

**ASSESSMENT OF INFORMATION NEEDS AND SEEKING  
BEHAVIOUR OF POSTGRADUATE STUDENTS AT THE  
UNIVERSITY OF NAIROBI.**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF  
THE DEGREE OF MASTER OF LIBRARY AND INFORMATION  
SCIENCE, DEPARTMENT OF LIBRARY AND INFORMATION  
SCIENCE, UNIVERSITY OF NAIROBI**

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## DECLARATION

This research project is my original work and has not been submitted for examination to any other university.

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## **DEDICATION**

I dedicate this project to God Almighty my creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. He has been the source of my strength throughout this program and on His wings only have I soared. I also dedicate this work to my husband, Peter Gatheca who has encouraged me all the way and whose encouragement has made sure that I give it all it takes to finish that which I have started. To my children Amanda and Amara who have been affected in every way possible in this quest. Thank you. God bless you.

A special feeling of gratitude also goes to my loving parents, Joseph and Mary Mwangi whose words of encouragement and push for tenacity ring in my ears. My sisters Liz, Lydia and my brother Peter who have never left my side. Thank you.

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Finally, I pay glory to the Almighty God.

## TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION .....	iii
ACKNOWLEDGEMENT .....	iv
ABSTRACT.....	viii
LIST OF FIGURES.....	ix
LIST OF TABLES .....	x
LIST OF ABBREVIATIONS AND ACRONYMS.....	xi
<b>CHAPTER ONE.....</b>	<b>1</b>
<b>INTRODUCTION AND BACKGROUND OF THE STUDY .....</b>	<b>1</b>
1.1 Introduction .....	1
1.2 Background to the Study.....	1
1.2.1 Information Needs of Postgraduate Students .....	2
1.2.2 Information Seeking Behaviour of Postgraduate Students .....	2
1.2.3 Information Resources Use .....	3
1.2.4 Challenges Faced by Postgraduate Students .....	4
1.2.5 Context of the Study .....	4
1.3 Statement of the Problem.....	6
1.4 Aim of the Study.....	7
1.4.1 Specific Objectives .....	7
1.5 Research Questions.....	8
1.6 Assumption of the Study.....	8
1.7 Scope of the Study.....	9
1.8 Limitation of the Study .....	9
1.9 Significance of the Study .....	9
1.10 Definition of Operational Terms .....	10
1.10 Chapter Summary .....	11
<b>CHAPTER TWO.....</b>	<b>12</b>
<b>LITERATURE REVIEW .....</b>	<b>12</b>
2.1 Introduction .....	12
2.2. Theoretical Framework.....	12
2.2.1. Wilson’s (199) Model of Information Behaviour.....	12
2.3 Information Seeking Behaviour of Postgraduate Students .....	144
2.4 Information Needs of Postgraduate Students.....	155
2.5 Academic Research and Learning in Modern Academic Library.....	156
2.6 Information Resources Preferred by Postgraduate Students.....	157
2.6.1 Electronic Information Resources .....	157
2.7 Challenges of Accessing Information.....	19
2.8 Conceptual Framework.....	200
2.9 Chapter Summary .....	222
<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>24</b>
3.1 Introduction .....	24
3.2 Research Design .....	24
3.3 Area of Study.....	24
3.4 Target Population .....	25
3.5 Sample and Sampling Techniques.....	25
3.5.1 Sample Size .....	25

3.5.2 Sampling Techniques.....	26
3.6 Data collection Methods .....	27
3.6.1 Questionnaire.....	27
3.6.2 Interview Guides.....	27
3.7 Research Instruments .....	27
3.7.1 Validity.....	27
3.7.2 Reliability .....	28
3.8 Data Collection Procedures.....	28
3.10 Ethical Considerations .....	28
3.11 Chapter Summary .....	29
<b>CHAPTER FOUR .....</b>	<b>30</b>
<b>DATA PRESENTATION, ANALYSIS AND DISCUSSION.....</b>	<b>30</b>
4.0 Introduction .....	30
4.1 Response Rate of Respondents.....	30
4.2 Background Information of Students.....	30
4.3 Postgraduate Degrees.....	31
4.4 Academic Library Staff.....	32
4.5 Period of Study at the University .....	32
4.6 Information Needs .....	33
4.7 Information Seeking Behaviour .....	34
4.8 Hours Spent in the Library in a Week .....	35
4.9 Print and Electronic Information Resources .....	36
4.10 Access and Use to Electronic Resources .....	37
4.11 Information Retrieval.....	38
4.12 Level of Satisfaction .....	40
4.13 Challenges in Accessing Information .....	41
4.14 Discussions and Data Analysis.....	43
4.14.1 Information Needs of Postgraduate Students .....	43
4.14.2 Information Seeking Behaviour of Postgraduate Students .....	43
4.14.3 Information Resources Used .....	44
4.14.4 Challenges Faced by Postgraduate Students during Information Seeking.....	44
4.15 Chapter Summary .....	44
<b>CHAPTER FIVE.....</b>	<b>46</b>
<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS.....</b>	<b>46</b>
5.1 Introduction .....	46
5.2 Summary of the Findings.....	46
5.2.1 Information Needs of Postgraduate Students .....	46
5.2.2 Information Seeking Behaviour of Postgraduate Students .....	47
5.2.3 Information Resources used .....	48
5.2.4 Challenges Faced by Postgraduate Students during Information Seeking .....	48
5.3 Conclusion.....	49
5.4 Recommendations.....	50
5.4.1 Enhancement of Service Delivery .....	50
5.4.2 Infrastructure Development.....	50
5.4.3 Improvement of Internet Connectivity.....	51
5.4.4 Comprehensive Collection Development .....	51
5.4.5 User Training.....	51
5.5 Suggested Areas for Further Study.....	52

5.6 Chapter Summary .....	52
<b>REFERENCES .....</b>	<b>53</b>
APPENDIX 1: INTRODUCTION LETTER.....	61
APPENDIX II: QUESTIONNAIRE FOR POSTGRADUATE STUDENTS.....	63
APPENDIX III: INTERVIEW SCHEDULE.....	67

## ABSTRACT

The use and access of information resources is rapidly shifting due to technology advancement and changing information needs of postgraduate students and inadequate information resource tools. The purpose of the study was to assess the information needs and seeking behavior of postgraduate students in public universities. The study's specific objectives sought to examine the information needs of postgraduate students in public universities, examine their information seeking behavior of postgraduate students at the University of Nairobi, establish the types of information resources and services used by postgraduate students, explore the challenges faced by postgraduate students while accessing information resources in the public university, including possible solutions. The study was based on both quantitative and qualitative research methodology. The study was conducted at the University of Nairobi- main campus. The research was informed by Wilson (1999) Model of Information Seeking Behavior. The study employed stratified random sampling technique to sample. The target population was 1,830 postgraduate students in the school of humanities and social sciences and the sample size was 328 students. Data collected was analyzed using tables, graphs, pie charts. The findings indicated 76% of the respondent's information seeking behaviour anchored on finding information that would primarily allow them to pass their examinations. The findings also revealed that 60% of the students sought information using various retrieval tools such as OPAC to be of main importance in their diverse needs for accessing information. Furthermore, inadequate e-resources, poor quality service delivery, inadequate IT infrastructure, inadequate user training, and slow internet connection were identified as major challenges. The recommended strategies for improvement were that, libraries should increase the allocation of internet bandwidth, improve on the service delivery and offer frequent information literacy to the students. The study will be useful in guiding public universities and other academic libraries in providing access to information.



## LIST OF FIGURES

Figure 2.1: Wilson's (1999) Theory of Global Model of Information Behaviour.....	13
Figure 2.2: Conceptual Framework.....	33
Figure 4.1: Age Bracket of Postgraduate Students.....	31
Figure 4.2: Period of Study at the University .....	33
Figure 4.3: Information Needs and Seeking Behaviour .....	34
Figure 4.4: Information Seeking Behaviour .....	35
Figure 4.5: Hours Spent in the Library in a Week .....	36
Figure 4.6: Print and Electronic Information Resources .....	37
Figure 4.7: Level of Satisfaction .....	41
Figure 4.8: Challenges in Accessing Information.....	42

## LIST OF TABLES

Table 3.1: Sampling Frame.....	26
Table 4.1: Postgraduate Degrees.....	32
Table 4.2: Access and Use to Electronic Resources.....	38
Table 4.3: Information Retrieval.....	40

## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>CD-ROM</b>	Compact Disc Read-Only Memory
<b>E-books</b>	Electronic books
<b>E-Journals</b>	Electronic journals
<b>ICT</b>	Information Communication Technology
<b>IR</b>	Institutional Repository
<b>IT</b>	Information Technology
<b>JKML</b>	Jomo Kenyatta Memorial Library
<b>MBA</b>	Masters in Business Administration
<b>OPAC</b>	Online Public Access Catalogue
<b>SNS</b>	Social Networking Sites
<b>UON</b>	University Of Nairobi
<b>URL</b>	Universal Resource Locator
<b>VPN</b>	Virtual Private Network

# CHAPTER ONE

## INTRODUCTION AND BACKGROUND OF THE STUDY

### 1.1 Introduction

This study investigated information seeking behaviour of postgraduate students at the University of Nairobi JKML. This chapter explains the concept of information seeking behaviour and its associated terms in the context of this study. "Information-seeking behaviour is a broad term encompassing the ways individuals articulate their information needs, seek, select, evaluate, and use the needed information" (Majid, 2002). Additionally, they indicate that individuals or groups often have to perform different work roles at different stages of their careers and often face various challenges and problems that require solutions. As a result, they encounter knowledge gaps that trigger information needs resulting in the information-seeking process (Majid, 2002). Information seeking behaviour is an area of dynamic interest among librarians, information scientist, communication scientists, sociologist, and psychologists. Information seeking behaviour is expressed in various forms, from reading printed material to research and experimentation (Bhatti, 2010).

### 1.2 Background to the Study

This research work delves into the access of print and electronic information resources in regard to the information seeking behaviour of postgraduate students at University of Nairobi-main campus.

### **1.2.1 Information Needs of Postgraduate Students**

Higher academic institutions have libraries as their central educational systems, assisting in the improvement of learning and dissemination of knowledge to meet the information needs of their students. This information resources are required for student's academic enhancement. Students need information materials to produce quality research work (Kehinde et al., 2016). Information needs arise when an information user recognizes some information deficiency and desires to acquire that information (Kakai, Miriam et al. 2014). Frequent analyses of the information needs of the postgraduate students is needed for planning and acquiring what's relevant for student's scholarly study and knowing how easy it is for them to utilize the available information resources. Identifying methods for searching for information in the current era of information explosion is very vital in the general handling of information.

### **1.2.2 Information Seeking Behaviour of Postgraduate Students**

An important component for students in any learning institution is how they seek knowledge in their learning process. The objective of any institution of higher learning is to satisfy its students with adequate information that is relevant, timely and easily accessible no matter the format (Donald 2012). However, some postgraduate students may have difficulties in finding relevant electronic resource that they need. In addition, in his study on information seeking, Kakai, Miriam et al. (2004) stated that several postgraduate students faced challenges while seeking academic resources required in electronic format. According to Ikoja-Odongo (2004), information seeking behaviour is the manner at which people go about looking for relevant information.

Fasola & Olabode (2013) also defined information seeking as a basic pursuit involved by all information seekers and explained through a certain manner. In our day to day activities we access and use various information systems and services not limited to either communications, such as e-mail, social networking, such as Facebook, to a bigger extent of web-based database systems and other information services (Goker & Davis 2009).

Information seeking behaviour is revealed in various major ways, including reading printed resources to research and experimentation (Catalano (2013). Those people who seek information make active and deliberate efforts to look for current information from the library resources, including, electronic sources. It's imperative to point out that the rise of information technology especially in the academic environment has radically influenced the way libraries and information services are providing their services and has brought about significant changes in the ways in which information is consumed.

### **1.2.3 Information Resources Use**

Information is an important and key resource for every institution of higher learning. Libraries are organized knowledge hubs where users can access diverse information sources. Gunasekera (2010) indicated that libraries can build their collections and facilities to meet user's satisfaction. The learning process of researchers is hugely dependant on the richness of the library collection, development of enabling library technologies and the quality of the information service delivery in a library environment.

#### **1.2.4 Challenges Faced by Postgraduate Students**

Any negative outcome to information search is also defined by Ogba (2012) as an impeding and limited way which affects a person looking for information or requires to find more specific information. All these can be categorized as barriers to access information resources and inability to search and use information resources given that academic library users need information for education, training and research to address their information needs. Fasola and Olabode (2013) and Onuaho and Awoniyi (2011) reveal the barriers that face students in universities and academic institutions when seeking and searching information resources in the library collections are limited time, lack of internet facilities and connections, inadequate and irrelevant library materials. The library professions have been criticised for not being supportive while offering services, with a lack of proper attitude to their patrons, and lacking training and knowledge of using e-resources. Okite-Amughoru, Makgahlela and Bopape (2014) also states that postgraduate students are conversant of the library resources contained in the library in both print and electronic, but have challenges in accessing them due to poor internet connection in campus, lack of information literacy to search information and limited space in the library.

#### **1.2.5 Context of the Study**

The University of Nairobi was established in 1956 initially as the Royal Technical College with admission of A-level students in April 1956. It was then changed to the second University College in East Africa on 25th June, 1961 by the Scottish mathematician Prof James Morton Hyslop, gaining support from University of London. The university commenced enrolment of students in various academic disciplines such as the Arts, Science and Engineering while still offering the

professional diploma. In 1970, it became the first national University in the country and thus it was renowned as the University of Nairobi. University of Nairobi Library fully identifies with the philosophy of the University as spelt out in its mission and vision. The vision is to be a world class information centre committed to excellence in the provision, dissemination and preservation of knowledge. (University of Nairobi, 2018).

The tasks of the University Library System towards the accomplishment of the functions and objectives enlisted in the University of Nairobi Act 1985, to carry out basic functions of acquiring, organizing and disseminating information in support of the University mission. More precisely it is designed to deliver reading, reference, research materials and other library services to the students, academic staff, non-academic staff and to a limited number of the external community authorized to access the facility. (University of Nairobi, 2018).

The University of Nairobi Library System is composed of twelve libraries grouped into six college libraries plus a central library. The central library known as Jomo Kenyatta Memorial Library (JKML) also houses the administration, central services such as acquisitions, cataloguing coordinating unit, the union catalogues, the bindery and the archives. The system has a total stock of approximately 750,000 volumes, inclusive of books, periodicals and other non-print materials. The stock is divided into a general lending materials and specialized research collections to support scholarly work. Books in the library system are classified by the Library of Congress Classification Scheme. A union catalogue of library materials held in the system is maintained in the JKML.



Strategic objectives of the University of Nairobi Library;

- To provide access to information for teaching, learning, research and consultancy.
- To enhance Library facilities and environment for improved information delivery.
- To enhance staff capacity and innovativeness.
- To establish and promote collaborations and partnerships for resource-sharing.

(University of Nairobi, 2018).

### **1.3 Statement of the Problem**

Postgraduate students from diverse disciplines have got different approaches of information seeking for both print and electronic information resources. Globally, postgraduate students in search for information are vulnerable to challenges such as existing information gaps in their pursuit of their scholarly works. (Kalantari 2017). This situation is not any different for postgraduate students in East Africa as well as local universities in Kenya. The researcher in her capacity as a postgraduate student at the University of Nairobi observed that postgraduate students seem to suffer from inability to utilize the core retrieval tools used to retrieve information, lack adequate training on IT user skills such as use of web based resources available at JKML library and inadequate space especially with the growing students' population (Sakaja 2011).

This view compares favourably with Sakaja, (2011) who observed that access to electronic resources by students at the extra mural department of the University of Nairobi has been hindered by unreliable internet connectivity within the library

facility and undeveloped technological infrastructure. According to Okite et al, (2014) postgraduate students at Delta State university, Nigeria are well informed of the library resources, especially electronic resources, but that they are greatly impeded by the lack of skills, inadequate space in the library facility, poor internet connection on campus and unreliable power supply when accessing these information resources.

According to (Wasike (2012); Otike (2000); and Adika, (2003) postgraduate students' information needs and seeking behaviour may be associated with certain challenges that students have in optimally utilizing academic library resources. Currently, no study has been carried out on assessment of information needs and seeking behaviour specifically targeting postgraduate students at the public university, It's on this premise that this study was carried out specifically aimed at assessing information needs and seeking behaviour of postgraduate students at the university of Nairobi.

#### **1.4 Aim of the Study**

The aim of this study was to investigate the information needs and seeking behaviour of postgraduate students in public universities.

##### **1.4.1 Specific Objectives**

The specific objectives of this study were to:

1. Examine the information needs of postgraduate students at the University of Nairobi.
2. Examine the information seeking behaviour of the postgraduate students at the University of Nairobi.

3. Establish the types of information resources and services used by postgraduate students at the University of Nairobi.
4. Explore the major challenges faced by postgraduate students while accessing information resources at the University of Nairobi library including possible solutions.

### **1.5 Research Questions**

This study was guided by the following research questions:

1. What are the information needs of postgraduate students at the University of Nairobi?
2. Are there common information seeking behaviour of postgraduate at the University of Nairobi?
3. What are the types of information resources used by postgraduate students at the University of Nairobi?
4. Are there key challenges that postgraduate students face while accessing information sources at the University of Nairobi?
5. What are the possible solutions in relation to the challenges that hinder access to information resources at the University of Nairobi?

### **1.6 Assumption of the Study**

The following are the research assumptions.

1. Information literacy enhances individual capabilities of accessing information resources from the library facility.
2. Access to electronic resources is a very crucial factor in determining the users' satisfaction levels.

### **1.7 Scope of the Study**

Scope of this research study was basically defined as the extent of the content to be revised by the research in order to establish more logical conclusions (Walliman 2011). This research project was carried out at the University of Nairobi - main campus in Nairobi with the purpose of assessing information seeking needs and behaviour of the postgraduate students. This study is grounded on Wilson's (1999) nested model of information behaviour which essentially embraces the generation, acquisition, use and communication of the information. The target population that was used for this study was confined to the postgraduate students.

### **1.8 Limitation of the Study**

This are the challenges that the researcher encountered during data collection. The anticipated challenges of data collection were: Due to the nature of the quantitative and qualitative research emphasised here the study was not exempted to limitations in the homogeneity of the sample population and representation. The study was only limited to the University of Nairobi library and postgraduate students taking Masters in Business Administration and Information Sciences. Therefore, this cannot be extrapolate representational to additional academic institutions.

### **1.9 Significance of the Study**

The findings of this study were two fold; to help the students to have a positive attitude while seeking and using information resources at the University of Nairobi and also help the policy makers of University of Nairobi to put in place the right mechanism of addressing students' challenges in terms of accessing information resources. The expectations are that postgraduate students of University of Nairobi

will improve their skills of accessing information sources efficiently. The goal of this study was to help improve students' experience in accessing library resources. To academics and practitioners, it may build the body of knowledge on top of the existing and may enhance translation of theory to practice.

## **1.10 Definition of Operational Terms**

### **Information Need**

The concept of information needs is the simple process of asking questions in a systematic way within the universe of knowledge.

### **Information Seeking**

Basically it's the information seekers' constructive determination to get meaning from information. This process constitutes a series of experiences with information within a given period time.

### **Information Seeking Behaviour**

Information seeking begins when a person recognizes that the present condition of possessed knowledge is not what is needed to deal with some knowledge gap. The skills in which the information searcher uses to access the required information in relation to his or her specific needs.

### **Information Use**

Indicates the purpose which accessed and acquired information both in print or electronic is used for academic and knowledge purpose.

### **Public University**

A university which is predominantly funded by the government entity.

## **User Studies**

User studies seeks to comprehend the established patterns of information seekers, information requirements and what really drives them by the use of observations and various feedback mechanisms in a meaningful manner.

### **1.10 Chapter Summary**

The chapter introduces the research study and the reason of conducting the study, history of the case study, the extent and challenges of the study. This chapter illustrates the problem statement that led to the researcher undertaking this study with regard to the stated problem, broad and specific objectives and hypothesis that were used to guide the researcher. Also discussed in this chapter is the significance of the study and definition of the terms used.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The chapter seeks to give variation of theories and models in regard to information needs and seeking behaviour. It discusses concept and origin of information seeking behaviour in libraries and information centres, and highlights the findings and recommendations of studies undertaken in information seeking behaviour.

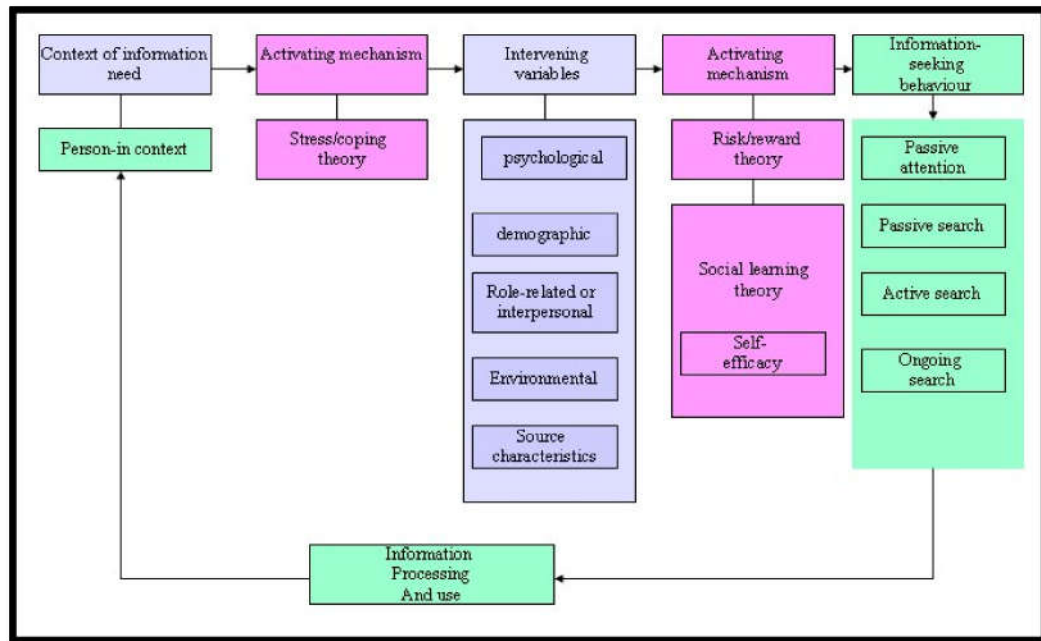
#### **2.2. Theoretical Framework**

The researcher explored the theoretical framework in information seeking behavior. A theoretical framework in this case is an attempt to show the existence of self-formulated theories and how they relate to the research objectives and their connection with variables and propositions. It guides the research in determining what information is to be researched on and measured in information seeking behavior. This provides an organized description of the main concepts covered in the study in a logical manner. It evidently gives an introduction of the theory that justifies why the research problem being studies exists. This provided the lens through which the researcher evaluated the research problem and research questions. The work was grounded on existing Wilson's classical models.

##### **2.2.1. Wilson's (199) Model of Information Behaviour**

Wilson in his model has demonstrated what information seeking is all about and how information seekers should be handled. A model is described by Wilson (1999) "as a framework for thinking about the problem and may evolve into a statement of the relationships among theoretical propositions". Wilson (1999) further elaborates that "models in information behaviour field are statements in a form of diagrams that

attempt to describe the information-seeking activities, causes, consequences and relationships among stages in the information-seeking behaviour." In addition, Wilson (1999) argues that models can be used as theoretical frameworks while they are still evolving into theories. Wilson's through his model provides for an understanding of the needs and skills required during searching of information (Wilson 2005).



**Figure 2.1: Wilson's (1999) Theory of Global Model of Information Behaviour**

Wilson (2005) usefulness is further exemplified by use in increasing and maintaining awareness of the various information searching skills and their contribution to a given area of research. Wilson (1999) notes that factors influencing information-seeking include human personal needs such as physiological, affective and cognitive needs making it the root of motivation towards information-seeking behaviour. The information- seeking process which Wilson developed is general in nature hence it should be emulated by the postgraduate students of University of Nairobi.



### **2.3 Information Seeking Behaviour of Postgraduate Students**

Consequently, with the changes in the nature of the information environment brought about by technological developments and the increasing usage of online resources more scholarly work is being produced. Similarly information is being disseminated on a daily basis and this has resulted to information explosion of electronic journal articles that most postgraduate students accessed at the institutions of higher learning (Baro 2010). This has led to the way students access and use information in various formats in institutions and better human engagement to information through searching and retrieval. Many of the traditional theories of academic information sources and information seeking have stood the test of time and are now being applied in online information searching context and are proving useful in explaining user needs and behaviour in a wide range of contexts and disciplinary fields (Martin 2008).

Electronic information resources have significantly transformed dissemination of information but also acquisition of information and its use for scientific research (Candy, 2002). Information explosion has also affected research done by postgraduate students in the recent days (Muthoni 2000). Most postgraduate students differ in their information needs which are not easily acquired through common means of searching information due to their vast research work that they carry out. These needs also seem to be influenced by the fact that most of them are employed in organization particularly in higher ranks where they would need to gather more information related to their office roles at work. Information is part of the vital resources for driving and maintaining an organization in a strategic environment. Various ways of how graduate students access info has been analyzed from 1997 to date by (Catalano 2013). They

like to consult their faculty members and access the facility in a variety of ways to seek information.

Few studies have conducted research on knowledge management. However, there are various studies that have been conducted to relate knowledge sharing and information seeking of university students in general. Wei et al. (2012) undertook a research in Malaysian universities with the aim of ascertaining knowledge-sharing techniques amongst the University students. The study revealed scholars accessed the internet in a wider degree to connect and share knowledge amongst themselves within their space. This suggests that online facilities in an academic library are heavily utilized by the academic students in information seeking and information sharing. In a different scenario, Hussain, et al (2011) did a study on promotion of knowledge sharing where academic based on discussion groups to get a better grasp about a particular subject. This is well exemplified by a scenario in Singapore where students shared knowledge with their colleagues through tutorials, personal notes, software's and databases. This is an indication that student group cohesiveness is an important aspect in promoting knowledge sharing between students of a similar as well various disciplines (Hartmann, 2001). Rahman, (2014) conducted a study on undergraduate and postgraduate students information sharing. The study revealed some interesting findings. It was found out that postgraduate students share information through URLs of popular databases as compared to the undergraduate students.

#### **2.4 Information Needs of Postgraduate Students**

An information need is an intuition that is inherent in an individual thoughts (Wilson 2000). Using reference services occurs in two ways: through a proxy- the library staff or user system (OPAC) or individual searching (Marca, 2013). Consequently,

Andersen (2000) indicates that information searching is based on how users conduct research in relation to their study area.

Evaluating information needs has become a critical aspect in formulating strategies on how to satisfy various stakeholders' information needs whether from an organizational perspective or academic fraternity in an academic institution. Nazan and Kurbanoglu (1998) in their work stated that there were variations in accessing information for students in different disciplines such as engineering, social sciences and humanities. However, they were able to note similar activities in searching for information between engineers and scientist and humanities students which have different study content and academic objectives. Which explains the variance in the measurement of their academic needs.

Sriyani (2002) in his research at the University of Sri Lanka on arts and engineering students discovered three information requirements namely lecturing, administrative needs and actual studying. Tahir (2008), revealed through his research that also faculty members conducted search for information in humanities in preparation of lectures. Kerins et al. (2004) found that students taking engineering courses used print materials such as books and journals. Sriyani's (2002) research reveals that students of arts used published catalogues for information search.

## **2.5 Academic Research and Learning in Modern Academic Library**

Gunasekera (2010) gave a simplistic explanation of this academic facilities as being the key business of the learning environment which provides infrastructural space for knowledge sharing and exchange. This highlights the role academic libraries have

played in promoting and facilitating research in institutions of higher learning. With realization of this crucial role, decision-makers of this academic institutions should align the information services and resources to this cause.

The acquisition policy of this academic facilities should be comprehensive and current to ensure quality collection development and that the facility adds value to the students learning process (Wijetunge, 2016). Research works by Okite-Amughor, Makgahlela, and Bopape (2014) points out to the student's preference of access to online materials, indicating clearly a departure from the traditional ways of information seeking patterns by students of the 21<sup>st</sup> century.

## **2.6 Information Resources Preferred by Postgraduate Students**

Students in higher learning institution and other professionals have increasingly over the years shown much interest in access to information in a bid to enrich their knowledge. Wijetenga (2016) reported that most students preferred accessing the digital content. Dilrukshi (2014) affirmed the preference of agriculture undergraduates who were in their fourth year strongly preferring to use online journals. Natarajan (2013), also indicated that students were comfortable using the internet, electronic journals and electronic books to access academic materials.

### **2.6.1 Electronic Information Resources**

Electronic resources is basically information that is packaged and accessed electronically, (IRMA, 2015). Digital content use has changed both sharing of information and acquisition of information and searching skills (Adegboro, 2011). Advancements in IT have improved the learning process as a continuous part of

scholar's activity (Liebowitz and Jay, 2010). Towards the end of the 21st century, the probability of use of ICT technologies in information activities has increased.

According to the author, ICT application in libraries has changed the traditional aspect of changing information centres to intellectual centres. Involvement of ICTs in library has resulted into embracing new ways of sharing information (Kasemsap, 2013). Carr, (2003) reported that an estimated \$2 trillion is spent worldwide on information technology each year. We should therefore ask ourselves whether the amount has been well utilised. Every information centre should employ methods of measuring use of technology against the benefits accrued (Siddike, 2010). Technology has become intertwined with education and specifically access of electronically packaged information. This has resulted in the creation of electronic databases as well as institutional repository.

Challenged with dwindling budgets and the rise of giant google web which has been able to provide a special service feature known as google scholar librarians have opted on channels of packaging information in the form of electronic books which have current information and are economically to maintain since they do not require physical space as print books and are portable (Jeong 2012). With reasons such as lack of print materials at the library, students working from their homes found it cumbersome to visit the library and searching and retrieval of information was easier due to a simple interface provided for at the information centres (Tahir, 2010). On the contrary, majority of the students only read part of the eBooks. Thus 7.1 % indicated as having read the whole book while 60% preferred print books compared to 25% who preferred accessing information in electronic format (Nwagwu, 2014).

In a different study by Jung et al (2011), 40 percent of academic students complained of eye related issues such as eye fatigue through use of e-books as compared to print books. This means that they could still use e-books but preferred print materials over eBooks. As a result, e-books have brought about new realization on both the user and publishers in terms of access of the e-books, borrowing and the level of acceptance of the skills, the features required for access and the prevention of copy right issues. This was through a national consumer survey which was done in South Korea which is very well known in its use of eBooks. The study revealed that promotion and use of eBooks was aligned with age bracket of the students, level of education, work status. Demographic issues formed the biggest chunk of the correlation between the use of eBook and the user.

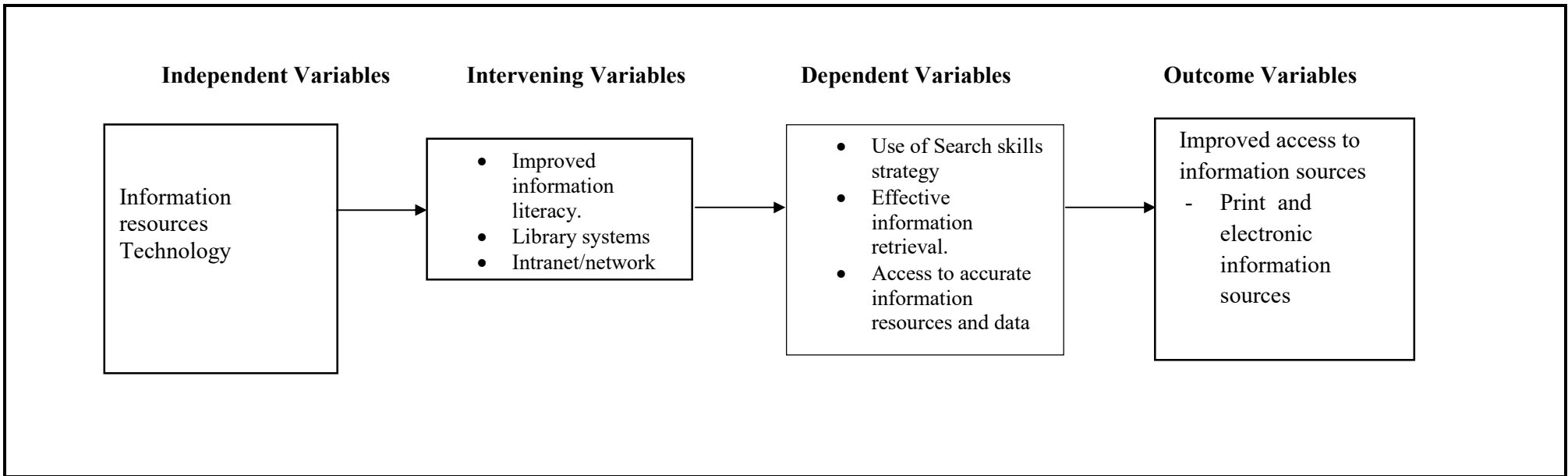
## **2.7 Challenges of Accessing Information**

The web happens to be the chief source of information. Searching tools like yahoo, google offer an efficient and effective means of searching information. However, various challenges have been experienced vis-à-vis information from the web as stated by (Kaul, 1999). For instance, it's clear that most of the information sources from the internet do not provide authentic bibliographical information. Poor internet connectivity, underdeveloped IT infrastructure components, lack of clear ICT policy, slow adoption of information management systems can be cited as some of the major challenges hindering access of information in academic libraries.

## **2.8 Conceptual Framework**

Various variables were discussed and tested in the study. These include:

Independent variable was Information Resources Technology. This was affected by the following dependent variables; Use of search skills strategy, Effective Information Retrieval and Access to Accurate Information Resources and Data. In this case, information seeking depended on the needs of the students, the type of print and electronic information sources and the electronic retrieval tools used. In between the dependent and the independent variables, we have the intervening variables whereby University of Nairobi library staff might have put in place for ease of accessing information.



**Figure 2.2: Conceptual Framework**



## 2.9 Chapter Summary

This chapter reviewed the concept of information needs and information seeking behaviour towards print and electronic information resources. It explored a models that addressed information seeking, use and retrieval of information in the institution of higher learning. Information searching has gradually progressed from looking for information using traditional way of searching to using advanced way of searching information through electronic information systems, as well as from other searching links to end-user search. In the current research studies they have revealed some existing gap in the traditional information seeking behaviour: the assumption that information searching is static and people only formulate queries in their search process.

Diverse standards of information seeking, varying from the search moves to search strategies and usage patterns, have been established, as well as circumstances associated with task, user knowledge structure, system design, and the social and organizational context affecting the search process. Significantly, information seeking models have been developed to illustrate either the dynamic search process or major elements that affect the search process. The model used also offer suggestions for enhancement and design of better strategies in information seeking behaviour.

A very common factor of all these models reviewed is their effort to define information seeking processes and behaviour in general terms. In this assertion most of the information seeking behaviour models seems to take cognisance of the fact that a user in need of information may use a variety of

information sources, automated systems, information services for problem solving. This clearly overlooks other variations and context in information seeking process. For this models to be theoretically sound and applicable in a practical sense an appreciation of the fact that information seeking behaviour is a complex process of actions and interactions where people engage in whilst seeking information should be observed.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the methodological procedures that the researcher employed in the study. It covered research design, sample design procedures, data collection instruments, data collection procedures, data analysis techniques and ethical issues that were considered in carrying out the research.

#### **3.2 Research Design**

This provides the structure of the research to describe how major sections of the work were intertwined together. This is a descriptive research method which sought to give an assessment of the information needs and information seeking behaviour of postgraduate students. For the researcher to use descriptive research design was that the study participants could be observed in a natural and unchanged environment. This approach easily accounts for the positive and negative variables taking into account how the results affect the objectives of the study. This provides a blueprint to finding proper feedback to the defined research questions (Bryman, 2013). The research methods and procedures which were used in data collection were provided.

#### **3.3 Area of Study**

The University of Nairobi, Jomo Kenyatta Memorial Library located within the main campus was the area of the study.

### **3.4 Target Population**

According to Kothari, (2014) a target population or universe is a group which concerns the researcher while trying to gain information about and upon which judgment and conclusions can be drawn. The researcher used the qualitative approach on a population target of 1,830 postgraduate students registered at the university as provided by university of Nairobi Board of Postgraduate Studies University of Nairobi. A simple random sample of 328 was identified for the gathering of information for the study. The underlying assumption here was that the selected users were representative of all the users in the library.

### **3.5 Sample and Sampling Techniques**

#### **3.5.1 Sample Size**

University of Nairobi – main campus has a student population of about 1,830 postgraduate students doing various master programs in business administration and library science field and the researcher sampled 328 as sample size. To ensure that all the respondents of the target population are represented, the researcher applied non-probability sample random sampling after identifying the various schools and administered equal number of questionnaires to each school at University of Nairobi, Nairobi Campus. Yamane (1967) offers a simplified formula to calculate sample sizes. This formula was used to calculate the desired sample size from the targeted population in an effort to achieve homogeneity of the results.

The sample size is given by:

$$n = \frac{N}{1 + N(e)^2}$$

Where

$n$  = corrected sample size,  $N$  = population size, and  $e$  = Margin of error (MoE),  $e = 0.05$  based on the research condition.

$$n = \frac{1830}{1 + 1830(0.05)^2}$$

$$= 328.251 \sim 328$$

**Table 3.1: Sample Frame**

No.	Respondents	Target	
		Population	Sample size
1.	Master of Business Administration	1,800	300
2.	Master In Library and Information Science	30	28
	<b>Total</b>	<b>1,830</b>	<b>328</b>

### 3.5.2 Sampling Techniques

The sampling technique was based on a list of all the colleges as units of classification within the board of postgraduate studies and their corresponding students' population as provided by the university. Stratified random sampling was found suitable in this case. Its not biased which makes it easy to draw generalization of the research finding (Lapan, et al., 2012). Sampling was based on a model believed to be objective. Classification along schools was found untenable as this information was rated as classified by the administrator.

### **3.6 Data Collection Methods**

This helps to facilitate the collection of data so as to enhance proper data analysis. Questionnaire were designed, and employed in this study to facilitate data collection from the field. They were administered and the researcher collected the duly filled questionnaire from the respondents, respondents were also interviewed for purposes of gathering more facts.

#### **3.6.1 Questionnaire**

The questionnaire was guided by the study objectives as demonstrated in (Appendix II). The researcher administered questionnaires personally after attaining research permit from the Department. A brief introduction letter (Appendix I) was done to the respondents before administering the questionnaires in order to explain the nature and importance of the study. The questionnaire included both open ended and close ended questions that enabled the researcher to gather qualitative and quantitative data.

#### **3.6.2 Interview Guides**

Qualitative data was collected through interviews guides that were in line with decision making, management, policies and other managerial functions of the libraries.

### **3.7 Research Instruments**

#### **3.7.1 Validity**

This study used content validity which consist of face validity and sampling validity. In this case, face validity was assessed by the researcher and sampling validity is

extent to which the research questionnaire adequately samples the content population of the characteristics been measured.

### **3.7.2 Reliability**

According to KIM (2009), reliability of a research study instrument is the degree of consistency or whether it can be used to reflect similar results when used by someone else or when used again and again on the same respondents. This study used the test-retest method during the pilot study. This is whether the results can be used to reflect similar results when used by someone else or when used again and again on the same respondents.

### **3.8 Data Collection Procedures**

This is the demonstration of the established facts. To facilitate, and enhance proper data analysis, questionnaires were designed, and employed in this study. They were administered and the researcher collected the duly filled questionnaires.

### **3.9 Data Analysis and Presentation**

Since the study was quantitative in nature, data was presented and analysed by use of tables, pie charts, graphs among others. In a situation that data was qualitative, it was analysed thematically.

### **3.10 Ethical Considerations**

The researcher observed the following ethical issues during the time of conducting the study: protect the rights and welfare of everybody; seek informed consent and respondents' confidentiality; was honest in reporting data, results, methods and

procedures. This ensured that the researcher would not imagine, fabricate the data that was collected, analysed and presented.

### **3.11 Chapter Summary**

The research technique used was stratified random sampling. In this case 328 students were used as sample size from a total population of 1,830 postgraduate and nine staff members were interviewed at the University of Nairobi Library (JKML). The challenges faced in data collection were not a hindrances to the completion of the study as there was general cooperation and support from the rest of the respondents.



## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS AND DISCUSSION**

#### **4.0 Introduction**

In depth discussions is presented in this chapter to give an analytical understanding of the research area.

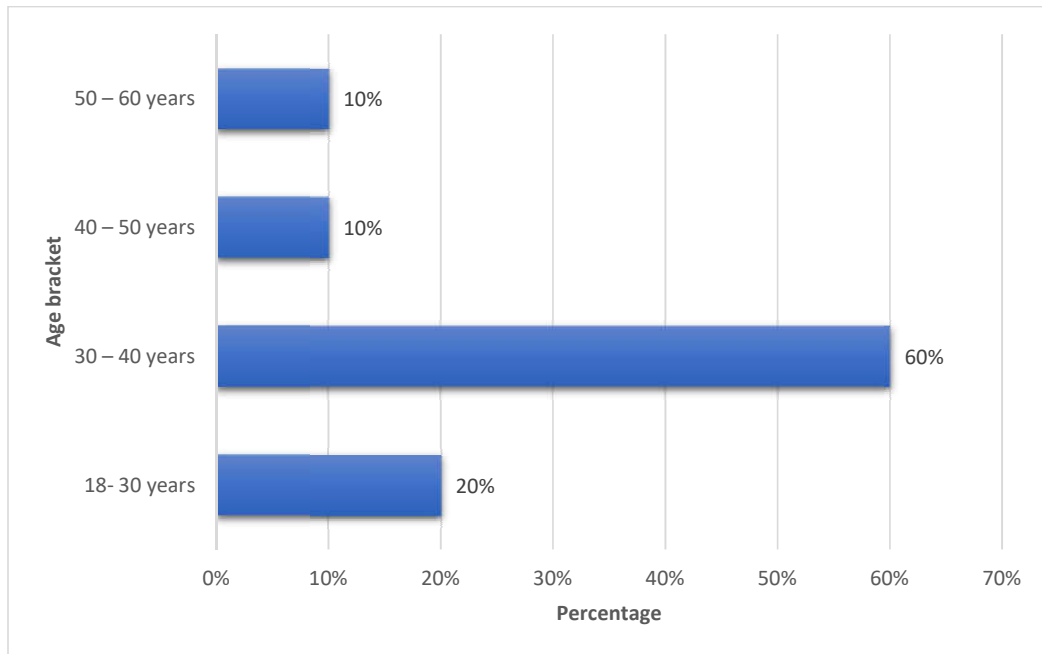
#### **4.1 Response Rate of Respondents**

The study was based on distribution of questionnaires to the respondent's. The study was based on 328 respondents; 225 Masters of Business Administration and 25 Masters of Library and Information Science representing 76% response rate. Using 9 interview guides the researcher also collected data from respondents in the information profession. The interviews targeted nine (9) information professionals at the Jomo Kenyatta Memorial Library using purposive sampling technique to obtain greater depth of information management in the Library. Seven (7) out of nine (9) of the interviewees responded, giving a favorable response rate of 78%. Combining the response rate of both qualitative and quantitative data collection, this was considered a fairly high response rate that is adequate for a research of this magnitude.

#### **4.2 Background Information of Students**

The essence of this was to identify the relationship of postgraduate students in relation to age and ability to use modern tools such as OPAC and the internet to access both the print and electronic information resources. Figure 4.1 revealed that students between (30–40) years formed the majority of the postgraduate students at 60%, while the least students between the age of (40-50) and (50-60) years were both at 10% and

this could be attributed to the fact that they could be probably nearing the mandatory retirement age leading to fewer students in that age bracket. While students between (18-30) years were 20 %, this could have been due to the fact that majority of them had either enrolled for diplomas or undergraduate in the same institution or other institutions.



**Figure 4.1: Age Bracket of Postgraduate Students**

### 4.3 Postgraduate Degrees

The study also desired to confirm the number of students doing the various postgraduate degrees based on this study. Table 4.1 show respondents prefer studying for postgraduate degree in Masters of Business Administration as compared to the respondents undertaking Master of Library and Information Science. MBA had a percentage of 90% while Masters in library science had percentage of 10%.

**Table 4.1: Postgraduate Degrees**

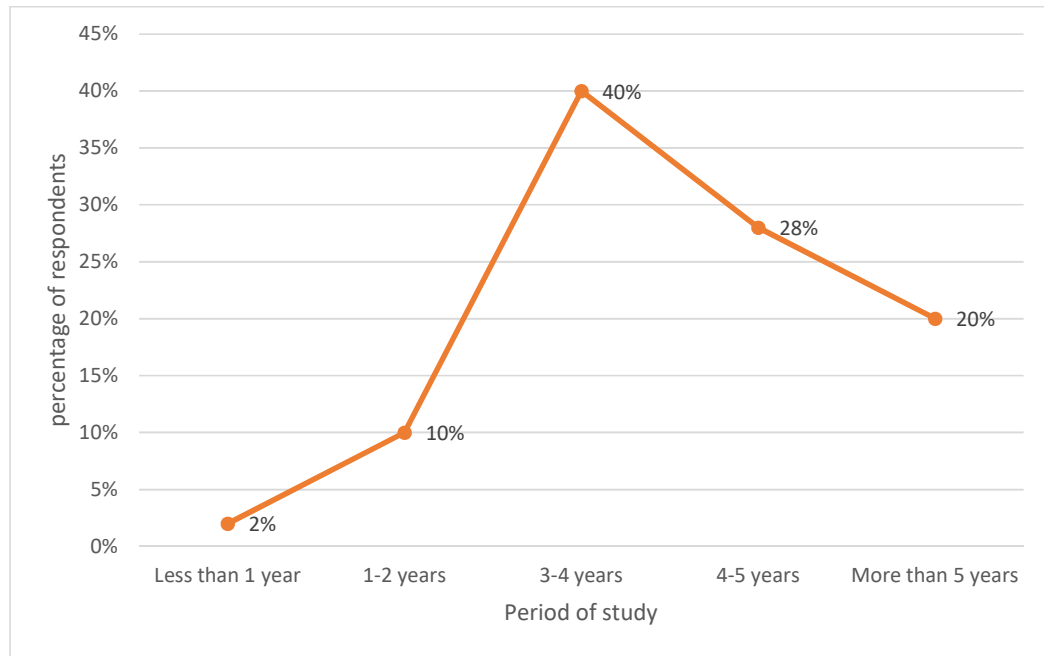
<i>Program</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Master's in Business Administration</i>	<b>225</b>	<b>90</b>
<i>Masters in Library and Information Science</i>	<b>25</b>	<b>10</b>
<b>Total</b>	<b>250</b>	<b>100.0</b>

#### **4.4 Academic Library Staff**

The academic library staff that participated in the study were those based at the Jomo Kenyatta Memorial Library. The youngest and oldest serving librarian interviewed had served the library for (3) three years and thirteen (13) years respectively. All the meetings for the interviews happened at their respective offices, the shortest interview was 20 minutes and the longest lasted 35 minutes.

#### **4.5 Period of Study at the University**

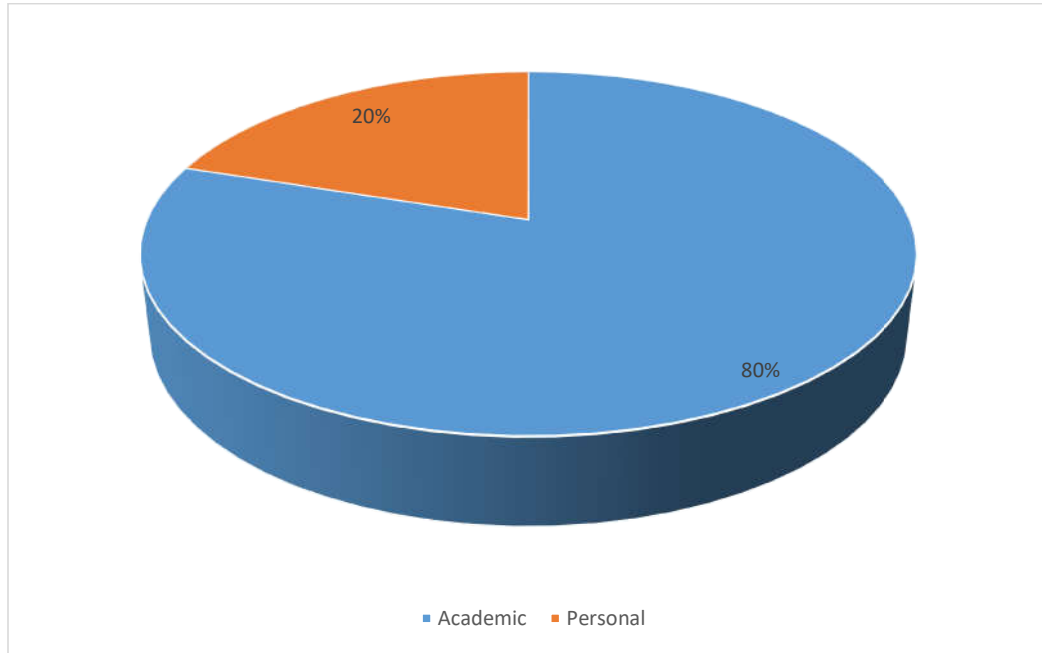
The more years a student had spent at the university could denote two meanings that the student had to repeat various units after failing to attain the required pass mark or secondly, the student has been studying at the university for various programs.



**Figure 4.2: Period of Study at the University**

#### **4.6 Information Needs**

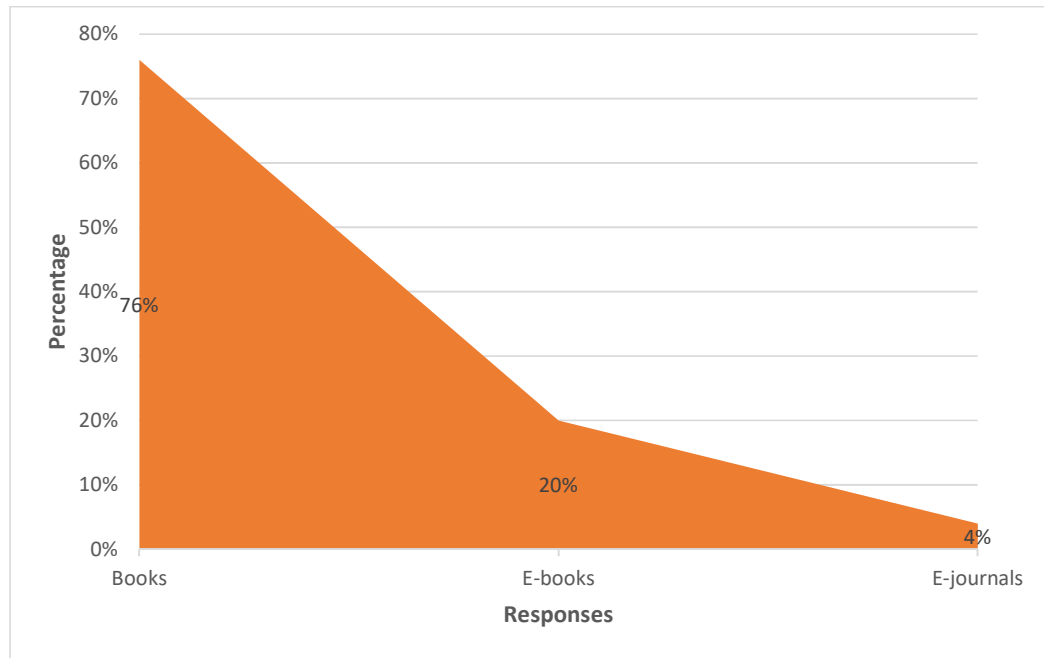
The study was geared at assessing what drives postgraduate students to access information in relation to their information needs and seeking behaviour at the university of Nairobi postgraduate students. Majority was due to academic needs represented by 80% while the remaining 20% responses indicated personal needs which includes social needs. This shows major information needs' are for academic purpose and this results are similar with the study on information seeking behaviour of polytechnic students by Owalabi, Jimoh and Okpeh (2010) with 285 (59%) of their respondents for academic purposes. Postgraduate students require information for their research projects. This includes information proposal formulation and writing, research methodology for dissertations and projects, as well as how and where to publish their scholarly work. From the staff interview schedule it was noted that there was lack of proper channels.



**Figure 4.3: Information Needs and Seeking Behaviour**

#### **4.7 Information Seeking Behaviour**

Findings confirmed that postgraduate students preferred accessing online resources through the databases that the library subscribed to through the OPAC. The most accessed databases were Google Scholar, Emerald and JSTOR. Through their search for information postgraduate students preferred to formulate their queries according to their information preferences. They break down the research statement into keywords. The Figure 4.4 below indicates that majority of the respondent's information seeking behaviour accessed books with 76%, while e-books were accessed by 20% and 4% preferred e-journals.

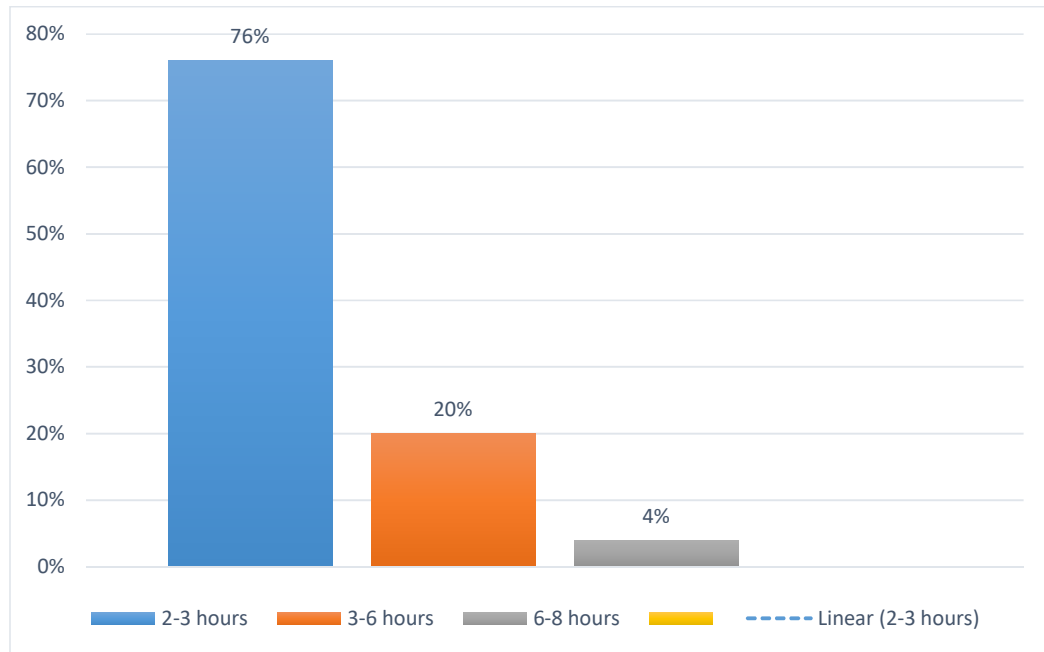


**Figure 4.4: Information Seeking Behaviour**

#### **4.8 Hours Spent in the Library in a Week**

This was important due the fact that it would assist in highlighting whether the more the hours spent in the library was the same time that would be spent in accessing information. Figure 4.5 illustrates the percentage of time spent in the library. Majority of the respondents spent 2-3 hours weekly at 76% whilst 20% of the respondents spent 3-6 hours and the remaining 4% of the respondents spent a total of 6-8 hours in the library. Postgraduate students needed more hours for accessing information which could be attributed to the extensive research involved in the program.

The researcher noted that postgraduate students frequently used the library but not as much as expected. They viewed the library as a central place for doing their assignments and research works, as well as for studying for examinations. When they had ample time they preferred doing class discussions with their other classmates.



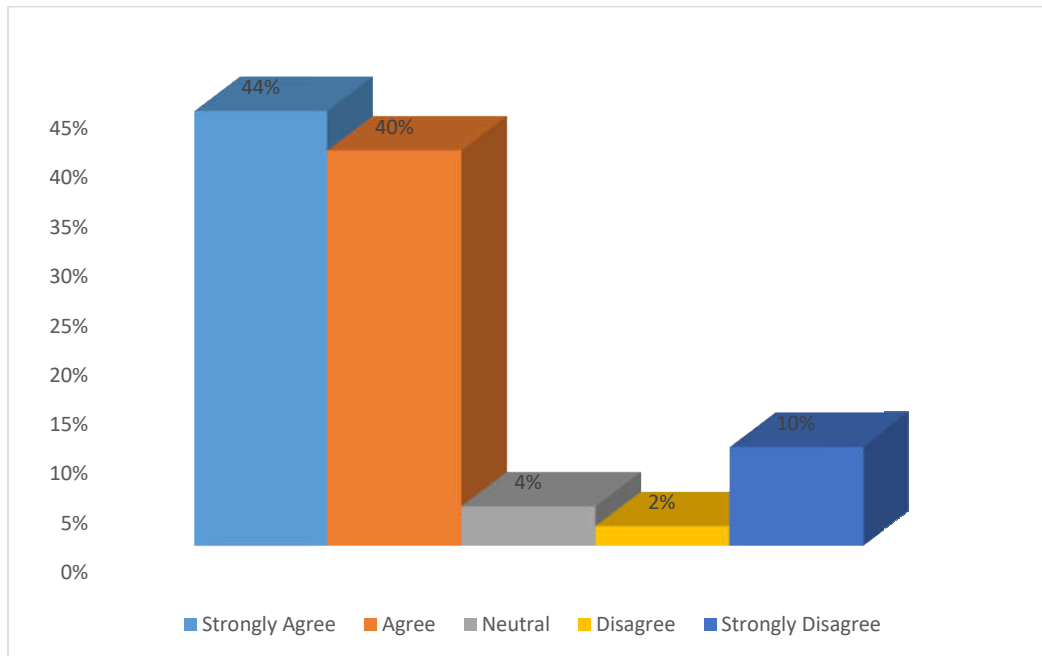
**Figure 4.5: Hours Spent in the Library in a Week**

#### **4.9 Print and Electronic Information Resources**

In the analysis 44 % strongly agreed that there was adequate availability of both print and electronic information resources, 40% agreed, 4% were neutral on whether the information resources mentioned above were adequate, 10% strongly disagreed and 2% disagreed on this statement. The staff interview schedule revealed that the University of Nairobi had both archival materials and core text in print as well as subscription to online databases such as the e-resources for all disciplines.

The staff interview guide revealed that the University management together with the University library management worked hand in hand to acquire the required print and electronic information materials.

*“I am pleased to say that most of the books have been purchased, the two faculties researched on has the fewest print collection in the library. However, journals in the field are also enough and useful to both students and academics. This has helped and will continue to help our students to be abreast of new and current research”*



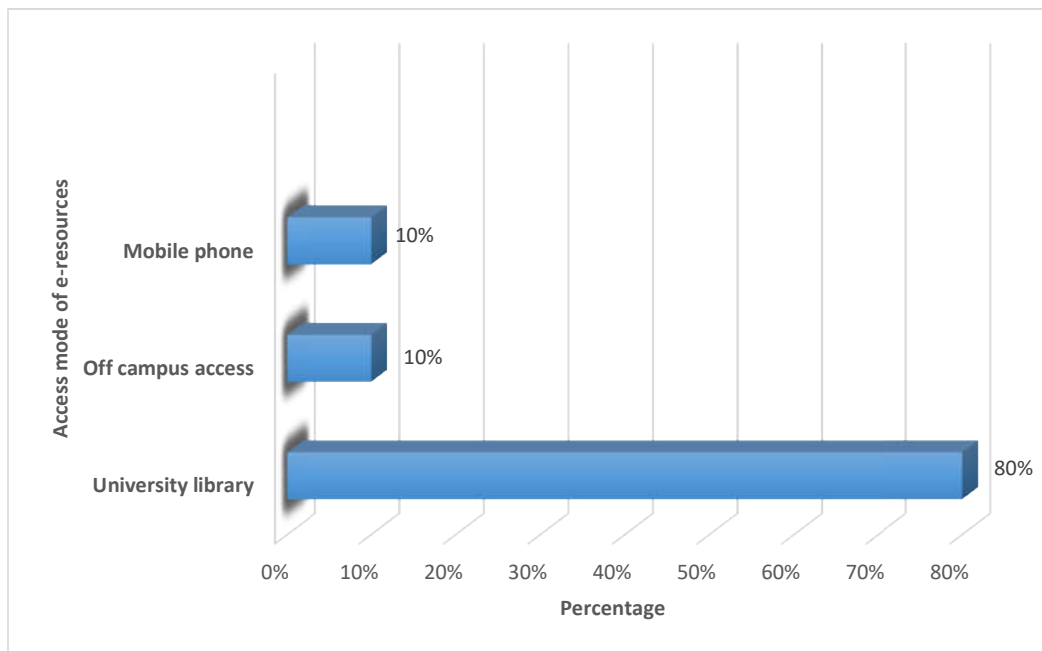
**Figure 4.6: Print and Electronic Information Resources**

#### **4.10 Access and Use to Electronic Resources**

Table 4.2 indicates that a high percentage of the respondents access their electronic information resources from the University library at 80%, while both off campus access and mobile phone access was rated at 10% due to the fact that the university library uses VPN which is not stable in terms of accessibility. Use of smartphone was low and this could be attributed to the social media distractions.



Postgraduate students, particularly first year students preferred to access and use electronic resources. Ndinoshiho, J. (2010) studied the use of electronic information services by undergraduate nursing students at the University of Namibia’s Northern campus: a descriptive study and found that the top five information resources in order of preference were books, (94%), lecturers (84%), the internet( 86%), and friends (84%). In their study they reported that students relied heavily on printed sources of information and their use of electronic journals and databases was very low.

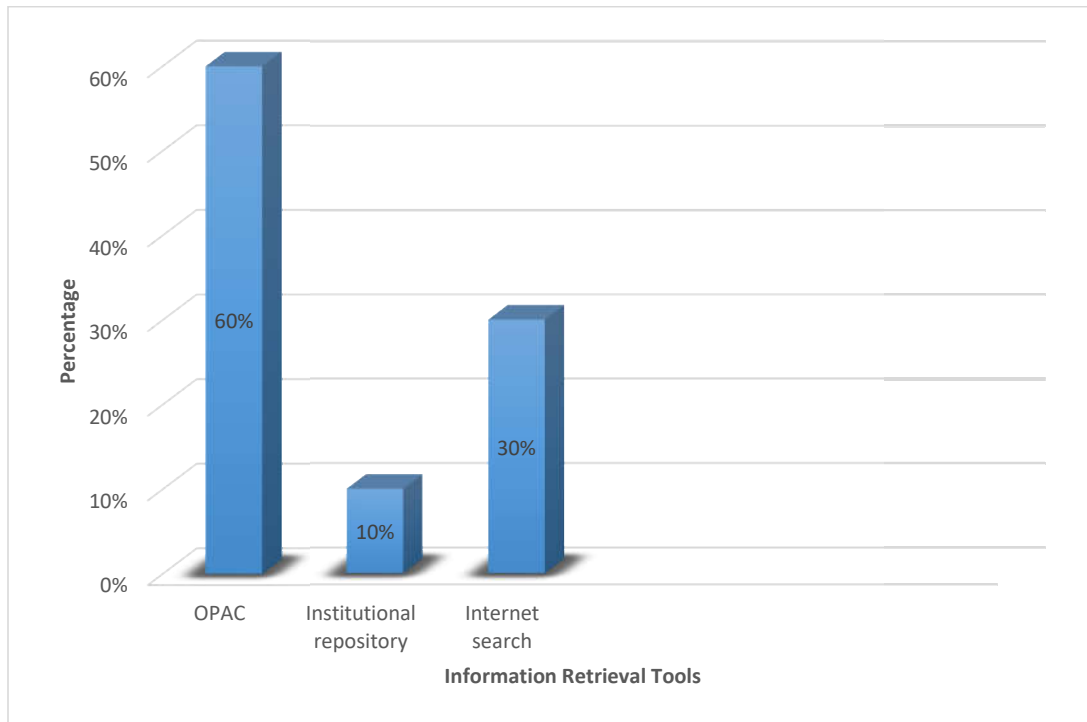


**Table 4.2: Access and Use to Electronic Resources**

#### **4.11 Information Retrieval**

The essence of this study would not be complete without assessing the retrieval tools used to harness and package information for use. In this case, the study sought to investigate the effectiveness of various retrieval tools. The following was revealed: that OPAC was rated at 60% as the most preferred tool, the internet was rated at 30% while the Institutional repository was rated at 10% in the study. *Interviews schedule*

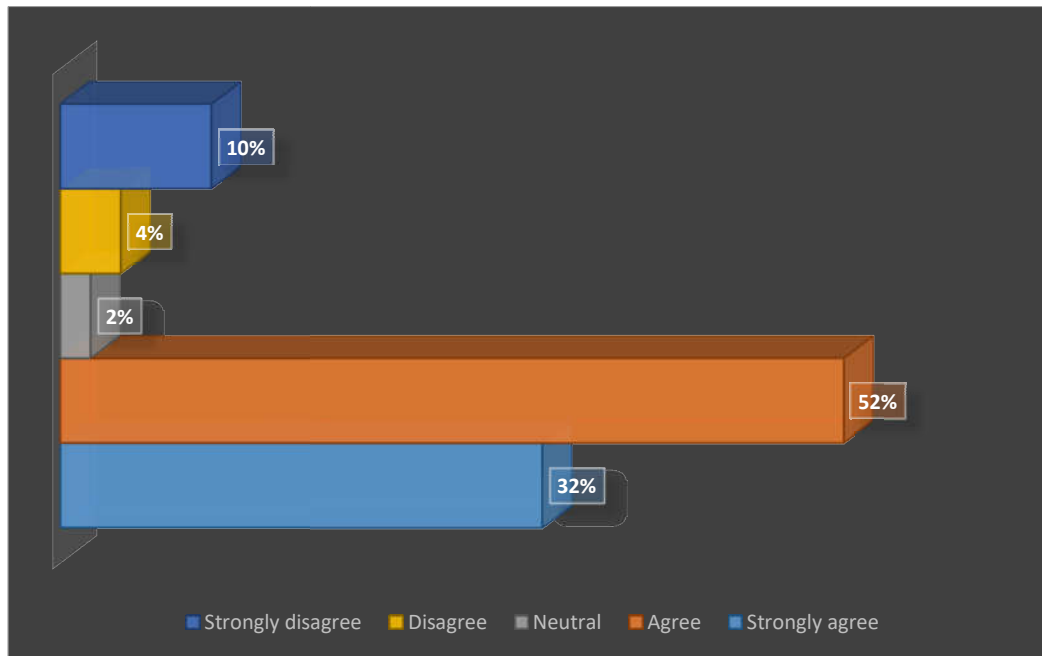
*revealed “that the university has continuous communication through the notice board located at the entrance. The library also offers regular group or individual training depending on the level of students’ understanding”.* Some postgraduate students suggested that the library produce videos for them to watch at their own space. They would like lessons on different topics such as what resources are available in the library and how to find resources relevant to their research. Hartmann (2001) research findings reported that undergraduate students experienced difficulty in locating items from the library collection and did not understand the processes for retrieving journal articles. Kerins, Madden and Fulton (2004) in another study of graduate engineering students reported that the majority of the students indicated that the Internet was the first source of information they used for a project, and also Rasul A, Singh D (2010) reported that many students used the Internet extensively for finding course-related information.



**Table 4.3: Information Retrieval**

#### **4.12 Level of Satisfaction**

The study also sought to seek the levels of satisfaction with the information services from the library facility. From the data gathered 52% of the students agreed, 32% strongly agreed, 10% strongly disagreed while 4% disagreed and the remaining 2% remained neutral in their response. Level of student's satisfaction is shown in figure 4.7.



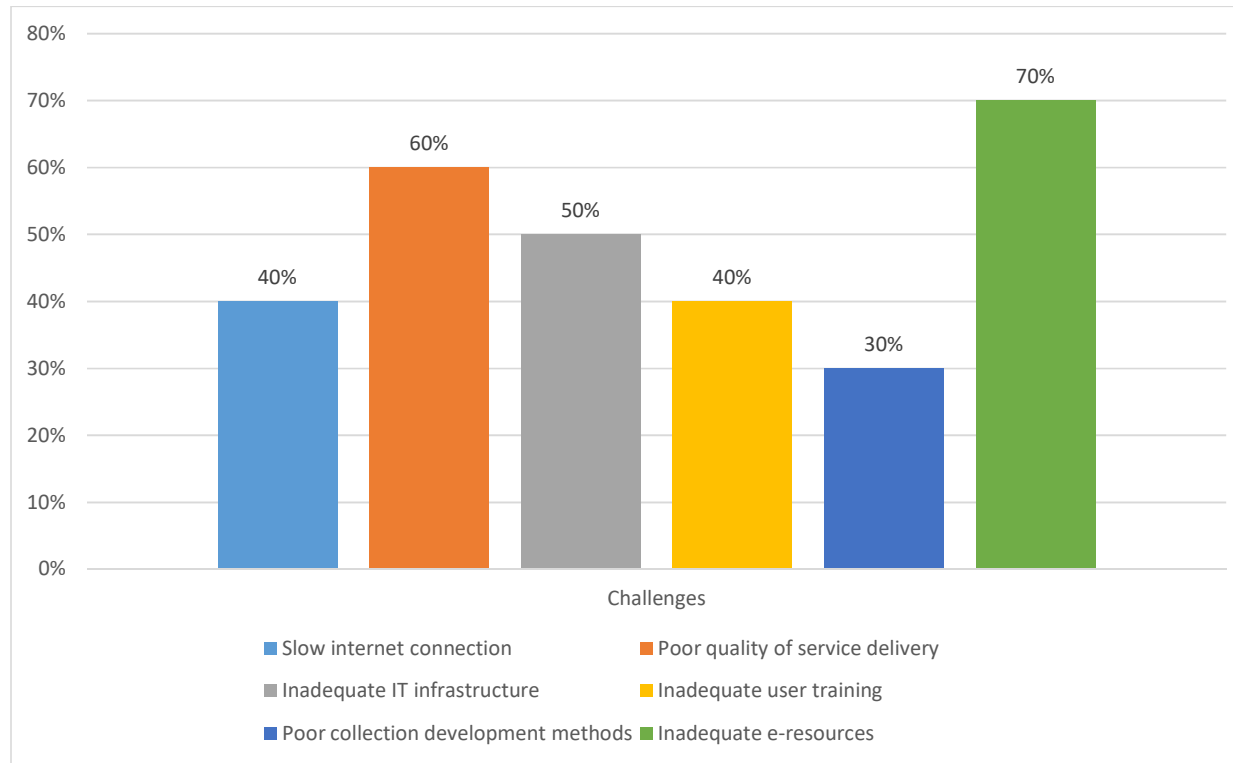
**Figure 4.7: Level of Satisfaction**

#### **4.13 Challenges in Accessing Information**

Respondents were asked to rate against the expected challenges below on how frequently they occurred. They reported that the facility does not subscribe to enough electronic databases and, if they do subscribe, the resources that users access do not always include full articles. This limited access does not provide users with access to relevant online resources.

From the figure 4.8 below, 70% of the respondents reported inadequate e-resources as a key challenge, 60% indicated poor quality of service delivery, 50% mentioned inadequate necessary IT infrastructure, while 40% pointed out inadequate user training and slow internet connectivity and 30% indicated poor collection development as a major challenge they encountered. The interview schedule revealed that *“the University management has taken steps to resolve the major challenges*

encountered. There is need for more student orientation that should be conducted as well as improvement on access to e-resources as possible solutions”.



**Figure 4.8: Challenges in Accessing Information**

Other challenges noted through the interview guide were that “*though the University staff have undergone numerous training sessions the staff are very reluctant to impart the necessary skills such as searching skills for e-resources to the postgraduate students. Library statistics can reveal that the University library received a total of 300 students in a day*”.

## **4.14 Discussions and Data Analysis**

### **4.14.1 Information Needs of Postgraduate Students**

The first objective of the study was to establish the information needs of the Postgraduate Students at the university. The findings indicated that, majority of the information needs and information seeking behaviour of postgraduate students was due to academic needs while minority indicated personal needs. This conclusions indicate that the majority of the respondents' major information needs' are primarily for academic purpose and this results are comparable with the study on information seeking behaviour of polytechnic students by Owalabi, Jimoh and Okpeh (2010) who also discovered that 285 (59%) of their respondents needs information in relation to their academic. The study identified that there was need to guide and direct students on how they could better access the library from various devices.

### **4.14.2 Information Seeking Behaviour of Postgraduate Students**

The findings reported that majority of the respondent's information seeking behaviour anchored on finding information that would primarily allow them to pass their examinations. The analysis reveal the need to promote electronic information materials available for the library clients. The library has variety of resources especially for the e-resources which are rarely utilized or known to students. During the library orientation library staff should ensure that students have access accounts to the e-resources and other resources either within the library or externally and students should be encouraged to access this electronic resources remotely anywhere anytime.

#### **4.14.3 Information Resources Used**

The third objective of the study was to establish the types of information resources and services used by postgraduate students at the university. This question revealed that majority of the students found information retrieval tools search as OPAC to be of chief importance in the quest for accessing information. Majid and Ai (2002) studied the use of information resources by computer engineering students in Singapore and established that the top five information resources in order of preference were books, (94%), lecturers (84%), the internet( 86%), and friends (84%). The library management must invest in the necessary ICT infrastructure components to ensure maximum utilization of OPAC retrieval tool in the library.

#### **4.14.4 Challenges Faced by Postgraduate Students during Information Seeking**

Bottlenecks encountered by postgraduate students while accessing information resources in the university including possible solutions was also looked into. Inadequate e-resources, poor quality service delivery, inadequate IT infrastructure, inadequate user training, and slow internet connection were acknowledged as major challenges facing the postgraduate students. The Wilson's Model envisions information behaviour predominantly from an individual user's perspective. Most of this challenges mentioned by the respondents can be resolved by building the user's capacity largely in searching and retrieval of information.

#### **4.15 Chapter Summary**

This chapter discussed the data collected, it reported and analysed its findings using figures and tables, percentages and other statistical methods. The quantitative and

qualitative analysis was done separately and a merging of interpretation and conclusion become evident.



## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents summary of the findings, conclusion and recommendations of the study guided by objectives and research questions. The aim of this study was to investigate the information needs and seeking behaviour of postgraduate students in public universities.

Objectives of the study included to:

- Examine the information needs of postgraduate students at the University of Nairobi.
- Examine the information seeking behaviour of the postgraduate students at the University of Nairobi.
- Establish the types of information resources and services used by postgraduate students at the University of Nairobi.
- Explore the major challenges faced by postgraduate students while accessing information resources at the University of Nairobi library including possible solutions.

#### **5.2 Summary of the Findings**

The study's findings are summarized as follows:

##### **5.2.1 Information Needs of Postgraduate Students**

Purpose of access by the students was predominantly for academic needs represented by 80% while the remaining 20% responses indicated personal needs. The findings

indicate that the majority of the respondents' major information needs' are for academic purpose and this results are similar with the study by Owalabi, Jimoh & Okpeh (2010) who also reported similar results in their research work. The study identified that there was need to guide students and advise them on how they could better access the library from various devices such as the iPad, mobile phone and also through their laptops when not within the institution library. This requires more focus on off-campus access of library information resources and an increase in electronic library information resources. From the analysis this shows that the library need to conduct library orientation and information literacy for new students every new semester and continuous information literacy sensitization on the current and new developments in print and electronic information resources. Additionally, library staff need to consider information literacy as work objective so that it can be considered as a serious objective that is measurable. Another aspect that might attract to use the library is the interior design of the library. For instance the library furniture should be constantly reviewed to ensure that torn and broken furniture are replaced with new furniture, strong internet bandwidth that is accessible 24 hours and functional electronic sockets for charging their laptops and other electronic gadgets.

### **5.2.2 Information Seeking Behaviour of Postgraduate Students**

The study findings indicated that majority of the respondent's information seeking behaviour anchored on finding information that would primarily allow them to pass their examinations. This was supported by the fact that 76 % use information for exam purposes, while 20% need to understand the concept and 4% for leisure, this are reading novels and surfing the internet. The analysis reveal the need to promote electronic information materials available for the library clients. The library has

variety of resources especially for the e-resources which are rarely utilized or known to students. During the library orientation library staff should ensure that students have access accounts to the e-resources and other resources either within the library or externally. This should be a key activity for the purposes of ensuring that students are frequently accessing electronic information resources. For this to work library staff need to frequently work closely with the lecturers so that they can have sensitization sessions for lecturers who will then be expected to guide their students on accessing electronic information resources.

### **5.2.3 Information Resources Used**

This study established that majority of responses given found information retrieval tools search as OPAC to be of major importance in the quest for accessing information. It was found necessary to make use of the ICT infrastructure to avail information resources to the users, given that a high percentage of users preferred to use ICT methods in searching for information. University of Nairobi can adopt more training and awareness program on how to use digital libraries in accordance with the existing access policies in cases where electronic resources should be utilized.

### **5.2.4 Challenges Faced by Postgraduate Students during Information Seeking**

Difficulties encountered by postgraduate students while accessing information resources in the university including possible solutions. From the figure 4.8, 70% of the respondents reported inadequate e-resources as a key challenge, 60% indicated poor quality of service delivery, 50% mentioned inadequate necessary IT infrastructure, while 40% pointed out inadequate user training and slow internet connectivity and 30% indicated poor collection development as a major challenge

they encountered. The analysis from the survey which should be carried out after every semester should guide the library staff on identifying the gaps that postgraduate students experience and thereby map the way forward on various ways of mitigating on the challenges. One serious concern is how library staff should guide students to use e-resources as opposed to google in accessing information. Google has become a major challenge to librarians since most students view it as a much faster avenue of accessing electronic information which has led to a rise in plagiarism. Librarians should be in a position to outlay the advantages of e-resources as compared to google. This should then drive postgraduate's students to redirect their search of information to authoritative electronic databases that have been recommended by the library staff and the library management in general.

### **5.3 Conclusion**

This study made the following conclusions:

- The study concluded that University of Nairobi postgraduate students are not aware of the various ways they could access off-campus information resources and therefore the management must create awareness among the postgraduate students.
- The library staff were not prompt in service delivery to the clients and that internet connectivity was slow. Library staff should focus on providing efficient and effective services to library clients and in particular postgraduate students and in this they will be able to market the library and thereby attract more students to using the available library resources.

## **5.4 Recommendations**

### **5.4.1 Enhancement of Service Delivery**

The library management must work towards improving the quality of the service delivery to motivate postgraduate students to optimally use the information resources. New strategies must be employed to improve user experience within the library environment and incorporate value additional services. The university library must design innovative solutions and create more opportunities to ensure that the library provides a vibrant social infrastructure that satisfactorily quenches the thirst of every information seeker accessing the facility. Looking towards the future, if libraries are to succeed, they will have to increase investment in value addition services that extend beyond traditional user assumptions of just providing access to books.

### **5.4.2 Infrastructure Development**

The management should enhance technology adaptation in the library to ensure full automation of the library functions which will go a long way in value addition and quality service delivery. The dynamic contexts like social, political, economic, and cultural in which libraries function in this era. The way a library's collection is stored and made accessible shapes the intellectual infrastructure of the institution hence the technological investment plays a very significant role in a library ecosystem. University of Nairobi library management should heavily invest in relevant technologies like cutting edge integrated library system to ensure quality service delivery to the information seekers.

### **5.4.3 Improvement of Internet Connectivity**

The internet speed should be increased to facilitate quick, easy and convenient access to electronic resources subscribed by the library for instance electronic scholarly journals and online resources. Internet connectivity provided should be reliable and stable to promote access to OPAC remotely. Undoubtedly, reliable and fast internet connection is key to access of electronic information materials provided to library users.

### **5.4.4 Comprehensive Collection Development**

This calls for a complete review of the current university acquisition policy to ensure quality collection development. The primary purpose of a collection development policy is to create a collection of library information resources that supports and reflects the library's mission. An up-to-date collection development policy will act as a blueprint for the academic library collection guiding the management regarding the selection, acquisition, management, maintenance and preservation of the collection. Library management must consider anticipated demand and community interest to ensure proper development of the library collection.

### **5.4.5 User Training**

The university library staff should provide mandatory end-user training and educate users on how to optimally make use of the various available resources. In this changing technological environment, library users require specific training hence user education, library orientation, library instruction, bibliographic instruction are some of the necessary training users should undergo. Wilson's model of information behaviour recognizes information seeking, searching and retrieval as inherent

individual activity, which normally gets triggered the moment the information seeker recognizes existence of information need. This places the user of information at the heart of the information seeking process hence building their capacity in regards to searching and retrieval skills in inevitable.

### **5.5 Suggested Areas for Further Study**

- Since the present study concentrated only on the postgraduate students, a further study should extend to information seeking behaviour of undergraduate students at the campus. This would inform the University as to the key needs of undergraduate students at JKML Library.
- A study on information seeking behaviour involving all levels of teaching staff should be conducted. The inclusion of library staff as respondents is highly recommended in order to fill the gaps of some of the unseen problems and to have a clear picture of library services.

### **5.6 Chapter Summary**

The key findings are presented for identification of the recommendations, conclusion and suggested further areas of study that will be of high importance in enhancing information seeking skills of postgraduate student. The chapter gives practical recommendations which if adopted will enhance information management and service delivery in the library.

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## **APPENDIX 1: INTRODUCTION LETTER**

Salome Mwangi

Department of Library and Information Science

University of Nairobi

P.O. Box 30917-00100

Nairobi.

Dear Respondent,

### **RE: INTRODUCTION LETTER FOR RESEARCH**

I am a Master of Library and information Science student in the Department of Library and Information Science, University of Nairobi. At present, I am conducting a research titled; *Assessment of information needs and seeking behavior of postgraduate students in public universities: case of University of Nairobi*. The objectives of the study are: examine the information needs of the postgraduate students; examine the information seeking behaviour of the postgraduate students; establish the types of information resources and services used by postgraduate students; explore the challenges faced by postgraduate students while accessing information resources in public universities including possible solutions.

The information and opinions you provide are purely for academic purposes of the study and shall remain strictly confidential.



Thank you in advance for your cooperation.

Yours faithfully,

Salome Mwangi

Registration Number: C54/79005/2015

**APPENDIX II: QUESTIONNAIRE FOR POSTGRADUATE  
STUDENTS**

**Background Information**

1. Please indicate your age bracket as shown below:

18- 30years

30- 40years

40-50 years

50-60years

2. Gender

A .Male

B. Female

3. Indicate which post graduate degree you are pursuing.

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4. From the following, which one represents the period you have studied for this course at this campus

1-2 Years

3-4 year

4-5years

Over 5 years

**Information needs and seeking behavior**

5. Statement to this question relate to the need at which you seek for information resources from the library. Rate using: Strongly Agree = 5, Agreed = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1.

No.	Statement	5	4	3	2	1
1.	Academic needs					
2.	Personal needs					
3.	Social needs					

6. What prompts you to seek for information

A. Exams

B. Need to know

C. Leisure

7. On average how much time do you spend in a week while accessing information based on the schedule below?

No.	Hours - weekly
1.	0-1
2.	2-3
3.	3-6
4.	6-8

### Print and Electronic information resources

7. Statements to this question relate to the rate at which students perceive the University of Nairobi library in terms of adequate print and electronic resources information resources? Use the following scale to rate the resources. Strongly Agree = 5, Agreed = 4, Neutral = 3, Disagree = 2, strongly Disagree = 1.

No	STATEMENT	5	4	3	2	1
	<b>Print and Electronic Information Resources</b>					
1.	Print materials					
2.	Electronic journals					
3.	Electronic books					
4.	Electronic student research					

9. From which location do you access the library electronic resources most often?

University Library

Off campus access

Mobile phone

10. On average, how often do you use electronic resources?

A. Daily

B. Weekly

C. Monthly

D. Yearly

E. I do not use

### Challenges in accessing information

11. Indicate the level at which the following challenges are frequently encountered by post graduate students when.

No	STATEMENT	3	2	1
1.	Low internet bandwidth			
2.	Lack of library orientation			
3.	Lack of prompt services from library staff			

4.	Lack of library facilities			
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**Retrieval tools**

8. Using the following scale to Rate the following information retrieval tools in relation to effective access of information. On a scale of; 1. Don't know, 2. Not effective, 3. Moderatel, Effective, 4. Highly effective.

No.	Statement	1	2	3	4
1.	OPAC Design				
2.	Institutional Repository				
3.	Searching tools				
4.	Internet				

## APPENDIX III: INTERVIEW SCHEDULE

### Demographic data

Name of interviewee (optional): \_\_\_\_\_

Department/Section: \_\_\_\_\_

Age of the Library: \_\_\_\_\_

Size of collection: \_\_\_\_\_

### Information Seeking Behavior

1. What are the information needs of the postgraduate students?

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2. Describe the adequacy and relevance in meeting the needs of postgraduate students?

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3. How accessible is information in your library to the users?

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4. What methods do you use for orientation of both print and electronic in the library for new postgraduate students?

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5. What are the methods used to promote the use of print and electronic information resources?

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6. What are the promotional materials used to promote and create awareness of both print and electronic information resources?

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7. What are the frequent questions asked by your users on how to access and retrieve information of their interest?

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8. Do you have an integrated system that includes OPAC, or one which has accessible Intranet, and how active is it?

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9. What strategies can you suggest to improve the information seeking behavior?

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