries responding to researcher needs. Other services such as guidance on copyright issues and guidance on

where to publish scored lower - that means they are not being used enough. Forsman, Ndinoshiho and Eija (2012) found that UNAM Library still provided traditional library services as part of research support services. It is also further confirmed from the *UNAM Library Annual Report (2015)* that the support services provided by the UNAM subject librarians are mainly: to teach researchers about relevant databases for use in research; assist in literature searches; and guide them to search for titles in library lists of books which are relevant to their studies. The librarians also teach referencing styles and how to manage citations.

Although the literature review indicated that research librarians need to continue with these traditional services, there are core activities which can be added to the services in response to the country and the institutional research agenda, changing patterns in scholarly communication and researcher needs. Activities which are believed to respond to new trends and help in increasing research outputs are research data services, open repositories, assistance on research grant application and research impact evaluation. Therefore, the traditional services cannot be satisfactorily considered as a core task of research support service (Kennan, Corral and Afzal, 2014).

5.2.2 The extent to which the campus library services meet the needs and expectations of researchers

The second objective of the study was to investigate the extent to which the campus' library services met the needs and expectations of the researchers. The concept of Research Librarianship aims at responding to country, institution and individual research needs through providing research support services in order to produce a high quality and quantity of research outputs. Research support services should consist of activities which empower researchers with necessary skills to adapt to changes and new developments (Kennan, Corral and Afzal, 2014). This section is divided into two subheadings. The first subheading deals with the needs of researchers regarding the research support services. The second one is the summary of the data which revealed the expectations of researchers.

5.2.2.1 Needs of researchers concerning research support services

In relation to the extent to which the research support service met the needs of researchers, data revealed that researchers' needs were not met to satisfaction, even via the traditional services offered by the library. Researchers indicated that they wanted information literacy training and literature searching assistance to happen more often and also that it should address their needs.

Evidence from the data revealed that researchers need additional services in order to carry out their research. These are: help with searching strategies, access to full text articles, referencing style, copyright issues and measuring research impact. These services are already being offered by UNAM Library, but perhaps not on a satisfactory level.

On the question whether the library research support services contribute to the faculty research agenda, data revealed only academics understand whether research support services contribute to the faculty agenda or not, while emerging researchers do not understand it at all, hence they did not respond the question. On the question regarding the benefits received by the institution as result of library training, data revealed that some researchers have improved competencies in searching for information, while others are better able to handle information resources because of the training. That means that the existing library training is still important and it has benefits to researchers, but, in agreement with Abubakar (2011), a revision of the service is required in order to successfully benefit researchers.

When researchers were requested to indicate challenges experienced in the process of research, the feedback indicated that inadequate information resources in the library and a shortage of professional library staff are the main reason why they feel they are not provided with adequate services to enable them to increase their research output. The data revealed that library staff are currently concentrating on circulation activities and assisting with photocopy issues. This evidence is worrisome: if the needs of researchers are not met, that means the library services are not relevant to researchers. This is a reminder of the suggestion by Abubakar (2011) that academic libraries

might require adding more services to respond to the needs for researchers in order to remain relevant in their institution. It is also supported by Neal (2014) who suggested that the library should demonstrate its value and impact in research by providing the support services that meet researcher' needs. Researchers need support to be able to conduct research (Percy-Smith, et al. 2002); research librarians should assist in advancing the research process and assist researchers to cope in their work (Parker, 2012). Data further revealed that the library needs to engage in awareness of library information literacy training. While many researchers noted the value of this training, it was discovered that others are not aware of the existence of such training. It also indicated that there is a need for IT training. These should be in line with Kroll & Forsman (2010), Corral (2012) and Raju (2014) who stated that knowledge of latest information technology has an effect on new research services such as RDM and the management of institutional repositories.

5.2.2.2 Expectations of researchers with respect to research support services

Data indicated the following suggestions for research support services which are taken as expectations of researchers. It revealed that library IL training which is being offered is too basic and better training for the level of researchers is expected. Data revealed that researchers expect regular training on how to access information resources in order to continuously be able to access relevant information for their research. The study takes cognizance of Corral and Afzal (2014), who stated that the purpose of research support services is to proactively support the growth and the development of research activities and facilitate issues surrounding scholarly communication. There are core tasks of research support services which result from proactive engagement of research librarians with the researchers throughout the research process in order to understand researchers' expectations (Raju and Schoombee, 2014).

The other suggestion from the data is that researchers are not aware of the IR. They expect that the library should engage in awareness programmes to make the campus community aware of what is being offered. This issue can

be related to the study by Raju and Schoombee (2014) where it was emphasised that the library should indicate its relevance to its community, so awareness should be one way of marketing, not only the availability but the importance of library services.

The study found that there is a difference between the expectations of established researchers and emerging researchers (the postgraduate students). Data derived from the question where they were asked to suggest additional services to the research support services revealed the following: Emerging researchers suggested that the library should introduce more training on how to access information resources. Academics suggested that the library needs to engage in awareness of library information literacy training; and academics also suggested that the library needs more subject related textbooks to respond to researchers' needs.

5.2.3 Re-conceptualising the Research Support Service

The study found that the current services did not really respond to all the needs of researchers and that the library services which were provided were not at the level of academic research support services suggested by the literature. According to the Research Librarianship concept, research support services should be a set of activities that responds to researchers' needs and increases research outputs (Parker, 2012: 2). Data collected from answers on what the library should add to the research support services as well as from the question on challenges experienced during the research process revealed that there is a need to establish proper research support services to increase research productivity at HP campus. This means that the UNAM Library needs to improve its services by adding more services or changing the way the research support services are being provided. The study by Forsman, Ndinoshiho and Eija (2012) confirmed that UNAM Library was still providing traditional services and the findings of the present study suggest that this is still largely the case. While traditional services are still necessary to a research service (Abubakar, 2011), it should also include activities which are solely to increase research outputs in the institution (Kennan, Corral and Afzal, 2014:670).

In reconceptualising research support services at UNAM Library, the Research Librarianship concept provided directions and ideas. The conceptual framework emphasised coordination and collaboration with researchers in their institutions during the research process to enable librarians to understand researchers' needs. It further encouraged that for the library to remain relevant, research support services should respond to the research landscape and changes in scholarly communication. It is necessary therefore that UNAM Library should further reconceptualise research support services taking into consideration trends in academic libraries and changes in scholarly communication. It should also coordinate and collaborate with researchers in the institution during the research process. This study can be a first step in collaboration between librarians and researchers. For example, services and activities which are recommended as per top trends (ACRL, 20016a) are: digital and open scholarship, resource discovery and access management, research grant and contract, research skills training, research data services and research output evaluation (as discussed in chapter 4). The 'old' services are still needed, but the conceptual framework requires that more relevant activities which respond to the scholarly communication and new trends are the core to research support services.

This study, further, takes recommendations from the literature and previous studies to help in reconceptualising the research support services at UNAM Library. It is noted that rapid development changes in technology, scholarly communication as well as higher education pedagogy influence the needs and expectations of researchers (Corrall, Kennan and Afzal, 2012). This situation means that academic libraries worldwide should consider changing the role of librarians working with researchers. Library services should be repurposed and research support services should be enhanced (Raju and Schoombee, 2014). Kesselman and Watstein (2009:385) emphasised that academic libraries "have taken on new functions in areas of integrated IL instruction and scholarly communication in order to meet the dynamic changing needs of their users".

5.3 Recommendations

Recommendations from this study are divided into two parts. They are: recommendations on how to address the study problem and recommendations for future studies.

5.3.1 Recommendations from the study

There are suggestions made from the study as to what should be done in order to improve the research support services and be able to meet the needs of researchers. In addition, some recommendations are taken from the conceptual framework and literature as to how to respond to the challenges which were revealed by the study. These recommendations can therefore assist to reconceptualise the research support services at HP campus.

Raju and Schoombee (2014) believed that academic libraries should provide research services as per new trends such as RDM and management of institutional repositories to support scholarly communication. It is therefore recommended that the UNAM Library at the HP campus enhances the research support services by responding to new trends in an academic library particularly in relation to the new higher education teaching environment. The author of this study knows that UNAM has an IR, however, findings from the question of whether participants are aware of the UNAM IR indicated that few established researchers are aware of it, while none of the emerging researchers are. RDM services did not exist at all at UNAM at the time of the study.

An IR is very important to an institution that wishes to contribute to the accessibility of research outputs and increase the visibility of the institution's research (Raju and Schoombe, 2014). Academic libraries should thus encourage the use of the IR in order to change the landscape of scholarly communication (Tmava and Alemneh, 2013). UNAM Library should promote its IR in order to encourage OA and for researchers to showcase their research outputs. It is important for researchers to understand the OA movement since it will enhance the visibility and accessibility of the research product (Lynch, 2003). From the data, it is evident that some researchers only deposit publications into the IR occasionally and most of them are not aware of its

existence. Thus, the UNAM Library should develop awareness programmes of library research support services for academics.

Data from the question regarding challenges experienced by researchers revealed that there is also a need to integrate IT skills into library training. This finding is in agreement with authors (Abubakar, 2011; Raju and Schoombee, 2014; Sinclair, 2009; Auckland, 2012; Ball and Tunger, 2006) who argued that IT skills are a necessity in scholarly communication.

In agreement with Kroll & Forsman (2010) and Corral, Kennan and Afzal (2012), librarians should take new roles in areas of integrated IL instruction and scholarly communication in order to meet the ever-changing needs of their users. Currently, UNAM Library is offering training on: literature searches, how to search the library catalogue, training on how to access the library databases with electronic information resource, referencing styles and citations. These are traditional services and are still relevant but require revamping (Goetsch, 2008). UNAM Library should have a revised information literacy framework to fit all the levels of academics and, more specifically, researchers. That means that a new set of skills such as research and subject-related skills are required by academic librarians.

De Jager, Nassimbeni and Crowster (2016) emphasised the need for specialised librarians with relevant competencies and skills for research. It is therefore recommended that the UNAM Library structure be adjusted to accommodate professional librarians with research skills who can provide subject specific support and help with research related activities. For example, librarians with higher degrees in librarianship.

Research Librarianship means that to provide research support services, academic libraries need to acquaint themselves with current trends. Hence, staff development should be a continuing programme for UNAM librarians to constantly adapt to new trends and ensure library services are on par with the changes in research.

5.3.2 Recommendations for future studies

This study is limited to researchers at one campus of the University of Namibia. It is noted that it did not cover all the aspects relevant to respond to questions related to research support services at the University of Namibia Library. It is recommended that a similar study is carried out in the future, as this study will unearth further questions necessary to add to the knowledge component. It is recommended that further studies deal with the following:

- An inclusion of library staff in order to triangulate data. This would help to fill the gap of the one-sided survey and provide a clear picture of what type of research support services the library does and should provide.
- Further study could be generalised to all Education Campuses of the University of Namibia. This would enable the University library to make a proper decision regarding the research support services to all education academics.
- A study on library staff qualifications, skills and abilities to deliver research support services at the required level. This is in order to find out whether the library has the capacity to deliver the required services.

5.4 Summary

The purpose of this study was to investigate the library research support services at the University of Namibia, Hifikepunye Pohamba Campus. This was done by finding out the current research services at the campus, whether the services meet the needs of the researchers and where their needs are not met, and what other services are required in order to provide research support services which meet these needs.

The study concluded that researchers are in need of more research-related services which will help them speed up and improve the process of research at the campus. The study also indicated that the services do not meet the standards of a research library as UNAM Library is in need of advanced services which deal more specifically with the research process.

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Appendix A: Cover Letter

Cover letter

Dear Participant,

I, Maria MM Aipinge, a student at University of Cape Town, Library and Information Studies Centre, am conducting this study as part of the requirement for my Master's Degree (MLIS).

I invite you to participate in a research study entitled: Evaluating the library research support services in the Faculty of Education, University of Namibia (UNAM): a case study of the Windhoek and Hifikepunye Pohamba Campuses. The purpose of the research is to investigate the research support services at the University of Namibia's Faculty of Education. The findings of the research could be used to improve the practice and research support services at the UNAM libraries.

Your participation in this research project is completely voluntary. You may decline to participate altogether, or leave blank any question you do not wish to answer. Your responses will remain confidential, anonymous and will be treated with utmost confidence.

You are not required supply your name or any other means of identification. Data from this research will be kept safe by the researcher of this study and no other person may have access to these data other than the researcher and her supervisor.

The questionnaire has been designed to collect information on UNAM Library's research support services, specifically those that support the researchers at the Faculty of Education at the two campuses mentioned above. If you agree to participate in this project, please sign the consent form.

For further information concerning this study, please contact me at the following contact details: APNMAR001@myuct.ac.za or +264 (0)81 4385938.

Thank you for your assistance in this important endeavour.

Sincerely yours,

Maria Aipinge

Student number: APNMAR001

Supervisor: Michelle Kahn, michelle.kahn@uct.ac.za, +27 (0)21 6501851

Appendix B: Informed Consent Form



UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

Faculty of Humanities
Library and Information Studies Centre

Informed Consent Form

Name of researcher:

Maria MM Aipinge

Title of research project:

Evaluating the library research support services in the Faculty of Education, University of Namibia (UNAM): a case study of the Windhoek and Hifikepunye Pohamba Campuses.

By signing below:

- I agree to participate in this survey.
- I have read this consent form and the information it contains and was afforded the opportunity to ask questions.
- I agree to my responses being used for educational and research purposes, subject to the following: - (*tick as appropriate*)

	Yes	No
My personal details (e.g. age, occupation, position) may be included in the published research		
My responses can only be used in a way that I cannot be personally identifiable		

- I understand that I am under no obligation to take part in this survey.
- I understand I have the right to withdraw from the survey at any stage.
- I understand that this research might be published in a research journal or book. In the case of dissertation research, the document will be openly available to readers in the institutional repository.
- I understand the researchers received ethical clearance from UCT and clearance from UNAM to carry out the survey.

Name of Participant

:

Signature of Participant

:

Signature of researcher

Date

:

Appendix C: Questionnaire

Introduction

I, Maria MM Aipinge, a student at University of Cape Town, Library and Information Studies Centre, am conducting this study as part of the requirement for my Master's Degree (MLIS). A study titled: "Evaluating the library research support services in the Faculty of Education, University of Namibia (UNAM): a case study of the Windhoek and Hifikepunye Pohamba Campuses".

Your response will be treated with utmost confidence.

Do not supply your name or any other means of identification.

Please return the questionnaire within three days to the provided email address. This questionnaire has 4 sections with and will take about 15 minutes of your time.

Your participation is very valuable and I appreciate you taking the time to complete it.

Please tick the appropriate box and, elaborate where required.

SECTION 1. PERSONAL INFORMATION

1.1 What is your primary role at UNAM?

a	Academic	
b	Postgraduate student	
c	Other (please specify)	

1.2 At which campus are you based?

a	Hifikepunye Pohamba Campus	
b	Windhoek Campus	

SECTION 2. RESEARCH SUPPORT SERVICES

2.1 How often do you make use of the library with a research- related need?

a	At least weekly	
b	At least monthly	
c	At least yearly	
d	Not at all	

2.2 What library services do you use that support your research? (Select as many as you use)

a	Reference style training	
b	Support with data analysis tools (e.g. SPSS)	
c	Information literacy training	
d	Training on measuring research impact	
e	Access to information resources	
f	Institutional Repositories training	
g	Literature searching assistance	
h	Electronic Theses access	
i	Searching tools	
j	Research data management advice	
k	Information on where to publish	
l	Copyright advice	
m	Other (Please specify)	

2.3 Based on your own experience, please provide your opinion on the effectiveness of the library training/guidance of which you have made use. (Select the most appropriate rating for each training)

		Useful	Not Useful	No participation
a	Reference style training			
b	Training on data analysis tools (e.g. SPSS)			
d	Information literacy training			
e	Training on how to work out one's research impact			
f	Training on how to access information resources			
g	Training on how to upload documents into UNAM Institutional Repositories			
h	Training on using electronic journal articles			
i	Training on how to use E books			
j	Postgraduate research support for proposal, theses and dissertation writing			
k	Guidance on where to publish			
l	Guidance on copyright issues			
m	Others (Please specify)			

2.4 After attending any of the above training, do you think your research skills improved?

a	Yes	
b	No	
c	I don't know	

2.5 What other types of support do you feel you need from the library as an individual researcher?

SECTION 3. BENEFITS OF RESEARCH SUPPORT SERVICES

3.1 Referring to 2.3, kindly specify one or two of the research support services that you find most valuable to your research.

a) _____

b) _____

3.2 Please provide the reason/s why the above-mentioned service/s is/are valuable to your research?

3.3 The Faculty of Education has a research agenda that stipulates the priority research areas and themes which are required by the Faculty to conduct research.

Do you think the library through its research-related services contributes to the achievement of the faculty research agenda?

a	Yes	
b	No	
c	I don't know	

3.4 Kindly tick the specific benefits that you or the institution receive as a result of the library training?

a	My competencies in searching for information have improved	
b	I am better able to handle information resources	
c	I gained knowledge of referencing style	
d	I have a better understanding of Open Access	
e	I am able to share my research findings via Institutional Repositories	
f	I contribute to collaboration and/or attracting international lecturers on permanent capacity as well as guest lecturers	
g	Others (please specify)	

SECTION 4. PARTICULAR SERVICES AND THEIR BENEFITS & CHALLENGES

This section will interrogate certain services more closely.

Information Literacy training

4.1 Has the Information Literacy training had any effect on you as a researcher?

a	Yes	
b	No	
c	I don't know	

4.2 Please provide reason/s to your answer on whether Library Information Literacy training has benefited you or not.

Access to e-resources

4.3 Do you make use of the library website to access online resources?

a	Yes	
b	No	

4.4 Please elaborate on your answer to 4.3

Appendix D: Ethical Clearance Certificate: University of Cape Town Library and Information Studies Centre



University of Cape Town

Upper Campus

Private Bag X1, RONDEBOSCH, 7701 South
Africa Level 6 Hlanganani, The Chancellor
Oppenheimer Library

Tel: +27 (0) 21 650 4546 Fax: +27 (0) 21 650 2529

E-mail: lisc@uct.ac.za

Internet: www.lib.uct.ac.za/lisc

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Ref No.: UCTLIS201712-21

19 December 2017

Ms Maria MM Aipinge
Library and Information Studies Centre
Chancellor Oppenheimer Library
University of Cape Town

Ethics approval for Master's research

Dear Ms Aipinge

I am pleased to inform you that ethics clearance has been granted by an Ethics Review Committee of the Library and Information Studies Centre, Faculty of Humanities, for you to proceed with collecting data for your Master's study on **'Evaluating the library research support services in the Faculty of Education, University of Namibia (UNAM), a case study of the Windhoek and Hifikepunye Pohamba Campuses'**.

As a next step, please ensure that you obtain approval from the ethics committee to collect data at your data collection site, as necessary.

We wish you well with your data collection and the completion of your research.

Yours faithfully,

Signature Removed

Mr Richard Higgs

Chair: Department (LISC) Research Ethics Committee

"Our Mission is to be an outstanding teaching and research university, educating for life and addressing the challenges facing our society."

Appendix E1: Minutes from the Campus Research Committee

Dear Ms Aipinge,

I am glad to inform you that the Campus RPC met yesterday to discuss your application for research ethics. Kindly attend to their comments below and submit the required items.

Thank you very much.

1.1 Issues rising from Ms Aipinge's application

1. For question 3, the applicant must attach the ethics approval/certificate from the home university.
2. At question 4, Ms Aipinge is supposed to describe who the participants are. Also the number of participants in the proposal background does not match with those at question 5, 74 or 73? In addition, the numbers of participants from the two campuses need to be specified. However it is recommended that the two campus are too big for the study, hence it should be limited to one Campus.
3. Question 6, needs to specify the exact time/length and avoid the word likely. She also needs to specify where the study will take place, HP or main campus?
4. For question 9, Ms Aipinge needs to describe clearly her recruitment process, how she will first get in contact with them. Also indicate how she will invite them to the study and how she will get the phone numbers of participants.
5. Question 11(a), the cover letter should be read during the recruitment process and not during the interview stage.
6. 11(c) consent form not attached, must be submit to the RCP.
7. For question 12(d), the applicant must avoid the danger of giving participants a choice to have their identity revealed, as she will be held responsible and UNAM reputation may be damaged if any misunderstanding occurs. She also needs to clarify how data will be protected. The second sentence need to be removed, raw data need to be protected until the time it will be destroyed, and data must not be shared with the person outside the research team
8. In question 12(c), specify the length of time that the data will be stored, maximum should be 5 years.
9. Question 15, needs to state that a draft of research finding chapter will be given to participants to make sure that what is written reflect the true information of what the participants have said before you publish. In case something needs to be changed they can inform you.
10. Question 18, request permission letter from UNAM PVC: Research and submit it to the RPC.
11. Question 21, since there are librarians involved in the research and the researcher being their supervisor, there is conflict of interest involved. It is recommended that Librarians should be excluded from the study.
12. The applicant must attach the questionnaire and interview schedule.

Ms Aipinge is advised to submit the documents and attend to the raised issues.
The chairperson thanked all members for their participation and attendance.
Meeting was adjourned at 10:30.

Dr Helena Miranda
Deputy Director: Academic Affairs & Research
Hifikepunye Pohamba Campus
University of Namibia
Tel: +264 65 232 3024
Fax: +264 (0) 65 230 006
E-mail: hmylanda@unam.na
Web: <http://www.unam.edu.na>
Private Bag X5507, Oshakati, NAMIBIA

Appendix E2: Permission to conduct research activities at the University of Namibia



CENTRE FOR RESEARCH AND PUBLICATIONS

Office of the Pro-Vice Chancellor: Research Innovation and Development

UNIVERSITY OF NAMIBIA, Private Bag, 13301 Windhoek, Namibia

340 Naarume Ndemulayo Avenue, Pioneers Park, Office D090 ☎ +264-61-2054624 ✉ research@unam.na Fax: 264-61-206 4624

17 August 2018

Dear Ms Maria MM Aipinge

PERMISSION TO CONDUCT RESEARCH ACTIVITIES AT THE UNIVERSITY OF NAMIBIA (UNAM)

Your application to conduct research at UNAM entitled: **Evaluating the library research support services in the Faculty of Education, University of Namibia (UNAM)** was considered based on ethical evaluation from your institution. Hence, permission is hereby granted with the following conditions:

1. During the course of your research activities at UNAM, you will observe the required procedures, norms and ethical conduct in accordance with the relevant Research Policies and Guidelines. If unsure, please consult *the Centre for Research and Publications* at UNAM for guidance. Any deviations and amendments to the original documents submitted (i.e. research proposal, interview guide, consent forms, etc.) must be submitted again for approval, before the research activities can commence.
2. The results of the findings will be shared with the PVC: Research, Innovation and Development, and the Centre for Research and Publications, before they are disseminated or published in the public domain.
3. Upon completion, a copy of the Research Report must be lodged with the UNAM Library for our records.
4. Proper, full acknowledgements of the University of Namibia and all participants /respondents shall be done in the Research Report and any subsequent publications arising from this research.

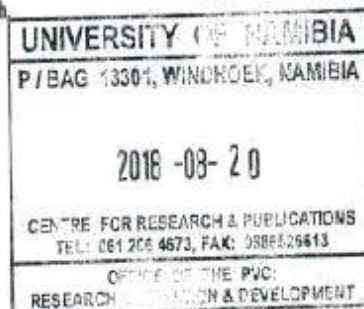
If you are agreeable to the above conditions, please sign and date a copy of this letter and return it the Centre for Research and Publications (Email: research@unam.na). If you have any queries, do not hesitate to contact the Centre for Research and Publications.

Wishing you all the best with your research

Yours sincerely

Signature Removed

Dr. Hileni M. Kapenda



I accept and agree to all the conditions

Maria M.M. AIPINGE

Signature Removed

20/08/2018

Full Name and Surname

Signature

Date