Information-seeking behaviour of history and international studies postgraduates in an academic hybrid library in Nigeria

by

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DEDICATION

This thesis is dedicated to God almighty who is my creator and maker of heaven and earth. The thesis is also dedicated to the loving memory of my late father, Mr. Henry Obasola Libert who gave up the luxuries of life to educate his five daughters.

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ABSTRACT

This thesis was designed with the purpose of investigating the "Information-Seeking Behaviour" (ISB) of history and international studies postgraduates in an academic hybrid library in Nigeria. The study consisted of eight objectives and research questions. The study's scope focused mainly on postgraduates of history and international studies department, and on librarians, in a federal university in Nigeria. Wilson's (1999:251) model of information behaviour, and his (1999:252) model of ISB were selected as the study's theoretical framework. Qualitative case study was selected as the research design, and interpretivism research paradigm was used to shape the study. Purposive sampling technique was used to draw samples from the study's population. Focus group, observation and interview were used as data collection instruments. The data obtained were analysed using qualitative analysis method. Among the study's findings, it was revealed that: the postgraduates need information from the library mainly for their academic and personal activities; the postgraduates are regular users of the library, and they usually use the library for different purposes; the postgraduates usually employ technology or manual method to access information in various sources; there are different ways the library uses to satisfy the information needs of the postgraduates, and to an extent, the library information resources are meeting the postgraduates' information needs; apart from the library, the postgraduates also consult other information sources, but their most preferred information source is the Internet; the postgraduates' ISB also involve information exchange and transfer; and there are certain factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking. Finally, it was revealed that there are barriers to the postgraduates' information-seeking and use of information in the library and beyond. Based on the findings, it was recommended among others that the library should establish a personal librarian program, and the postgraduates should be trained on how to search the library digital resources. Also, based on the findings, the theoretical framework of the study was modified. The study contributed to knowledge by providing an insight into the ISB of history and international studies scholars, and by extending the research on humanities postgraduates' ISB.

KEY WORDS:

Academic hybrid library; History and international studies postgraduates; Nigeria; Information, Information needs; Barriers to information-seeking and information utilisation; Information sources; Information exchange; Information transfer; Information use; Information-seeking; Information-seeking behaviour.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ABBREVIATIONS

AGORA	Access to Global Online Research in Agriculture
AJOL	African Journals Online
ASK	Anomalous State of Knowledge
E-books	Electronic books
e-mail	electronic mail
HINARI	Health Internetwork Access to Research Initiatives
IB	Information Behaviour
ICT	Information and Communication Technology
IFLA	International Federation of Library Associations
IR	Institutional Repository
IRs	Institutional Repositories
ISB	Information-Seeking Behaviour
IT	Information Technology
JSTOR	Journal Storage
Pcs	Personal computers
RIN	Research Information Network
RLUK	Research Libraries United Kingdom
SCONUL	Society of College, National and University Libraries
UK	United Kingdom
UNISA	University of South Africa
USA	United States of America

LIST OF APPENDICES

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1   INTRODUCTION

In today's society, information is very important in every aspect (Pareek & Rana 2013:1). Due to the ability of people to transfer information easily and to have prompt access to information that was previously difficult to find, Borkovich and Noah (2014:14) describe this contemporary period as the "information age". However, the period is also referred to by many as the "computer age" or "digital revolution" (Borkovich & Noah 2014:17). According to Julien (2019) individuals use information to seek meaning in different situations such as to acquire a skill, reach a goal, generate new ideas or to derive pleasure. In the case of researchers, information is even more important because they all need the right and updated information for their research needs (Pareek & Rana 2013:1). Ikoja-Odongo and Mostert (2005:147) state that an information need is a requirement that drives people into information-seeking. According to Kingrey (2002:1) seeking information, retrieving it, and utilising it are central to librarianship and library studies. Kingrey further states that libraries function because of users seeking information. However, Ikoja-Odongo and Mostert (2005:148) linked information-seeking with an individual's knowledge state. They submit that information-seeking is perceived as a process that humans engage in, in order to deliberately change their knowledge state. The way people seek and utilise information is referred to as "Information-Seeking Behaviour" (XU 2022). Kumar (2016:99) defines user studies as an investigation into users' Information-Seeking Behaviour (ISB). This definition signifies that user study is synonymous with ISB study.

User studies are significant for library development, because they are employed to ascertain users' needs, the degree to which the needs have been fulfilled, user response or reaction to library services and the efficiency of the system (Kumar 2016:99).

Saylor Academy (2012:33) categorises academic disciplines into four broad divisions. These are business, natural and applied sciences, social sciences and humanities disciplines. The humanities/arts consist of those branches of learning which are concerned with the cultures, thoughts and values of human beings (Adomi 2012:1).

Humanities/arts discipline includes sub-disciplines such as languages, linguistics, archaeology, music, arts, law, religion, literature and history (Adomi 2012:1). History is a word of several meanings that are all associated to the past (New World Encyclopedia n.d, sv 'history'). When employed as the name of a discipline, history conventionally refers to the investigation and interpretation of the written record or documentation of past human undertakings, people, societies and civilisations leading up to the contemporary day (New World Encyclopedia n.d, sv 'history'). According to Ajaegbo (2013:6-7) there is no generally accepted definition of the sub-discipline of history. However, there seems to be agreement among historians that history relates to past activities or events of people in society (Ajaegbo 2013:6-7). Individuals who study history are called historians (New World Encyclopedia n.d, sv 'history'). From the above definitions and explanation, it might infer that historians play the vital role of investigating the human past to proffer solutions to contemporary problems.

International studies involve studying cultural, economic, political and social issues that govern international agenda (British International Studies Association 2018). From the viewpoint of Breuning and Ishiyama (2004:400), the sub-discipline of international studies is an interdisciplinary field focused on a wide range of global and international issues. Smallman and Brown (2011:5) explain that international studies focus on how global trends influence or impact humankind. A combination of history and international studies involves the study of the historical origins of the global society through an interdisciplinary viewpoint (Vrije Universiteit Amsterdam 2020).

A university is an institution where students study for degrees and academic research is conducted (Collins English dictionary 2022b, sv 'university'). Chikwe, Ogidi and Nwachukwu (2015:44) explain that educational research has contributed immensely to educational progress, a solution to educational problems, the growth of human capital in education, the advancement of social progress, development and nationwide survival. Costes and Stalter (2010:11) assert that on many occasions, the research function of a university remains a major source of a nation's knowledge base. They further assert that the future or prospect of this function is highly dependent on postgraduate education. A postgraduate or a postgraduate student is a student with a first degree from a college or university who is conducting research or studying at a more advanced level (Collins English dictionary 2022a, sv 'postgraduate').

Lecturers and postgraduates form an important group of researchers or scholars in a university (Adeyemi & Oluwabiyi 2013:247). In a university, postgraduates will be expected to obtain and maintain a comprehensive but highly exhaustive knowledge of their subject and associated disciplines. They should also conduct original research in partial completion of the award of an advanced degree (Adeyemi & Oluwabiyi 2013:247).

International Federation of Library Associations and Institutions (IFLA 2003:2) defines a library as a channel to access information, works of imagination and ideas. Aina (2004:27) categorises the library into five. These are the special library, school library, public library, national library and academic library (Aina 2004:27). Kennedy (2005:238) asserts that library collections are progressively digital and print resources hybrids.

According to Breaks (2002:99) the term "hybrid library" is a suitable way of describing new kinds of library services that endeavour to assimilate traditional print with digital resources. A hybrid library is perceived as a mid-way step towards a complete digital library (Breaks 2002:99). Similarly, Tsimpoglou (1999:1) describes a hybrid library as the co-existence of content in traditional printed form as well as in digital form in the same library. Breaks (2002:99) points out that in the past, digital resources of a library have supplemented rather than replace traditional print-based resources. He further points out that information users must operate in a hybrid atmosphere or environment, where digital and paper-based sources will be utilised simultaneously. Tsimpoglou (1999:1) notes that in the present digital age, most libraries are hybrids, since libraries that are entirely traditional or completely digital are rare.

As university students, postgraduates utilise their institutions' libraries for research (Aina 2004:28). According to Uzoagba and Okichie (2018:147) universities' achievements depend largely on the condition of their libraries because universities cannot achieve academic excellence without functional libraries. This implies that academic libraries play vital roles in the scholarly activities of postgraduates. Research Information Network and Research Libraries United Kingdom (2011) mention that academic libraries and other research libraries play specific roles towards enhancing the research activities of scholars. These roles include the provision of:

i. Access to qualitative resources which forms the basis for excellent research.
ii. Conducive environment for research in the library.
iii. Qualitative resources that would result in high quality, more efficient, more satisfied and motivated research outputs.
iv. Opportunities through strong service culture for researchers to secure contracts and research grants.
v. Skilled human-resources to manage Institutional Repositories which increase institutions' visibility globally, thereby raising their research profiles and increasing potential readership of their research outputs.
vi. New models and new technologies of scholarly communications that would eventually result in more efficient research outputs (Research Information Network & Research Libraries United Kingdom 2011:21).

The above-mentioned roles imply that the successful completion of a postgraduate course and the quality of postgraduate research output depends mainly on the quality of accessed and utilised library resources.

As researchers, history and international studies postgraduates play significant roles towards national and international development. Also, as part of academic library users, they are expected to access and utilise library resources and services. Hence academic libraries need to support the research activities of this user group through the provision of relevant information resources. Kumar (2016:99) asserts that library users or clienteles are very significant asset of a library and libraries are created to provide the information needs of their clienteles. He further asserts that a way of knowing the information needs of clienteles is through user studies. Rocio, Libia and Ivan (1987:684) mention that the purpose of user studies is to enhance or improve the present conditions of a library.

In literature, some related studies were found on the ISB of postgraduates in different academic disciplines and different institutions of higher learning all over the world. For instance, Majyambere (2015:205-206,209) examined the ISB of international humanities postgraduates in some public universities in South Africa. The information needs of the postgraduates were disclosed in the research results. Also, in the result, it was disclosed that the postgraduates were utilising different information sources to satisfy their educational information needs. The problems were also disclosed in the

results that the postgraduates encountered during their ISB. Similarly, Fidzani (1998:329) investigated the information needs and ISB of postgraduates at a university in Botswana. The result of the investigation disclosed that the postgraduates needed guidance in using library resources and facilities to meet some of their information needs.

Delaney and Bates (2018:63) investigated the academic library needs of doctoral students at a university in Ireland. The result of the investigation communicated that over half of the students usually begin their ISB from the library's databases or the library's site for an electronic journal (e-journal). It was also disclosed that the students were mostly utilising the databases and e-journals compared to other library resources. The result also revealed that there were barriers to using library resources.

Mohammed (2020:1) investigated the ISB of postgraduates of the Faculty of Management Sciences at a university in Nigeria and the results show that the postgraduates usually engage in ISB for various reasons. It also disclosed that specific barriers hindered their ISB. Similarly, Mwangi (2018) examined the information requirements and seeking activities of postgraduates at a university in Kenya. In the result obtained, it disclosed that the majority (76%) of the postgraduates' ISB have anchored on discovering information that would enable them to pass their examinations. The result also disclosed barriers that the participants encountered during their ISB.

Catalano (2013:243) explored the patterns of postgraduates' ISB through the review of literature from 1997 to 2013. The result of the review disclosed that the postgraduates usually begin their ISB on the Internet. Still on utilising internet resources by postgraduates, Monyela (2013) investigated the ISB of postgraduates in two South African universities. The result of the investigation disclosed that the postgraduates were utilising diverse sources of information for their academic activities. It was further disclosed that the Internet has been discovered as the source the postgraduates valued most and also relied on most. Similar results were also reported in the study conducted by Khan and Khan (2020:8). The study was on the ISB of postgraduates at a university in Pakistan. In the result, it was disclosed that most participants usually consult the Internet as their first choice of information source, followed by online databases and their library collection.

Studies have also shown that postgraduates utilise informal sources of information during their academic activities. Among such studies is the study that was conducted by George, Bright, Hurlbert, Linke, St. Clair and Stein (2006:1). The study was on the ISB of postgraduates at a university in the United States of America (USA). The result of the study disclosed that the postgraduates usually begin their ISB by meeting with their professors who provide direction, recommendations and resources for them. Furthermore, it expressed that other students helped shape postgraduates' research activities. However, it disclosed that certain factors affected the ISB of the psotgraduates.

Barrett (2005:324) investigated the ISB of humanities postgraduates at a university in Canada. In the study, she pointed out that postgraduates in the humanities discipline have received little attention from library researchers and as a result their ISBs were often assumed to resemble the ISB of undergraduates or the ISB of their lecturers. This implies that as at 2005, when Barrett conducted his study, little was known about the ISB of this library clientele. Therefore, there was a need for more research works to be conducted on their ISB. The literature review will be done in detail in chapter three of this thesis.

1.2   CONTEXTUAL SETTING

University of Jos, Nigeria was established in 1971 as a campus of the University of Ibadan. It became a full-fledged autonomous University in 1975 (Achuenu & Auta 2015:23). Initially, the University started operating with four faculties, but today, the University has a total of twelve faculties with eighty-six departments (University of Jos 2023b).

Among the eighty-six departments of the University is the Department of History and International Studies which is a department under the Arts Faculty. The Department started as the Department of History in 1972. Since then, the Department has grown from a few staff and students to over four hundred and fifty students offering both undergraduate and postgraduate programs. The postgraduate programs are at the master's and doctoral levels. In 2005, the Department was accredited to a change of nomenclature from History, to History and International Studies which reflects the

actual existing content of the program (Department of History and International Studies, Faculty of Arts Undergraduate Handbook 2023).

From available information obtained from the office of the Head of Department of History and International Studies, the Department offers postgraduate programmes in African History, Economic History, History, and History and International Studies. Also, from the available information, as at the time of this study, there were three sets of master's and doctoral students in the Department. These are: 2017/2018 set, 2018/2019 set, and 2020/2021 set respectively (see appendix).

The University of Jos Library began as a campus Library servicing the newly created Jos campus of University of Ibadan, in 1972. Services in the Library started in February 1972 with seating capacity for fifty-six readers (Akintunde 2015:139). The Library now offers services at four locations. These are: the Naraguta Campus Library, Bauchi Road Campus Library, Law Library and Medical Library (University of Jos 2023a). Currently, from the available statistics in the Library, the Library serves a student population of forty-one thousand, with a seating capacity of four thousand readers.

Currently, from the available statistics in the University of Jos Library, it has approximately eighty-six thousand, one-hundred and eight (86,108) volumes of books and ten thousand, nine hundred and forty-six (10,946) volumes of journals in print format. Akintunde (2015:140) mentions that the Library has transformed significantly from being a manually operated library into an increasingly digital environment. Apart from the resources in print format, the Library also has electronic books (e-books), databases and Institutional Repository (IR) at its website (University of Jos 2023a). The University, through the Library, was the first institution in Nigeria to launch an IR (Akintunde 2015:144).

1.3   STATEMENT OF THE PROBLEM

As a developing nation, Nigeria is currently experiencing problems that include poor leadership, imbalance in the devolution of political powers, corruption, sentimentalism, militancy, ethno-religious conflicts, farmer-herder conflicts and indigene-settler conflicts (Elewomawu 2019:5-8; Mohammed 2013:55). Okoro (2018:2) mentions that conflicts between herders and farmers are not limited to Nigeria alone, but cut across other West African Regions, Mali, Democratic Republic of Congo and Central African

Republic. Luo (2021:3) asserts that currently human society experiences many worldwide challenges, such as water pollution, food safety and climate change. The study of history and international studies aims to curbing these national and international issues (Nnamdi Azikiwe University 2022).

Research activities of history and international studies postgraduates aim to curbing national and international issues. However, for the postgraduates to effectively conduct their research, their academic hybrid libraries need to support them. A way of supporting their research activities is to find out their ISB in the library, which could be achieved through user studies. However, from the literature, studies were found on the ISB of postgraduates in different academic disciplines. But no study was found on the ISB of postgraduates in the academic discipline of history and international studies. This implies that little 8is known about their actual information needs, the sources they consult, and the actions they take on the information they find. This study therefore focused on investigating the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. The study aimed at investigating the ISB of the postgraduates through the use of qualitative case study design. The study also aimed at proffering recommendations to all the postgraduates' research stakeholders on ways through which the hybrid library and other information providers can effectively support their research activities which are focused towards finding solutions to contemporary problems in the human society. The study will also fill the existing gap in literature on the ISB of the history and international studies postgraduates and extend the frontiers of knowledge in research on the ISB of humanities postgraduates.

1.4   OBJECTIVES OF THE STUDY

The general objective of this study is to investigate the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. The specific objectives are to:

1. Investigate the information needs of the history and international studies postgraduates in the academic hybrid library.
2. Find out ways through which their information needs are being satisfied in the hybrid library.

3. Find out the means through which the postgraduates' use the library Information and Communication Technology (ICT) facilities to access information in the library.

4. Investigate the use of the hybrid library as a formal information source by the postgraduates, and find out other formal and informal information sources usually consulted by the postgraduates.

5. Investigate the roles of information exchange in the information-seeking activities of the postgraduates in the hybrid library and in other sources.

6. Investigate the roles of information transfer in the information-seeking activities of the postgraduates in the hybrid library and in other sources.

7. Find out the factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities in the hybrid library and in other sources.

8. Find out the barriers to the postgraduates' information-seeking and utilisation of information in the hybrid library and in other sources.

1.5   RESEARCH QUESTIONS

1. What are the information needs of the history and international studies postgraduates in the academic hybrid library?

2. How are the information needs of the postgraduates being satisfied in the hybrid library?

3. What are the means through which the postgraduates use the library ICT facilities to access information in the library?

4. How do the postgraduates use the hybrid library as a formal information source, and what are the other information sources they usually consult?

5. What are the roles of information exchange in the information-seeking activities of the postgraduates in the hybrid library and in other sources?

6. What are the roles of information transfer in the information-seeking activities of the postgraduates in the hybrid library and in other sources?

7. What are the factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities in the hybrid library and in other sources?

8. What barriers do the postgraduates usually encounter, during their information-seeking and utilisation of information in the hybrid library and in other sources?

1.6 IMPORTANCE OF THE INQUIRY

According to Rocio *et al.* (1987:684) user studies are crucial in the following areas:

i. They provide a substantial body of particular facts, knowledge and conclusions that are of great significance for the development of new amenities, services or facilities.

ii. They yield inferences that can be used in improving administrative procedure since they can transform into indicators of accomplishments and weaknesses in the design and development of facilities or services.

iii. They show the various channels used by users in the information acquirement process, the various kinds of information sources and the regularity with which they are used.

iv. They are also a way of ascertaining users' needs and behaviour leading to better effectiveness in the information transfer procedure.

v. They are the most effective way of ascertaining users' needs and therefore, determining the services or facilities to meet them appropriately.

vi. They also enable constant assessment of the system to take place (Rocio *et al.* 1987:684).

Barrett (2005:324) points out that studying the ISB of specific user groups has contributed to the development of varieties of library services. This statement implies that studying the ISB of history and international studies postgraduates will improve academic hybrid library services. An investigation into the ISB of history and international studies postgraduates will also benefit their department especially during the accreditation of institutions and their various programmes.

Accreditation is the re-statement or establishment of the status, appropriateness or legitimacy of an institution's module of study or programme (Harvey 2004:2). Institutional accreditation is also aimed at ensuring that institutions meet minimum standards in specific areas such as staff qualifications, students' intake, research activities and learning resources. Institutional accreditation also intended to ensure that graduates produced by institutions have the required academic standard and

meet the required professional competence (Harvey 2004:2). Kwegyiriba, Aidoo, Agyemang, Mensah and Enchill (2021:31) explain that during accreditation of programmes university libraries also have a role to play. As explained by Kwegyiriba *et al.*, the quality of resources and services, and the adequacy and competence of library staff are essential for the effective running of programmes in a university, and as such, they will function as the criteria for accreditation (Kwegyiriba *et al.* 2021:31). However, for academic libraries to prepare for accreditation, they need to find out the needs of their users in terms of resources, services, staff strength and infrastructure. Therefore, an investigation into the ISB of history and international studies postgraduates in a particular institution of higher learning will assist their academic library in preparing for accreditation, which aims to ensure standards in their department and their university at large.

Research papers have made known that most academic libraries all over the world are experiencing financial hardships because of economic recession (Ajayi & Madu 2018:2; Guarria & Wang 2011:199; Nicholas, Rowland, Jubb & Jamali 2010:377). This implies that academic libraries are no longer getting sufficient funds to develop their libraries. It also implies that there is a need for academic libraries to make judicious usage of their budgetary allocations since they have limited funds. However, for academic libraries to do so, they need to find out the ISB of their users.

This study is vital to the hybrid library under study and other academic hybrid libraries. This is because results of the study will assist in improving the present conditions of their libraries in terms of resources; workforce, services and infrastructure. The results will also assist in improving the administrative processes of the hybrid libraries. Furthermore, the results will help the hybrid libraries to evaluate their entire systems. The results will also assist the hybrid library under study to know the specific information needs of the postgraduates and acquire relevant resources based on those needs. This will create an avenue for the library to make sensible use of its financial allocations.

To the postgraduates, the study's results can lead to a greater satisfaction of their information needs in the hybrid library. This will in-turn improve the quality of their research activities and their entire academic performances. An improvement in the quality of their research activities could create opportunities to attract grants for them.

More so, an improvement in their academic standards will make them highly skilled and employable in their profession which could lead to national and international development. Through the study's results, the information needs of other scholars in the history and international studies department may also conform to an extent. This is because in the hybrid library, they share the same collection. By meeting their information needs, their academic standards will also improve.

Finally, from the literature, no study was found on the ISB of history and international studies postgraduates. Therefore, this study is significant because it will fill the gap in the subject field of information science.

1.7   SCOPE AND DELIMITATION OF THE STUDY

This study aimed to investigate the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. The study focused solely on master's and doctoral students in the University of Jos Department of History and International Studies undertaking studies in African History, Economic History, History, and History and International Studies. Therefore, the study included all these four categories of students in order to ensure the complete composition of the postgraduates in the department.

Although this study acknowledged the existence of other postgraduates in the University's Faculty of Arts, these postgraduates were not the focus of the study. Hence, the scope of this study only covered the postgraduates in the Department of History and International Studies. The postgraduates were chosen rather than their undergraduate counterparts because of the vital roles they play in creating new knowledge through in-depth research.

Also, only two librarians working in the University's hybrid library were interviewed, excluding other librarians. This is because based on the researcher's judgement; these librarians were the only ones that could give relevant information that would add credence to the information obtained from the postgraduates.

The study was delimited to a timeframe of four (04) years. In terms of methodology, the study was delimited to the qualitative case study design, excluding other study designs. This was to enable the researcher to conduct an in-depth study of a single

case (the postgraduates). It was also delimited to focus group discussion, observation and interview as the data collection instruments, excluding other data collection instruments. These instruments were selected because they were appropriate for the generation of the right data for the study.

There were three major limitations in the study. The first limitation concerned the use of focus group as a data collection instrument. The second limitation was in the use of observation as a data instrument, while the third was in studying a single case of the ISB of history and international studies postgraduates. The limitations will be discussed in detail in chapter seven of this study.

1.8   DEFINITION OF KEY CONCEPTS

1.8.1   Academic library

This is a library that is attached to a post-secondary institution in order to support the objectives of the institution with regards to research, teaching and learning (Aina 2004:27-28).

1.8.2   Hybrid library

This is a library that contains contents in traditional printed form as well as in digital form (Tsimpoglou 1999:1).

1.8.3 History

This refers to the investigation and interpretation of the written record or documentation of past human undertakings, people, societies and civilisations leading up to the contemporary day (New World Encyclopedia n.d, sv 'history').

1.8.4   International studies

This field involves the study of cultural, economic, political and social issues that govern international agenda (British International Studies Association 2018).

1.8.5   History and international studies

This field involves the study of the historical origins of the global society through an interdisciplinary viewpoint (Vrije Universiteit Amsterdam 2020).

1.8.6 Historians

These individuals study history (New World Encyclopedia n.d, sv 'history').

1.8.7 Postgraduates

These are students with a first degree from a university who are studying or doing research at a more advanced level (Collins English Dictionary 2022a, sv 'postgraduates').

1.8.8 Information

These are all the instances where human beings relate with their surroundings or environments in ways that add to, or change the status of their knowledge (Bates 2010:2381).

1.8.9 Information resources

These are materials that are usually consulted for specific information on a topic, event, theme, date, number, place or a word (Serema & Mooko 2002:110).

1.8.10 Print resources

These are information resources available for use by libraries in hard copy, physical format or paper form (Adomi 2012:10).

1.8.11 Digital resources

These are information resources that exist in soft copy or non-print form and are accessible through computers and other related ICT facilities (Obaseki *et al.* 2010:35).

1.8.12 Information sources

These are persons, places or things from which information is acquired (Adomi 2012:10). In this context, "places" denotes formal sources such as libraries and the Internet, and information sources such as colleagues and friends.

1.8.13 Information need

This denotes gap or disparity in the existing knowledge state of a user (Devadason & Lingan 1996).

1.8.14 Information-seeking

This is a procedure that results from the identification that a problem is in existence and a search is required (Pendleton & Chatman 1998:742).

1.8.15 Information-seeking behaviour

This describes different behaviour displayed by people when they perceive a need for information; make preferences about where and how to search for information and deliberate or act on the information they find (Choo 2005:29). In this context, it also includes barriers to information-seeking and utilisation.

1.8.16 Information use

This denotes the things individuals do with the information they acquire through serendipity, seeking or through other means (Case & Given 2016:6).

1.8.17 Information behaviour

These are numerous ways individuals search and utilise information through an interaction with the information (Bates 2010).

1.8.18 Information exchange

This is the utilisation of information in a trading or bartering agreement (Wilson 1994:13).

1.8.19 Information transfer

This is the act of delivering to others, of information assumed to be of significance to them by the initial receiver of that information (Wilson 1994:13).

1.8.20 Information barriers

These are obstacles or impediments that prevent, delay or hinder access to information (Świgoń 2011:475).

1.9 LITERATURE REVIEW

In this study, the literature review was done in the third chapter. The review was done in order to find out the results that were obtained by previous researchers on the ISB of postgraduates, especially postgraduates in the humanities discipline. The review was also conducted to understand the trends in the ISB of the postgraduates, especially regarding their information needs, the sources they consult and their use of the information they have acquired. Furthermore, the review was done to identify the gap that required filling in the literature for the thesis topic. The review was conducted under broad themes and sub-themes based on the research questions.

1.10 METHODOLOGY

The methodology that was used to carry out this study was discussed in chapter four. Under the methodology, the appropriate research paradigm, approach and design for the study was chosen. The study population was defined, and a suitable sampling procedure was also selected. The data instruments and data analysis plan were also selected. The procedure for ensuring the validity and reliability of the research findings and the ethical issues that were considered during the study were equally discussed under the methodology.

1.11 ETHICAL CONSIDERATIONS

Ethical considerations were also discussed in chapter four of this thesis. In the chapter, specific ethical issues were considered to ensure that the right things were done. The ethical issues considered include issues that concern the research participants and the researcher. Concerning the research participants, during the data collection process, the researcher ensured that she obtained the full consent of her participants. She also ensured that none of the participants was harmed in any way. Furthermore, she complied with the COVID-19 rules for all learning facilities and schools in Nigeria. She also ensured the anonymity of her participants. The researcher also ensured that

the information obtained from the participants was kept strictly confidential. As regards the ethical issues that concerned the researcher, throughout the research process, the researcher ensured that she avoided partiality by reporting all her results correctly. The researcher also avoided plagiarism. To avoid plagiarism, the researcher ensured that other people's work had been quoted correctly. Furthermore, the researcher ensured that the appropriate methodology was applied to carry out the inquiry. Finally, the researcher respected the sites where the data were collected.

1.12   ORIGINALITY OF THE STUDY

Yin (2016:13) explains that an "original" study implies a study that a resear99cher initiated using his/her own ideas, data and words. Alajami (2020:7-8) submits that in a research work, originality can emerge through the: research topic, method of studying a problem or a topic, research results or findings, and/or through the selection of a problem. Thus, original research would study a topic with new tools, new circumstances, and different perspectives. Originality may also be entrenched in the research environment, sample, data, and/or community (Alajami 2020:8).

In literature several past studies were found on the ISB of scholars in different sub-disciplines within the humanities. Among the studies found are the studies conducted by Delgadillo and Lynch (1999), Lee and Haddow (2018), Wang (2020), Yadav and Kumar (2021), and Ideris (2022). Delgadillo and Lynch investigated the ISB of postgraduates in the sub-discipline of history. Meanwhile Lee and Haddow investigated the ISB of artists. Then, Wang explored the ISB of early career translators in Chinese to English and English to Chinese languages. Similar research was also carried out by Yadav and Kumar on the ISB of undergraduate students of English department, while Ideris investigated the ISB of historians in Malaysia.

In literature, some studies were also found that investigated the ISB of scholars within the whole humanities discipline. Among such studies that were found are the studies that were carried out by Barrett (2005), Rimmer, Warwick, Blandford, Gow and Buchanan (2006), Tahir and Mahmood (2008), Majyambere (2015), and Al Shboul, Obeidat and Sundar (2019). Barrett's (2005) study focused on the ISB of humanities postgraduates, while Rimmer *et al's.* study was on the ISB of humanities scholars and their use of digital resources. More-so, Tahir and Mahmood's study was on the

information needs and ISB of humanities teachers, while Majyambere investigated the ISB of international postgraduate student in the humanities, and Al Shboul *et.al.* investigated the information needs and behaviour of humanities scholars in an ICT environment.

The present study is on the ISB of postgraduates of a sub-discipline (history and international studies) within the humanities. In literature, studies were found on the ISB of scholars in different sub-disciplines within the humanities, and also on the ISB of scholars in the whole humanities discipline. However, the author did not find any study on the ISB of history and international studies scholars including postgraduates. This study is original with respect to the research topic, ideas, and the method of studying the research problem. Moreover, the data were obtained directly from the participants. The results obtained were also original because they were directly analysed from the acquired data. The researcher also observed the necessary research ethics during the analysis of the data. Therefore, the results were not falsified or plagiarised. These factors equally added originality to the research results.

1.13   STRUCTURE OF THE THESIS

For this study to be successfully executed, each procedure was investigated step by step from the beginning to the end. Based on that, the study was conducted from chapter one to seven as briefly discussed below:

1.13.1   Chapter one: Introduction and background to the study

This first chapter comprised the preamble of the thesis. Therefore, the chapter entailed a general overview of the entire thesis.

1.13.2   Chapter two: Theoretical framework

In this chapter, the study's theoretical framework was selected. Also in this chapter, a conceptual framework for the ISB of history and international studies postgraduates was derived.

1.13.3   Chapter three: Literature review

The third chapter examined the previous related literature to the present study. The research questions that were derived from the research objectives were used to arrange the literature under various themes and sub-themes.

1.13.4   Chapter four: Research methodology

The fourth chapter detailed discussions of various methodological aspects employed during the thesis writing. In this chapter, the interpretivism paradigm was selected as the appropriate research paradigm for the study. Also in this chapter, qualitative case study was selected as the appropriate study design. Other methodological aspects that were discussed are the data collection tools, sampling technique, population, sample, validity and reliability of the research and ethical considerations that were observed during the conduct of the research.

1.13.5   Chapter five: Presentation of results

The fifth chapter of the thesis comprised the presentation and interpretation of the results that were obtained during the study through the use of focus group, observation and interview as the data collection tools. The results were presented according to the research questions of the study.

1.13.6   Chapter six: Discussion and interpretation of results

The sixth chapter comprised a detailed discussion and interpretation of the results that were obtained. This was done by comparing some of the results with the past literature and also with the selected theoretical framework. The discussion and interpretation of the results were done according to the research questions of the study.

1.13.7 Chapter seven: Summary, conclusions and recommendations

This is the last chapter of the thesis. The chapter comprised the summary of the major findings of the study. Also in this chapter, conclusions were drawn from the results and recommendations were proffered based on the conclusions reached. After the recommendations, the study's contributions to knowledge were also discussed. This was followed by the limitations of the study and suggestions for further studies.

1.14   CHAPTER SUMMARY

In this first chapter, the topic of the thesis was introduced. This was done by providing background information about the topic. Also, this chapter discusses the contextual setting of the study, the problem statement, objectives, research questions and the importance of the study. Other sub-topics discussed in this chapter include the definition or delineation of important keywords, originality of the study, ethical issues, methodology and the thesis structure.

CHAPTER TWO

THEORETICAL FRAMEWORK

2.1   INTRODUCTION

This chapter focuses on discussing theories, models and theoretical frameworks. The chapter also focuses on selecting the appropriate theoretical framework and developing a conceptual framework for the present study. However, before discussing the models and frameworks, it is expedient to understand the basic concepts that make up the topic and objectives of the study.

2.2   CONCEPTUALISATION

The process through which a researcher specifies what s/he means when utilising a specific term is known as conceptualisation (Babbie 2011:134). During research activities on ISB, certain concepts are employed frequently. These concepts include information, information-seeking, information need, information-seeking procedure or process, and information utilisation (Ikoja-Odongo & Mostert 2006:146). This study is on the ISB of history and international studies postgraduates in an academic hybrid library. The study comprises eight objectives. The objectives are to:

1. Investigate the information needs of history and international studies postgraduates in the academic hybrid library.
2. Find out ways through which their information needs are being satisfied in the hybrid library.
3. Find out the means through which the postgraduates' use library ICT facilities to access information in the library.
4. Investigate the use of the hybrid library as a formal information source by the postgraduates, and find out other formal and informal information sources usually consulted by the postgraduates.
5. Investigate the roles of information exchange in the information-seeking activities of the postgraduates in the hybrid library and in other sources.
6. Investigate the roles of information transfer in the information-seeking activities of the postgraduates in the hybrid library and in other sources.

7. Find out the factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities in the hybrid library and in other sources.

8. Find out the barriers to the postgraduates' information-seeking and utilisation of information in the hybrid library and in other sources.

The concepts that make up the topic and objectives of this study are information, information need, information sources, information-seeking, information utilisation, information exchange, information transfer, information-seeking behaviour and barriers to information-seeking and utilisation. These concepts in the subsequent sub-sections are discussed.

2.2.1   Information

Capurro and Hjørland (2003) mentioned a philosophical disagreement about the concept of "information". According to Capurro and Hjørland (2003) the word "information" has Latin origins and Greek roots. Case and Given (2016:58) also mention the difficulty in defining the word "information". They point out that the adoption of the term by several disciplines is part of the difficulty associated with defining the word. As a term, "information" has been employed to denote sensory stimuli, problem-solving, mental representations, states of mind, decision-making, an aspect of human learning and thinking, the content of subject areas, the procedure of communication, discernments about the importance of information to information needs, recorded knowledge, and specific objects that convey information such as documents (Case & Given 2016:58).

Laudon and Laudon (2012:15) define information as data constructed into a form that is important and cherished by people. Buckland (1991) defines information as being informed, which could lead to a decrease in unawareness and ambiguity. This definition implies that information increases an individual's awareness level or state of knowledge about a specific issue. Buckland further views information as a "process", as "knowledge" and as a "thing". As a "process", information is the act of being informed. Hence, information is considered the act of being spoken of something. Similarly, "knowledge" as information, is employed to transmit particular subject, fact, or event. A fundamental feature of information as "knowledge" is that it is not tangible

because it cannot be touched or measured directly. As a "thing", "information" denotes objects such as documents and data (Buckland 1991).

Case (2002:5) views "information" as any difference an individual perceives in his/her environment or within him/herself. In the definition, Case further explains that "information" is any aspect that an individual notices in the pattern of life or reality. Ackoff (1988:2) points out that information is contained in descriptions, and provides answers to questions that start with certain words such as "what", "who", "when", "where" and "how many". Liew (2007) describes "information" as a message that encompasses significant meaning, input, or implication for action and/or decision. Liew also describes "information" as current communication or processed data.

From Bates' (2017:1) perspective, the word "information" implies circumstances that human beings interact with their surroundings or environment, such that it leaves some impressions on them by positively or negatively changing their knowledge state. Bates explains that the positive impression can encompass the emotional variations that result from reading a novel, to multi-faceted communications where information merges with pre-existing knowledge in order to create new understanding. However, she explains that a negative impression denotes an individual ignoring or rejecting information. She further explains that an individual's knowledge state may also remain unchanged even though the individual has absorbed new information. Finally, she explains that the most significant amount of information that an individual absorbs is the passive information that is received by simply being aware, which is absorbed in the context of daily existence. This study adopts the definition of information given by Bates (2017:1).

2.2.2　Information need

Citing literature, Case and Given (2016:80-82) argue that the terms "want", "desire" and "demand" are not the same as the term "need", because they all have distinct meanings. The word "need" could be viewed as a lack or deficiency of something desirable, requisite or useful (Merriam-Webster English dictionary 2022, sv 'need'). Wilson (as cited in Wilson 1997:552) argues that "need" is a subjective or personal experience that takes place only in the mind of the individual in need and consequently is not directly accessible to an observer. Wilson (1997:552) also argues that the

experience of need can only be discovered by deduction from behaviour, or through the reports of the person in need. Case and Given (2016:94) mention that "need" is an awkward or difficult concept because it is not readily observable. In the same vein, Devadason and Lingan (1996) argue that "need" is usually specific and time-bound, and it could be immediate or deferred.

The concept of "information need" is entrenched in users' studies, users' environment and information utilisation (Devadason & Lingan 1996). Naumer and Fisher (2017:2452) mention that "information need" is one of the most fundamental concepts in library and information science. However, Naumer and Fisher (2017:2453) submit that despite the concept's centrality, it still remains ambiguous in literature. They explain that the ambiguity may stem from the fact that it is challenging to create a frontier around the concept. Case and Given (2016:82) assert that "information need" is frequently described simply as a cause of information- seeking.

Cole (2011:1217) points out that the need for information is essential to human situation or condition. Cole (2011:1217) also likens the term "information need" to a form of "black box" to both the users who are articulating queries to an information system and the researchers who desire to investigate the reason why individuals search for information. Cole explains that "black box" is something the users cannot define and the researchers cannot know or cannot observe. However, Wilson (2006:663) opines that there is a misperception in the association of the two words "information" and "need". Therefore, he suggests that the concept of "information need" should be replaced with a more appropriate term.

In his seminal work, Taylor (1962:391) employs the term "question" to also refer to "information need". According to Taylor, a "question" is a sign of insufficiency on the part of an inquirer who is optimistic about remedying that insufficiency by demanding for the information system. Dervin (1983:172) explains that the types of question people ask regarding their situations signify their information needs. Dervin (1983:172) further explains that information needs are often personalised. Taylor (1962:392) categorises "information need" or "question" into four levels. These are:

1. Visceral need: this is the real, unexpressed or unstated need for information by an inquirer.

2. Conscious need: this denotes the conscious psychological description of an imprecise area of indecision and such a description is usually an ambiguous and rambling statement.

3. Formalised need: this is a level whereby an inquirer develops a rational and properly qualified statement of his/her "question".

4. Compromised need: this is a level whereby the inquirer recasts the "question" in anticipation of what s/he will get out of the system (Taylor 1962:392).

Belkin (1980:133) suggests that information retrieval must be considered from the user's point of view of the "Anomalous State of Knowledge" (ASK). Belkin (1980:136) describes the concept of "ASK" as a perceived inadequacy in a user's state of knowledge. Belkin (1980:136-137) points out that "ASK" shares characteristics of Taylor's first and second levels of questions. Devadason and Lingan (1996) submit that in everyday activity, lack or absence of self-sufficiency comprises "information need". They also submit that information need represents gaps in the existing knowledge state of an information user. Krikelas (1983:6) views information need as recognising vagueness or uncertainty. According to Cole (2015:4118) "information need" is the starting point or basis of information-seeking. From this statement, it might be deduced that "information need" initiates information-seeking, therefore, without information need, there will be no information-seeking. From the perspective of Case and Given (2016:6), information need is a recognition that an individual's knowledge state is inadequate to satisfy a given goal. Relying upon Devadason and Lingan's (1996) definition, in this study, "information need" is conceptualised as gaps in the knowledge state of history and international studies postgraduates.

2.2.3   Information sources

According to Wilson (2006:660), whatever source of information is used, it will be evaluated to discover its relationship to user's needs. This statement points out that information sources are supposed to be utilised by users. Adomi (2012:10) defines "information sources" as "persons", "things" or "places" from which information has been acquired and used, to offer knowledge to a person about something. From this definition, "persons" could be deduced to imply librarians in an academic hybrid library, project supervisors, lecturers and/or students. "Things" can imply the format of information sources such as print and digital format. "Places" can signify information

centres such as an academic hybrid library. Using Adomi's definition as a reference point, "information sources" is conceptualised in this study as persons, things or places from which information is acquired and utilised by history and international studies postgraduates, in order to gain knowledge.

2.2.4   Information-seeking

Kingrey (2002:1) notes that "information-seeking" serves as an umbrella overarching or all-encompassing a set of inter-related issues and concepts. Naumer and Fisher (2017:2453) mention that an information need that is explicit or unambiguous is often believed to be the inspiration behind a user's action to search for, or seek information. Shah (2017:13) explains that information-seeking is considered an act that is essential to human behaviour. Hence, information-seeking is conceptualised with respect to people and their needs, regardless of any system and regardless of the availability of any information (Shah 2017:3). Shah (2017:3) further explains that information-seeking is a subset of IB which encompasses all types of interactions individuals have with information. From the viewpoint of Dervin (1983:172), individuals seek information when their living conditions are such that their old senses have run out. Dervin and Nilan (1986:21) explain that in a situation where an individual's old sense has run out, the person must create a new sense. Savolainen (2016b:1) mentions that conventionally, information-seeking is understood as a process through which a person resolves or finds answers to an information need. Case and Given (2016:6) view information-seeking as a conscious effort to obtain information in response to a gap or need in a person's knowledge state. They further explain that information also comes through a chance encounter, serendipity or when other people share information that they think may be beneficial to someone. Kingrey (2002:1) points out that information-seeking has been perceived as a cognitive exercise, cultural and social exchange, discrete approaches applied when encountering uncertainty, and a basic situation of humanity in which all persons exist. However, Kingrey (2002:1) defines information-seeking as involving searching, retrieving, identifying and applying meaningful content. Pendleton and Chatman (1998:742) view information-seeking as a procedure that results from the identification that a "problem" is in existence, and a search is required. In this definition, the word "problem" could interpret to imply an "information need" or a knowledge gap that exists in an individual. This definition is

adopted and used to conceptualise "information-seeking" from this study's perspective.

2.2.5   Information use

Cole (2015:4117) views a "user" as a person with an information need who seeks information to satisfy that need. Cambridge English dictionary (2021) defines the word "use" as the means of putting something, such as a tool, skill or building to a particular purpose. Julien (2019) submits that the concept of "information use" has not yet been thoroughly researched. She further submits that "information use" is personal and subjective to the user. Devadason and Lingan (1996) mention that information offered for a need will be used. However, where there is interest, the offered information may either be used or not (Devadason & Lingan 1996). Dervin (1983:172) submits that individuals are responsible for how they use information. Julien (2019) views "information use" as the comprehension of information sources that people select or choose, and the ways that people apply information to make sense of their situations and lives. Cole (2015:4117) defines "information use" from the cognitive or user perspective as the modification of the knowledge structure of a user. Case and Given (2016:6) define "information use" as what an individual does with the information s/he has acquired through serendipity, seeking or through other means. In their definition, they further mention that information use also includes ignoring or applying the information to suit a goal or personal context. Case and Given's (2016:6) definition is adopted for this study.

2.2.6   Information exchange

The word "exchange" denotes the action of taking or giving something in return for another thing (Merriam Webster dictionary 2023 sv "exchange"). Wilson (1994:13) perceives information exchange as the utilisation of information in a trading or bartering agreement. Wilson (2010b:1) notes that information exchange is an uncharted or unexplored aspect of IB. Among the first scholars who drew attention to the role of information exchange was Wilson, in his 1981 publication (Wilson 2010b:2). For the present study, Wilson's (1994:13) definition of information exchange was adopted.

2.2.7   Information transfer

The word "transfer" could be defined as the act of conveying from one individual, situation or place to another (Merriam Webster dictionary 2023 sv "transfer"). Wilson (1994:13) defines information transfer as the act of delivering to others, of information assumed to be of significance to them, by the initial receiver of that information. For the present study, Wilson's (1994:13) definition of information transfer was adopted.

2.2.8   Barriers to information-seeking and utilisation of information

Wilson (1999: 252) explains that in a bid to find information that would fulfill a need, an enquirer is likely to encounter barriers of various kinds. The context of the need may be the enquirer, the enquirer's job description or the environment where the enquirer works. Barriers that usually impede the search for information by the enquirer arise out of these contexts (Wilson 1999:252). Świgoń (2011:475) views "barriers to information" as obstacles or impediments that prevent, delay, or hinder access to information. For this inquiry, Świgoń's definition to imply "barriers to information-seeking and utilisation" is adopted.

2.2.9   Information-seeking behaviour

The term "ISB" was first coined by Thomas D. Wilson in his 1981 paper (XU 2022). It was coined based on the line of reasoning that "information need" was unbeneficial as a basis for a research agenda, since "need" could not be noticed directly, while how people conduct themselves or behave during information- seeking could be observed and investigated (XU 2022). Ikoja-Odongo and Mostert (2005:148) mention that studies in ISB arose from concerns surrounding how people utilise information to carry out their work. Gray (2003:259) points out that research into ISB occupies a position at the intersection of information science, psychology, management and communications. Rather and Ganaie (2014:14) reported that from available literature, most ISB inquiries have been conducted based on advanced educational institutions with emphasis on students' learning.

Meho and Tibbo (2003:570) explain that the ISB of academic scholars has been the focus of inquiry within the library and information community for decades. They also explain that initially, researchers conducted uses and user studies primarily to evaluate

collections. These followed closely by studies aimed at discovering useful information about the research habits of individuals or groups to design appropriate systems and services that could facilitate those habits. However, there was a significant shift both in conceptualisation and research design in response to calls in the mid-1980s for more focus on the user rather than the system (Meho & Tibbo 2003:570).

From the viewpoint of Choo (2005:29), "ISB" is the behaviour that individuals display when discovering an information need, the choices made regarding where and how to seek information, and the actions taken on the information found. Krikelas (1983:6-7) defines "ISB" as an activity undertaken by an individual to recognise information that would satisfy a perceived need. Wilson (2000a:49) describes "ISB" as a purposive seeking for information by an individual because of a need to fulfill some objectives. Wilson further explains that during the information-seeking, the individual may interact with either computer-based systems such as the Web, or with manual information systems such as libraries. Thus, these three definitions are similar, in the sense that the three definitions mention information need as the basis of "ISB". Moreover, all the definitions acknowledge "ISB" as human activity.

A critical examination of the three definitions of ISB given above revealed that none of the definitions included barriers to information-seeking and utilisation by an individual. However, it could be argued that during information-seeking and utilisation individuals might encounter certain barriers. Barriers encountered during ISB by history and international studies postgraduates formed part of the objectives of this study. In this study, the definition of ISB that was given by Choo (2005:29) is adopted and modified to include barriers to the postgraduates' information-seeking and utilisation.

2.3   THEORETICAL FRAMEWORK

Abend (2008:178) defines a theory as an explanation of a specific social prodigy or phenomenon. Bhattacherjee (2012:14) views a theory as a set of systematically inter-related constructs and suggestions envisioned to explain and forecast a behaviour or phenomenon of interest, within certain boundary assumptions and conditions. Case and Given (2016:143) define theory as a set of related statements that describe, explain or predict phenomena in a certain situation. From the viewpoint of Mctavish and Loether (2015:34), theory is the answer or response to "why" questions.

A term frequently used in unification with theory is "model" (Bhattacherjee 2012:14). Wilson (1999:250) describes a model as a framework or structure for deliberating on a problem, which may change into a statement of the interactions among theoretical suggestions. He further explained that most models in the subject area of IB are statements, frequently in the form of diagrams that endeavour to illustrate an information-seeking action, the causes and outcomes of that action, or the relationships among the stages in ISB. Bhattacherjee (2012:14) views a model as a representation or symbol of all parts of a system created to investigate the system.

Wunsch (1994:20) argues that the dissimilarity between theories and models is unclear because models frequently have a theoretical subject matter or content, and models convey theories. Wunsch therefore notes that sometimes the terms are synonymously used. Case and Given (2016:143) state that models and theories are simplified versions of actuality or reality.

Grant and Osanloo (2014:13) define the term "theoretical framework" as a blueprint for a dissertation. They explain that the theoretical framework provides the structure to define how a researcher will philosophically, epistemologically, methodologically, and analytically approach the dissertation as a whole (Grant & Osanloo 2014:12). Based on the objectives of this study, the major concepts are within the research area of ISB, in the field of information science. Therefore, the theoretical framework that will be adopted for the study will be a framework within the research area of ISB.

2.3.1   Wilson's (1999:251) model of information behaviour

Wilson's (1999:251) model of IB is a variation of his first model which was developed in 1981 (Wilson 1999:251). According to Wilson (1999:251) the aim of the model was to outline the various areas covered by what he proposes as "ISB", as a substitute for "information needs". However, the scope of the model is much larger than "ISB". Therefore, the model also covers "IB" (Wilson 1999:251). The model exhibits in figure 2.1.
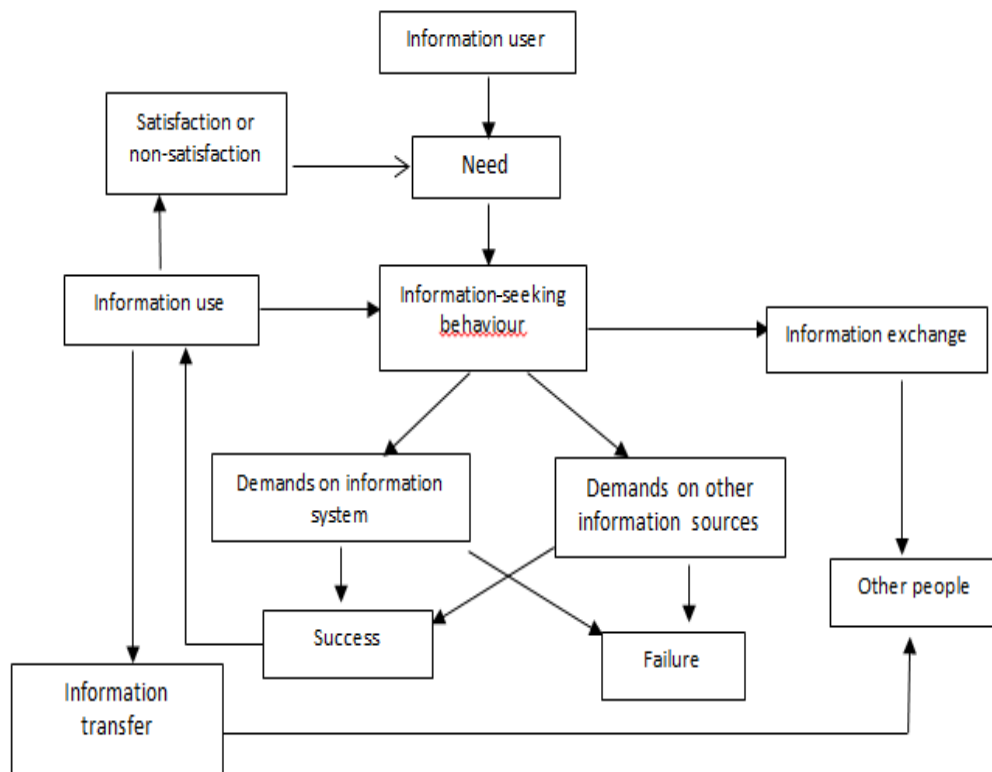
Figure 2.1: Wilson's (1999:251) model of information behaviour
(Source: Wilson 1999:251)

Wilson's (1999:251) model of IB proposes that ISB arises from a perceived need by an individual who is an information user. The model also proposes that ISB may take numerous forms. For instance, the individual with the need may seek information from formal systems such as libraries, or informal systems such as estate agent's offices. Alternatively, the individual may seek information from other individuals rather than systems through "information exchange". The information-seeking may result in failure or success in discovering the appropriate information. If the search is successful, the individual then utilises the information found. The information found may satisfy or fulfill the perceived need, or may fail to fulfill the need. In either case, it may be of prospective importance to the need of another individual and could be transferred to such an individual (Wilson 1999:251).

2.3.1.1 Strengths and flaws of Wilson's (1999:251) model of information behaviour

Wilson's (1999:251) model of IB serves as a map of ISB and discloses some gaps in research in the field of ISB. However, the model does not offer recommendations for

31

the factors that are instrumental to IB, therefore, it does not directly recommend hypothesis to be evaluated in that regard (Wilson 1999:251-252). According to Potnis (2015:94) Wilson's (1999:251) model serves as a milestone in shaping the IB research. He further points out that the model steers the direction of IB research from system-centric" to "person-centric". This is by proposing ISB as a new lens in combination with information use to study the dynamic process experienced by users for satisfying information needs (Potnis 2015:94). However, Potnis notes that as researchers from diverse disciplines employ the model as a basis for solving problems of IB, the model is likely to evolve in the future.

2.3.2   Wilson's (1999:252) model of information-seeking behaviour

Wilson's (1999:252) model of ISB is a simplified version of his second model that was developed in 1981 (Wilson 1999:252). The model is shown in figure 2.2.
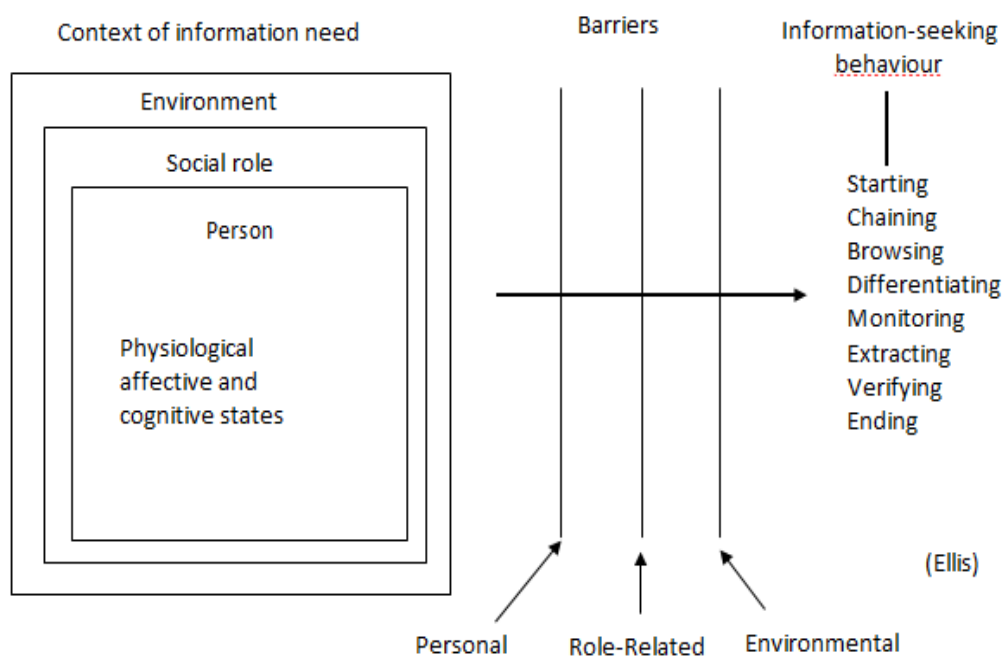
Figure 2.2: Wilson's (1999:252) model of information-seeking behaviour
(Source: Wilson 1999:252)

Wilson's (1999:252) model of ISB suggests that information need is a secondary need that arises out of primary needs. The primary needs categorised into three. These are affective, physiological and cognitive needs. Examples of affective needs are the

needs for attainment or domination, while physiological needs are the needs for shelter, water and food, and cognitive needs are the need to learn a skill or the need to plan. The model shows the relationship between the three categories of needs. Thus, the context of any of these needs may be the individual, the task that the individual performs or the environment within which the individual performs the task. Additionally, in a bid to engage in ISB that would fulfill a need, the individual may encounter different barriers that may hinder the ISB. These barriers usually come out of the same category of contexts (Wilson 1999:252).

2.3.2.1 Strengths and flaws of Wilson's (1999:252) model of information-seeking behaviour

Wilson's (1999:252) model of ISB suggests how information needs start, and what may aid or prevent the actual search for information. Besides, the model discloses the inter-related disposition of theory in the field of information science. The model is also hospitable to the explanations offered by other researchers. Furthermore, the model may be explained as a universal model, and indirectly embodies some testable IB hypotheses. However, the testable hypotheses are implicit rather than explicit. Also, there is nothing to indicate the processes whereby context affects the individual with an information need. Moreover, there is no indication that the different barriers have different or similar effects towards the individual's motivation to seek information (Wilson 1999:252-253).

2.3.3 Guidelines for selection of a suitable theoretical framework

Grant and Osanloo (2014:19, 23-24) highlight the guidelines for selecting the most appropriate and best-suited theoretical framework for thesis/dissertation research. According to Grant and Osanloo (2014:19, 23-24) for a researcher to select the most appropriate theoretical framework, the researcher should:

- Identify his/her beliefs or worldviews.
- Consider several theories that intersect well with his/her epistemological values.
- Develop a working knowledge of theories and an understanding of the importance of each theory to his/her study.

- Conduct a review of the literature to obtain authentication for the theory s/he intends to select.

- Consult the Proquest theses/dissertations database to review how other researchers have applied the precise theory s/he is considering.

- Consider arguments that oppose his/her theory and beliefs.

- Apply answers to "how" the theory relates to his/her problem, the research purpose, significance and also design.

- Investigate the discipline that the theory will apply.

- Verify the suitability of the theory with his/her methodological plan.

- Verify how the study's problem, purpose and significance perfectly align with the theoretical framework.

- Verify if the theory can be used with his/her research questions or if the research questions need modifying to incorporate and reflect the theory.

- Find out how the theoretical framework informs his/her literature review.

- Find out if the data analysis plan utilise codes established based on the theoretical framework s/he intends to select, or if the plan gives room to the development of codes related to an entirely new and evolving theoretical framework.

- Ensure that the theoretical framework s/he intends to select under-grids his/her implications, conclusions and recommendations.

- Select a theoretical framework that provides a solid, descriptive "blueprint" for his/her reader (Grant & Osanloo 2014:19, 23-24).

By applying most of the guidelines highlighted above, Wilson's (1999:251) model of IB, and Wilson's (1999:252) model of ISB were adopted as the theoretical framework of this study. These models because of the following major reasons were adopted:

i.   The models provide a solid, descriptive "blueprint" for the study.

ii.   The present study is in the area of ISB and information science. The models are also in the areas of ISB and information science. Therefore, the models and the topic align in terms of the domain of study.

iii.   The problem, purpose and significance of the study align with the models.

iv.   The models can be used with the inquiry's objectives and research questions.

v. The models are suitable for the methodological plan of the study. This is going to be further discussed in chapter four of this project. Chapter four of the stduy comprises the research methodology.

vi. The models intersect well with the present study's epistemological values. This will also be discussed fully in chapter four of this project.

2.3.4 Utilisation of Wilson's models in literature

Savolainen (2021:1) points out that Wilson's pioneering models for IB and ISB have made classic contributions in the domain of information science. Yaminfirooz, Nooshinfard and Siamian (2012:567) also point out that Wilson's ISB model has formed a foundation for other ensuing related models.

In literature some studies were found that adopted Wilson's (1999:251) model and Wilson's (1999:252) model as their theoretical framework. A study that adopted Wilson's (1999:251) model of IB is the study undertaken by Makinde (2018). The study was a doctoral thesis on the information needs and ISB of researchers in a research organisation in Nigeria. Makinde (2018:114) explains that the model allowed the study's objectives and the research questions to be successfully resolved (Makinde 2018:114). A similar doctoral study was carried out by Mathabela (2018). The study was on the ISB of lawyers in private practice in Swaziland. Wilson's (1999:251) model of IB has also been adopted as the theoretical framework. This model was adopted because it proposes the commencement of information needs. It also incorporates information utilisation and transfers, a fundamental aspect of the study (Mathabela 2018:43). Majyambere (2015) also conducted a doctoral study on the ISB of transnational humanities postgraduates in some South African municipal universities. The study also adopted Wilson's (1999:251) model of IB as its theoretical framework. This model has been chosen because information need, information-seeking, and information exchange were integrated and were found relevant to the study. Also, the model provides an understanding of human behaviour, including transnational students (Majyambere 2015:43-44).

A study that adopted the first version of Wilson's (1999:252) ISB model was the study conducted by Fitzgerald (2017). The study was a doctoral thesis on the information-seeking endeavours of intellectuals in the discipline of higher education at a university

in the USA. The reason for adopting this model is that the model comprises information needs and barriers to the quest for information, found relevant to the study (Fitzgerald 2017:25-26). Nel (2015) conducted a master's study on the information needs and ISB of veterinary science researchers at a university in South Africa. The first version of Wilson's (1999:252) ISB model was also adopted as the theoretical framework alongside other models. The rationale behind the adoption of the model was that the model acknowledges the influence of the environment as well as work roles on a person's ISB (Nel 2015:40). Thus, the research works that were discussed above are all in the subject area of ISB. Hence, they are related to the present study and were also used as guides for the selection of Wilson's models as the theoretical framework for this study.

2.3.5 Conceptual framework

Grant and Osanloo (2014:16-17) explain that a conceptual framework is an outline or structure that shows the relationship between different variables in a research work. Similarly, Miles, Huberman and Saldaña (2014:37) describe a conceptual framework as a graphical or narrative explanation of the significant things to be examined in a research work such as constructs, variables or key factors, and the relationship among them.

According to Kumar (2005:37), a conceptual framework comes from a theoretical framework and usually focuses on one aspect of the theoretical framework which forms the basis of a study. Ngulube, Mathipa and Gumbo (2015:50) also explain that there may be numerous theories associated to a concept or construct, but a researcher may be concerned with testing some aspects of the theories, and this becomes the conceptual framework of a given study.

The present study has eight objectives and eight research questions. Wilson's (1999:251) IB model aligns with all the objectives and research questions except the last. This is because the aspect of barriers to an individual's information-seeking and utilisation has not been incorporated into the model. However, that aspect was incorporated in Wilson's (1999:252) ISB model. Therefore, Wilson's (1999:251) IB model was adopted fully as the theoretical framework for the study, while the aspect of barriers to an individual's quest for information in his (1999:252) ISB model was

adopted and incorporated into his (1999:251) IB model to form the conceptual framework for the study. Figure 2.3 exhibits the conceptual framework.
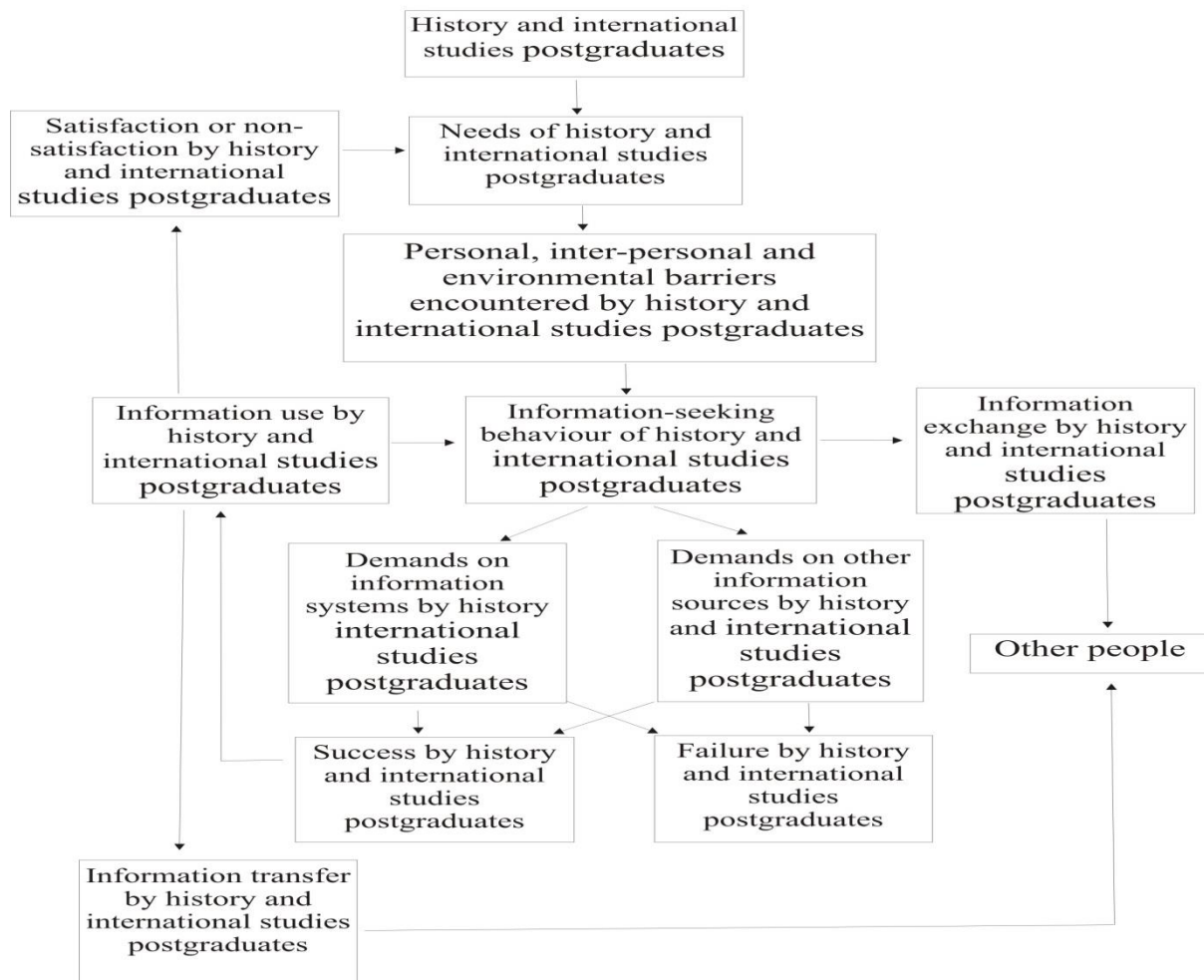
Figure 2.3: Conceptual framework: Adapted from Wilson's (1999:251)
model of Information Behaviour and Wilson's (1999:252)
model of Information-Seeking Behaviour

The conceptual framework proposes that ISB arises from the perceived needs of history and international studies postgraduates, who are information users. However, for them to engage in ISB, they are likely to encounter certain barriers. These barriers may be personal, task-related or environmental. The model also proposes that ISB may take numerous forms. For instance, the postgraduates with the needs may seek information from formal systems such as academic hybrid libraries or from informal systems such as business centres. Alternatively, the postgraduates may decide to

seek information from other individuals rather than systems through an exchange. The search may result in failure or success in discovering the appropriate information. If the search is successful, the postgraduates then utilise the information found. The information found may satisfy their perceived needs or may fail to satisfy their needs. In either case, the information may be transferred to other individuals by the history and international studies postgraduates.

2.4   CHAPTER SUMMARY

This chapter discusses the theoretical and conceptual frameworks of this study. The chapter commenced with a brief introduction, followed by the conceptualisation of the terms "information", "information need", "information sources", "information-seeking", "information use", "information exchange", "information transfer", "barriers to information-seeking and utilisation", and "information-seeking behaviour". After the conceptualisation, Wilson's (1999:251) IB model and Wilson's (1999:252) ISB model were discussed at length, including their strengths and flaws. The guidelines were discussed for selecting an appropriate theoretical framework for a study. Subsequently, Wilson's (1999:251) IB model and Wilson's (1999:252) ISB model were selected as the study's theoretical framework. Some related research works that adopted these models and their reasons for adopting them were examined. Finally, a conceptual framework for the ISB of history and international studies postgraduates was derived from the theoretical framework. In the chapter, diagrammatical representations of the models and the conceptual framework were shown in figure 2.1, 2.2, and 2.3 respectively.

CHAPTER THREE

LITERATURE REVIEW

3.1   INTRODUCTION

It is expedient for researchers to review related literature during a research process. This is because the literature review makes an important input to every operational phase of the research process. Therefore, it forms an essential part of the research process (Kumar 2011:46). Conducting a literature review rests on the notion that knowledge builds up and that researchers can gain knowledge from other researchers and also build on what other researchers have done. The review also rests on the belief that scientific research is a mutual effort which many researchers contribute and share results (Neuman 2014:126).

A literature review serves many important functions to researchers and their readers. To researchers, a literature review brings focus and clarity to their various research problems. Since through the review, the researchers comprehend their subject areas better and conceptualise their research problems precisely and more clearly (Kumar 2011:47). Leedy and Ormrod (2015:70) explain that a review of literature can show researchers how other researchers have overseen methodological and design issues in research works that are similar to their own. Kumar (2011:47) also explain that a literature review reveals the problems other researchers might have encountered with the methodologies they selected. He further explains that by becoming aware of any drawbacks or pitfalls, researchers are well-equipped to choose methodologies that can provide logical answers to their research questions. This will increase their confidence in the various methodologies they plan to utilise and will equip them to defend their utilisation (Kumar 2011:47). To the research readers, the review informs them about the key issues in the research. It also increases their confidence in the researchers' specialised background and capability (Neuman 2014:126).

A well-conducted review should specify whether the preliminary research questions were addressed in the literature, which would avert the need to repeat the research. The review should also specify whether there are new research questions or whether the original research questions should be revised (Bhattacherjee 2012:21). The higher the academic level of a researcher, the more significantly a complete integration of

results with existing literature becomes (Kumar 2011:46). According to Leedy and Ormrod (2015:78, 85) preparing a review of literature involves the following basic steps:

i. Write the research problem and also the sub-problems.

ii. Identify the essential phrases and words in each of the sub-problems.

iii. Change the phrases and words into precise themes that require further learning. These themes become the focus of the review.

iv. Go to the library catalogue, its online database and the Internet to seek out resources related to the focus of the review.

v. Ascertain common themes that frequently occur in the literature.

vi. Demonstrate how methodologies to the topic have changed with time.

vii. Compare and contrast different theoretical viewpoints on the topic.

viii. Illustrate common trends in research outcomes.

ix. Ascertain contradictory results and propose reasons for such contradictions (Leedy & Ormrod 2015:78, 85).

A review of literature that is conducted by following the above-mentioned steps by a researcher indicates that the researcher has contributed something new to knowledge in the area of study even before conducting the research (Leedy & Ormrod 2015:85). The review of literature should be concluded by writing a summary of the main themes and propose how the research would address a disparity or gap in the themes, and how the research would further contribute to the literature (Boote & Beile 2005:3). The review of literature for the present study was conducted based on most of the steps that were highlighted above.

This study is on the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. The study consists of eight objectives. The objectives are to:

1. Investigate the information needs of the history and international studies postgraduates in the academic hybrid library.

2. Find out ways through which their information needs are being satisfied in the hybrid library.

3. Find out the means through which the postgraduates' use the library ICT facilities to access information in the library.

4. Investigate the use of the hybrid library as a formal information source by the postgraduates, and find out other formal and informal information sources usually consulted by the postgraduates.

5. Investigate the roles of information exchange in the information-seeking activities of the postgraduates in the hybrid library and in other sources.

6. Investigate the roles of information transfer in the information-seeking activities of the postgraduates in the hybrid library and in other sources.

7. Find out the factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities in the hybrid library and in other sources.

8. Find out barriers to the postgraduates' information-seeking and utilisation of information in the hybrid library and in other sources.

The logical development of a review should be determined by the specific purpose of a study or by the research questions or hypothesis (University of South Africa. Department of Information Science 2019:55). For this study, the research objectives were used to logically develop the review of literature under the following broad sections and sub-sections:

- o **Information need**
  - i. Factors affecting information need
  - ii. Categories of information need
  - iii. Purposes of seeking information to satisfy a need
- o **Ways of satisfying information need**
  - i. Means of satisfying
- o **Means of using library ICT facilities to access information in the library**
  - i. Utilisation of computers
  - ii. Utilisation of the Internet
- o **Utilisation of library as a formal information source**
  - ▪ Perception of the library
  - ▪ Frequency of library use
  - ▪ Accessibility of the library

- - Purposes of visiting the library
  - Roles of librarians
  - Utilisation of library information resources
  - Utilisation of print resources
  - Utilisation of digital resources
    - Utilisation of electronic books
    - Utilisation of library databases
    - Utilisation of Institutional Repository
  - Utilisation of hybrid collection
  - Preferred format
  - Utilisation of other formal sources
  - Utilisation of informal sources
  - Information source preference
  - **Roles of information exchange**
    i. Purposes of exchanging information
    ii. Factors affecting information exchange
  - **Roles of information transfer**
  - **Perceived information needs satisfaction and end of information-seeking**
  - **Barriers to information-seeking and utilisation of information**
    1. Types of information barrier
    ii. Factors that minimise barrier to information
  - **Appraisal of literature**
  - **Chapter summary**

3.2 INFORMATION NEED

Information needs studies have developed extensively (Naumer & Fisher 2017:2453). As explained by Naumer and Fisher (2017:2453-2454), in the USA, the 1960s and 1970s were an era of research focused on community and social issues. During that period, numerous major large-scale research works were conducted. These public library-oriented research works sought to recognise the information needs of vast population. Also, during that period, there was a commencement of a new conceptualisation of information need. This was the user-centered conceptualisation (Naumer & Fisher 2017:2453-2454).

In the conceptual framework of this study, it proposed that "ISB" arises from postgraduates' perceived "needs". Therefore, based on the framework, postgraduates' "information needs" initiate "ISB". Aina (2004:67) points out that the information needs of professionals, pupils, specialists and students focused on information that will support their professional developments, teaching and learning. He explains that the services to be provided by the library for these categories of library clientele must include all kinds of resources that will further their professional, educational, and career progression. He further explains that in addition to this crucial need, they also need all-purpose information for meeting their daily activities as well as information for recreation. Linsha and Bavakutty (2017:71) state that researchers need numerous types of information resources. They also state that university libraries provide the needed information resources to the research communities.

Collins and Jubb (2012:176) point out that researchers operate within a complicated information setting or environment, with needs that they might not always fully comprehend, and are reliant on modifying services and affected by much broader social trends. Nevertheless, Nicholas (2019:6) argues that the key to understanding the information needs of researchers lies in understanding the nature of the problems that makes the researchers to seek the needed information. Naumer and Fisher (2017:2453) also argue that to comprehend information need, it is often essential to comprehend the context of human needs that generate a need for information, and this approach entails an extensive comprehension of an individual's situation.

3.2.1 Factors affecting information need

Kaniki (2003:8) argues that information needs among individuals will differ due to several factors such as educational level, geographic location, economic status, disposal to and awareness of information systems and information services. Kaniki (2003:8-9) further argues that the degree or level of need for information will therefore differ from one individual to another and from time to time. Leckie, Pettigrew and Sylvain (1996:183) submit that research works on the information-seeking of professionals show that the nature of a particular profession and factors such as career stage, age, geographic location and area of specialisation can influence the preparation of the information need.

Auckland (2012:13) asserts that from the literature, it is evident that researchers are not a uniform group and their activities, approaches to research, discourse, and information needs vary, in relation to their subject and/or discipline and its custom and culture, and their career stage. Abduldayan, Dang, Karemani and Obadia (2016:158) also mention that every researcher's need differ in relation to the specific area of interest. Kennedy, Cole and Carter (1999:272) assert that information needs are not absolute but situational, and information needs change during the task performance of a user. Nevertheless, Cole (2011:1229) argues that users' information needs do not change during task performance, instead, the information needs reveal themselves to the users differently. This is because there are phases to the task performance of users but there are no phases to their underlying information needs (Cole 2011:1229). Byström and Järvelin (1995:26) undertook a project to determine the relationship between task complexity, information-seeking and information utilisation. The project was conducted in Finland. In the project's finding, it was made known that as task complexity increases, the participants' information needs become more complicated.

3.2.2 Categories of information need

Wilson (1997:553) points out that information need have different categorisations. Using a framework known as the "Johari window framework" to classify information needs, Shenton (2007:487) categorises information needs into five. These are:

1. Information needs that are known only to the information user.
2. Information needs known to both the user and the information specialist.
3. Information needs known to the user but not known to the specialist.
4. Information needs known to the specialist but not known to the user.
5. Information needs known to either the user or the specialist (Shenton 2007:487).

Devadason and Lingan (1996) categorise information needs into three. These are:

i.   Expressed or articulated needs that a user is aware of.
ii.   Needs which the user is aware of but does not like to express.
iii.   Delitescent or dormant need which the user is unaware of (Devadason & Lingan 1996).

Borlund and Pharo (2019) carried out a study to investigate the day-to-day information needs of some students and educators in Denmark. The result of the investigation showed that the participants' information needs belong to three categories. The categories are studies, work and personal interest. A similar result was achieved in a study conducted by Mwangi (2018:33). The study was on the information needs and ISB of postgraduates at a university in Kenya. It was communicated in the result that the majority (80%) of the participants had academic information needs, while few (20%) of the participants had personal information needs. The study undertaken by Kehinde, Obi, Akinade and Anyim (2016:17) also reported a similar result. The study was also on the information needs and ISB of some master's students at a university in Nigeria. In the result of the study, most participants acknowledged that they needed information on their academic activities, entertainment, job updates and political issues. In the research work performed by Majyambere (2015:205, 218), it reported that the participants had academic and personal information needs. Regarding the participant's academic information needs, most participants indicated that they needed information for their research works. As further reported in the result, all (100%) of the participants indicated that the library resources were the primary resources that they were consulting to fulfill their information needs.

3.2.3 Purposes of seeking information to satisfy a need

According to Sundin and Johannisson (2005:109) the purpose of seeking information is an expression of an individual's need for information. This regularly includes the individual's explicitly asserted wishes and those desires that the individual possesses which are not consciously recognised (Sundin & Johannisson 2005:109). Aina (2004:66) mentions that library users utilise the library for different purposes. He further mentions that some users utilise the library for reading especially those preparing for examinations, undergoing formal education and professional development, research and related needs. Others utilise the library for entertainment and recreation, and yet a large number still use it for meeting their current awareness needs or solving personal information problems (Aina 2004:66). In the result of Borlund and Pharo's (2019) study, it is made known that the participants' information needs serve several purposes. The purposes are to:

i.   Make choices between several options.

ii.   Make decisions that influence their personal lives.

iii.   Make a life-changing decision.

iv.   Find inspiration for something they want to achieve.

v.   Find information supporting their hobbies or leisure activities.

vi.   Learn something new about a phenomenon.

vii.   Plan trips for vacations.

viii. Compare the quality or prices of items.

ix.   Purchase something.

x.   Let time pass by.

xi.   Write a report or assignment (Borlund & Pharo 2019).

Ibrahim and Perumal (2018:1-3) explored the information needs and ISB of foreign students at a university in India. The research findings showed that the participants were seeking information from their academic library for writing assignments, updating their knowledge, and conducting their research activities. Kehinde *et al.* (2016:18) also reported on the purposes of seeking information by their participants. As reported in their study, most participants acknowledged that they were seeking information from their institution's library for reading, conducting their research activities and for self-development.

3.3   WAYS OF SATISFYING INFORMATION NEEDS

Harbo and Hansen (2012:367) mention that it is an expensive venture to offer services that are of no need to users. This statement implies that it is irrational to procure what users do not need in a library. They also suggest that there is a constant need for academic libraries to improve their services because of the substantial amount of resources spent on the services and also because of the need to guarantee the worth of money.

3.3.1 Means of satisfying

Nowadays, there are many ways academic libraries can use to satisfy the information needs of their users. Citing literature, Yi (2016:2) highlights some ways that can be used by academic libraries to promote their resources and services towards information needs satisfaction. They include the use of digital media such as a library's

website, blogs and podcasts, e-mail lists, posters, workshops and orientation tours, and library publications.

3.4   MEANS OF USING LIBRARY ICT FACILITIES TO ACCESS INFORMATION

Thomas and Amaechi (2015:136) mention that the influence of ICT on learning and educational undertakings globally is pronounced, especially in the dependence on ICT facilities to improve the expected amendment in learning and teaching. Brockman, Neumann, Palmer and Tidline (2001:31) examined how humanities scholars accomplish and organise their research, and incorporate technology into their research work. The location of the study was in the USA. The result of the study disclosed that technology had improved the participant's scholarships in various ways. As reported in the study, information-searching became easier and faster among the participants through the utilisation of technology. It reported that through technology, the participants could work with, and consult more resources and better verify claims and ideas (Brockman *et al.* 2001:31). Ankamah, Akussah and Adams (2018:1) examined the perception of postgraduates towards utilisation of ICT in selected universities in Ghana. In the result obtained, it revealed that most of the participants had a positive perception towards the utilisation of ICT in their research processes. As further revealed in the result, most participants acknowledged that the ICT facilities their institutions provided for their utilisation were meeting their research needs. It revealed that the participants perceived the utilisation of ICT in their research processes as beneficial, due to the ability to access information quickly and conveniently. As further revealed in the result, the participants acknowledged that using ICT saved their time and provided them with current information.

3.4.1   Utilisation of computers

Shuster and Pearl (2011:137) point out that higher education inseparably links to the utilisation of computers due to the vast amount of information available through technology. This statement implies that modern university scholars require using computers in their scholarly activities. Kwafoa, Anhwere and Manu (2019:7) explored the utilisation of digital resources by postgraduates at a university in Ghana. In the result, it was disclosed that most participants were utilising ICT devices such as laptops, IPads, desktop computers and mobile phones for their research activities.

3.4.2 Utilisation of the Internet

Singh (2001:17) points out that the term "internet" was coined out from the concept of "inter-networking", which denotes the interaction between computer networks. Singh (2001:18) mentions that in recent times, the Internet has become an integral part of the library environment and has added an enormous value to library services.

3.5   UTILISATION OF LIBRARY AS A FORMAL INFORMATION SOURCE

At a point in time, individuals view libraries as a depository of ideas, community centre, source of answers to factual questions, tool for life-long learning, place to obtain new skills and/or a place of sheer enjoyment and pleasure (IFLA 2003:2). Aina (2004:67) notes that people typically seek information from libraries when they require complex information. Kaye (1995:16) defines formal sources as sources organised in some standardised manner and are often impersonal to the user. While informal sources are sources not organised formally and are often personal to the user (Kaye 1995:16). Libraries, electronic information services, government departments and agencies, and radio and television companies are some examples of formal sources (Kaye 1995:18). Information that is being received through personal advisers, professional associates, social and family contacts and through colleagues are some examples of informal sources (Kaye 1995:18).

3.5.1 Perception of the library

Malatji (2017) conducted a study on the perception of students about the role of the library in their scholarly activities. The study's location was at a university in South Africa. In the result obtained, it disclosed that the participants had a positive perception of the library. It was also disclosed that the participants perceived their institution's library as user-friendly. Hart and Kleinveldt (2011:45-46) conducted a similar study at a university in South Africa. In the result obtained, it reported that most participants rated their academic library highly. Nevertheless, it reported that one participant rated the library poorly.

3.5.2 Frequency of library use

In the research work performed by Catalano (2013:243), it reported that postgraduates usually utilise libraries in diverse ways depending on their academic disciplines. Gyesi (2016:3, 12, 16) conducted a study on the ISB of postgraduates at a university in Ghana. In the finding of the study, 41(35.7%) of the participants indicated that they were utilising their institution's library regularly. Similar findings reported in the studies carried out by Das and Achary (2014:560), and Delgadillo and Lynch (1999:245, 250-252). Das and Achary examined the ISB of research scholars at a university in India. In the result of the study, it disclosed that the majority of the participants were also utilising their institution's library. Delgadillo and Lynch (1999:245, 250-252) equally examined postgraduates ISB in the USA. In the result obtained, the majority of participants indicated that they were also utilising their institution's library regularly. The participants mentioned reference and special collections units as the units they often visited in the library. However, a contrary finding was reported in the study by Makinde (2018:179-180, 205). In the finding obtained, it reported that the participants were not fully utilising their institution's library because the resources were not current and there was no internet facility in the library. A contrary finding was also reported in the research work that was conducted by Brown and Swan (2007:6, 23). The research work was on the utilisation of academic libraries by researchers, and the location was in the United Kingdom (UK). In the result found, it reported that there was a drastic decline within the past five years in the number of researchers that visited their institutions' libraries. The decline ascribed to the fact that the researchers preferred to access digital resources via their computers and from their homes and offices rather than visiting the library physically (Brown & Swan 2007:6, 23).

3.5.3 Accessibility of the library

Academic libraries are usually located within the campuses of their institutions. In the study conducted by Adeyemi and Oluwabiyi (2013:253), the majority (76.7%) of the participants acknowledged that their institution's library was well-situated and easily accessible to them. Relatedly, in the study conducted by Brown and Swan (2007:26), almost half (46%) of the participants indicated that it was "very vital" for their institutions' libraries to be in a suitable location.

3.5.4 Purposes of visiting the library

Lal (2014:53-54) examined the ISB of postgraduates at a university in India. In the result found, the majority 62 (62%) of the participants indicated that they were utilising the library to borrow books. Meanwhile, 28 (28%) of the participants indicated that they were utilising the library to read books. In the result obtained, the frequency of library use by the participants is also reported. As reported in the result, more than half 55 (55%) of the participants indicated that they were utilising the library daily. However, as reported in the result, only 13 (13%) participants indicated that they were utilising the library once a week. In another related study, Ismaila (2019:6) explored the ISB of postgraduates at a university in Nigeria. As revealed in the result obtained, about one quarter (34.1%) of the participants indicated that they were utilising the library to prepare for their examination. However, a few (11.7%) participants indicated that they were utilising the library to carry out their research activities. With respect to the frequency of utilising the library by the participants, more than half (58.3%) of the participants indicated that they were utilising the library daily, while few (20.3%) participants indicated that they were utilising the library alternatingly. A similar result was communicated in the study conducted by Malatji (2017). In the result obtained, it communicated that the participants were utilising their institution's library mainly for borrowing books, reading and accessing the Internet.

3.5.5 Roles of librarians

Alsop and Bordonaro (2007:1) assert that librarians in academic libraries provide numerous services to their patrons. Some services include guiding staff and students at the reference desk, teaching library research sessions and developing library collections (Alsop & Bordonaro 2007:1). Ducas, Michaud-Oystryk and Speare (2020:43) note that librarians' roles have naturally evolved. Ducas *et al.* (2020:43) point out that modern academic librarians perform different roles for their patrons such as research support, data management, bibliometrics, digital initiatives, scholarly communication and user experience.

Madden (2013:280-282) examined the IB of doctoral students in the humanities at a university in Ireland. In the result obtained, 09 of the participants mentioned library staff among the individuals they believed might offer them some assistance during

their literature search procedure. The assistance postgraduates receive from librarians also reported in the study conducted by George *et al.* (2006:10). As reported in the study, 40% of the participants acknowledged that they usually consult their librarians during their information-seeking activities. In Nel's (2015) study, it was reported that there was a substantial gap between researchers' expectations from librarians, and the librarians' perceptions of roles to fulfil. Relatedly, in the study conducted by Majyambere (2015:224), it was reported that some of the participants described their subject librarians as "very helpful" or "somewhat helpful". However, it reported that few participants described their librarians as "unhelpful".

Nann (2010:21) observes that many librarians are experiencing a decline in the number of reference queries asked by their clienteles. Based on that, Nann (2010:22) suggests that librarians need to connect with students (through a personal librarian program) who are absent from the library, who may be reluctant to be seen asking for assistance, or who may be ill-informed of librarians' roles towards them. Meals (2022:1) describes a personal librarian program as a practical form of academic librarianship that demonstrates the advancement of library services away from the physical space. As further explained by Meals, a personal librarian program entails librarians communicating with, and acting as primary contacts for the library, for a particular student population. This is done to improve students' understanding and ease with academic libraries, relationship with librarians, research skills and academic skills (Meals 2022:1). Personal librarians can render the following services to students:

i. Answer any query about the library.
ii. Discover peer-reviewed articles or any other library material for a project.
iii. Locate and utilise style manuals or even manage citations.
iv. Conduct appraisal of literature, manage data, find grants, calculate bibliometrics, identify predatory publishers and answer questions about copy right issues (Texas Tech University Libraries 2022; University of South Africa. Library n.d).

From the roles of librarians mentioned by Alsop and Bordonaro (2007:1) and Ducas *et al.* (2020:43), it could be deduced that librarians usually interact with their patrons in various ways. It could also be deduced that some of the interaction may involve information exchange and/or transfer.

3.5.6 Utilisation of library information resources

Savolainen (2009:1) asserts that although information use is ever-present in every day contexts, information scientists have dedicated inadequate attention to it. Cole (2008:1) also asserts that the broadest possible reason people utilise information is with regards to species survival. This assertion implies that the phenomenon of information use is a phenomenon that concerns the survival of the human species. Julien (2019) states that information is usually used in different ways by diverse individuals and groups. Julien also states that an individual may utilise the same information in more than one way, depending on the circumstance that the individual finds him/herself. Westbrook (1993:546) notes that internalising information or knowledge is crucial to meaningful utilisation.

Julien (2019) explains that individuals could use information to do something tangible such as skills acquisition. Julien also explains that information could be utilised to confirm or verify something, predict what may happen or maintain relationships. Information could also be stored in the memory of an individual until such information becomes useful or beneficial to the individual in the future (Julien 2019).

Certain factors influence the utilisation of information by different individuals. These factors include the individuals' existing knowledge state, their affective state such as their moods and motivations, their scholarly abilities, their existing skills such as their level of information literacy, their physical abilities or disabilities, their peer groups, their occupation and their cultural beliefs (Julien 2019).

McCreadie and Rice (1999:46) mention that some academic disciplines understand information as a commodity or resource. In institutions of higher learning such as universities, academic libraries provide all the information resources needed for carrying out effective learning and research activities (Aina 2004:28).

Adomi (2012:10) classifies information resources into print and non-print formats. Print format is information resources that are available in hard copy, physical format or paper form, whereas non-print format is information resources that are available in the non-paper form or non-physical format (Adomi 2012:10). In academic libraries, common examples of print resources include textbooks, theses, journals, dissertations, dictionaries, magazines, encyclopedias and newspapers (Adomi

2012:10). Conversely, common examples of non-print resources include audio-visual materials, microforms, microfilms, audio tapes and videotapes (Adomi 2012:10; Wall 1985:129-130). Unlike print resources, non-print resources are only accessible using additional equipment (Wall 1985:130).

The emergence of ICT has introduced another type of non-print resources into libraries. These are the digital resources (Obaseki, Umeji & Kurbu 2010:35). Dukare (2020:46) defines digital resources as those that entail access to the computer or any electronic gadget that offers an assemblage of data. They could also be viewed as information resources that exist in soft copy or non-print form and are accessible through computers and other related ICT facilities (Obaseki *et al.* 2010:35). The term "digital resources" is often used interchangeably with the terms "electronic resources", "digital materials", and "soft library resources" (Edem & Egbe 2016:61). Resources such as books, dictionaries, conference proceedings, government publications, journals, encyclopedias, maps, monographs, photographs, magazines and newspapers that exist in digital form or soft copy are typical examples of digital resources (Dukare 2020:46; Nwabueze & Urhiewhu 2015:2; Obaseki *et al.* 2010:35).

The advent of computers in the 1950s ushered in the creation of data in digital or electronic format (Parashar & Babel 2022:160). Nowadays, digital resources are recognised as primary sources for disseminating information in universities, especially for scholars or researchers (Edem & Egbe 2016:60). More so, in modern times, library users expect to access digital information resources as well as print resources (Spasser 2006:92).

In 2020, the Society of College, National and University Libraries (SCONUL) published an article. In the publication, it reported that emerging evidence from the UK proposes that universities which involved students to utilise library resources will get rewarded with greater academic results among those students. The publication also reported that comparative research in the USA and South Africa has provided related results (SCONUL 2020). Dube (2011:28) submits that academic libraries require expertise in the selection, acquisition and processing of resources in order to provide access to their hybrid collections. According to Dube the appropriate resources and services a library is supposed to offer its users should possess the following attributes:

i.   Convenient access: this attribute implies that the resources and services should be easily accessible to users.

ii.   Relevance: this attribute implies that the resources and services should be significant to the user's needs.

iii. Usability: this attribute implies that users should be able to utilise the resources and services effectively for their academic activities.

iv.   Currency: this attribute implies that the library resources should be built gradually by acquiring up-to-date resources to add to the existing ones. The services offered should be state-of-the art services to meet standard practices in the world.

v.   Comprehensiveness: this attribute implies that the resources and services offered should be exhaustive enough to fulfill user's needs and achieve a high academic standard.

vi.   Collection preservation: this implies that the library should have laid down policies to safeguard against theft, mutilation, loss and destruction of the resources (Dube 2011:29).

3.5.6.1   Utilisation of print resources

Before the advent of the digital format of resources in the early 1990s, the print format of resources was the most popular format of resources available for utilisation by researchers (Brown & Swan 2007:28). According to Wu (2005:235), the print format will remain in the collections of libraries for a long time, because the invention of a new media does not automatically nullify the former ones. Wu also explains that print is a time-tested or time-verified format that continues to accomplish promises that technology cannot yet accomplish. He further explains that despite the remarkable advances in digitisation technologies and electronic publishing, the mainstream of the world's published resources continue to be in print format only.

Rowlands, Nicholas, Jamali and Huntington (2007:16) examined the perception of lecturers and students about e-books at a university in the UK. The result of the study disclosed that more than one-third (38.3%) of the participants were regularly utilising their library's print format of resources. A more recent and related study undertaken by Yamson, Appiah and Tsegah (2018:299-300) at a university in Ghana, also

disclosed that the majority (49.9%) of the participants were still utilising print resources.

There are certain benefits that scholars derive from the utilisation of print format of resources. Pálsdóttir (2019) examined students' opinions of the benefits and drawbacks of print and digital resources at two universities in Iceland. In the research findings, it was reported that the ability to concentrate more when reading, the ability to remember what is read and the ability to read lengthy texts were among the benefits that students were deriving from the utilisation of print format of resources.

3.5.6.2   Utilisation of digital resources

Brown and Swan (2007:28) point out that the widespread availability of digital versions of scholarly information resources is a recent phenomenon. They also point out that nowadays, many libraries are adapting their policies to focus more on digital access to such resources. Rasul and Singh (2010:76) also note that in recent times, researchers have been more self-assured in accessing digital resources. Similarly, Ani, Ngulube and Onyancha (2014:167) point out that accessibility and utilisation of digital resources are fast becoming a standard employed for the conduct of research in universities all over the world.

Nwachukwu and Faga (2017:12983) examined the availability and utilisation of library digital resources by postgraduates at a university in Nigeria. The finding obtained disclosed that the majority of the participants were highly aware of the available digital resources in their institution's library. The findings also disclosed that participants utilised digital resources to a great extent.

3.5.6.2.1   Utilisation of e-books

Hernon, Hopper, Leach, Saunders and Zhang (2007:3) view e-books as contents made up of texts with a clear scope. Mulholland and Bates (2014:493) describe e-books as digitised forms of paper-based books, or born-digital resources conveyed on various electronic platforms ranging from personal computers to mobile devices.

Al Saadi, Lane-Kelso, Al Hafeedh, Al Sheithani and Al Wishahi (2017:11) note that in recent times, e-books have gained quick acceptance globally among institutions of higher learning as the preferred format for text resources. Abdullah and Gibbs

(2008:593) investigated students' attitude towards e-books at a higher institution in Scotland. The result of the investigation disclosed that 57% of the participants were unaware of the availability of e-books in their institution's library. Further result also disclosed that 60% of the participants indicated they had not used library e-books. In a more recent inquiry, Casselden and Pears (2019:607-608) examined e-books utilisation by students in two universities in the UK. The findings of the study revealed that the majority (71%) of the participants were utilising the library e-books. It was further revealed that half (50%) of the participants who were utilising the e-books believed that e-books are crucial for reading about their subject areas. Likewise, Ojulong (2018:39-42) investigated the utilisation of library e-books by postgraduates at a university in Uganda. In the result obtained, it disclosed that participants were regularly utilising the library e-books because of the need to access recent information and the ease of access.

The devices employed by students to access e-books have been reported in the study undertaken by Bozkurt, Okur and Karadeniz (2016:668). The study was on using e-books by postgraduates at a university in Turkey. In the study, it reported that laptops, smart phones, desktops and dedicated e-book reader were the most common devices the students used to access e-books.

In the study undertaken by Bozkurt *et al.* (2016:668-670), the participants reported the benefits derived from the utilisation of e-books. Some of the benefits mentioned are the ability to easily access e-books, portable features of e-books, the ability to download full-texts of some e-books and the ability to copy and paste texts in some e-books.

3.5.6.2.2   Utilisation of databases

Databases are collections of information specially organised for quick search and speedy retrieval by a computer (Encyclopedia Britannica n.d). Resources in databases are either created originally or generated from various reliable sources (Berkeley College Library 2018). Databases usually cover diverse topics ranging from medicine, law, engineering, news and current events, classified advertisements, games and instructional courses (Encyclopedia Britannica n.d). There are different sizes of databases. Large databases are typically maintained by government agencies,

universities and business organisations. These large databases may contain texts of resources such as abstracts, legal statutes, reports, newspapers and journals, catalogues and encyclopedias (Encyclopedia Britannica n.d).

Tiemo (2017:46) points out that databases are among the recent technological innovations in libraries. Correspondingly, Harazeem, Mshelia and Bello (2019:16) mention that databases have become major elements of library collections around the globe. Zhang, Ye, Liu and Rao (2011:828) highlight some advantages that databases offer to libraries. The advantages include requirements of less physical storage spaces, features of large virtual information storing capacities, strong sharing ability and great potential for collection expansion. According to Tiemo (2017:46) databases are important resources for learning, research and teaching because they usually provide current information resources to scholars.

In a publication by Nwankwo, Chukwu, Igbokwe and Agbanu (2019:188), it reported that awareness of library resources usually facilitates the utilisation of the resources. This report implies that the higher the awareness level of library resources among users, the higher the level of utilisation of the resources among the users and vice-versa. Janaki and Mohamed (2007:257, 263) examined the utilisation of databases by postgraduates at a university library in Malaysia. In the result of the study, it disclosed that databases were among the popular online resources that the university library provided access to. It was further disclosed that the university library sensitised the postgraduates about the databases resulting in high usage among them. Similar findings were reported in the study conducted by Tiemo (2017:46) in some selected universities in Nigeria. In the study's findings, it reported that the level of utilisation of databases was high among the participants. Similar findings also reported in the studies carried out by Delaney and Bates (2018), and Majyambere (2015:273).

Okunoye (2020:257) explored postgraduates' awareness, attitude and utilisation of databases in two academic libraries in Nigeria. In the finding obtained, it revealed that the awareness level among the participants was low. It also revealed that the level of usage was equally low. However, it revealed that the participants had a positive attitude towards the databases. In another related work, Tanackovic, Ivanovic and Cupar (2016:1) examined the utilisation of databases by students at a university in Croatia. In the result obtained, it revealed that the majority of the participants were

utilising free internet resources more than resources in the databases for their scholarly activities.

Based on subject or disciplinary field, there are different types of databases. Some subject databases are EBSCOHOST, Emerald Insight, Health Internetwork Access to Research Initiatives (HINARI), Access to Global Online Research in Agriculture (AGORA), African Journals OnLine (AJOL), PUBMED, Journal Storage (JSTOR), Science Direct and Scopus (University of Jos 2021; University of South Africa 2021). A study that discussed the types of databases used by postgraduates is a study undertaken by Mussa (2020:28-29,40). The study was on the ISB of postgraduates at a university in Mozambique. In the result obtained, it disclosed that the participants were mainly accessing resources in HINARI and PUBMED. The types of databases that postgraduates utilise are also reported in the study carried out by Adeleke and Nwalo (2017:51, 63-65). The study was on utilising digital resources by postgraduates at a university in Nigeria. The result of the study disclosed that Science Direct was the most utilised databases by the participants, followed by JSTOR, AGORA, AJOL and HINARI. In the finding of Tiemo's (2017:46) study, it reported that the participants were utilising various databases for their academic activities.

3.5.6.2.3   Utilisation of Institutional Repository

Crow (2002:2) defines Institutional Repositories (IRs) as digital collections that capture and preserve the scholarly outputs of universities. Lynch (2003:328) views IRs as services that universities offer to members of their communities, for the dissemination and management of digital resources created by the universities and their community members. According to Koutras and Bottis (2013:1499) IRs play vital roles in today's education system. Akintunde (2009:2-3) highlights four benefits that institutions derive from establishing a repository. The benefits are the following:

i.   Creation of global visibility for their scholarly research.
ii.   Collection of their research output in a distinct location.
iii.   Provision of open or unrestricted access to their research output.
iv.   Storage and preservation of their digital assets, including unpublished and/or easily lost literature (Akintunde 2009:3-4).

Shiweda (2018:138) explored the utilisation of IR by lecturers and postgraduates at a university in Namibia. In the result, it disclosed that there was a lack of awareness about IR among the participants. It further disclosed that the participants who were aware of the IR had a misconception about it. A similar result reported in the study Saulus undertook in 2017. The study was on the utilisation of IR by lecturers and postgraduates at a university in Swaziland. In the result obtained, it was reported that most of the lecturers were aware of the existence of IR, while many of the postgraduates were not. It further disclosed that most of the lecturers who were aware of the IR were not utilising it.

Some research works have shown that scholars have different perceptions about IRs. Among such studies is the study undertaken by Adedimeji and Adekoya (2019:42) at a Nigerian university. The study was on students' attitudes towards IR. The result of the study showed that the participants had a positive attitude towards utilising IR. It further showed that the extent of utilisation of the IR by the participants was high. Wangai (2018:49-50) also carried out a similar study in Kenya. Nevertheless, a divergent result was obtained in the study. In the result obtained, it was revealed that the participants had negative perception about IR. It also disclosed that their utilisation of the IR was low.

Depending on the institutions' policy, there are different types of information resources in IRs. The resources range from published materials such as books and journals, to grey literature such as preprints, working papers, theses/dissertations, technical reports and research reports, conference proceedings, surveys and statistical reports (Scholarly Publishing & Academic Resources Coalition 2002:24-26). Gohain and Angadi (2019:732) examined the utilisation of IRs by scholars in selected universities in India. In the finding, it was revealed that the resources in the IRs that were accessed by the scholars are journal articles, theses and dissertations, and conference proceedings.

3.5.6.3   Utilisation of hybrid collection

In a typical hybrid library, the balance between print and digital resources is gradually inclined towards digital resources (Breaks 2002:99). The utilisation of hybrid library resources by postgraduates will be reported in the result of the study carried out by

George *et al.* (2006:18-22). In the result that was obtained, it was disclosed that the participants were utilising both print and library digital resources. Hart and Kleinveldt (2011:37,47) also reported similar findings in their research work. As reported in the finding, more than half (65%) of the participants mentioned relying on the library for access to print and digital resources.

3.5.6.4 Preferred format

Samzugi (2019:122) investigated users' preference on utilising print and digital resources in three universities in Tanzania. In the finding that was gotten, it reported that the majority (55.4%) of the participants preferred print over digital resources. A congruent study by Mawindo (2005:59,72) was undertaken at a university in Malawi. Also, the finding of the study disclosed that the participants were making heavy use of print resources and preferred print over digital resources. In another related study undertaken by Ogunbodede, Idubor and Ivwighreghweta (2020:7-8) in Nigeria, it disclosed that some participants preferred digital resources while others had preference for print. Those who preferred digital resources mentioned portability, convenience and accessibility as reasons for their preference. Conversely, the participants that preferred print resources mentioned ease of use, tangible nature of the print format and less distracting nature of print format as their reasons for the preference.

3.5.7 Utilisation of other formal information sources

Apart from utilising their academic libraries, at times library users visit other libraries to utilise their resources. Brown and Swan (2007:25) point out that researchers visit libraries outside their institutions to acquire or consult information sources, examine journals to which their institution's library does not subscribe, or books the library has not procured. The utilisation of other academic libraries by researchers is reported in the study conducted by Brown and Swan (2007:26). As reported in the study, some participants acknowledged that the digital resources of other libraries are useful to them.

Aina (2004:67) notes that with the advent of the Internet, many researchers, professionals and highly placed individuals now seek considerable proportion of their information from the Internet. Aba, Kwaghga, Ogban and Umogbai (2015:20)

examined the utilisation of internet services by postgraduates at a university in Nigeria. The research findings revealed that 40 (14.81%) of the participants were utilising the Internet to access their e-mails, while 81 (30%) of the participants were utilising it to browse. It further revealed that 18 (6.6%) of the participants were utilising it to access e-books, while 20 (7.41%) were utilising it to access e-journals.

3.5.8 Utilisation of informal information sources

Aina (2004:67) submits that most individuals naturally seek information from their colleagues, friends, neighbours, and group meetings such as religious groups, associations or cooperative societies. Singh, Kumar and Khanchandani (2015:35) surveyed on the ISB of transnational postgraduates. The location of the study was at a university in India. In the survey's finding, it disclosed that more than half (55.6%) of the participants were seeking information informally from their friends, while 45 (51.1%) of the participants were seeking information informally from their lecturers (Singh *et al.* 2015:35). A similar study has been undertaken by Ibrahim and Perumal (2018:6). As reported in the study, some of the participants indicated that they were seeking information informally from their friends. Also, in Barrett's (2005:328-329) research work, it was revealed that the participants were seeking information informally from their supervisors, specialists in their fields of study and fellow postgraduates.

3.5.9 Information source preference

As students, postgraduates usually gather information from a variety of sources. Hence as they examine each source, they must evaluate the sources and determine the quality of the information provided within them (Brock University Library 2021). Standard evaluation criteria for information sources include purpose and audience of the sources, credibility and authority of the sources, reliability and accuracy of the sources and timeliness and currency of the sources (Brock University Library 2021; Mandalios 2013:7-9).

Hertzum, Andersen, Andersen and Hansen (2002:577) mention that the quality of an information source will be determined by establishing the extent to which an individual is willing to trust the information source. Julien (2019) mentions that individuals tend to use sources that they believe are trustworthy. This is because if an individual does

not trust a source, it may not be used by the individual. Decisions made by an individual about a source's trustworthiness depends on factors such as the individual's values, the situation that the individual finds him/herself in, or the problem that the individual is facing (Julien 2019). Bronstein (2010:6) investigated the criteria used by students in selecting information sources at a university in Israel. The result of the investigation disclosed that the concept of accessibility appeared as a central norm; and it received five diverse meanings. The meanings are: ease of utilisation, physical proximity, full-text availability, language and sources that save time (Bronstein 2010:6). Relatedly, Lu and Yuan (2011:142) examined the role of information need in the selection of information sources at a university in the USA. The result of the study disclosed that compared to accessibility, quality was a stronger predictor in source selection for individuals with high information needs.

During information-seeking, individuals choose to trust or rely on some information sources while others are left unexplored (Hertzum *et al.* 2002:575). The selection of specific information sources depends on whether they include written or oral, virtual or human, external or in-house, authoritative or lay, inaccessible or easily accessible, and/or whether the sources contain information or they are pointers to information (Hertzum *et al.* 2002:575). Angchun (2011:109) examined factors associated with selecting information sources at a university in Thailand. The results obtained disclosed that accessibility, the convenience of utilisation, availability of information sources and familiarity with the information sources are the factors associated with selecting sources by the participants.

3.6 ROLES OF INFORMATION EXCHANGE

Opeke and Opele (2014:102) assessed postgraduates' knowledge sharing conduct in some universities in Nigeria. The finding of the study showed that more than half (55.6%) of the participants preferred face-to-face knowledge sharing compared to other media types. The finding also showed that knowledge in personal studies was the most frequently shared knowledge among the mainstream (92.8%) participants. Relatedly, Fari and Ocholla (2015:41) assessed knowledge and information sharing among scholars in some universities in Nigeria and South Africa. In the result of the research work, it reported that all the participants were familiar with knowledge and information sharing and participated in the sharing in various ways.

3.6.1 Purposes of exchanging information

Majid and Chitra (2013:1292) investigated the role or function of knowledge sharing in the education process. A total of 226 students from 12 Junior Colleges in Singapore participated in the study. The result of the study showed that the primary motive for knowledge sharing among the students was to improve their understanding of the concepts discussed in the class. The result also showed that knowledge sharing occurs among the students during group assignments.

3.6.2 Factors affecting information exchange

Wangpipatwong (2009:1) investigated the factors influencing knowledge sharing among university students. A total of 207 students from a university in Thailand participated in the study. The findings of the study showed that technological support, students' ability to share, and the extent of competition with fellow students influenced knowledge sharing among the participants considerably. Likewise, Mallasi and Ainin (2015:1) surveyed knowledge-sharing behaviour among postgraduates in six public universities in Malaysia. The result of the survey disclosed that non-monetary factors such as the pleasure of assisting fellow students, self-efficacy, and interpersonal trust had a substantial influence on the participants' knowledge sharing. However, it also disclosed that the students' reputation did not influence their ability to share knowledge.

3.7   ROLES OF INFORMATION TRANSFER

Wilson (1994:13) defines information transfer as the act of delivering to others, of information assumed to be of significance to them, by the initial receiver of that information. Wilson (2006:660) explains that "information use" may satisfy or may fail to satisfy the needs of a user, and in either case, may be of significance to another user's needs, and may be transferred to such a user. From Wilson's definition and explanation, it deduced that "information transfer" can occur after the initial receiver of the information has finished utilising the information. The transfer can also occur without the initial receiver of the information utilising the information. That is, if the information does not have any relevance to the initial receiver of the information but has relevance to another person. In that case, the initial receiver transfers the relevant

information to the person who needs it, instead of keeping it for future utilisation, or instead of discarding it altogether.

3.8 PERCEIVED INFORMATION NEEDS SATISFACTION AND END OF INFORMATION-SEEKING

Prabha, Connaway, Olszewski and Jenkins (2007:3) used the term "satisficing" to describe "information competency", whereby people assess how much information is sufficient to satisfy or gratify their information needs. Prabha *et al.* (2007:6) mention that the profusion of information makes it vital for information seekers to decide on sufficient information to meet their aims or objectives.

Westbrook (1993:546) points out that the aim of information systems is to offer what is necessary to satisfy users' needs. However, Wilson (1994:14) submits that there are few studies that have specifically examined users' satisfaction with regards to the information they have received.

Prabha *et al.* (2007:10-13) examined the information needs satisfaction of scholars at a university in the USA. The scholars comprise of undergraduates, postgraduates and lecturers. In the inquiry's finding, several conditions were disclosed under which the scholars usually perceive their information needs have been satisfied.

3.9 BARRIERS TO INFORMATION-SEEKING AND UTILISATION OF INFORMATION

Wilson (1999:252) submits that in an effort to find out information that would satisfy a need, there is a likelihood that the inquirer will come across different types of barriers. In the same vein, Savolainen (2016a) submits that researchers have identified various barriers to information-seeking since the 1970s.

3.9.1 Types of barrier

Savolainen (2016a) submits that barriers to information-seeking and utilisation could be external or internal. An external barrier is a form of barrier that originates from an individual's surrounding. Barriers of this nature may be spatial, for instance the long distance to a library. The barrier may also be temporal, for instance, insufficient time for information-seeking. The barrier may also be socio-cultural, for instance,

bureaucratic inertia or complicated organisational procedures and rules (Savolainen 2016a). Concerning internal barriers, Savolainen (2016a) explains that these barriers are usually within an individual. He categorises internal barriers into two. These are cognitive and affective barriers. In his 1999 publication, Wilson proposes that the barriers that usually impede the search for information arise out of three contexts. The three contexts are:

i.   Personal context.
ii.   The role-demands of an individual.
iii. The environment (technological, political, economic and so forth) within which the individual lives or performs his/her roles (Wilson 1999:252).

Wilsons' (1999:252) "personal barrier" could be likened or equated to Savolainen's (2016a) "internal barrier". While Wilson's (1999:252) "role-related barrier" and "environmental barrier" could compare to Savolainen's (2016a) "external barrier".

In the study that was carried out by Gyesi (2016:3, 12, 16) on the ISB of postgraduates, some of the participants mentioned certain barriers to their information-seeking activities in the library. The most technical barriers included minimal internet speed, password requirements and insufficient search skills. Barriers to library use were also mentioned among the findings of Makinde's (2018:205) study. Lack of current books, poor library infrastructure and an unconducive library environment were mentioned as some of the barriers to the use of the library among the participants.

3.9.2 Factors that minimise barriers to information

According to Julien (2019) barriers to information use can lessen by increasing the future usefulness or valuableness of the information. Other factors that can minimise the barriers include information accuracy, preciseness, completeness, trustworthiness, timeliness and consistency (Julien 2019).

3.10   APPRAISAL OF RELATED LITERATURE

During the review of past literature, some studies were found that are closely related to the present study. Among the studies is the study that was carried out by Delgadillo and Lynch (1999). The study was on the ISB of postgraduates in the department of

history at a university in the USA. The study sought to find out whether the postgraduates were demonstrating the same ISB as established history scholars. The sample size comprised 15 postgraduates of history. Interview was used to obtain data from the participants. However, the selected research design was not mentioned in the inquiry (Delgadillo & Lynch 1999:248-249). Another weakness that was observed in the study is that due to the small sample size, findings of the study cannot be generalised.

The research questions of Delgadillo and Lynch's study were found to be relevant to the field of information science. Also, some of the study's findings were found to be relevant to the present study. Although their study is similar to the present study, there are some differences. The major difference is that their study was a comparative study, while the present study is not. Another difference is found in the sample composition. The sample composition of Delgadillo and Lynch's study comprised only postgraduates of history, while the composition of the present study comprised postgraduates in the combined sub-discipline of history and international studies.

Another related study was carried out by Barrett (2005). The study was on the ISB of postgraduates in the humanities at a university in Canada. The study sought to compare the ISB of postgraduates with the ISB of undergraduates and faculty members. The research design that was used for the study is the exploratory research design. The sample composition comprised ten humanities postgraduates, and interview was used as the data collection instrument (Barrett 2005:325). The study design was appropriate in addressing the research questions. However, based on the small sample size, and being an inquiry that was conducted in only one institution, the result obtained from this inquiry cannot be generalised.

There are similarities between Barrett's study and the present study in terms of research area. Also, some of the findings were relevant to this study. Furthermore, Barrett's study just like this study, employed qualitative design (exploratory study) as its study design. However, the study is different from this study in the sense that this study is not a comparative study. The two studies also differ in terms of location. Barrett's study was carried out in Canada, while this study was conducted in Nigeria. Also, in terms of data collection instrument, Barrett employed only interview to obtain data from his participants, while in this study, multiple data collection methods were

employed. The sample compositions are also not the same. Barrett studied postgraduates in various departments (English, History, Philosophy, Classics and Music) within the humanities discipline. But in this study, the ISB of only the postgraduates of one department in the humanities was studied, which is history and international studies department.

Another related study that was found in literature is the study that was carried out by George *et al.* (2006). The study was also on the ISB of postgraduates at a university in the USA. The study also adopted the qualitative research design as its study design, and interview was used to obtain data from 100 postgraduates in various academic disciplines including the humanities (George *et al.* 2006:1). The study design was appropriate for the research questions. Also, the sample size was fairly large for a qualitative inquiry. However, the findings cannot be generalised because the study was carried out in only one university.

The research questions of the study that was carried out by George *et al.* were found to be very relevant to the field of information science. Also, the findings of the study were found to be relevant to the present study. The study is similar to the present study in terms of research area and research design. However, the locations are not the same. Also, the method(s) used to obtain data are different. The sample compositions are also slightly different.

In the same vein, Ismaila (2019) investigated the ISB of postgraduates of a university in Nigeria. Interview and questionnaire were used to obtain data from 630 postgraduates from three faculties including the humanities (Ismaila 2019:3). However, in the study, the design that was used was not mentioned. Moreover, the findings of the study cannot be generalised because the study investigated the ISB of postgraduates in only one university.

However, most of the research questions of Ismaila's study were found to be relevant to the field of information science. The study is similar to the present study in terms of research area, which is ISB. Although, both studies were carried out in Nigeria and in the same geo-political zones, the states are not the same. Ismaila's study was carried out in Kwara state, while this study was carried out in Plateau State. The studies also differ in terms of data collection instruments and sample compositions.

Majyambere (2015) conducted a doctoral study on the ISB of humanities international postgraduates in public universities in South Africa. The study adopted mixed method as its research design. A total of 232 international students formed part of the participants, while the other participants consisted of some heads of international students' office. Questionnaire, focus group and interview were employed as the data collection tools (Majyambere 2015:146,179-180,182). To an extent the findings of this study could be generalised due to the fact that the samples were taken from multiple universities within a country. Also, the selected research design was appropriate for the study. The use of multiple data collection instruments was also appropriate because it enabled the researcher to obtain rich data. Furthermore, the data that were obtained justified the conclusions of the study. The study also made significant contributions to knowledge in the field of information science.

Some of the findings of Majyambere's (2015) study were found to be applicable to the present study. However, there are some differences between his study and the present study. The differences were found in the research designs, sample compositions, locations, and data collection instruments. In Majyambere's study, mixed method design was used, while qualitative study design was used for this study. In his study, samples were drawn mainly from international students in the humanities from different universities in South Africa. But for the present study, samples were drawn mainly from history and international studies (a sub-discipline within the humanities discipline) postgraduates from a single university in Nigeria. Finally, in his study, questionnaire, focus group and interview were used as the data collection instruments, while in the present study, focus group, interview and observation were used to obtain the required data.

Kehinde *et al.* (2016) also investigated the ISB of some master's students at a university in Nigeria. A total of 117 master's students from the faculty of communications and information science formed the sample composition. The study design that was selected is the survey research design. Questionnaire was used to obtain data from the participants (Kehinde *et al.* 2016:1, 7). The research questions were clearly focused and relevant to the field of information science. However, the findings cannot be generalised because the inquiry focused only on one university.

Some of finding of the study that was conducted by Kehinde *et al.* (2016:1, 7) were found to be valid and applicable to the present study. Although their study is similar to the present study in terms of research area of ISB, however, the two studies are different. In terms of location, the locations of the two studies are in north-central Nigeria. Nevertheless, the states are not the same. Their study was carried out in Kwara State, while this study was carried out in Plateau State. The sample compositions are also not the same. Their study focused only on master's students, while this study focused on master's and doctoral students. Another difference is in the selection of research design and data collection instrument (s). They used survey research design and questionnaire to obtain the required data. But this study adopted qualitative research design as the study design, and interview, observation and focus group were employed to obtain the required data from the participants.

Relatedly, Nwangi (2018) conducted a master's study on the ISB of postgraduates at a university in Kenya. A total of 328 master's students of business administration and library and information science formed the study participants. Descriptive research design was selected as the study design, while questionnaire and interview were used to obtain data from the participants (Nwangi 2018:28-29). The study's questions were found to be relevant to the field of information science. The study also addressed questions that were clearly focused. The research design that was used was also justified by the researcher. However, findings from the study cannot be generalised. This is because the study focused on investigating the ISB of master's students of two departments in a single university.

Some of the results that were presented in Nwangi's study are valid and significant to the field of information science. The results were also found to be applicable to this present study. Although both Nwangi's study and the present study are similar in terms of research area (ISB study) and research participants (postgraduates). There are differences in terms of location, research design, sample composition(s) and data collection instrument(s). Despite that both studies were conducted on the continent of Africa. However, her study was carried out in Kenya, while the present study was carried out in Nigeria. Descriptive research design was used in Nwangi's study, while in this study; qualitative case study design was used. The sample composition of Nwangi's study comprised only master's students of two departments, while the sample composition of the present study comprised mainly master's and doctoral

students of a single department, and librarians. Questionnaire and interview were used as the data collection tool for Nwangi's study, while in this study, focus group, interview and observation were used.

In another closely related study, Khan and Khan (2020) investigated the ISB of postgraduates at a university in Pakistan. Survey research design was used to carry out the study. Questionnaire was employed to obtain data from 300 participants from various faculties including the humanities (Khan & Khan 2020:1,4). The study's questions were also found to be relevant to the field of information science, and the study addressed clearly focused questions. The selected study design was justified. Moreover, the data that were obtained justified the conclusions that were reached. However, the findings cannot be generalised because the study focused only on one university.

The study that was carried out by Khan and Khan and the present study are in the same research area of ISB. The results that were obtained in their study were found to be applicable to the present study. However, the two studies are not the same in terms of location, research design, data collection instrument(s) and sample composition(s). Their study was conducted in Pakistan, while the present study was conducted in Nigeria. Their research design is survey, while the present study's design is qualitative in nature. In their study, questionnaire was used to obtain the required data, while this study employed focus group, interview and observation. Moreover, their sample consisted of postgraduates from different faculties including the humanities, while in this study the sample mainly consisted of postgraduates of a sub-discipline within the humanities discipline.

During the appraisal of literature, some studies were found that investigated the ISB of postgraduates of various academic disciplines and sub-disciplines. However, only two studies were found that exclusively examined the ISB of postgraduates of the humanities discipline. These are the studies carried out by Barrett (2005) and Majyambere (2015). In addition, one study was found that exclusively examined the ISB of postgraduates of the sub-discipline of history. This is the study carried out by Delgadillo and Lynch (1999). However, no study was found in existing literature that exclusively examined the ISB of history and international studies postgraduates.

70

From broad to specific areas of the present study' topic, the gaps that were identified in the literature that were appraised include gaps on the research topic, research objectives and questions, study location, research design, sample composition, and data collection tools. The present study aimed to fill the gap.

3.11 CHAPTER SUMMARY

This chapter comprises a review of previous literature. This study investigates the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. The research questions of the study formed the basis for arranging the various themes and sub-themes. The chapter began with a discussion on the importance of conducting a comprehensive literature review during thesis or dissertation writing. This was followed by steps or guidelines for writing a comprehensive review. Based on the research questions of the study, the first theme reviewed is the literature on the information needs of the postgraduates. This was followed by literature on: ways of satisfying the postgraduates' information needs; means of using ICT facilities to access information by the postgraduates; the postgraduates' use of formal and informal information sources; roles of information exchange on the information-seeking activities of the postgraduates, roles of information transfer on the information-seeking activities of the postgraduates; and barriers to the postgraduate's information-seeking and utilisation.

The literature review was conducted by identifying similar and contradictory findings. The review was also done in both broad and specific areas of the topic of the present study. The latest trends in the ISB of postgraduates especially their information needs, sources they consult, and their use of information in the present information or digital era were also reviewed. In terms of location, previous literatures that were reviewed comprised studies that were undertaken in various countries of the world including Nigeria. In the course of the review, some past studies that are closely related to the present study were appraised. The appraisal was done in order to compare and contrast the present study with past studies in terms of study location, research design, sample composition, data collection instrument(s) and so forth, so as to identify gaps that require filling in literature. During the appraisal, the strengths and weaknesses of those past studies were also identified.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1   INTRODUCTION

This chapter consists of a discussion on the methodology used in conducting the study. The term "research methodology" refers to how researchers approach problems and seek answers (Taylor, Bogdan & Devault 2016:3). Kothari (2004:8) views research methodology as a way to systematically, analytically or scientifically solve, respond to, or answer a research problem. Research methodology has numerous aspects or dimensions. More so, research methodology encompasses various techniques that are employed to conduct a research work and the rationale behind the use of the techniques in the perspective of a research project (Kothari 2004:8). In this chapter, methodological aspects or dimensions discussed including aspects of research paradigm, research approach, research design, study population, sampling, data instruments, data analysis, validity and reliability, and ethical considerations.

4.2   RESEARCH PARADIGM

According to Case and Given (2016:182) the term "paradigm" has become popular as a way of describing the numerous points of view that scholars take in their research explanations. Creswell (2014:35) refers to paradigm as "worldviews". He further notes that some authors refer to paradigm as "epistemologies and ontologies" or "research methodologies". Creswell describes paradigm as a general logical orientation about the world and the nature of research that a researcher brings to a study. Guba (1990:17) describes a paradigm as a "fundamental set of beliefs that directs action".

Neuman (2014:93) submits that scientific research paradigms rest upon principles from two fundamental sets of philosophical assumptions. The two sets of assumptions are ontology and epistemology (Neuman 2014:93). Bhattacherjee (2012:18) also refers to ontology and epistemology as the two fundamental sets of philosophical assumptions. Neuman (2014:94-95) describes ontology as the fundamental or basic characteristics of reality, while he describes epistemology as how people know the world around them. From the viewpoint of Bhattacherjee (2012:18), ontology is the assumptions about how people perceive the world, while epistemology is the best way

to study the world. Using these two sets of assumptions, Bhattacherjee (2012:18) categorises research paradigms into four. The categories are functionalism, radical structuralism, radical humanism and interpretivism.

4.2.1   Interpretivism paradigm

Interpretivism paradigm is a belief system whereby researchers think that the best way to study social order is through the subjective interpretation of the participants involved (Bhattacherjee 2012:19). This belief system involves procedures such as interviewing different participants and reconciling differences among their responses using their subjective perspectives (Bhattacherjee 2012:19). The goal of interpretivism paradigm is for a researcher to rely as much as possible on participants' views of the situation that is being studied (Creswell 2014:37-38). The researcher's intent is to make sense of, or interpret participant's views of a situation (Creswell 2014:37-38).

Neuman (2014:103) notes that people often refer to the interpretivism paradigm as qualitative research. The reason for this is that most researchers that uphold this belief system usually employ participant observation and field research to obtain data. Participant observation and field research frequently require the analyses of transcripts of conversations or the study of videotapes of behaviour in extraordinary detail by the researchers. Researchers do this when they look for subtle non-verbal communication in order to understand the details of interactions in their context (Neuman 2014:103). Researchers that uphold the interpretivism belief system may interact for a lengthy period with several individuals to assemble highly detailed qualitative data. This enables the researchers to acquire in-depth understandings of how people create meaning in their everyday lives (Neuman 2014:103).

Babbie (2011:32) mentions that theories and paradigms intertwine throughout the search for meaning in social life. This statement implies that there is a relationship between theories and paradigms. Similarly, Case and Given (2016:218) assert that both theories and paradigms are intertwined together with the research methods selected by a researcher. Grant and Osanloo (2014:19) mention that theory should intersect or interconnect well with a researcher's epistemological values to broaden the researcher's way of discerning the concept under study. For this study, Wilson's (1999:251) model of IB, and Wilson's (1999:252) model of ISB have been adopted as

the theoretical framework. Wilson (2016) acknowledges that his ISB theory which his models represent is interpretive, inductive or constructivist.

This study is on the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. In this study, majority of the participants constituted the postgraduates of history and international studies. The other participants constituted two librarians working in the hybrid library.

This study was shaped by the interpretivism paradigm because the researcher obtained the required data from the postgraduates in the natural environment where they usually access needed information for their academic activities (the academic hybrid library). Additional data was obtained from the librarians in their offices situated within the library. A close examination of the postgraduates was done through focus group and observation. The researcher interacted for a lengthy period with the postgraduates (through the focus group and observation) in order to assemble detailed data. This enabled the researcher to acquire in-depth understanding of how the postgraduates create meaning of their ISB. For the librarians, a one-on-one interview was conducted with them. The data obtained from the focus group and interviews were recorded and later analysed. The research design, data instruments and data analysis will be discussed in detail in the subsequent sub-sections of this chapter. The theoretical framework of the study also intersects well with the interpretivism paradigm. The intersection is such that the framework is also rooted in the paradigm.

4.3   RESEARCH APPROACH

Creswell (2014:31) views research approach as a plan or procedure used to conduct a study. He explains that the plan and procedure extend from general assumptions to detailed techniques of data assemblage, data analysis and interpretation or explanation of results. He further explains that research approach intersects between the research paradigm, research design and specific data collection methods, analysis and interpretation. Research approach could be categorised into three. These are quantitative or structured approach, qualitative or unstructured approach and mixed approach also known as multiple approaches or structured and unstructured approach (Creswell 2014:32; Kumar 2019:76).

4.3.1 Qualitative approach

Creswell (2014:32) describes the qualitative research approach as a methodology for exploring and understanding the meanings individuals or groups ascribe to a human social problem. Kumar (2019:49-52) explains that the qualitative approach follows a flexible, open and unstructured approach to inquiry. He also explains that the approach usually emphasises the narration and description of the participant's perceptions, feelings and experiences. The selection of a research approach will be based on the following:

i.   Nature of the research problem or the nature of the issue that a researcher is tackling.
ii.   The researcher's experience.
iii. The audience for the study.
iv.   The paradigm that the researcher plans to adopt (Creswell 2014:31).

According to Creswell (2014: 50) qualtitative approach may be required to conduct a study when the topic is new. This study was designed to investigate the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. In past literature, this specific topic was not found. Therefore, using the research topic as a criterion, the qualitative approach was selected as the suitable approach for this inquiry.

Concerning the researcher's personal experience, Creswell (2014:51) mentions that individuals that are trained in statistics or scientific writing would most likely select quantitative approach, while individuals who enjoy writing in a literary way may be attracted to the qualitative approach. As a scholar, the researcher enjoys writing in a literary way. Hence, the mode of writing also influenced the selection of the qualitative approach by the researcher.

With respect to audience of the study, Creswell (2014:52) explains that experiences of audiences with the different types of research approach can influence the decision made about the selection of an approach by a researcher. During the proposal writing stage of this study, the qualitative approach was proposed by the researcher and approved by the examiners who formed part of the audience for the study.

Guba and Lincoln (1994:109) emphasise that no researcher should commence a research project without having a clear idea about the paradigm that would inform and guide the approach the researcher intends to employ. According to Creswell (2014:35, 37) it is expedient for researchers to make explicit the paradigm they intend to espouse at the onset of their research. This is because the information will help explain their choice of research approach (Creswell 2014:35, 37). Creswell (2014:35, 37) also mentions that the interpretivism paradigm is perceived as an approach to qualitative research. Likewise, Neuman (2014:103) mentions that individuals often refer to the interpretivism paradigm as qualitative research. These statements imply that the interpretivism paradigm aligns with the qualitative approach to research. As discussed in the previous sub-section, the interpretivism paradigm will be used to shape this study. Therefore, the interpretivism paradigm aligns with the selection of the qualitative approach for this study.

4.4 RESEARCH DESIGN

Research design is a plan for empirical research that is aimed at providing answers to research questions or for testing hypotheses (Bhattacherjee 2012:35). From the perspective of Yin (2003:19), a research design is a rationality that connects or links the data gathered and the conclusions to be reached to the research questions of a study. As explained by Kumar (2011:96), research design provides an avenue for researchers to decide on the procedure they would employ to collect data and select their respondents. The research design also provides an avenue for researchers to know the method they would employ to analyse their data and communicate their findings (Kumar 2011:96). The primary purpose of research design is to assist researchers in avoiding a situation whereby their research results do not address their research questions (Yin 2003:21). Creswell (2014:41) categorises research design into three. These are mixed methods, quantitative and qualitative design (Creswell 2014:41).

4.4.1 Qualitative design

According to Kumar (2019:226) the focal point of the qualitative design is to understand, discover, explore, explain and clarify situations, perceptions, feelings,

attitudes, beliefs, values and experiences of a category of people. Some of the characteristics of qualitative design include the following:

i. Natural setting: qualitative researchers tend to assemble data in the field at the location where the participants experience the problem or issue under study. This up-close information gathered by talking directly to the participants and seeing them act and behave within their context is a significant attribute of qualitative research. In the natural setting, the researchers often interact face-to-face with the participants over time.

ii. Researchers as a key instrument: qualitative researchers assemble data by observing behaviour, examining documents or interviewing participants. They may employ an instrument for assembling data, but the researchers are the ones who actually assemble the information. They do not tend to rely on questionnaires or instruments developed by other researchers.

iii. Multiple sources of data: qualitative researchers usually gather data from multiple sources such as observation, interview and audiovisual information rather than rely on a distinct data source. The researchers then review all the data, make sense of them and organise them into themes that cut across all the data sources.

iv. Inductive and deductive data analysis: qualitative researchers build their themes, patterns and categories from the bottom up through the organisation of the data into increasingly more abstract units of information. This inductive procedure demonstrates a back-and-forth movement between the themes until a comprehensive set of themes establish. Then deductively, the researchers re-examine their data to ascertain whether more data can support each theme, or whether they need to collect extra data. Thus, while the procedure commences inductively, deductive reasoning also plays a vital role as the analysis progresses.

v. Participants' meanings: in the entire qualitative procedure, the researchers focus on understanding the meaning that the participants hold about the problem under study rather than the meaning the researchers bring into the research.

A holistic examination of participants and settings: in qualitative methodology the researchers usually examine people and settings holistically (Creswell 2014:234-235; Taylor *et al.* 2016:7-11).

4.4.1.1 Strengths of qualitative design

i.   The design is usually an in-depth study.
ii.   The design is flexible because it can be modified at any time.
iii. The design is cheap compared to other designs that may require expensive equipment or expensive research staff (Babbie 2011:348).

4.4.1.2 Flaws of qualitative design

i.   The design is not appropriate for examining the statistical description of a large population.
ii.   The design is often too subjective.
iii. The design is often difficult to replicate.
iv.   In this design, there is usually the problem of generalisation.
v.   The design lacks transparency (Bryman 2012:390, 405-406).

According to Leedy and Ormrod (2015:272-275) there are five types of qualitative design. These are ethnography, grounded theory, phenomenology, content analysis and case study.

4.4.1.3 Case study

The case study also known as idiographic research, involves an in-depth study of a particular individual, event or program within a given time frame (Leedy & Ormrod 2015:271). Similarly, Bharttacherjee (2012:93) explains that a case study is a method of intensively examining a phenomenon over time. Case study equally provides an astute insight or a sound judgment about the phenomenon of interest (Neuman 2014:179). The phenomenon will also be examined within its natural setting in one or more locations. In this design, multiple data collection methods could be employed, such as observation, interview, secondary data and pre-recorded documents. The interpretations of the phenomenon of interest tend to be detailed, rich and contextualised (Bharttacherjee 2012:93). Kumar (2019:252-253) elucidates that a

"case" could be an individual, instance, episode or event. A "case" could also be a group, community, town or city (Kumar 2019:252-253). Yin (2003:1) explains that a case study is employed when "how" and "why" questions are being asked, when the researcher has little control over events, and when the focus of the inquiry is on a modern phenomenon within certain real-life situations or contexts.

According to (Kumar 2011:123) case study is a very useful design when exploring an area where little is known. It is also a functional design when a researcher wants a holistic understanding of a phenomenon (Kumar 2011:123). The design is of enormous significance when a study focuses on comprehensively understanding and exploring, rather than quantifying and confirming (Kumar 2011:123). Leedy and Ormrod (2015:271-272) submit that a case study is also appropriate for investigating how an individual, event or program changes over time possibly due to certain interventions or condition. Creswell (2014:236) also submits that a case study is suitable for exploring processes, events and activities.

Leedy and Ormrod (2015:272) explain that in the case study design, a researcher usually spends a lengthy period of time on site, and frequently interacts with the individual or persons. They also explain that the researcher also records details about the context surrounding the case (s) of focus, including information about the physical environment and any historical, social or economic factors that have a bearing on the situation. By describing such contexts, the readers of the research report can easily draw conclusions about the extent to which the research findings might be generalisable to other situations (Leedy & Ormrod 2015:272).

For the present study, Wilson's (1999:251) model of IB, and Wilson's (1999:252) model of ISB were adopted as the theoretical framework. Grant and Osanloo (2014:21) assert that a theoretical framework allows a researcher to identify the design of a study. Wilson (2016) mentions that his theory which his models represent is qualitative in nature. This statement implies that the theoretical framework for the present study has its roots in a qualitative design.

This study is on the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. No study was found from existing literature to have exclusively examined the ISB of this group of academic hybrid library users. This

indicates that little or no information is known about their ISB. Hence, there is a need to have a holistic understanding of their ISB. To have a holistic understanding of their ISB, the researcher obtained data from the participants using multiple data sources. Besides obtaining the required data by herself, she also spent sufficient time with the participants before obtaining the required information from them. Also, she obtained the data from the participants in the library where one group usually utilise information resources and the other group of participants work. The data was obtained from the participants to understand the meanings they held about the problem under study.

Bhattacherjee (2012:41) explains that a research design should depend on the nature of the research phenomenon studied. From the objectives of this study, the phenomenon under study is exploratory. Since a case study is suitable for conducting studies that are exploratory, this study adopted the case study which is a type of qualitative design. The theoretical framework that was selected was used as a guide in identifying the case study as the suitable design for the study.

4.4.1.3.1 Strengths of case study

i.   Compared to other designs, the case study offers a richer, more contextualised, authentic interpretation of the phenomenon of interest, by its ability to describe a rich collection of contextual data.

ii.   Also, the phenomenon of interest may be analysed from numerous participants' perspectives.

iii. The design can ascertain a wide range of social, political and cultural factors that possibly connect to the phenomenon of interest that may be difficult to ascertain in advance (Bharttacherjee 2012:40,93).

The adoption of this research design enabled the researcher to describe and interpret a rich assemblage of contextual data. This served as a major strength of the research design to the study.

4.4.1.3.2 Flaws of case study

i.   In this design, there are no experimental controls; therefore, the internal validity of inferences is often inadequate.

ii.   Most often, the quality of inferences derived from case research depends heavily on the integrative powers of the researcher; hence, the findings sometimes criticised as being subjective.

iii.   The inferences are also heavily contextualized; therefore, it may be difficult to generalise inferences from this design to other contexts or other similar organisations (Bharttacherjee 2012:93).

Although qualitative case study was employed to carry out this study, nevertheless, the conclusions were contextualised. This was a flaw observed in the use of this research design.

4.5   STUDY POPULATION

A study population is a group of people or items from which a researcher selects a sample (Kumar 2011:180). A sample is a small group of people or items from whom a researcher collects needed information (Kumar 2019:366). From available statistics in the postgraduates' department, as at the time of this study, there were three sets of postgraduates in the department. These are the 2017/2018 set, 2018/2019 set, and 2020/2021 set. In the 2017/2018 set, there were forty-two (42) students that enrolled for master's programme, while thirteen (13) students enrolled for doctoral programme. In the 2018/2019 set, forty-four (44) students enrolled for master's programme, while eight (08) students enrolled for doctoral programme. Then, in the 2020/2021 set, forty-one students enrolled for master's programme, while twelve (12) students enrolled for doctoral programme (see appendix 13). Also, from the statistics obtained from the hybrid library as at the time of this study, there were a total of thirty-one (31) professional librarians working in the library (see appendix 15). The professional librarians had various degrees that ranged from bachelors to doctoral degree in librarianship and related fields.

As earlier mentioned in this chapter, case study, a type of qualitative design, was adopted as the appropriate research design for this study. The design was adopted to enable the researcher to holistically explore the ISB of history and international studies postgraduates. Therefore, to carry out this holistic exploration, the study population comprised the history and international studies postgraduates in the university. The

study population also comprised the librarians that were working in the academic hybrid library of the university.

4.6   SAMPLING

Sampling can be defined as the process of choosing a few from a bigger group as the basis for predicting or estimating the occurrence of an unknown piece of information, outcome or situation regarding the bigger group (Kumar 2019:364). Sampling can also be defined as the process of choosing a sample from the sampling frame using a well-defined sampling technique (Bhattacherjee 2012:66). A sampling frame is a list that identifies each element of the study population (Kumar 2019:365). The sampling technique is the method that a researcher employs to select a sample from a given population (Kumar 2019:366). Bharttacherjee (2012:66) categorises sampling technique into two broad categories. These are probability and non-probability sampling techniques (Bharttacherjee 2012:66). Non-probability sampling is usually employed in a qualitative study (Kumar 2019:381).

The number of people or items from whom a researcher obtains the needed information is known as the sample size (Kumar 2019:366). However, the sample size is not usually determined during a qualitative study. Instead, the concept of "data saturation" is applied (Kumar 2019:389). Grady (1998:26) defines data saturation as a stage in an interview session when a researcher receives repetitive comments from interviewees. At that stage, the researcher should stop collecting information from the interviewees and start analysing the information (Grady 1998:26). However, Urquhart (2013:194) and Given (2016:135) define saturation with respect to data analysis. Urquhart (2013:194) defines it as a data coding stage when a researcher no longer discovers new codes in the data. While Given (2016:135) defines it as the point at which additional data do not lead to discovering new themes. Bernard and Ryan (2010:92) define it in terms of data collection and data analysis. According to Bernard and Ryan saturation is a point in data collection and analysis when new data produces little or no information that would address the research questions. Based on the data collected or analysed, Saunders *et al.* (2018:1893) explain that saturation usually indicates that further data collection and/or analyses are not necessary. From the various definitions of the term "saturation" discussed above, it could deduce that in qualitative research, saturation occurs during data collection and analysis.

According to Kumar (2019:385-386, 389-390), the greater the diversity of the situation or phenomenon under study, the greater the number of people from whom a researcher needs to collect the information to reach the saturation point. In an instance whereby the information collected is in a collective format, such as focus groups, a researcher should strive to gather as diverse and as much information as possible, until no new information emerges. At that stage, it has been assumed that the researcher has reached the saturation point (Kumar 2011:196-197; Kumar 2019:385-386, 389-390).

Kumar (2019:385-386, 389-390) pinpoints certain flaws associated with the concept of data saturation in a qualitative study. He notes that the concept is highly subjective because only a researcher can decide when saturation has been reached during the process of data collection. He also states that the study may be biased if the entire sample has strong biases on an issue. He also mentions that the technique is difficult to use when the sample becomes relatively large.

4.6.1 Non-probability sampling procedure

Kumar (2019:381) explains that a non-probability sampling procedure or technique is a procedure that does not follow the theory of chance or probability in the selection of items from a sampling population. He further mentions that there are six types of the non-probability sampling procedure. These are accidental, quota, convenience, snowball, expert and purposive sampling procedures (Kumar 2019:381).

4.6.1.1 Purposive sampling procedure

As explained by Kumar (2019:384), the purposive sampling entails a researcher's discernment as to who can give the best information to accomplish the objective(s) of the researcher's study. He also explains that the researcher only goes to those individuals who, in his/her judgement, are likely to have the needed information and be willing to disclose it. This procedure is useful in either the construction of historical reality, the description of a phenomenon or the development of something that only little is known about (Kumar 2019:384). According to Yin (2016:93), purposive sampling aims to select a sample that will yield the most significant and plentiful data or information-rich data based on a researcher's topic of study.

In this study, qualitative case study was adopted as the appropriate research design. Therefore, as a qualitative study, the purposive sampling procedure which is non-probability sampling procedure was employed to select a sample from the study population. The study population comprised all the history and international studies postgraduates and all the librarians working in the university hybrid library. At the time of this study, there were three sets of postgraduates in the department. The sets are the 2017/2018, 2018/2019, and the 2020/2021 set. The first set of students were at the last stage of their research activities, while the second set had just completed their course work and were about to commence their thesis/dissertation writing, and the third set were the newly admitted set who were still conducting their registration and about to commence their course work. Purposive sampling procedure was employed to select the second set of postgraduates. This sampling procedure was equally employed to select two librarians in the hybrid library. The postgraduates in the second set were selected because they had completed their course work and proposal writing and had commenced writing their thesis/dissertation. Therefore, in the researcher's judgement, compared to the other two sets, they were more likely to provide the needed information required to accomplish the objectives of this study. The two librarians were also selected because one of the librarians was in charge of the arts collection, while the other librarian was in charge of subject libraries. Therefore, based on the researcher's judgement, compared to the other librarians, the two librarians were more likely to provide the information needed to holistically understand the ISB of the postgraduates.

The researcher obtained the lists of master's and doctoral students from the office of the departmental head of the postgraduates. The two lists served as sampling frames for the inquiry. From the lists obtained, there were 44 master's students and 08 doctoral students in the 2018/2019 set of postgraduates. As a qualitative study, the frames were not used to determine sample size; instead, they were used to obtain the accurate statistics of the total number of students sampled purposively by the researcher.

4.7   DATA COLLECTION PROCEDURE

Yin (2016:137) states that "data" serves as the foundation for an inquiry or research study. Data collection is the procedure of assembling and measuring information on

variables of interest in a systematic manner so as to enable researchers to answer their research questions, test hypotheses and evaluate their findings (Kabir 2016:3). Data collection usually commences with the determination of the kind of data that is required. Then follows the selection of a sample from a particular population, after-which a data collection instrument is used to collect the data from the designated sample (Kabir 2016:3). According to Des Moines University Library (n.d), a data collection instrument is a measurement tool that is developed to obtain data on a research topic of interest.

4.7.1   Interview

An interview is a form of social interaction that often encompasses a face-to-face meeting between two or more individuals, each evaluating and constructing the meanings of the other's words, gestures and expressions (Taylor *et al.* 2016:114). Babbie (2011:340) explains that a qualitative interview involves an interviewer and interviewee. He further explains that the interaction is such that the interviewer has an all-purpose plan of questions which includes the topics to be covered, but not a set of inquiries that must be asked with specific words and in a specific order. During the interview, the interviewer must be fully conversant with the questions. This allows the interview to proceed naturally and smoothly (Babbie 2011:340). Likewise, Creswell (2014:239-240) explains that in qualitative interviews, the researcher conducts face-to-face interviews or telephone interviews with the interviewees. The researcher can also involve in a focus group interview with six to eight participants in every group. The qualitative interview involves unstructured and open-ended questions that are few and projected to elicit opinions from the interviewees (Creswell 2014:239-240).

A qualitative interview is usually audio-recorded and transcribed since the researchers are often interested in what people say and how they say it. Therefore, if every aspect of the interview is captured for analysis, the interview has to be recorded using a recorder (Bryman 2012:482). Taylor *et al.* (2016:130) explain that a recording device allows the interviewer to capture more information during the interview sessions. Yin (2016:183) stresses the importance of maintaining a personal journal during the interview process. Taylor *et al.* (2012:132-133) mention that an interviewer's journal serves many purposes that benefit the interviewer.

Leedy and Ormrod (2015:287) state that most laptops and many smartphones can serve as recorders with the appropriate software. They also explain that with transcription software programs such as HyperTRANSCRIBE and Dragon, interviewers can mark key points in an audio or videotaped interview. Also, with these programs, interviewers can retrieve desired pieces of information quickly and transcribe the information more easily (Leedy & Ormrod 2015:287).

Kumar (2011:143) categorises interview questions into two. These are open-ended questions and closed questions. Open-ended questions allow interviewees to answer the questions freely without any limited set of pre-conceived answers or possible answers. Conversely, closed questions are forms of questions that allow interviewees to select from a distinctive set of pre-conceived answers. Closed questions are particularly valuable for eliciting factual information, while open-ended questions are useful for seeking opinions, attitudes or perceptions. The choice of open-ended or closed questions depends on the reason behind conducting a study, the study population, the format for communicating the study's findings and the socio-economic background of the readership (Kumar 2011:143).

4.7.1.1 Benefits of the interview

i. The interview is a useful technique for collecting in-depth information through probing. Therefore, in instances whereby in-depth information is needed, an interview is the ideal data collection technique.

ii. Since interview questions are flexible, most often the questions can be made explicit to interviewees. Therefore, it is less likely that interview questions will be misunderstood by the interviewees, as the interviewer can either prepare a question or put it in a form that the interviewees understand.

iii. The interview has a broader application. This is because it can use almost any type of population such as children, the disabled, illiterate or the aged population.

iv. Information obtained through interviews can easily supplement data from other data collection techniques such as observation.

v. Most often, during interview sessions, the interviewer has an opportunity to clarify any issue raised by the interviewees. The interviewer can also ask probing or follow-up enquiries.

The interview also allows interviewers control the line of enquiry or questioning (Bharttercherjee 2012:78; Creswell 2014:241).

4.7.1.2   Drawbacks of the interview

i.   During the interview, there is a tendency of bias in the framing of questions and the interpretation of responses by the interviewer.

ii.   The interviewer's presence may equally bias the responses of the interviewees.

iii.   The interview is usually resource-intensive and time-consuming, especially when the interviewees are spread across a wide geographic area.

iv.   To correctly probe the interviewee, the interviewer requires special interviewing skills, experience and commitment. This is because the quality of data depends upon the interviewer's skill, experience and commitment.

v.   Data quality may vary when many interviewers are used (Bharttercherjee 2012:78; Creswell 2014:241; Kumar 2011:145).

4.7.2   Focus group

This is a distinctive qualitative research procedure whereby individuals are informally conversed in a group discussion situation or setting (Neuman 2014:471). Chawla and Sundhi (2016:58) explain that focus groups carry out discussions with important persons linked with the problem under investigation or study. The discussion is often based on structured, unstructured or semi-structured interviews (Babbie 2011:343). It is a technique that allows the interviewer or moderator to question several individuals simultaneously and systematically (Babbie 2011:343). The procedure is that a researcher brings about six to twelve individuals together in their natural setting or in a comfortable location to discuss a particular topic for about 90 minutes. The researcher who is usually the interviewer or moderator facilitates free and open discussion by all participants. The discussion is also usually non-directive. A typical study involves four to six groups to acquire the required data. The group should be made up of homogenous members but should exclude relatives or close friends (Neuman 2014:471). Kumar (2011:124) suggests that in the formation of a focus group, the size of the group is an important consideration. He further suggests that the

size should not be too large or too small, because size can affect the quality and extent of the discussion.

Focus group allows a researcher to comprehend why individuals feel the way they do. It also allows the group members to probe each other the reason for holding a particular view (Bryman 2012:503-504). Bhattacherjee (2012:40) explains that during the group discussion, the moderator attempts to build a holistic understanding of the problem or issue based on the participants' remarks and experiences. Bryman (2012:503) mentions that the technique helps seek a wide range of diverse views concerning a specific issue. During the discussion, group members can bring to the fore issues about a topic they consider significant. Also, during the discussion, group members often argue and challenge each other's views. This method of argument signifies that the researcher may be able to gather a more realistic account of what the group members think, since the members are forced to think and revise their opinions. It also presents an opportunity for the researcher to examine how the group members mutually make sense of a phenomenon (Bryman 2012:503-504). Bhattacherjee (2012:40) mentions that since the size involved in a focus group is often very small, findings from the discussion may not be generalised to other similar situations. He also mentions that focus group discussion is commonly employed for exploratory rather than explanatory research. Bryman (2012:504) states that just like qualitative interviewing, focus group discussion yields the best results if recorded and transcribed. The recording of the discussion usually becomes the basis of analysis for the findings and conclusions of research work (Bryman 2012:504).

4.7.2.1 Benefits of focus group

i. Focus group allows a deeper examination of complex issues compared to other data-gathering procedures. This is because, during the discussion, when individuals listen to other people, they often generate new ideas or remember those they might have forgotten.

ii. The natural setting where the discussion usually takes place allows the group members to express their views freely.

iii. During the discussion, the group members may query each other and/or explain their answers to each other.

iv. The technique is flexibility.

v.   Compared with other procedures, focus group is relatively less expensive and needs far less time to complete (Babbie 2011:344; Bharttercherjee 2012:78; Kumar 2011:124; Neuman 2014:472).

4.7.2.2 Drawbacks of focus group

i.   Only one or two topics get discussed at a meeting consecutively.

ii.   If the discussion is misdirected, it may only reflect the views of those who tend to control or dominate the group.

iii.   At times assembling the groups could be difficult.

iv.   Data obtained from the discussion tend to be more difficult to analyse than data obtained from other techniques.

v.   During the discussion, some group members may be unwilling to voice their views in the presence of their superiors or peers, mainly when a sensitive issue is discussed (Babbie 2011:344; Bharttercherjee 2012:78; Kumar 2011:124; Neuman 2014:472).

4.7.3   Observation

Kumar (2011:134) describes observation as a systematic, purposeful and selective way of watching and listening to a phenomenon or interaction as it takes place. According to Creswell (2014:239) during qualitative observation, a researcher usually takes field notes on the activities or behaviour of individuals at a research site. In the field notes, the researcher records semi-structured or unstructured activities at the site (Creswell 2014:239). Kumar (2011:134) mentions that when a researcher is more interested in behaviour rather than in people's perceptions, observation is the best technique to obtain the needed information.

According to Kumar (2011:134) there are two observation procedures. These are a participant and non-participant procedure. Participant observation procedure entails the participation of the observer or researcher in the activities of the group that is being observed. The participation is done in the same manner as the group members, with or without their knowledge that they are being observed. However, in the case of the non-participant observation procedure, the observer does not get involved in group activities. Instead, the observer remains passive, watching and listening to the activities and drawing conclusions from them. The observation procedure whether

participant or non-participant could equally be recorded just like the interview and focus group (Kumar 2011:134).

Observing a group in its natural activities or operations rather than intervening is known as observation under natural circumstances. Nevertheless, when a stimulus is introduced to a group for it to react to, observing the reaction is regarded as controlled observation (Kumar 2011:135).

4.7.3.1 Benefits of observation

i. In the observation procedure, researchers usually have firsthand experience with the participants they are observing.

ii. The researchers can also record activities as they occur, and unusual aspects of participants' activities can be easily noticed and recorded during observation.

iii. As a data collection tool, observation is a useful procedure for exploring topics that may be difficult, embarrassing, awkward or uncomfortable for participants to discuss freely with a researcher (Creswell 2014:241).

4.7.3.2 Drawbacks of observation

i. During the observation session, the observer may be perceived by the observed as intrusive.

ii. Confidential information that a researcher may not be able to report may be observed.

iii. The researcher may lack good observation skills.

iv. When individuals are aware that they are observed, they may change their behaviour. Depending upon the situation, this change could be negative or positive. A situation whereby a person's behavioural change is attributed to observation is known as the "hawthorne effect". Utilising the observation procedure in such a circumstance may introduce alteration in the result obtained. This is because what is seen may not represent their normal behaviour.

v. In this technique, there is always the likelihood of observer bias, and when there is bias, it is often difficult to verify the observations and the inferences drawn from them.

vi.   The interpretations perceived from observations may differ from one observer to another.

vii.   There is the probability of incomplete observation. This happens when an observer watches an activity keenly and disregards the recording of the activity. Likewise, an observer may take down detailed notes, but neglect some critical aspects of the activity observed (Creswell 2014:241; Kumar 2011:134-135).

4.7.4 Design of data collection tools

This study is on the ISB of history and international studies postgraduates. The study has eight objectives. The objectives are to:

1. Investigate the information needs of the history and international studies postgraduates in the academic hybrid library.
2. Find out ways through which their information needs are being satisfied in the hybrid library.
3. Find out the means through which the postgraduates' use the library ICT facilities to access information in the library.
4. Investigate the use of the hybrid library as a formal information source by the postgraduates, and find out other formal and informal information sources usually consulted by the postgraduates.
5. Investigate the roles of information exchange in the information-seeking activities of the postgraduates in the hybrid library and in other sources.
6. Investigate the roles of information transfer in the information-seeking activities of the postgraduates in the hybrid library and in other sources.
7. Find out the factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities in the hybrid library and in other sources.
8. Find out the barriers to the postgraduates' information-seeking and utilisation of information in the hybrid library and in other sources.

This study adopted qualitative case study design as its research design. Kabir (2016:3) categorises data into two broad groups. These are quantitative and qualitative data. As explained by Kabir, qualitative data are non-numerical and descriptive. By non-numerical and descriptive it implies that qualitative data are mostly in the form of

words. Qualitative data often capture emotions, feelings or individuals' subjective perceptions about certain issues (Kabir 2016:3). Leedy and Ormrod (2015:277) submit that qualitative researchers often utilise various forms of data during their studies. They further submit that qualitative researchers usually employ observation, interview and other data collection tools that can assist them in obtaining answers to their research questions. Yin (2016:137) also mention that for a qualitative study, significant data may derive from four data collection procedures which are feeling, collecting and examining (materials), observing, and interviewing.

Taylor *et al.* (2016:7) describe qualitative design as research that generates descriptive data. That is, people's spoken or written words and observable behaviour (Taylor *et al.* 2016:7). Grant and Osanloo (2014:21) explain that irrespective of a study design, a theoretical framework will often determine the data-gathering plan of a researcher and will illustrate information within the data. They further explain that the notions, ideas or concepts within a theory may be used to direct a study's data-gathering plan. As discussed in chapter two, sub-section 2.3.1 and sub-section 2.3.2, the concept within the theoretical framework of this study is the concept of ISB.

In order to obtain the required data that would provide the right answers to the research questions of this study, data triangulation was employed. Data triangulation will be discussed subsequently under validity and reliability. Focus group, observation and interview were employed as the appropriate data collection tools for the study. Focus group was employed as the main data collection tool. This tool was used to obtain data from the postgraduates. The tool was employed because it was deemed appropriate for the generation of data that would address all the research questions. Since this study was designed as a case study, this tool was therefore employed because it allowed the in-depth examination of the ISB of the history and international studies postgraduates. Also, the cost implication (relatively cheap) and time factor were put into consideration in the selection of this tool. Aside from the focus group, observation was also used on the postgraduates to obtain additional data that would address some of the research questions. This tool was chosen because it enabled the researcher to have direct interaction with the postgraduates in the course of their use of the hybrid library. Interview was equally employed to provide additional data for some of the research questions. This tool was selected because of its ability to

generate in-depth and rich information. The interview was designed for two librarians in the hybrid library.

4.7.5 Implementation of data collection tools

Before going to the field to obtain data from the participants, the data collection instruments were pre-tested. This was informally done by the researcher's supervisor. Due to her familiarity with the research topic, the supervisor was given the schedules to go through and check whether or not the questions in the schedules were making sense. The aim of giving her the schedules to go through was also to ascertain whether or not the questions were easy to understand. The aim was also to make sure that every question asked was essential to address the research questions. More-over, the schedules were scrutinised by the UNISA ethical committee on research before ethical clearance was given to the researcher.

Prior to the data collection, the researcher had obtained permission from the departmental head of the postgraduates. Permission was given to the researcher to enable the postgraduates to participate in the study. Also, the university librarian gave permission for the two librarians to participate in the research. The librarian equally granted permission to use the library to obtain the required data from all the study participants. Moreover, the researcher had obtained ethical clearance from her university, granting her permission to obtain data from her participants.

The data collection commenced with the group discussion. Before the discussion, the researcher obtained the lists of students of interest from the office of the departmental head. The lists informed her on the total number of master's and doctoral students that would participate in the research. From the lists obtained, there were 44 master's students and 08 doctoral students in the particular set that the researcher intended to study. After obtaining the lists, the class representatives of the master's and doctoral students were introduced to the researcher. She then met with the two representatives who arranged a meeting between her and the postgraduates. During the meeting, the researcher presented informed consent forms to the postgraduates (see appendix 8). The forms were given to them to seek their voluntary participation in the research through focus group and observation. Therefore, through the forms, the researcher could explain to the postgraduates what the entire research would entail. A total of 39

students attended the meeting. Of the 39 students, 37 agreed to participate in the research by signing the consent form. After collecting the consent forms from the students, the researcher met with the 37 students. The meeting aimed to arrange a suitable venue, date and time for the focus group. Concluding the meeting, it was agreed that the discussion would take place in one of the postgraduate spaces of the academic hybrid library. It was also agreed that the discussion would occur once a week during their free period.

Also, prior to the discussion, the researcher prepared a schedule (see appendix 1). The schedule contained a set of topics that will be discussed in detail. The topics were obtained from the research questions and the overall research problem. The schedule also contained questions under each topic. The questions were mainly open-ended and semi-structured questions. The researcher also acquired a pen and note-book for taking notes and a digital voice recorder for recording the discussion. More so, the researcher arranged with a research assistant who would assist her in recording the discussion to enable her to concentrate fully. The researcher also visited the postgraduate reading space of the library where the discussion would take place to ensure that the venue was well-arranged, tidy and comfortable.

Based on the total number of students (37) that agreed to participate in the study voluntarily, the researcher divided the students into six groups of 07, 06, 06, 06, 06 and 06 respectively. During the first session, the researcher discussed with the participants topics prepared in the schedule. The researcher recorded the participant's responses in a notebook, while the research assistant used the digital voice recorder to record the responses. After the first session, the researcher went through the notes and transcribed the recording before the commencement of the second session the following week. The researcher repeated the same procedure for the second, third and fourth groups of students. After the fourth session, a saturation point was determined based on the researcher's discretion. This was because after going through her notes and the transcription, she observed that she was no longer receiving any new information to address her research questions from the students. Therefore, at that point, the researcher stopped obtaining further data from the students. Each of the sessions lasted for about one and a half hours. The researcher spent six weeks organising and conducting the focus group with the students. Then, after analysing the

data, the researcher spent an additional two weeks with the students to carry out member checks. In each session, the researcher ensured that Nigeria's COVID-19 rules were strictly enforced. The adherence to the COVID-19 rules will be discussed in detail under ethical consideration in the last section of this chapter.

The use of focus group as a data collection tool was beneficial for this study. This is because it enabled the researcher to get detailed responses from her participants. This was due to the lengthy time she was able to interact with them. Also, the library setting allowed the participants to relax and express themselves freely. This also enabled the researcher to interview them in a relaxed mood, thereby, creating a conducive environment for the interaction to take place. In some of the sessions, some group members explained their answers to each other. This enabled the participants' not to lose concentration during the discussion. More-over, the researcher did not spend much money in organising and conducting the discussion with the participants. However, during the organisation of the group discussion, the researcher found it difficult to arrange for a suitable time and date with the participants. This difficulty was experienced more with the doctoral students, compared with the master's students. This was due to the students' busy academic schedules.

The researcher commenced observing the students immediately after the focus group sessions. This was so because the researcher could still recognise the faces of most students who participated in the discussion forum. The researcher also prepared a schedule (see appendix 2) for the observation session. Just like the schedule for the focus group, the observation schedule also contained some topics and questions developed from the research questions and the research problem. The schedule comprised of a set of semi-structured questions. The observation was non-participant because the researcher thought that participating in the postgraduates' activities would interfere with her ability to observe them properly. Therefore, being a non-participant observation, the researcher watched and listened to the activities of the postgraduates in the hybrid library without being part of the activities. The researcher holistically observed both the library setting and the participants. The researcher usually commences the observation in the mornings and ends in the evenings. The researcher took notes during the observation. However, the observation went unrecorded because the postgraduates were not observed alone but observed amidst other library

users. Therefore, based on the researcher's judgement, recording other library users who were not participating in the research without their informed consent was unethical. The researcher continued observing the participants and the setting until she stopped receiving new information at the research site. The library is usually open to users from Mondays to Saturdays. From Mondays to Fridays, the library is usually open to users between 8 am and 6 pm. However, the library is usually open on Saturdays between 8 am and 4 pm. The observation has been performed for a period of twenty-two days, excluding Saturdays. Saturdays were excluded to enable the researcher to go through her notes and determine the data saturation point.

Using observation as a data collection tool enabled the researcher to obtain additional data from the participants especially with respect to their use of the library and its resources and ICT facilities. However, the researcher could not observe the students all at once. This is due to the nature of the library building (three floors) and the various sections of the library. This was a major draw-back to the use of this instrument.

The researcher conducted the interview sessions after the observation session. An interview schedule was prepared by the researcher. The schedule comprised mainly open-ended and semi-structured questions. Just like the focus group and observation schedules, the interview schedule also comprised some topics obtained from the research questions. Before the interview sessions, the researcher sought the librarians' consent to participate in the research voluntarily. The librarians were given the informed consent forms (appendix 3), which they read, understood the content of, before signing and giving them back to the researcher. The interview took place in the librarians' offices, situated within the hybrid library building. During the interview, the researcher took notes in her journal, while her research assistant recorded the sessions using the digital voice recorder. The interview sessions lasted about 30 minutes each and conducted over two days. However, after the data analysis, the researcher used several more days to conduct member checks on the interview results obtained. During the interview sessions, the researcher also ensured that the COVID-19 rules were enforced.

Using interview as a data collection tool enabled the researcher to obtain additional information from the two librarians. The information complemented data from the focus group with the student participants. Using interview also allowed the researcher to

clarify issues raised by the interviewees. The researcher did not encounter any major draw-back during the interview sessions. This could be because she only interviewed two people and the people involved were professionals in their field who understood the questions asked, and gave the right answers without much waste of time.

4.8   DATA ANALYSIS

Data analysis is the process of systematically examining, organising and integrating data in order to search for relationships and patterns between them. Babbie (2011:419) elucidates that qualitative data analysis is the non-numerical examination and interpretation of observations to discover underlying meanings and relationship patterns. Likewise, Bhattacherjee (2012:113) explains that qualitative analysis is the process of analysing data such as text from interview records or transcripts. Kumar (2019:494) explains that in a qualitative inquiry, data processing and analysis depends on how a researcher intends to communicate his/her findings. Kumar also mentions that there are three basic ways to communicate findings in a qualitative study. The first method is developing a narrative to explain an episode, situation, instance or event. In this first method, data analysis is not usually required. The second method entails identifying and writing the major themes that arise from interview transcriptions or field notes and quoting the interviewees' exact words. The third method entails quantifying and indicating the frequency of occurrence of the main themes to provide their prevalence. The second and third writing methods usually require content analysis (Kumar 2019:494).

Content analysis is the process of analysing the content of observational field notes or interviews to identify the major themes that arise from the researcher's notes or from interviewees' responses (Kumar 2019:495). Bhattacherjee (2012:115) defines content analysis as the logical analysis of the content of a text such as "who says what", "to whom", "why" and "to what extent". Content analysis involves the following stages:

1. Identification of the major themes: qualitative researchers must carefully review participants' descriptive responses to each of their questions. This is necessary because the researchers need to understand the meanings that the participants are communicating. The researchers will develop extensive themes from the

responses that reflect those meanings. Since individuals use different words to express themselves, the researchers must choose the wording of their themes in ways that precisely represent the meaning of the responses categorised under a specific theme. The themes become the basis for analysing the text of their unstructured interviews. Likewise, the researchers must go through their field notes to identify the major themes.

2. Assigning codes to the major themes: when qualitative researchers intend to count the frequency of occurrence of a theme in an interview, the researchers need to assign codes to the major themes. The codes are assigned by identifying and counting the major themes and attaching numbers or keywords to the themes. The researchers should continue to identify the themes untill the saturation point is attained.

3. Categorising contents of the notes and/or responses under the major themes: this is done by going through the contents of the notes and/or transcripts of interviews and categorising the contents or responses under the various themes.

4. Integration of themes and responses into the text: this could be done by discussing the major themes and employing some notable verbatim responses. It could also be done by counting the frequency of occurrence of a theme and providing a sample of the responses (Kumar 2019:495-496).

Creswell (2014:247) defines coding as taking and segmenting text data or pictures into categories and labeling the categories with a term often based on the participant's actual language (invivo term). Creswell (2014:245) mentions that during qualitative analysis, a researcher must specify whether a computer program will be employed or hand-coding employed for the analysis. However, Creswell points out that hand-coding is usually time-consuming and laborious, while computer program requires skill and time to learn and employ effectively. As explained by Tesch (as cited in Creswell 2014:248) during coding, a researcher should:

1. Read all the transcriptions carefully and if possible, write down some ideas that come to mind while reading.
2. Pick a specific document, go through it, and discover its underlying meaning.
3. Make a list of all the topics and bring together similar topics.

4. Take the list and go back to the data to discover new categories or the emergence of new codes.

5. Look for the most descriptive wording for the topics and convert the topics into categories. Also, look for ways to reduce the entire category list by grouping related topics together.

6. Decide on the abbreviation used for each category.

7. Assemble the data that belongs to each category in one location and then perform a preliminary analysis.

8. The existing data should be re-coded if necessary (Tesch as cited in Creswell 2014:248).

Creswell (2014:249-252) describes the steps involved in a qualitative data analysis. The steps involve the following:

1. Organising and preparing the data for analysis: this is achieved through the transcription of interviews, typing field notes, sorting and arranging data into different types and so forth.

2. Reading all the data: this stage provides a general sense of information and an opportunity to reflect on the overall meaning of the data.

3. Coding the data: Coding is the procedure of taking and segmenting text data or pictures into categories and labeling the categories with a term often based on the participant's actual language (invivo term). A researcher can decide to use codes on the basis of the emerging information gathered from participants, or employ pre-determined codes and fit the data into the codes, or employ a combination of pre-determined and emerging codes.

4. Use the codes to generate themes or categories for analysis. The codes could also be used to generate a description of people or setting for analysis.

5. Inter-relate the themes and description: The most popular method is to employ a narrative passage or chapter to communicate the findings of the analysis.

6. Interpretation of findings: This is the final step of the data analysis (Creswell 2014:249-252).

Creswell (2014:245) mentions that during qualitative analysis, a researcher must specify whether a computer program will be employed or hand- coding employed for the analysis. However, Creswell points out that hand-coding is usually time-consuming and laborious, while computer program requires skill and time to learn and employ effectively.

Grant and Osanloo (2014:12, 21) point out that the theoretical framework underpins and dictates a researcher's data analysis plan. As discussed earlier in this chapter, the theoretical framework and research design for this study are qualitative. Based on that, the study's data analysis plan is equally qualitative.

The researcher started the analysis of the data obtained during the data collection process. The steps for carrying out data analysis that was developed by Kumar (2019: 495-496) and Creswell (2014:249-252), and the steps for data coding that was developed by Tesch (as cited in Creswell 2014:248) were used as guidelines for carrying out the analysis.

The first set of data analysed is the set obtained through the focus group sessions. The analysis commenced after the first session. The researcher started the analysis by organising the data. This was done by typing the field notes using computer Microsoft Word. The researcher then read the whole data in order to reflect on its overall meaning. The next step in the analysis was the coding of the data. The researcher opted for hand-coding rather than using a computer software program. Hand-coding was selected because the researcher better understood the procedure than a computer program. The coding was done by taking the data, segmenting the sentences and/or paragraphs into categories and labelling the categories with a term. The researcher used a combination of pre-determined codes derived from her research questions and codes based on emerging information gathered from the participants.

In the next stage of the analysis, the researcher used the codes to generate categories and themes for analysis. Common themes identified include information, information need, information resources, problems encountered, issues, information sources, use of internet, library books, use of e-books, use of e-journals, use of databases, use of IRs and use of library. The next stage was the presentation and interpretation of the

results. This entailed the integration of the themes and the participants' responses into the text by discussing the major themes and quoting some of the participants verbatim. The same procedure was performed for the interview data. However, for the observation data, quoting the participants was excluded during the analysis.

4.9   VALIDITY AND RELIABILITY

Various authors have used specific terms such as authenticity, adequacy, goodness, verisimilitude, trustworthiness, plausibility, credibility and validation to describe "validity" (Creswell & Miller 2000:124). Validity refers to the appropriateness and accuracy of a research process (Kumar 2011:166). Validity can be viewed as strategies used by researchers to ascertain the credibility or trustworthiness of their study (Creswell & Miller 2000:125). Bryman (2016:41) elucidates that validity is concerned with the integrity or honesty of the conclusions that are drawn from a research work. From the viewpoint of Neuman (2014:211) validity implies truthfulness.

Validity is usually performed in a systematic order in a qualitative study. This is achieved firstly through triangulation, followed by member checks, an adequate description of research findings, clarification of biases, presentation of negative information and spending lengthy periods in the field (Creswell 2014:251-252). Likewise, Leedy and Ormrod (2015:319) explain that enhancing the validity of qualitative findings by a researcher involves striving for fairness, balance and completeness in data analysis and interpretation. The researcher achieves this through the following:

i.   Triangulation of multiple data sources. Hales (2010:14) defines data triangulation as the utilisation of variety of data sources including persons and time in an inquiry. Results of the inquiry can be corroborated, and any drawbacks found in the data can be compensated for by the benefits of other data, thereby increasing the reliability and validity of the results (Hales 2010:14).

ii.   Continuous collection of data until the researcher no longer gains new insight about the phenomenon of interest.

iii.   Engagement of two or more individuals to independently code the data.

iv.   Seeking feedbacks from both participants and professional colleagues about findings and interpretations.

v.   Careful documentation of the procedures of analysis. This is imperative because the research process must be documented and justified. Ideally, the data analysis procedure should be described in enough details such that another researcher can replicate the procedure, and comparable results can be obtained.

vi.   Honesty about personal biases. Honest qualitative researchers never claim that they have conducted a project with thorough objectivity. Instead, they reflect on, and describe their beliefs, expectations and cultural values that might have inclined them to interpret their data in specific ways. With such knowledge, readers of the research work can better assess the validity of the findings and interpretations (Leedy & Ormrod 2015:319).

Neuman (2014:211) explains that "reliability" implies dependability or consistency. Babbie (2011:348) reiterates that reliability is a matter of dependability. However, from the viewpoint of Bryman (2016:41), reliability is concerned with the question of whether the results of a study are repeatable. With respect to data collection instrument, Kumar (2019:345) explains that if a data collection tool is stable, consistent, predictable and accurate, it is said to be reliable. He further explains that the greater the degree of stability and consistency in an instrument, the greater the reliability of that instrument. For a qualitative study, reliability is achieved by:

i.   Verifying transcripts to ensure that there are no noticeable mistakes.
ii.   Ensuring that the meanings of codes will not be interpreted.
iii.   Ensuring the consistency of findings.
iv.   Cross-checking codes thoroughly (Gibbs as cited in Creswell 2014:252).

For this study, the researcher checked for validity by using focus group, observation and interview to obtain data (triangulation). Triangulation was done by conducting focus groups. After the focus groups were conducted, observation of the postgraduates was carried out by the researcher followed by the interview. Although the researcher encountered some draw-backs with the observation, due to her inability to be present in all the library floors and sections at the same time, the data obtained

from the focus groups and interviews compensated for the draw-backs. The researcher also checked for validity by collecting data continuously from her participants until the researcher was no longer gaining new insight about the phenomenon of interest, taking the results obtained to some of the participants who were willing to go through, to do so, in order to confirm the accuracy of the results (member check), clarifying possible biases introduced into the study through self-reflection, careful documentation of the procedures of analysis, being honest in reporting the findings and by spending long periods in the field. Furthermore, the researcher checked for reliability by correcting any noticeable mistake in the report, ensuring that the code meanings were not misinterpreted, and by cross-examining codes to ensure consistency of the findings.

4.10   ETHICAL CONSIDERATIONS

Ethical considerations must be kept in mind during the planning and execution phase of research (University of South Africa, Department of Information Science 2019:37). Babbie (2011:67) maintains that researchers must be aware of the "general consensus" among fellow researchers about what is appropriate and inappropriate in the conduct of research. The "general consensus" is known as "ethics" (Babbie 2011:67). Ethics could be viewed as the legitimate or illegitimate things to do during a research procedure (Neuman 2014:145). However, from the viewpoint of Kumar (2019:436) the word "ethics" denotes the moral values or standards of professional behaviour desirable for excellent professional practice. Case and Given (2016:231) reiterates that ethics has occasionally been referred to as "standards of behaviour or conduct".

According to Kumar (2019:437) there are three stakeholders in any empirical research activity. These are the subjects or participants, the researcher, and the funding body (Kumar 2019:437-438). The participants are the stakeholders that have indirect or direct involvement in a research study. A researcher is the stakeholder that assembles information to enhance professional knowledge, and a funding body is the stakeholder that is responsible for sponsoring a research work (Kumar 2019:437-438). Kumar (2019:437-438) further explains that in a research activity, each category of stakeholder may have different perspectives, interests, purposes, motivations and aims that might affect how the research work is conducted, and how the findings will

be communicated and utilised. He therefore suggests that it is imperative to examine ethical conduct in research based on these three categories of stakeholders.

4.10.1   Ethical issues concerning participants

i.   Seeking consent: in every academic field, gathering information without the participants' knowledge, willingness and informed consent is regarded as unethical. Informed consent denotes that participants are made sufficiently aware of the type of information the researcher requires from them, the reason or purpose for seeking the information, how the participants expect to participate in the research study and how the study will indirectly or directly affect them. A standard procedure is to give the participants an "informed consent form", which explains the nature of the research project and the nature of the participants participating in it. It is imperative that the consent should be voluntary and in writing, therefore, without any pressure on the prospective participants.

ii.   No harm to participants: harm may include anxiety, discomfort, harassment, demeaning procedures or invasion of privacy. When a researcher is collecting data from participants, the researcher must carefully examine the tendency to harm the participants in any way. If the tendency is there, the researcher must ensure that the risk of harm is kept low. Minimal risk denotes that the degree of harm in the research work is not greater than the harm ordinarily encountered in everyday life. It is unethical if a researcher seeks information by creating harassment or anxiety, and if a researcher believes this may happen, the researcher should take the necessary steps to prevent it.

iii.   Anonymity and confidentially: any research involving people must respect participants' rights to privacy. A researcher should protect the privacy of his/her participants by not disclosing the participants' identities after collecting information. This usually takes two forms which are anonymity and confidentially. Anonymity implies that the participants remain nameless or anonymous, while confidentiality implies that a researcher holds information in confidence or keeps it undisclosed from the public. A researcher should not disclose information such that it could associate with

specific participants. Confidentiality may protect research participants from physical injury or harm.

iv. Providing incentives: offering little gifts to participants after obtaining information as a sign of appreciation is ethical. However, giving such gifts before the collection of data is considered unethical.

v. Seeking sensitive information: sexual behaviour, marital status, drug use, age and income may be considered an invasion of participants' privacy, and hence could be regarded as sensitive information. It is not unethical to seek sensitive information from participants. However, to do so, a researcher should frankly inform the participants about the type of information s/he is going to seek, and give the participants enough time to make up their minds about disclosing such information to the researcher without any major incentive, bribe or inducement (Babbie 2011:68-71; Bhattacharjee 2012:137-139; Creswell 2014:136; Kumar 2011:220-222; Kumar 2019:439-442; Leedy & Ormrod 2015:120-123; Neuman 2014:146-154).

4.10.2   Ethical issues concerning researchers

i. Avoiding bias: bias is a purposeful attempt to hide what a researcher has found in his/her inquiry. It is unethical to introduce bias into a research study. If a researcher cannot control his/her bias, the researcher should not be engaged in the research work.

ii. Using unsuitable research methodology: a researcher must utilise appropriate methodology in conducting a study. Therefore, it is unethical to purposefully utilise an inappropriate method to prove or disprove a phenomenon.

iii. Incorrect reporting: correct reporting of the results are important characteristics of ethical research practice. Falsifying authorship, data results, evidence or conclusion is unethical. A researcher should report his/her results honestly and completely without any distortion. Hence, it is unethical for a researcher to report research results by altering the results to serve the researcher's or someone else's interest. Under no condition should a researcher feign data to support a specific conclusion. Data analysed should be kept for a considerable period. After that period, the

researcher should dispose of the data to prevent the data from being misappropriated by other researchers. A researcher should also avoid revealing only favourable results. In qualitative research, a researcher needs to report the full scope of results including results that may oppose the themes.

iv. Avoid plagiarism: plagiarism is a deception involving a researcher stealing the writings or ideas of another researcher. These are serious breaches of ethical standards.

v. Respect for research site: the research site should be respected and disrupted as little as possible, especially in qualitative research. This is necessary because the research site should be left uninterrupted after a research activity (Babbie 2011:67-76; Bryman 2012:143; Creswell 2014:137-140; Kumar 2019:443-445; Leedy & Ormrod 2015:123; Neuman 2014:146).

4.10.3 Ethical issues concerning sponsoring organisations

i. Restrictions enacted by sponsoring organisation: sometimes there may be indirect or direct controls exercised by a sponsoring organisation. Such restrictions are mostly unethical. This is because they can interfere and lead to the sponsoring organisation tailoring research results to meet its vested interests.

ii. Misuse of information: it is unethical to allow research findings for use as a reason for justifying management resolutions in an organisation when the research findings do not corroborate such a decision (Kumar 2011:223; Kumar 2019:445-446).

According to Mctavish and Loether (2015:13) the ethical behaviour of a researcher has consequences not only for the welfare of the participants and organisations involved in the research, but also for the researcher's chances of conducting research again. Concerning the participants of this study, the researcher sought their full consent before data could be obtained from them. This was done by providing each participant with an informed consent form to read and sign, to indicate their willingness to participate in the research (see appendix 8). The researcher also respected the participants' right to privacy during the data collection process. This was done by not

disclosing the participants' identities after collecting information from them. In addition, the information collected from the participants was kept in confidence by the researcher. The researcher equally ensured that the participants were not harmed in any way in the course of obtaining data from them. This was done by ensuring that they were not harassed, pressured to participate in the study and not delayed longer than necessary at the research site. In addition, the researcher ensured that the data collection session did not affect the student participant's normal academic activities and the librarians' work schedules. She also ensured that the interactive sessions with the participants occurred in a comfortable place. Finally, she ensured that the COVID-19 rules were adhered to by herself and all her participants.

Due to the COVID-19 pandemic, there was a need for the researcher to comply with Nigeria's COVID-19 rules for all schools during the period of obtaining data from the participants in the library. Nigeria Federal Ministry of Education (2020) and Nigeria Centre for Disease Control (2019) have mandated that all schools in the country comply with specific rules to mitigate the risks of contacting COVID-19. Some of the codes of behaviour are outlined below.

i. All schools should establish a conspicuous triage point at their entrances. Everyone gaining access to a particular school will be screened for high temperature and must perform hand hygiene.
ii. Classrooms and other learning facilities should be well-ventilated with a minimum of one-meter sitting layouts or arrangements.
iii. It is compulsory for every person above the age of six, to wear face masks within the premises of a school.
iv. All schools must ensure sufficient access to running water, hand sanitisers or soap (Nigeria Federal Ministry of Education 2020; Nigeria Centre for Disease Control 2019).

In the university where the researcher obtained data, the COVID-19 rules were being enforced by the management. In compliance with the rules, the researcher ensured that everyone wore a face mask during the interactive sessions. She also ensured social distancing was upheld during the interactive sessions. Moreover, she ensured the venue windows where the interactive sessions took place were open for adequate and cross ventilation of air.

Regarding ethical issues that concerned the researcher, during the research, the researcher avoided being subjective. Therefore, she tried to be completely honest throughout the research and reported the findings correctly. In addition, the researcher ensured that the appropriate methodology was applied to carry out the research. This was done by using the nature of the research problem, the objectives of the inquiry, the theoretical framework, the research paradigm and other criteria for selecting appropriate methodology as guides to the selection of the suitable methodology for the inquiry. The researcher is the custodian of all data obtained and is kept in her safekeeping. The data will be kept for a considerable period before the researcher disposes of the data to prevent the misappropriation of the data by other people. Also, the researcher ensured that other peoples' works were correctly cited to avoid plagiarism. Finally, the site where data were collected was not disrupted by the researcher. Therefore, after the data collection process, the researcher ensured that she left the site how she found it.

4.11   CHAPTER SUMMARY

This chapter comprises discussions on various methodological aspects employed to carry out the present study. This study is a doctoral thesis on the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. The methodological aspects discussed in the chapter include aspects of the research paradigm, research approach, research design, study population, sampling, data instruments, data analysis, validity and reliability, and ethical considerations. The various aspects were discussed under different sub-sections.

The interpretivism paradigm was selected as the appropriate paradigm that shaped the study, and the qualitative approach was selected as the appropriate approach for the study. Case study, a type of qualitative design, was selected as the appropriate research design for the inquiry.

The study population consisted of the history and international studies postgraduates in the federal university, and librarians in the university library. The purposive sampling procedure, which is a type of non-probability sampling procedure, was employed to sample the study population. Hence, the second set of postgraduates in the department and two librarians in the hybrid library were selected using the purposive

sampling procedure. However, as a qualitative study, the sample size was not determined; instead, data saturation was used to determine the sample size.

Being a qualitative study, focus group, observation and interview were employed to obtain the required data from the participants. Focus group and observation were employed to obtain data from the student participants, while interview was employed to obtain data from the librarians.

The data obtained were analysed by using the procedure for qualitative data analysis developed by Kumar (2019:495-496). Also, as a qualitative study, the procedures for carrying out qualitative validity developed by Creswell (2014:251-252), and Leedy and Ormrod (2015:319) were adopted. The procedure for conducting qualitative reliability developed by Gibbs (as cited in Creswell 2014:252) was also adopted. The chapter concluded by discussing the ethical issues considered during the thesis writing.

CHAPTER FIVE

PRESENTATION OF RESULTS

5.1   INTRODUCTION

This study is on the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. In this chapter, the results obtained from the data analysed from the focus groups, observation and interviews are presented. Kumar (2019:519) explains that during a research project, the next task after data analysis is the presentation of results. He further explains that the aim of presenting results is to provide answers to the research questions (Kumar 2019:546). For this study, the research questions are:

1. What are the information needs of the history and international studies postgraduates in the academic hybrid library?
2. How are the information needs of the postgraduates being satisfied in the hybrid library?
3. What are the means through which the postgraduates use of library ICT facilities to access information in the library?
4. How do the postgraduates use the hybrid library as a formal information source, and what are the other information sources they usually consult?
5. What are the roles of information exchange in the information-seeking activities of the postgraduates in the hybrid library and in other sources?
6. What are the roles of information transfer in the information-seeking activities of the postgraduates in the hybrid and in other sources?
7. What are the factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities in the hybrid library and in other sources?
8. What are the barriers to the postgraduates' information-seeking and utilisation of information in the hybrid library and in other sources?

In this chapter, results are presented by integrating themes and participants' responses into the text. The results are also presented by quoting verbatim the responses of some of the participants. Taylor *et al.* (2016:207) assert that quotes must

not be used to make points; instead, researchers should make their points before using quotes to illustrate them. They further assert that researchers should use a specific quote only once because repeating quotes can leave the impression that a researcher's data are thin. Similarly, Thorne (2020:5) points out that verbatim quotation should only be included in a research result when it serves to highlight, illustrate or bring to life the point a researcher is trying to convey to the reading audience.

Based on the order in which data were obtained and analysed in the previous chapter, this chapter will first present the findings of the focus group sessions, followed by the findings of the observation and interviews.

5.2   FINDINGS OF FOCUS GROUP

The focus group discussion was carried out to obtain data from the postgraduates that would address all the research questions of the study. As discussed in section 4.7.4 of chapter four, the discussion with the students took place in one of the postgraduate reading spaces in the hybrid library under study. This space is located on the second floor of the hybrid library consisting of three large tables, chairs, ceiling fan and charging points.

5.2.1   Demographic data of participants

N= 25
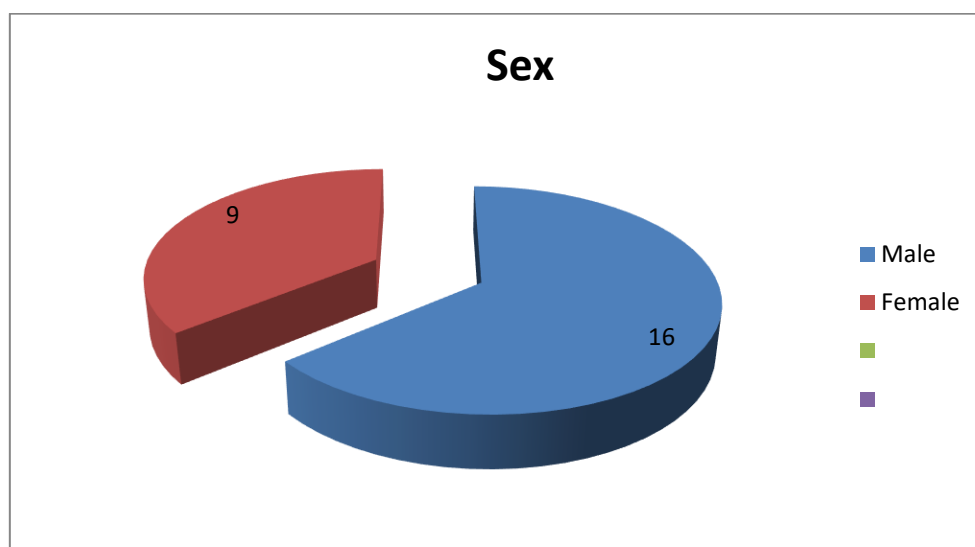
Figure 5.1: Distribution of participants by sex

The above chart shows that a total of 16 (64%) males and 09 (36%) females attended the four sessions of the focus group in the academic hybrid library. These figures indicate that more males than females participated in the four sessions.
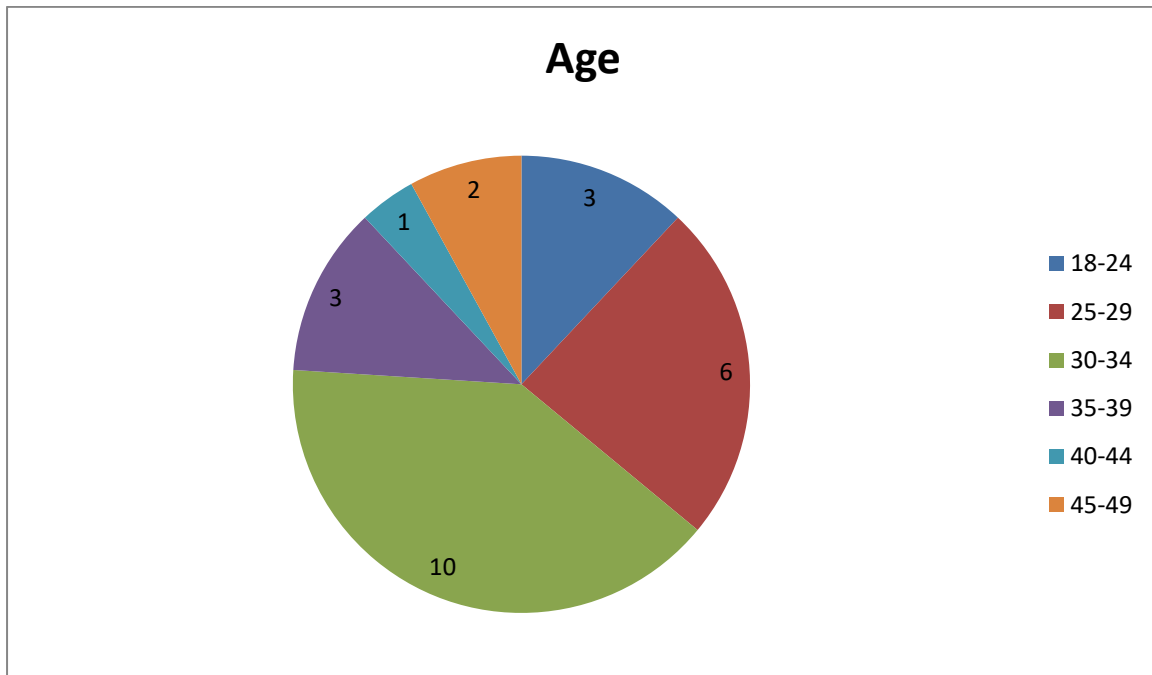
Figure 5.2: Distribution of participants by age

The above chart presents the age distribution of the participants. Based on the chart, majority 10 (40%) of the participants are in the age range of 30-34 years. Followed by 6 (24%) of the participants in the age range of 25-29 years. The age range with the least number of participants is 40-44 years, which comprises only 01 (4%) participant. These figures indicate that majority of the participants are young adults.
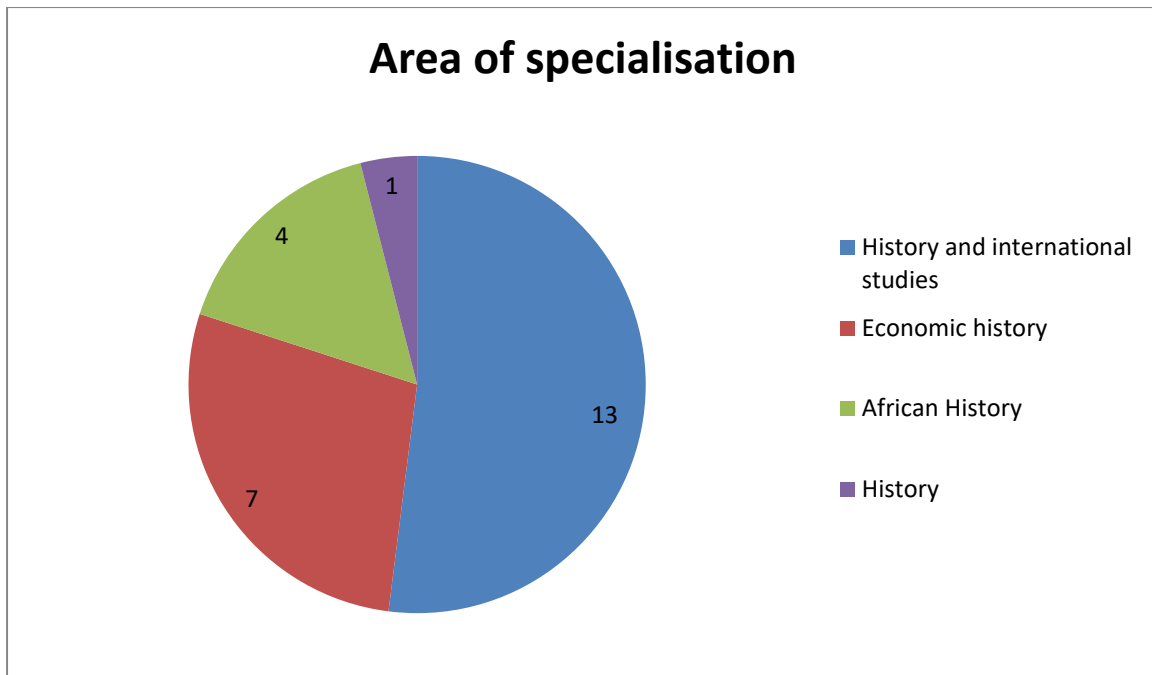
Figure 5.3: Participants' areas of specialisation

The above chart illustrates that out of the 25 students that participated in the study, the area of specialisation of 13 (52%) participants is history and international studies, while the area of specialisation of 07 (28%) participants is economic history. The chart also illustrates that the area of specialisation of 04 (16%) participants is African history, while the area of specialisation of 01 (4%) participant is history. These figures indicate that majority of the participants are in the area of history and international studies, followed by economic history. The figures also indicate that only one history major student participated in the inquiry.
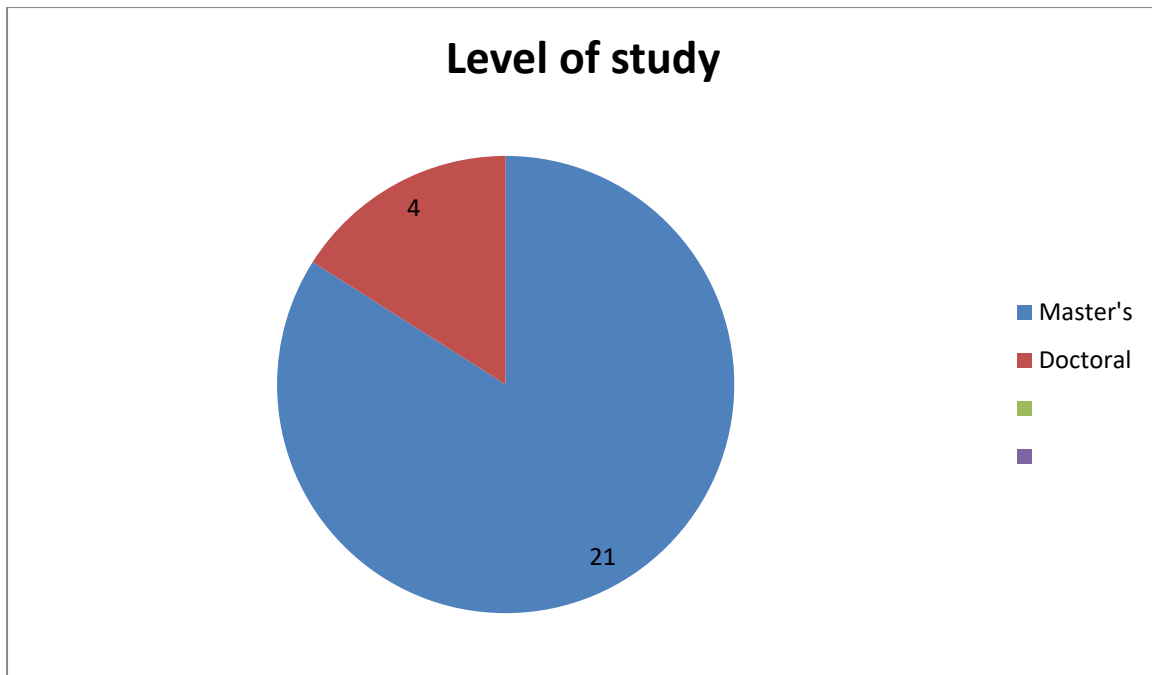
Figure 5.4: Participants' level of study

The above pie chart displays that out of the 25 students that participated in the study, 21 (84%) are master's students, while 04 (16%) are doctoral students. These figures indicate that majority of the students that participated in the study are master's students.

5.2.2 Information needs

In all the sessions, the participants that interacted acknowledged that they need information to carry out their daily activities. Some participants mentioned the kinds of information needed for their daily activities.

5.2.2.1 Categories of information needs

The kinds of information needed were mentioned by some of the participants and were centered mostly on their studies and personal lives. In one of the group sessions, a participant said "I need information for my school activities and also for my personal activities such as how to make money as a student". In another group a participant mentioned "I need information on a daily basis concerning my academic work and concerning what is happening in my environment and the world at large".

5.2.2.2   Kinds of print resources needed

In the entire focus group sessions, majority of the participants mentioned that they needed various relevant print resources in the hybrid library based on their various research topics. Across the groups, "textbooks", "journals", "government publications" and "theses and dissertations" were mostly mentioned by the majority of the participants as the common types of print resources they need.

Also, majority of the participants acknowledged through the raising of the hands that they need both dated and current resources in the hybrid library. Most of the participants mentioned "newspapers", "textbooks" and "government publications" as the dated resources they mostly require from the hybrid library. However, majority of the participants mentioned "journal articles", "theses and dissertations", "textbooks", "conference proceedings" and "government publications" as the current resources they mostly require from the hybrid library.

5.2.2.3   Kinds of digital resources needed

During the discussion, majority of the participants mentioned the need for varieties of digital resources from the hybrid library. Also, majority of the participants mentioned that they needed specific resources based on their research topics.

5.2.2.4   Purposes of seeking information to satisfy a need

In all four sessions, the participants mentioned different but similar purposes for seeking information in the hybrid library. Most of the purposes mentioned by the participants were for conducting assignments, reading for examinations, carrying out research activities, leisure and self-development.

5.2.3   Utilisation of library ICT facilities to access information

Across the groups, the mainstream of the participants acknowledged that they have basic ICT skills. This is acknowledged by raising a hand and by saying "yes" to the question asked by the researcher on the topic under discussion. Also, the mainstream of the participants acknowledged that they own mobile phones, while few participants acknowledged they own laptops. The majority of the participants also acknowledged that to a considerable extent they know how to browse the Internet with their mobile

phones and laptops. None of the participants indicated that s/he could not browse the Internet or send e-mails.

All the participants acknowledged that they know about the library ICT facilities. The main facilities mentioned by some of the group members are "desktop computers", "printers", "scanners" and "photocopiers". Various group members also mentioned that they know about the "Internet facility" in the hybrid library. All the participants also acknowledged that they know of the computer laboratory in the library. Also, they acknowledged that they usually visit the library to utilise the Internet. The majority of the participants mentioned that they usually connect to the Internet with their smartphones and laptops. Few participants acknowledged that they sometimes utilise computers in the laboratory. However, one of the participants in one of the discussion groups said "I perceive the computer laboratory as a laboratory that is meant for undergraduate students because I always see them there".

Most participants who interacted during the sessions mentioned that they usually utilise the library ICT facilities to search for information resources including resources in the hybrid library. They also acknowledge that they usually use the ICT facilities to carry out other academic activities such as group chats and word-processing. However, some participants also mentioned that they sometimes manually search for information resources in the hybrid library and other information sources. The participants mentioned "browsing through the shelves" as the manual method they usually employ to search for resources in the hybrid library. However, in one of the discussion groups, a participant said "I sometimes ask the library staff to assist me to search for resources".

5.2.4 Utilisation of hybrid library and frequency of utilisation

During the interactive sessions, all the participants indicated by raising their hands that they usually visit the library. Most of the participants mentioned that they visit the library regularly. In one of the discussion groups, a participant said "I visit the library regularly because the library is close to my faculty". In another discussion group, a participant stated "I visit the library very often because I enjoy reading for long hours in the library". Only a few participants indicated that they visit the library occasionally and none mentioned that s/he had never visited the library. In one of the discussion groups a

participant explained "I visit the library once in a while because I often use my departmental library". In another group, a participant explained "I visit the library occasionally because bags are not allowed inside the library, and most of the time, the lockers that are provided for keeping bags are occupied with other bags".

5.2.4.1 Sections often visited

Regarding the section of the library that is often visited, across the groups, most participants mentioned the postgraduate space as the section they usually visit. In one of the group discussions, a participant explained "I usually visit the postgraduate space because the space is meant for us and it is usually quiet compared to other sections". In another group discussion, a participant mentioned "I usually find my class mates in the postgraduate room and we usually study together". However, some participants mentioned that apart from the postgraduate spaces, they also visit other sections of the library for one purpose or the other. In one of the group discussions, a participant mentioned "I also visit the documents section to consult theses and dissertations". In another group discussion, a participant mentioned "I also visit the serials section to read newspapers and also to check the journals". In another group discussion, a participant also mentioned "At times I visit the open space … I enjoy resting in the settees".

5.2.4.2 Perception of hybrid library

All the participants that spoke in the various groups commended the library. None of the participants expressed a contrary view about the library. In one of the discussion groups a participant described the hybrid library as "a modern library". In another discussion group, a participant described the library as "State-of-the-art library". During the discussion in the two groups, the majority of the group members agreed with the statements made by their fellow students by nodding their heads. This result indicates that the perception of majority of the participants about the library is positive.

5.2.4.3 Usefulness of hybrid library

The majority of the participants perceived the library as very useful to their academic activities. In one of the discussion groups, a participant described the hybrid library as "a conducive learning environment". Majority of the other group members concurred

with the participant. More so, in another group discussion, a participant said "I usually get encouraged to read for long hours in the library … this has improved my academic performance". However, few participants across the various discussion groups did not view the library as useful to their academic activities. In one of the groups a participant expressed the view that "Except for the reading spaces and internet connectivity, I don't perceive the library as really important… most of the resources I need are on the Internet… I think I can do without the library".

5.2.4.4   Roles of faculty librarian

Most participants acknowledged that their faculty librarian has a role to play in their utilisation of the hybrid library. Also, most participants mentioned that they know their faculty librarian. However, only a few participants acknowledged that they sometimes consult their librarian for reference services. The majority of the participants said that they utilise the library and its resources without assistance from their librarian or any other librarian.

During the discussions, some participants mentioned specific issues that they would like the library to address. Most of the issues centered on resources, services, facilities and training. These issues are reflected in the statements below:

"I want the library to provide more current and relevant resources".

"The library should provide more lockers for users to keep their bags".

"The internet connectivity should be improved upon".

"The opening hours of the library should be extended especially during exam periods".

"During exam periods, the reading tables and chairs are usually insufficient … more seats should be provided during such periods".

"The library should organise regular ICT training to students…to enable us to use the library e-resources".

"At times the open reading spaces are too noisy…the library should control the noise in those places … especially the use of mobile phones to make calls."

During the discussions, question was asked on the need for the students to have a personal librarian that would assist them with all library affairs. The mainstream of the

participants across the groups agreed that having a personal librarian would enhance their utilisation of the library and its resources. In one of the groups a participant exclaimed "It is a welcome idea!".

5.2.4.5   Utilisation of hybrid library print resources

Across the groups, most participants acknowledged that they know about the print resources in the hybrid library. This was done by their saying "yes" to the question asked by the researcher on the topic under discussion. None of the participants gave a contrary answer. The majority of the participants also acknowledged that they are aware of the location of the arts collection in the library. The participants mentioned various avenues through which they became aware of the print resources. The avenues through which some of the participants became aware of the print resources illustrated in the statements below:

"I came to know about the library books by going through the shelves.

"I usually go through the library's online catalogue in order to check for book titles that I need, and in the process, I see other titles".

"I came to know about the arts collection by reading the directional map at the entrance of the library".

"One of my lecturers mentioned the need for students to use the library resources during his lecture. So, after the lecture, I visited the library to check out the arts collection and other relevant resources".

"I came to know about the arts collection through the arts librarian during a library sensitisation exercise".

The majority of the participants acknowledged that they use varieties of the hybrid library's print resources for one purpose or the other. The acknowledgement was done by their saying "yes" to the question asked by the researcher about their use of the resources. The mainstream of the participants that commented also mentioned that apart from their collection, they also utilise some relevant resources (especially textbooks and journal) in the collections of other departments and faculties. Across the groups, some participants mentioned the resources in the collections of education, archaeology and heritage studies, criminology, religion philosophy, international law

119

and jurisprudence, political science, sociology and economics as some of the collections they usually utilise alongside their collection.

Across the groups, most participants also acknowledged that they usually utilise both dated and current print resources simultaneously.

5.2.4.5.1 Factors that influence choice of dated or current print resources

Some of the group members explained that the need to utilise dated or current print resources depends on certain factors such as "a given assignment", "area of specialisation" and "research topic".

5.2.4.6 Utilisation of digital resources

All the participants acknowledged that they know about the library's digital resources. This was done either through raising of the hand, or by their saying "yes" to the question asked by the researcher on the topic under discussion. The participants mentioned that they know the library's site for e-books, databases and IR. They also mentioned different avenues through which they became aware of the resources. Some of the participants' responses are shown in the assertions below:

"I became informed about the digital resources by browsing through the library's website".

"I became aware of the digital resources through the periodic library sensitisation exercise, and through the use of library course I offered during my undergraduate days".

"I know about the library e-books, databases and institutional repository".

Across the groups, most participants that spoke also mentioned that they usually utilise a wide range of digital resources that cuts across other academic fields. Most of their course mates agreed with them. In all the groups, no body disagreed with the explanations offered. In one of the discussion groups, a participant explained "I used different types of e-resources in my field of study and in other disciplines during my course work and right now, I still do the same for my project work". In another group, a participant said "Our course is interdisciplinary; therefore, we are expected to read widely…, and this entails our using resources in many fields of study…." However,

120

across the groups, the mainstream of the participants acknowledged that they usually utilise more current digital resources than dated digital resources.

5.2.4.6.1 Utilisation of library electronic books

The mainstream of the participants acknowledged that they browse the hybrid library e-books site. However, only few of the participants acknowledged that they use the e-books. In one of the groups, a participant mentioned "I usually check the e-books site from time to time to know the titles that are available. At times, I find some relevant titles which I use". In another group, a participant said "I sometimes browse the e-books site, but I hardly find what I need; therefore, most often, I download free e-books from the Internet". The other participants acknowledged that they also use more free internet e-books than library e-books. In another group, a participant mentioned "I prefer downloading free e-books from the Internet because the procedure is faster, unlike the library site where I am required to login". Some of the participants in some of the groups mentioned that they usually find relevant e-books on the Internet but those relevant books usually require subscriptions or purchases which they cannot afford.

5.2.4.6.2 Utilisation of databases

Only a few participants acknowledged that they usually utilise library databases. A few participants mentioned specific databases that they usually use. The participants also mentioned the kinds of resources they usually access in the databases. In one of the group discussions, a participant mentioned "I often use the full-text articles in JSTOR databases". In another group discussion, another participant mentioned "I use 'The African Theses and Dissertation' for my research work". Common resources mentioned by the participants as the resources they normally utilise in the databases are full-texts and abstracts of "journal articles", abstracts of "theses and dissertations" and "conference papers".

5.2.4.6.3 Utilisation of Institutional Repository

The mainstream of the participants indicated that they usually utilise the resources in the IR and this was indicated through the raising of the hand. Particular resources

mentioned by the participants that interacted include "past question papers", "e-theses and dissertations" and "journal articles".

5.2.4.7 Utilisation of hybrid resources

The entire participants acknowledged that they usually utilise both print and digital resources. However, most participants mentioned that they utilise more library print resources than digital ones. Various reasons for such behaviour were also given. Some of their statements are shown below:

"In terms of library resources, I use more print than digital resources because I find the print resources more relevant to me and easier to locate and use, than the digital resources".

"I use more of library print resources and internet resources".

5.2.4.8 Preferred format

In the discussion forums, mainstream of the participants acknowledged that they prefer digital resources and various reasons were given for their preference. Some of their statements are shown below:

"I use both print and digital resources, but I prefer digital resources because it is easier and faster to use".

"I prefer digital resources because I can access them at any place and time".

"I prefer digital resources, but I lack the skills and the time to search and access the library digital resources; therefore, I always use internet resources".

5.2.4.9 Utilisation of other formal information sources

Apart from their academic library, the participants mentioned the Internet as the main source they usually seek information. However, few participants mentioned the "Jos Museum" and the "National Archives" as sources they have visited in the past to get resources for their research activities when other sources have failed.

During the chats, several participants indicated that they do not utilise other academic hybrid libraries. This was done by their saying "no" to the question asked by the researcher. They gave various reasons for that.

In one of the groups, a participant explained "Other academic libraries usually demand for a letter of introduction from my institution, and it takes time to get such a letter ..." In another discussion group, a participant mentioned "Most academic libraries are far away from me; therefore, the distance and lack of money discourages me from visiting them". In another group, a participant said "I don't see the need to visit another library because I find most of the resources I need on the Internet". Few participants acknowledged that they have visited other academic libraries to use some of their resources and services. However, across the groups, very few participants mentioned that they sometimes use the online resources of other academic hybrid libraries. In one of the discussion groups, a participant acknowledged "I do use the e-theses and dissertations of other academic hybrid libraries through their websites".

5.2.4.10 Obtaining informal information

In the four discussion groups, all the participants who interacted acknowledged that from time to time they obtain informal information that concerns their academic activities from other individuals through different media. In one of the group discussions, a participant explained "Most times I obtain important information from my course representative about my school work either verbally, through phone calls or through WhatsApp group chat". The other group members agreed with the explanation. In the other group discussions, "lecturers", "supervisors" and "fellow students" were mentioned by most participants as the people whom they obtain informal information from.

5.2.4.11 Information source preference

During the interactive sessions, most of the participants mentioned the Internet as the first place they usually start their information-seeking process. Across the various groups, most participants were in agreement that they usually start their information-seeking activities on the Internet, followed by their academic hybrid library and other formal and informal sources. Several reasons were given for this behaviour. Across the four groups, the majority of participants also acknowledged that they usually go

back to the Internet to search for information if they fail to obtain what they need from the library and other sources. In one of the groups, a participant stated "If I don't get what I am looking for, I use new search terms to browse the Internet… and most of the times, I end up getting the information from the Internet". Other group members agreed with this explanation that the participant gave. A participant in another group said "I usually browse the Internet to seek information, before I think of the library, because the Internet is quicker and easier for me". Another participant said "I check the Internet first whenever I need information resources for an assignment or my project work; I still check the library for additional information resources". A participant in another group said "I start with the Internet, before the library and other places. If I don't get what I want, I still go back to the Internet".

Across the discussion groups, the participants that interacted acknowledged that their search for relevant information sometimes results in failure. In one of the groups, a participant explained "If my search is unsuccessful, I usually go back to the Internet and rephrase my search terms and most times I end up getting what I am looking for". In another group, a participant explained "Whenever I fail to get the right information for an assignment, I usually ask my classmates to direct me to where I will get the right information".

Across the four groups, some participants offered explanations regarding what they usually do when their search for information is successful. Most of the participants acknowledged that they usually suspend or halt their information-seeking activities briefly to go through what they have before putting the acquired information to use. The majority of the group members agreed with the explanations their fellow students gave. Some of the statements made to that effect presents below:

"I usually go through the information I have acquired, I then separate the relevant ones from the irrelevant ones. I use the relevant ones, and I keep the irrelevant ones aside".

"If the information is being sought for an assignment, I sometimes cross-check the acquired information with the ones my colleagues have acquired, in order to ensure that I have acquired the right information before putting the information to use".

"At times, if the search is hectic, I take some time off to rest in order to recover my lost energy before I start using the information I have acquired".

124

However, across the groups, most participants agreed that at times due to the urgency of an assignment or the deadline for submission of an assignment, they do not halt the seeking process, but usually go ahead to utilise the information they have acquired. In one of the groups, a participant said, "It happens when there is no time to go through the information". The other group members acknowledged that the participant's explanation was correct by nodding their heads and by saying, "It is true".

5.2.5   Roles of information exchange

The participants acknowledged that they engage in information exchange. The acknowledgement was done through various gestures such as raising the hand, nodding the head and saying "yes" to the question asked by the researcher. None of the participants gave a contrary answer. The participants mentioned the people they usually exchange information with as students. They also mentioned the medium they usually employ to exchange information. Some of their responses are reflected in the statements below:

"I always exchange information with my class mates …."

" … if we are together with my classmates, we exchange information verbally. But when we are apart, we use phones or social media platforms …."

"… I and my classmates engage in information exchange when having tutorials or discussions especially during assignments or in preparation for exams".

"Even in this discussion forum, we are exchanging information".

"Whenever we are having class discussions, I do exchange information with my lecturers and fellow students".

All the participants agreed that information exchange plays significant roles in their information-seeking activities. In the four group chats, similar points were mentioned by the participants. The other participants agreed with them, either by saying "yes" or saying "it is true" or nodding their heads. The statements below were selected across the four forums to illustrate some of the participants' utterances:

"I engage in information exchange in order to update my knowledge".

"Information exchange helps me to establish relationships with my fellow students".

125

"Information exchange helps me to reduce stress".

5.2.6   Roles of information transfer

All the participants agreed that they sometimes transfer the information they have acquired to other individuals. This is done before, during or after utilisation of the acquired information. They also acknowledged that the transfer could be voluntarily or based on request. Concerning information on their academic activities, most participants mentioned their "fellow students" and "school friends" as the people they usually transfer information to. In one of the forums, a participant said "I transfer information to my fellow students anytime the opportunity arises". Another participant said "When I have information that I feel that will be useful to another student, I usually ask the person… if the person says yes, I then transfer the information to the person".

The participants mentioned various media as the avenues through which they transfer information. Across the forums, a participant explained "If it is casual information, I use face-to-face communication or my phone to transfer such information. But if the information is in a document …, I transfer it in that medium". Another participant described her transfer mode as "Depending on the format on which the information appears, at times I transfer information using soft copy and at times I use hard copy to transfer the information".

During the interactive sessions, the roles of information transfer in the information seeking activities of the postgraduates were discussed. During the discussion the roles were mentioned by a few participants and agreed upon by the majority of the participants. This was done either by nodding their heads or saying "It is true". One participant mentioned "the sheer joy of assisting others with needed information", while another mentioned "the ability to part with information that is no longer useful", as the roles information transfer play in their information-seeking activities. Furthermore, another participant mentioned that information transfer enables him to "establish relationships" while another participant mentioned that the role of information transfer could be "mutual", because it could be a "give and take" venture.

5.2.7 Factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities

The majority of the participants agreed that the hybrid library resources are meeting their information needs to an extent. Although there were mixed reactions. In two of the forums, most participants agreed that the hybrid library resources met about "60%" of their information needs. A participant said "The library lacks key current resources especially textbooks and journals in our field of study". In another forum, most participants agreed that the hybrid library resources met about "50%" of their information needs. In that forum, some of the participants raised the issue of insufficient resources. However, in a particular forum, most participants agreed that the hybrid library resources met less than "50%" of their information needs. Although, a participant mentioned that "The library resources may be meeting more of our needs than we are thinking, but because we have not taken our time to discover all that the library offers, we might be rating the library lower". The other group members acknowledged that the participant's explanation "is true". More so, a participant said "I do not know the extent to which the library resources are meeting my information needs because I hardly use the library resources. I rely more on internet resources than on the library resources".

In all the groups the participants agreed that at a point in time, their information-seeking activities must end. None of the participants disagreed about ending the information-seeking process. Some of the participants gave various reasons with regards to when they usually stop the information-seeking process. Some of the participants' responses are illustrated below:

"I end my information-seeking activity when I am no longer getting any new information about a particular topic".

"I stop searching for information when I start to encounter the same or related information again and again".

"I stop looking for information whenever I think that I have provided the right answer to an assignment question".

"I discontinue seeking information anytime the deadline for submission of an assignment is forthcoming or when the time for an examination is very close".

"I finish my information-seeking activity when I have thoroughly searched the sources that contain the information that I am looking for".

5.2.8 Barriers to the postgraduates' information-seeking and utilisation of information

During the discussion with the postgraduates, barriers to the information-seeking activities and utilisation of information were mentioned by some of the postgraduates. The barriers are discussed below:

5.2.8.1 Complaints on utilisation of library ICT facilities by the postgraduates

A few issues were raised by the participants concerning their utilisation of library ICT facilities to access information resources in the library. The issues mainly centered on the library's internet service and charging points. In one of the discussion groups, a participant complained "The internet service tends to be slow especially in the afternoons when there are many users that are connected to it". In another group, a participant complained "The charging points in the library are not enough". The other group members acknowledged the statements saying "It is true".

5.2.8.2 Complaints on utilisation of print resources

Some participants complained about the general state of the print resources in the hybrid library. The complaints centered mainly on currency and insufficiency of resources. Also, the mutilated nature of some of the dated resources, especially textbooks was mentioned by a few participants. Another complaint mentioned is the issue of the library having few copies of some essential current textbooks. In one of the discussion groups, a participant mentioned "The library does not have sufficient current books and journals in our field of study". Some of the group members echoed that "It is true", while others nodded their heads in agreement. A participant in another group discussion said "Some of the books that I find relevant are torn or they have missing pages". In another group, a participant said "At times when I want to borrow a book, the book will not be available because another user has borrowed it".

5.2.8.3   Reasons for irregular usage of e-books

The major reasons mentioned by most participants for the irregular usage of the e-books were centered on the inability to find relevant e-books, insufficient ICT skills, lack of personal computers, and login procedures. In one of the discussion groups, a participant expressed the reason as "I do not know how to effectively browse and access the e-books". In another group, a participant pointed out "In some sites, the login procedure takes time, and I hardly find what I need; this discourages me". In another group discussion, a participant mentioned "I do not have a laptop where I can download the e-books".

5.2.8.4   Reasons for low usage of databases

The participants that interacted mentioned some reasons behind their low or non-usage of the databases. The reasons mainly centered on lack of ICT skills, the preference for internet resources, password requirements and lack of searching skills. In one of the discussion groups, a participant mentioned "I don't have sufficient browsing skills to access the databases". In another group discussion another participant mentioned "Searching for relevant resources in some of the databases is time-consuming". In another discussion group, a participant mentioned "I don't have the list of the passwords". Another participant also mentioned that "I am used to accessing resources from the Internet".

5.2.8.5   Complaints on utilisation of Institutional Repository

Most of the participants that spoke complained about the lack of full-texts of students' e-theses and dissertations in the repository. In one of the groups, a participant pointed out that only lecturers' theses and dissertations are available in the repository. Also some of the participants complained that the repository's content in terms of history and international studies collection is scanty.

5.2.8.6   Reason for non-utilisation of other academic libraries

In one of the groups, a participant explained "Other academic libraries usually demand for a letter of introduction from my institution, and it takes time to get such a letter …." In another discussion group, a participant mentioned "Most academic libraries are far

away from me; therefore, the distance and lack of money discourages me from visiting them". In another group, a participant said "I don't see the need to visit another library because I find most of the resources I need on the Internet".

5.2.8.7 Issues raised on obtaining informal information

In one of the discussion groups a participant mentioned "Most often I get required information from people without encountering many problems". However, a few problems were mentioned by some participants across the groups. In one of the groups, a participant said "At times people I request information from might be unwilling to give out the information". In another group, a participant mentioned "Sometimes when I approach my lecturers for information, they usually tell me that they are busy and I should come back at another time". In another group, a participant mentioned "Not all information that I get from other people are authentic and such information may be misleading". Most of the other group members agreed with these assertions by nodding their heads or saying "It is true".

5.2.8.8 Factors affecting information exchange

Some of the participants mentioned specific issues as the factors affecting their information exchange with other people. The factors centered on arguments, busy schedules and lack of money. The issues have been expressed in the responses below:

"Some of my classmates enjoy argument, … and during information exchange in the class, there might be too much arguments and lots of noise".

"Lack of money to purchase recharge card sometimes prevents me from exchanging information through phone calls, text messages or social media platforms".

"Sometimes my busy lecture schedules and research activities affect my interaction with my colleagues".

5.2.8.9 Factors affecting information transfer

Some participants mentioned a few factors affecting their ability to transfer information to other individuals. The factors centred on busy schedules, lack of funds and difficulty retrieving the transferred information later. The majority of the participants agreed with

the factors that their colleagues mentioned. The assertions below were selected across the four forums to illustrate some of the participants' responses:

"I might want to transfer information to someone, but I do not know whether the person has need for that information, and I might be too busy to ask".

"…I might not have sufficient money to transfer the information. Therefore, I might just leave the information with me and discard them at a later date".

"When I give a friend a book to read, and I later discover that I still need that book, collecting my book back might become difficult because …."

5.3   OBSERVATION RESULTS

Observation of the student participants and the setting was carried out in order to seek further answers to research questions three and four, and to validate the data obtained through the focus group and interview on the research questions. The observation entailed the researcher watching the postgraduates as they utilised the hybrid library for one purpose or the other. The observation also entailed the researcher studying the hybrid library environment where the postgraduates usually visit to utilise information resources.

The researcher observed that the hybrid library is a three story building that is centrally located within the university campus. She also noted that the library is a walking distance to the department of her participants. Within the library, the researcher saw staff offices, book shelves, journal racks, desktops, photocopiers and so forth.

5.3.1   Utilisation of library ICT facilities to access information by the postgraduates

During the sessions, the researcher saw some of the participants browsing the Internet with their personal computers. However, she did not see any of her participants making use of the desktops in the computer laboratory to access the library resources.

5.3.2   Frequency of utilising the library

During the sessions, the researcher observed that some students that participated in the focus group were regularly visiting the library. The participants were mostly seen

131

in the open spaces and the postgraduate spaces. They were seen studying, using their laptops, or browsing their mobile phones.

5.3.3 Utilisation of print format of resources

During the sessions, it was observed that the participants that regularly visit the library were utilising some resources in print format. The researcher usually sees the participants around the shelves browsing through the collections. Some participants were also often seen utilising some of the print resources in the open spaces, the postgraduate spaces, the serials section, and the documents section of the library. The resources she usually sees them utilising are textbooks, theses and dissertations.

5.3.4 Utilisation of digital format of resources

During the observation sessions, the researcher did not see any of her participants utilising the library digital resources. Therefore, she could not ascertain the frequency of use of the digital resources and the types of digital resources they usually utilise.

5.4 INTERVIEW RESULTS

A face-to-face interview was conducted between the researcher and the librarian in charge of subject libraries. Similarly, an interview between the researcher and the librarian in charge of the arts collection was also conducted. The interview sessions were carried out in order to seek answers to some of the research questions. The interview sessions were also carried in order to validate the data obtained through the focus group and observation on the research questions.

5.4.1 Demographic data of participants

Table 5.1: Participants' highest educational qualification

Staff	Highest educational qualification
Librarian in charge of subject libraries	Doctor of Philosophy (PhD) degree
Librarian in charge of arts collection	Master's degree

The above table displays the highest educational qualification of the two participants. From the table, it is understood that one of the participants is a PhD degree holder, while the other participant is a master's degree holder.

Table 5.2: Participants' work experience

Staff	Work experience
Librarian in charge of subject libraries	30 years
Librarian in charge of arts collection	33 years

The above table displays the years the participants have worked in the hybrid library. From the table it is understood that one participant has worked for 30 years while the other participant worked for 33 years. These figures indicate that both participants have long years of work experience in the hybrid library.

5.4.2 Ways of satisfying the information needs of the postgraduates in the hybrid library

During the interview sessions, the two participants mentioned ways of satisfying the information needs of the postgraduates in the hybrid library. The participants talked about different categories of print resources available for use by history and international studies postgraduates. During the interview, one participant said "The library has varieties of print resources which history and international studies postgraduates can use. There are textbooks, serials, reference materials and materials in the documents section". The participants also revealed the avenues the library usually employs to create awareness about the available print resources. One participant said "There are different ways which we employ to tell users about our print resources…. We create awareness through sensitisations and through reference services". However, the participant pointed out "The turn out by staff and students during sensitisations is often very low".

The two participants stated that the available digital resources were found at the hybrid library website. They revealed the availability of e-books, databases and resources in the IR. They also revealed different avenues the library employs to create awareness about the availability of digital resources. One participant said "We use the same

133

avenues to create awareness for print and digital resources among our users". The same participant also said "To the best of my knowledge, I think majority of the postgraduate students are aware of our digital resources".

5.4.2.1 E- books

The two participants talked about the availability of e-books on the library website. One of the participants said "There are currently 12 different e-book sites, and each site contains a huge number of e-books".

5.4.2.2 Databases

The two participants spoke of the availability of various databases on the university website. They mentioned that access to most databases requires "login passwords". They also mentioned that the list of passwords is available in the library and is usually given to users during sensitisations or based on request. The two participants described the databases using various sentences, as shown below:

"Currently the library has 33 different types of databases that are available for use".

"Some databases that contain resources in the subject area of arts are HEINONLINE, CORE, Internet Archive…."

"The resources in the databases are rich".

"Majority of the databases contain full-texts or abstracts of journal articles".

"There are very current articles in the databases".

"The resources in the databases are reliable because they are from credible publishers".

5.4.2.3 Institutional Repository

The two participants described the content of the IR. One of the participants mentioned "The IR contains resources such as the university's condition of service, the publications of the university's lecturers, the university's policies and past question papers". In addition to these resources, another participant mentioned that the library has commenced archiving lecturers' theses and dissertations.

5.4.2.4 Ratio of print to digital resources in the library

The two participants mentioned that the library has more digital resources than print resources in the subject area of arts. They gave reasons for the ratio. Concerning the reasons, one of the participants mentioned "There was a fire incident that destroyed the print collection of the entire Arts Faculty in the past. Due to that incident, the print collection is few" …. The participant further mentioned "Currently the library has a lot of databases in the subject area of arts… some of the databases contain thousands of resources…some even contain millions of resources".

5.4.3 Utilisation of library ICT facilities to access information by the postgraduates

During the interview sessions, the ICT facilities, and their availability to users were discussed. One of the participants said "There are over fifty desktop computers in the computer laboratory". Another participant said "The library has Internet connectivity on all the floors…even outside the library building one can get connectivity…, although, at times, the connectivity tends to be slow." Other ICT facilities that the participants mentioned are printers, photocopiers and scanners.

Concerning the utilisation of the ICT facilities by postgraduates, the participants mentioned that generally, the two most utilised facilities by library users are the Internet and photocopying facilities. One of the participants explained that the library scanners are not meant to be used by the patrons, but are used to digitise some library resources.

5.4.4 Utilisation of hybrid library

The participants revealed that generally postgraduates are among the library's regular users. One of the participants said that his office is close to one of the postgraduate spaces and he usually sees the postgraduates making use of the space. One participant mentioned "postgraduates frequently use the hybrid library", while the other participant mentioned "they use the library very frequently, especially when they have assignments".

When asked to compare the postgraduates' current library use with the past, one participant commented that there is an increase on library use by the postgraduates and other users. However, the other participant commented that there is a decline. The participant ascribed the decline to technological advancement especially the advent of the Internet.

5.4.5 Roles of faculty librarian

The participants mentioned some roles that faculty librarians usually play towards students' academic activities. Some of the roles include reference services, teaching courses, conducting series of sensitisation on the use of the library and its resources and so forth. One participant mentioned "It is my duty to assist any patron who needs my assistance with respect to the use of the library and its resources".

With respect to assigning a personal librarian to each postgraduate through a personal librarian program, the participants stated that the library does not have such a program. The two participants also agreed that such a program could enhance the utilisation of the library and its resources by the postgraduates. However, one participant lamented that it would be difficult for the library to run such a program due to the number of librarians in the library, which is relatively small compared to the number of postgraduates.

5.4.6 Utilisation of print resources by the postgraduates

During the interview, one participant explained "Due to the interdisciplinary nature of history and international studies, … they use a vast range of resources that cuts across the collections of other faculties". Concerning the use of print resources by the postgraduates, one participant explains "To the best of my knowledge, the postgraduate students are using print resources because some of them sometimes visit my office to ask for assistance in locating and retrieving specific resources". The participant further explained "From the statistics at the circulation desk, the students also borrow textbooks at a regular basis". The other participant mentioned that averagely postgraduates use print resources especially when they have assignments.

5.4.7 Utilisation of digital resources by the postgraduates

With respect to the usage of digital resources, one of the participants explained "Based on the available statistics in the library, the use of digital resources by both staff and students is generally low compared to the use of print resource". He further explained "However, the library keeps sensitising the users about the relevance of the digital resources to their academic activities". The participant further said "To some extent, serious students use the digital resources, while unserious students do not know where the library is".

5.5 CHAPTER SUMMARY

This study is on the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. This chapter comprises the presentation of the focus group, observation and interview results. Based on the research questions, the key finding that were presented are findings on their information needs, ways of satisfying the needs in the library, their utilisation of library ICT facilities to access information in the library, their use of library and other information sources, the roles of information exchange and information transfer in their information-seeking activities and barriers to their information-seeking and utilisation of information. The results of the focus group were presented first, followed by the results of the observation and interview. Chapter six will consist of discussion and interpretation of the results.

CHAPTER SIX

DISCUSSION AND INTERPRETATION OF RESULTS

6.1   INTRODUCTION

This study is on the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. The study has eight research questions. The research questions are:

1. What are the information needs of the history and international studies postgraduates in the academic hybrid library?
2. How are the information needs of the postgraduates being satisfied in the hybrid library?
3. What are the means through which the postgraduates use of library ICT facilities to access information in the library?
4. How do the postgraduates use the hybrid library as a formal information source, and what are the other information sources they usually consult?
5. What are the roles of information exchange in the information-seeking activities of the postgraduates in the hybrid library and in other sources?
6. What are the roles of information transfer in the information-seeking activities of the postgraduates in the hybrid library and in other sources?
7. What are the factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities in the hybrid library and in other sources?
8. What barriers do the postgraduates usually encounter, during their information-seeking and utilisation of information in the hybrid library and in other sources?

6.2   DISCUSSION AND INTERPRETATION

In this chapter, the results presented in chapter five are discussed. The results are discussed to enable the researcher to draw conclusions and proffer the necessary recommendations. The conclusions and recommendations will be done in chapter seven of this thesis. The results of the focus group, observation and interview are triangulated and discussed simultaneously. This was done in order to compare and contrast the results, and to give possible explanations for any contrasting result. The

triangulation of the findings also enabled the discussion of a specific topic to be done holistically. The results are systematically arranged to maintain consistency according to the research questions.

Some of the results discussed were compared with the literature and the theoretical framework of the study. Kumar (2019:546) explains that in qualitative research, findings should be expressed clearly and integrated into the literature. Creswell (2014:249) also explains that findings could be compared with information gathered from literature or theories either by confirming past information or by diverging from it.

6.2.1 Demographic data of the participants

The result obtained from the focus group sessions revealed that more males than females participated in the study. The result also revealed that majority of the participants were young adults undergoing master's programme in the subject area of history and international studies.

For the interview, the results revealed that one of the participants was a master's degree holder with 33 years work experience, while the other participant was a doctoral degree holder with 30 years work experience.

6.2.2 Information needs

In the result obtained through the focus group sessions, it disclosed that the postgraduates needed information for their daily activities. The required information centered mainly on academic works and personal activities. This result is in line with the results obtained by Mwangi (2018:44) and Kehinde *et al.* (2016:17), where it disclosed that their participants also had academic and personal information needs.

6.2.2.1 Categories of information need

From the focus group result, the information needs of the participants could be categorised into two. These are information needed for their academic work and information needed for their personal activities.

6.2.2.2   Kinds of print resources needed

In the result obtained through the focus group sessions, it revealed that most of the postgraduates needed relevant print resources in the hybrid library. The result also revealed that the postgraduates needed varieties of print resources in the hybrid library based on their various research topics. These results indicate users in an academic hybrid library still need the print format of resources even in the digital age. The results also affirm the assertion made by Wu (2005:235) about the relevance of print format in a hybrid library irrespective of the new digital format.

6.2.2.3   Kinds of digital resources needed

In the result obtained through the focus group sessions, it disclosed that the majority of the participants needed digital resources based on their specific subject areas and based on their research topics in the hybrid library. This indicates that the postgraduates require diverse and numerous resources in the hybrid library. It also indicates that the information needs of the postgraduates are not homogenous. The need for information resources in an academic hybrid library by the postgraduates supports the theoretical framework of this inquiry in which the "information need" of a user featured as part of ISB.

6.2.2.4   Factors that influence information need

The results obtained disclosed that two major factors were influencing the information needs of the postgraduates. The factors are their subject areas and research topics.

6.2.2.5   Purposes of seeking information to satisfy a need

The result obtained from the focus group sessions revealed that the postgraduates were seeking information for various purposes in order to satisfy their needs. From the results obtained, the major purposes are for carrying out their research activities, carrying out assignments, reading for examinations, leisure and self-development. These results are similar to the results obtained by Borlund and Pharo (2019:1) where it was reported that the participants' information needs served several purposes such as decision-making, assignment-writing, leisure and so forth. Similar result was obtained by Ibrahim and Perumal (2018:1-3), where it was reported that the

participants were seeking information for the purposes of: writing their assignments, updating their knowledge and carrying out their research activities. Kehinde *et al.* (2016:18) also reported similar finding. In their finding, it was reported that the participants were seeking information for the purposes of reading, conducting their research activities and for self- development.

6.2.3 Ways of satisfying the postgraduates' information needs

The result obtained through the interview revealed that the library usually procures huge volumes of print resources towards the satisfaction of the information needs of its users including the postgraduates. Also, the library usually subscribes to huge volumes of e-books and databases aimed at users' information needs satisfaction. Moreover, the library populates the IR with relevant contents also aimed at users' information needs satisfaction. In the result, it was also revealed that the library usually creates awareness through reference services, sensitisations and teaching of library courses about the availability of the print and digital resources. The awareness was for the purpose of utilisation of the library resources by users towards the satisfaction of their information needs.

6.2.4 Means of using library ICT facilities to access information

The result of the interview disclosed the types of ICT facilities that were available for users to use and access the library resources. The result further disclosed that in the library, the most utilised ICT facilities by users are internet and photocopying facilities. The result of the focus group disclosed that all the participants were aware of most of the ICT facilities in the library. The result obtained also revealed that mainstream participants had basic ICT skills and can browse the Internet and send e-mails.

The result of the focus group disclosed that all the postgraduates were utilising the internet facility in the library with their personal computers. However, in the result, it was disclosed that only a few postgraduates were utilising the desktop computers in the computer workroom to access the library resources. A similar result was obtained in the observation. The observation result revealed that none of the participants were utilising the desktops in the computer laboratory to access the library resources. These findings signify that although the participants know about the computers in the

141

laboratory, they hardly use them to access the library resources rather they prefer using their personal computers to connect to the library's internet service.

The result obtained in the focus group disclosed that most participants usually employ the library ICT facilities especially the internet facility to access the library resources and other formal sources, and to carry out other academic activities. However, in the result, it was also disclosed that at times the participants manually search for resources in the hybrid library by browsing through the shelves. It was also revealed that at times they also use manual methods to search other sources apart from their hybrid library. A similar result was obtained in the observation. During the observation; the researcher also saw some of her participants searching for resources manually in the shelves. The methods employed by users to search for information during their ISB were not featured in the theoretical framework of this inquiry.

6.2.5 Utilisation of hybrid library

The result of the focus group sessions revealed that mainstream postgraduates were regular library users. The postgraduates gave various reasons for this behaviour. Among the reasons given is the closeness of the library to their department. This reason shows that proximity of a library influences its utilisation. Another reason that was given is the use of the library as a reading place. However, from the result, it was also disclosed that a few postgraduates were not regular library users. Various reasons were equally given for their behaviour. Among the reasons given is the preference of using their departmental library rather than their academic library. This reason indicates that some of the postgraduates also utilise their departmental library. The result obtained through observation of the postgraduates also showed that some of the postgraduates were regular library users. This indicates that the result observed affirms the result of the focus group. The result obtained through the interview sessions equally affirmed that generally, postgraduates are regular library users. These results indicate that the postgraduates find the hybrid library useful to their academic activities. The results also corroborate with the theoretical framework of this inquiry, showing that users make demands on formal information systems or sources. The results are also similar to the result obtained by Lal (2014:53), where more than half of the participants indicated that they were utilising the library daily. Nevertheless, the results are in contrast to those obtained by Makinde (2018:205), and Brown and

Swan (2007:19), where it was disclosed that most participants were not fully utilising their institution's library.

6.2.5.1 Sections often visited

In the result obtained through the focus group sessions, it revealed that the postgraduates sit in common sections of the library. The common sections include the open spaces, postgraduate spaces, serials, and documents section. The result obtained through the interview sessions also revealed that generally, postgraduates usually utilise the postgraduate spaces meant for them. The result obtained through observation also revealed that the postgraduates mostly utilise the postgraduate spaces and the open study spaces during their library visits. These results also confirm the result of the focus group. These results indicate that postgraduates utilise some sections of the hybrid library more often than others. The results are similar to the result of Delgadillo and Lynch's (1999:251-252) inquiry, where the majority of the participants mentioned reference and document sections as the sections they often visited in the library.

6.2.5.2 Perception of hybrid library

The result obtained through the focus group sessions revealed that the perception of the hybrid library among the postgraduates is positive. This result implies that the postgraduates perceive the hybrid library as a standard library. It also implies that to a considerable extent; the hybrid library is meeting the expectations of the postgraduates. The result also indicates that they still value their academic library. This result supports the result of Malatji (2017:56), where it disclosed that all the participants also had a positive perception of their academic library. Hart and Kleinveldt (2011:45-46) also reported a similar result.

6.2.5.3 Usefulness of hybrid library

The result obtained disclosed that majority of the participants consider the library as useful, while few participants were of the opinion that they can do without the library.

6.2.5.4 Roles of faculty librarian

The interview result showed the roles being played by the faculty librarian towards the academic activities of the postgraduates. Some of the roles include reference services, teaching library courses, and conducting series of sensitisation on the use of the library. In the result of the focus group sessions, some of the postgraduates acknowledged the faculty librarian's role. However, in the result obtained, it was disclosed that only a few of the postgraduates were consulting their faculty librarian for reference services. This finding indicates that the postgraduates do not perceive their faculty librarian as relevant to their use of their library and its resources. It also indicates that there is no much interaction between the librarian and the postgraduates. Hence, information exchange and transfer between them is also not much. Therefore, they lack adequate communication on the services the library has to offer.

6.2.5.5 Utilisation of hybrid library print resources

The result of the focus group revealed that most of the postgraduates were utilising the print resources in the hybrid library. In the result obtained, it revealed that most of the participants also utilise the resources in the collections of other departments and faculties. This signifies that the postgraduates use a wide range of resources in the hybrid library, and not only the resources in their collection. The results obtained through the interview sessions also disclosed that some of the postgraduates were utilising print resources. The observation result also disclosed that the participants that regularly visit the library were utilising some resources in print format especially textbooks, and theses and dissertations. Therefore, the observation and interview results affirm the result of the focus group sessions. These results are similar to the result obtained in the study carried out by Yamson *et al.* (2018:299-300), where it reported that the majority of the participants were utilising their library's print resources. In the result, it was also revealed that the participants usually utilise both dated and current print resources simultaneously.

144

6.2.5.5.1 Factors that influence the utilisation of dated or current print resources

From the result obtained through the focus group, it was revealed that certain factors were influencing the utillisation of dated or current print resources among the postgraduates. The factors are a given assignment, area of specialisation and research topic

6.2.5.6 Utilisation of digital resources

In the result of the focus group, it disclosed that most of the participants usually utilise a wide range of digital resources due to the nature of their interdisciplinary course of study. This finding signifies that searching information by the participants might be a difficult task to due to the broad range of resources they need to explore before locating what they need to utilise. It also signifies that searching for information by the postgraduates requires time and might require money. In the result obtained, it was also revealed that the participants were utilising more current digital resources than dated digital resources.

In the observation result, none of the participants was seen making use of the library digital resources. The reason could be because the digital resources could be accessed remotely without necessarily visiting the library.

6.2.5.6.1 Utilisation of library e-books

The result of the focus group disclosed that mainstream postgraduates were not utilising the library e-books regularly. It also disclosed that rather than the library e-books, the mainstream postgraduates were utilising free internet e-books. This result implies that e-books are relevant to the postgraduates, although the postgraduates have preference for free- internet e-books rather than the library's e-books. Under-utilisation of the e-books by the postgraduates could also signify the wastage of funds used by the library to subscribe for the e-books.

6.2.5.6.2 Utilisation of library databases

The result obtained revealed that only a few of the postgraduates were utilising the library databases. This result corresponds with the result obtained by Okunoye

(2020:257), in which it disclosed that the participants' level of databases usage was low. The low utilisation level also corresponds to the result obtained by Tanackovic *et al.* (2016), where it was revealed that majority of the participants were utilising free internet resources rather than their library databases. However, the result is contrary to the results obtained by Tiemo (2017:46), and Delaney and Bates (2018:63), where it was reported that the level of utilisation of library databases was high among the participants.

6.2.5.6.3   Utilisation of Institutional Repository

The result of the focus group revealed that most of the participants were utilising some of the resources in the IR regularly. This result indicates that the IR is contributing positively to the academic activities of the postgraduates. This result is similar to the result obtained by Adedimeji and Adekoya (2019:42), where it reported that the extent of participant utilisation of the IR was high. However, the result is contrary to the result that Wangai (2018:49) obtained, where it reported that the level of utilisation of the IR among the participants was low, and their perception about the IR was negative.

6.2.5.7   Utilisation of hybrid resources

The result of the interview disclosed that in the hybrid library, there were more digital resources than print resources in the subject area of history and international studies. This was attributed to a fire incidence that happened in the past, which destroyed most of the print format of resources in the subject area. The result of the focus group disclosed that the postgraduates were utilising the library print and digital resources for their academic activities. This result implies that both print and digital resources are relevant to the postgraduates. This corroborates the results of George *et al.* (2006:23), and Hart and Kleinveldt (2011:37), in which it was disclosed that the participants were also utilising both print and digital resources in their institution's library.

6.2.5.8   Preferred format

The result of the focus group revealed that majority of the postgraduates had a preference for digital resources over print resources. The reasons for the preference were disclosed in the result. Among the reasons are the ability to access digital

resources anywhere and anytime, and the ability to use digital resources more easily and faster. This result signifies that accessing digital resources is more advantageous to the postgraduates than accessing print format of resources. The result is contrary to the results obtained by Samzugi (2019:122) and Mawindo (2005:77-78), where it reported that majority of the participants preferred print over digital resources. However, in the result, it disclosed that most of the postgraduates preferred to utilise more internet resources rather than the library digital resources.

6.2.5.9 Utilisation of other formal information sources

The result obtained from the focus group disclosed other formal sources the participants usually obtain information from apart from their hybrid library. As disclosed in the result, the Internet was mentioned by most of the participants as their major information source. Other sources mentioned by a few are the national museum and the national archives. These sources were mentioned as sources they have visited in the past when they could not get what they needed in other sources.

The result that was obtained further revealed that majority of the participants were not visiting other academic libraries to utilise their resources. It disclosed that only few participants were utilising the print and online resources of other academic libraries.

6.2.5.10 Obtaining informal information

The result of the focus group revealed that all the postgraduates regularly obtain informal information mostly from their course representatives, course mates, supervisors and lecturers. The medium used to informally obtain information by the postgraduates were also revealed in the result. Common medium that were mentioned are through verbal communication, phone calls and through group chats. This result corresponds with the study's theoretical framework, revealing that users also make demands on informal information sources. The result is similar to the result obtained by Singh *et al.* (2015:35), in which it revealed that more than half of the participants regularly obtain information informally from their friends and lecturers. A similar result was also reported in the study carried out by Ibrahim and Perumal (2018:6), where it was also reported that some of the participants were seeking information informally from their friends.

6.2.5.11 Information source preference

The result obtained through the focus group revealed that most of the postgraduates usually commence their information-seeking on the Internet, before searching other sources including their hybrid library. This finding implies that the postgraduates prefer the Internet as their first choice of information source. In the result, it was also revealed that most of the participants usually re-visit the Internet to search for information if they fail to obtain what they need from the library and other sources. The common reason given is that the Internet is faster and easier. Another reason given is that they always end up getting what they needed from the Internet using new search terms. This result indicates the following:

i.   The Internet is the formal information source that the postgraduates rely on mostly.

ii.   The postgraduates usually get what they need from the Internet compared to the hybrid library and other formal sources.

iii.   The hybrid library is not their primary or main information source.

iv.   Due to the heavy reliance on internet resources by the postgraduates, some of the resources in the hybrid library may be untapped, while others may be under-utilised by the postgraduates.

v.   The postgraduates usually consult different information sources therefore; their ISB is a complex process.

vi.   The library may be wasting funds procuring resources that are either under-utilised or untapped by the postgraduates and other library users. The postgraduates are also spending money to access other information sources especially the Internet.

This result is similar to the result obtained in the study undertaken by Catalano (2013:243), where it disclosed that the participants usually begin their ISB on the Internet. The result is also similar to the result obtained in the study carried out by Monyela (2013:115-116), where it was disclosed that the Internet was discovered as the source that the postgraduates valued most and also relied on most.

From the result obtained through the focus group, it was revealed that at times the search for information by the postgraduates results in failure. In the result, it was

further revealed that the postgraduates usually continue to search the Internet and other sources until they get what they need. This finding aligns with the study's theoretical framework.

The result obtained from the focus group disclosed that when the search for information is successful, most of the participants usually suspend or halt their information-seeking activities briefly to go through what they have before putting the acquired information to use.

6.2.6 Roles of information exchange

In the result obtained through the focus group, it was disclosed that all the postgraduates were participating in information exchange. This result is similar to the result obtained by Fari and Ochola (2015:41), where it reported that all the participants participated in knowledge and information exchange in various ways. This result also corresponds with the theoretical framework of this study showing that information exchange is part of users' ISB. In the result obtained, it also disclosed the people the postgraduates usually exchange information with, and the medium they usually employ to exchange information. As disclosed in the result, classmates and lecturers were mentioned by majority as the people they usually exchange information with. Verbal exchange and social media platforms were mentioned in the result as the medium the postgraduates usually employ. Furthermore, the result disclosed the roles of information exchange in the information-seeking activities of the postgraduates. As disclosed in the result, updating knowledge, establishing relationships and reduction of stress were mentioned by some of the participants as the roles of information exchange in their information-seeking activities.

6.2.7   Roles of information transfer

The result of the focus group sessions disclosed that all the postgraduates usually engage in information transfer during information-seeking and utilisation of information. As disclosed in the result, the postgraduates usually transfer information to their fellow students and friends either through face-to-face communication or through softcopy. This result corroborates the theoretical framework of this study, in which it was shown that information transfer is part of users' ISB, and it occurs during information use. In the result that was obtained, the roles of information exchange in

149

the information-seeking activities of the postgraduates were also disclosed. As disclosed in the result, the joy of assisting other people with needed information, the ability to part with information that is no longer useful and fostering of relationships are some of the roles that were mentioned by some of the participants.

6.2.8 Factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities

From the result obtained through the focus group, it was disclosed that to a considerable extent, the hybrid library resources were meeting the information needs of the postgraduates. As disclosed in the result, some of the participants agreed that the hybrid library was meeting more than 50% of their information needs, while others agreed that the library was meeting less than 50% of their information needs. This implies that to an extent the postgraduates were satisfied with the hybrid library resources.

In the result that was obtained through the focus group, it was disclosed that the postgraduates' information-seeking activities usually come to an end whenever they perceive that their information needs have been satisfied. In the result, various reasons were given for this behaviour or action. Among the reasons given are inability to get new information, submission deadline and coming across the right information for an assignment. This result is similar to the result obtained by Prabha *et al.* (2007:10-14), where it was reported that the participants also gave several reasons for ending their information-seeking activities. However, in the theoretical framework of this inquiry, it was not clearly stated that satisfaction with information needs ends the user's information-seeking process.

6.2.9 Barriers to information-seeking and utilisation

The results obtained through the focus group revealed certain barriers that the postgraduates usually encounter during their information-seeking activities and utilisation of information. The barriers are discussed under the following subtopics.

6.2.9.1 Issues raised on ways of satisfying the postgraduates' information needs

In the result of the interview, it was disclosed that the turn-out of users including the postgraduates during sensitisations is usually very low. This implies that the postgraduates are not usually present in large number when information is being transferred to them on library use. Also, in the result obtained, it was reported that the collection of print resources in the subject area of history and international studies was few due to a fire incidence. This implies that the library needs to procure more print resources in that collection in order to boost it.

6.2.9.2 Barriers to information needs satisfaction

In the result obtained through the focus group, some barriers impeding the postgraduates' information needs satisfaction in the hybrid library were revealed. Ignorance of the availability of relevant resources, insufficient current resources, lack of searching skills and lack of time were disclosed as some of the barriers that were affecting the postgraduates' information needs satisfaction in the hybrid library. These barriers could be equated to personal and role-related barriers based on Wilson's (1999:252) categorisation of barriers.

6.2.9.3 Complaints on utilisation of library information and communication technology facilities

In the result of the focus group sessions, it disclosed that some issues were affecting the participants' utilisation of the ICT facilities in the library to access the library resources. The issues were centered mainly on the library's intermittent internet service and few charging points.

6.2.9.4 Complaints on utilisation of print resources

In the result of the focus group sessions, it was disclosed that some of the participants complained about the condition of some of the print resources. The complaints were mainly about the currency, insufficiency and mutilated nature of some print resources. These complaints originated from the library. Therefore, they are external or environmental in nature.

6.2.9.5   Reasons for irregular usage of e-books

In the result of the focus group, the reasons for the irregular usage of the e-books by the postgraduates were disclosed. Among the reasons that were mentioned are a lack of relevant e-books, insufficient ICT searching skills, lack of personal computers and complex login procedures. Since the reasons for the irregular usage were given, it implies that if the reasons are tackled by the library, the postgraduates may be encouraged to use more of the library e-books. Some of the reasons originated within the individuals such as lack of skills, while others originated from the library environment. Therefore, the reasons given were both internal and external types of barriers to the utilisation of the e-books.

6.2.9.6   Reasons for low usage of databases

In the result of the focus group sessions, the reasons for the participant's low usage of the databases were also revealed. The major reasons for the low usage were a lack of searching skills, lack of time to search the databases and password requirements. From the reasons give, it signifies that the postgraduates require training on how to search the databases. They also require expert assistance with regards to searching the databases since they lack the time. Furthermore, they require the list of passwords to the databases. It also implies that if the library addresses these issues, the postgraduates might be encouraged to utlise more of the resources in the databases. These reasons originated from the individuals and also from the library. Therefore, they are internal and external barriers to their utilisation of the library databases.

6.2.9.7   Complaints on utilisation of resources in the Institutional Repository

In the result of the focus group, it was disclosed that some of the postgraduates complained about the content of the IR. The major complaints were the lack of students' e-theses and dissertations in the repository and the scanty nature of history and international studies resources in the repository. The complaints that were expressed signify that if the library populates the IR with relevant contents, the postgraduates might be encouraged to utlitse the IR more regularly. These complaints came from the library. Hence, they are external barriers to the utilisation of the IR by the postgraduates.

6.2.9.8 Reasons for the preference of the Internet as a formal source of information

Result of the focus group revealed that the postgraduates prefer to access resources on the Internet rather than the library digital resources due to lack of skills and time to search for the library digital resources. From the reasons, it signifies that the postgraduates require training on how to search the library digital resources. It also implies that they need someone that could assist them to search and retrieve relevant resources from the library, since they lack the time to search. Using Wilson's (1999:252) categorisation of types of barriers, lack of skills could be classified as a personal barrier, while lack of time as a role-related barrier.

6.2.9.9 Reasons for the low usage of other academic libraries

Result of the focus revealed the reasons for the low usage of other academic libraries by majority of the postgraduates. The major reasons given were distance, lack of money to use as transportation fare and delay in obtaining letters of introduction. Distance and delay are environmental barrier, while lack of money is a personal barrier.

6.2.9.10 Issues raised on the utilisation of informal sources by the postgraduates

The problems the postgraduates usually encounter when obtaining informal information were revealed in the result. The major problems revealed are unwillingness of the other party to give out information, the busy schedule of the other party, and the tendency of obtaining misleading or false information from the other party. This implies that there is no guarantee in obtaining informal information by the postgraduates. It also implies that there is a tendency of encountering unreliable information by the postgraduates. These problems came from the surroundings of the postgraduates therefore they are external barriers to their accessing informal information sources.

6.2.9.11 Factors affecting the postgraduates' information exchange

In the result, factors affecting information exchange among the postgraduates were disclosed. Among the factors disclosed are busy schedules and lack of money. These factors are personal issues; hence, they are personal barriers to their information exchange.

6.2.9.12 Factors affecting information transfer

The result obtained disclosed that busy schedules, insufficient funds, and difficulty retrieving information after transferring such information to another individual are some of the factors affecting information transfer among the participants. These factors equated to personal and role-related barriers based on Wilson's (1999:252) categorisation of barriers.

6.3   CHAPTER SUMMARY

This chapter focuses on discussion and interpretation of results of the present study. Based on the research questions, the results that were discussed are on the information needs of the postgraduates, ways of satisfying their information needs in the library, their utilisation of library ICT facilities to access information, their utilisation of the library as a formal information source and other information sources they usually consult, the roles of information exchange and information transfer in their information-seeking activities, and barriers to their information-seeking and utilisation of information. The discussion and interpretation enabled the researcher to draw conclusions and proffer the necessary recommendations. The conclusions and recommendations formed part of the seventh chapter of this study.

CHAPTER SEVEN

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1   INTRODUCTION

This is the last chapter of this study which is on the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. The study has eight research questions. The research questions are:

1. What are the information needs of the history and international studies postgraduates in the academic hybrid library?
2. How are the information needs of the postgraduates being satisfied in the hybrid library?
3. What are the means through which the postgraduates use library ICT facilities to access information in the library?
4. How do the postgraduates use the hybrid library as a formal information source, and what are the other information sources they usually consult?
5. What are the roles of information exchange in the information-seeking activities of the postgraduates in the hybrid library and in other sources?
6. What are the roles of information transfer in the information-seeking activities of the postgraduates in the hybrid library and in other sources?
7. What are the factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities in the hybrid library and in other sources?
8. What barriers do the postgraduates usually encounter, during their information-seeking and utilisation of information in the hybrid library and in other sources?

In this chapter, the major findings are summarised based on the research questions. Based on the findings, conclusions are drawn. Also, based on the findings and conclusions reached, the theoretical framework of this inquiry is slightly modified and adapted. The contributions that the study makes to knowledge are also discussed in this chapter. Finally, the researcher suggests areas for further studies.

7.2   SUMARY OF MAJOR FINDINGS

Based on the order of arrangement of the research questions, below are the summary of the major findings:

7.2.1   Information needs of the history and international studies postgraduates

- The postgraduates need information mainly for their academic works and personal activities.

7.2.1.1   Categories of the postgraduates' information need

From the result obtained, the information needs of the postgraduates could be categorised into two. These are information needs for:

- Academic works.
- Personal needs.

7.2.1.2   Kinds of print resources needed by the postgraduates

- The postgraduates need varieties of relevant print resources in the hybrid library.
- They need both dated and current print resources.

7.2.1.3   Kinds of digital resources needed by the postgraduates

- The postgraduates need specific digital resources based on their subject areas and research topics.

7.2.1.4   Factors that influence the postgraduates' information needs

There are two factors that influence the postgraduates' information needs. These are:

- Their subject areas.
- Their research topics.

7.2.1.5   The postgraduates' purposes of seeking information to satisfy a need

The main purposes of seeking information to satisfy a need by the postgraduates are for:

- Carrying out research activities.
- Carrying out assignments.
- Reading for examinations.

7.2.2 Ways of satisfying the postgraduates' information needs

There are ways through which the hybrid library usually employs to satisfy the information needs of the postgraduates. The ways include:

- Through the procurement of different types of print resources.
- Through subscription to different types of digital resources in large volumes.
- By creating awareness through periodic sensitisations, teaching of library courses and reference services among the postgraduates about the available resources in the hybrid library.

7.2.3 Means of utilising library ICT facilities to access information

- There are various types of ICT facilities in the library. Common among them is the internet facility, desktops, photocopiers and printers.
- Generally, the most utilised ICT facilities by users in the library are the Internet and photocopiers.
- All the postgraduates are aware of the available ICT facilities in the library.
- Mainstream of the postgraduates have basic ICT skills and can browse the Internet and send e-mails.
- All the postgraduates usually use the Internet with their personal computers.
- Few of the postgraduates use the desktops in the computer laboratory to access the library resources.
- Most of the postgraduates usually use the library ICT facilities especially the Internet to access the library resources, access resources in other sources, and to carry out other academic activities.
- The postgraduates sometimes search for resources in the hybrid library and other sources manually.

7.2.4 Frequency of utilisation of hybrid library by the postgraduates

The postgraduates utilise their library regularly due to certain reasons: Among the reasons are:

- Closeness of the library to their department.
- Use of the library as a reading place.

However, few of the postgraduates do not utilise the library regularly because of certain reasons. Among the reasons are:

- Preference of using their departmental library.
- Preference of using the resources on the Internet.

7.2.4.1 Sections of the library often visited by the postgraduates

The postgraduates often visit some sections of the library. The sections are the:

- Open spaces.
- Postgraduate spaces.
- Serials section.
- Documents section.

7.2.4.2 Perception and usefulness of the hybrid library

- The postgraduates have a positive perception about their hybrid library.
- The hybrid library is useful to the academic activities of the postgraduates.

7.2.4.3 Roles of faculty librarian

Some of the roles of the faculty librarian include the following:

- Rendering of reference services.
- Teaching of library courses.
- Periodic sensitisation on the use of the library.
- However, the turn-out of the postgraduates during the sensitisation is usually very low. More so, majority of the postgraduates use the library without any assistance form their librarian. Therefore, only few of the postgraduates consult their faculty librarian for reference services.

7.2.4.4 Utilisation of hybrid library print resources by the postgraduates

- The postgraduates utilise the library's print resources in their collection and also in the collections of other departments and faculties.
- The postgraduates utilise both dated and current print resources

7.2.4.4.1 Factors that influence the postgraduates' utilisation of dated and/or current print resources

There are certain factors that influence the use of dated and/or current print resources among the postgraduates. The factors are:

- A given assignment.
- Area of specialisation.
- Research topic.

7.2.4.5 Utilisation of digital resources by the postgraduates

- The postgraduates utilise a wide range of digital resources.
- They utilise more current digital resources than dated resources.

7.2.4.5.1 Utilisation of e-books by the postgraduates

- Mainstream postgraduates are not utilising the library e-books regularly, rather, they prefer to utilise free internet e-books.

7.2.4.5.2 Utilisation of library databases by the postgraduates

- Only a few of the postgraduates are regularly utilising the databases.

7.2.4.5.3 Utilisation of resources in the Institutional Repository by the postgraduates

- Most of the postgraduates are utilising the resources in the IR regularly.

7.2.4.6 Utilisation of hybrid resources by the postgraduates

- The postgraduates usually utilise both print and digital resources for their academic activities.

7.2.4.7 The postgraduates' preferred format of information resources

- The postgraduates' preferred format of resources is the digital resources. However, the postgraduates prefer to utilise internet resources rather than the library digital resources.

7.2.4.8 Utilisation of other formal information sources by the postgraduates

- The major formal source which the postgraduates consult is the Internet. However, a few of the postgraduates sometimes utilise the resources of other academic libraries and a few have visited the national museum and national archives in the past for research purposes.

7.2.4.9 Utilisation of informal information sources by the postgraduates

The postgraduates regularly obtain informal information mostly from their:

- Course representatives.
- Course mates.
- Supervisors.
- Lecturers.

They usually obtain the information through:

- Verbal communication.
- Phone calls.
- Group chats.

7.2.4.10 Information source preference

- The Internet is the most preferred information source among the postgraduates

7.2.5 Roles of information exchange in the postgraduates' information-seeking activities

- The postgraduates usually engage in information exchange with their course mates, course representative, supervisors and other lecturers, during their information-seeking activities.

Information exchange plays certain roles in the information-seeking activities of the postgraduates. Among the roles are:

- Knowledge update.
- Relationship establishment.
- Stress reduction.

7.2.6 Roles of information transfer in the information-seeking activities of the postgraduates

- The postgraduates usually engage in information transfer during their information-seeking activities and utilisation of information.

Information transfer plays certain roles in the information-seeking activities of the postgraduates. The roles include the ability to:

- Assist others with needed information.
- Part with unwanted information.
- Foster relationship.

7.2.7 Factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities

There are certain factors that determine ending the information-seeking process of the postgraduates. The factors include:

- Their inability to get new information.
- Submission deadline of an assignment or a given project.
- Encountering the right information for a given assignment or project.
- To a considerable extent the hybrid library is meeting the information needs of the postgraduates.
- The information-seeking activities of the postgraduates usually have an end.

7.3 CONCLUSIONS

This study is on the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. From the results obtained through the focus group, observation and interview, the following conclusions were reached:

7.3.1 Conclusions reached on the postgraduates' information needs

From the results obtained it could be deduced that:

- The history and international studies postgraduates have need for information mainly for their academic works and personal activities. Therefore, their information needs fall into two categories. These are academic work information needs and personal activity information needs.
- They need varieties of both current and dated print resources in the hybrid library based on their various research topics.
- They need digital resources in the hybrid library based on their specific subject areas and research topics.
- Two major factors are influencing the information needs of the postgraduates. The factors are their subject areas and research topics.
- The postgraduates usually seek information to satisfy their needs in the hybrid library for specific purposes. The purposes are for: carrying out their assignments, conducting their research activities, preparing for examinations, leisure and self-development.

7.3.2 Conclusions reached on ways of satisfying the postgraduates' information needs in the hybrid library

- In a bid to satisfy the information needs of the postgraduates, the hybrid library usually procures different types of print resources, subscribes to different types of digital resources, and creates awareness about the availability of the resources.
- To a considerable extent, the hybrid library is meeting the information needs of the postgraduates.

7.3.3 Conclusions reached on the postgraduates' utilisation of library ICT facilities to access information in the hybrid library

- The postgraduates usually utilise the library internet facility with their PCs to access some of the library resources, access information in other sources, and also to carry out other academic activities.
- At times the postgraduates search for information resources in the hybrid library and other sources manually.

7.3.4 Conclusions reached on the utilisation of the hybrid library by the postgraduates

- Majority of the postgraduates are regular library users.
- The postgraduates usually utilise specific sections of the library.
- Mainstream postgraduates have positive perception about the library and they consider the library as useful to their academic activities.
- Majority of the postgraduates usually utilise the library without consulting their faculty librarian for assistance.
- The postgraduates utilise a wide range of print resources in the hybrid library.
- They also utilise both current and dated print resources.
- There are certain factors that influence the utilisation of dated or current print resources by the postgraduates. The factors are a given assignment, area of specialisation and research topic.
- The postgraduates usually utilise a wide range of digital resources.
- Due to the wide range of print and digital resources that the postgraduates usually utilise, searching for information is not an easy task to accomplish by them, and searching for information requires time and money.
- Majority of the postgraduates are not utilising the library e-books regularly. However, they prefer to utilise free internet e-books.
- Only few of the postgraduates use the library databases regularly.
- Mainstream postgraduates use the resources in the IR regularly.
- There are more digital resources than print resources in the collection of history and international studies in the hybrid library.

- The postgraduates use both print and digital resources for their academic activities.
- Majority of the postgraduates prefer digital resources to print resources.

7.3.5 Conclusions reached on the utilisation of other formal sources by the postgraduates

- The postgraduates consult informal information sources during their information-seeking activities.
- The postgraduates prefer the Internet as their first choice of information source.
- Due to the numerous sources that the postgraduates usually consult, their ISB is a complex process.

7.3.6 Conclusions reached on the roles of information exchange in the information-seeking activities of the postgraduates

- The postgraduates engage in information exchange during their information-seeking activities mainly with their course representative, course mates, supervisors and other lecturers.
- There are certain roles that information exchange plays in the information-seeking activities of the postgraduates. The roles include: updating their knowledge, establishing relationships and reduction of stress.

7.3.7 Conclusions reached on the roles of information transfer in the information- seeking activities of the postgraduates

- The postgraduates usually engage in information transfer during their information- seeking activities mainly with their friends and course mates.
- Information transfer plays specific roles towards the information-seeking activities of the postgraduates. The roles include: the joy of assisting other people with needed information, ability to part with information that is no longer useful and fostering of relationships.

7.3.8 Conclusions reached on the factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities

- There are certain factors that determine the postgraduates' perceived information needs satisfaction and end of their information-seeking activities. Among the factors are: inability to get new information, submission deadline and encountering the right information for an assignment.
- To a considerable extent, the hybrid library resources are meeting the information needs of the postgraduates.
- The postgraduates' information-seeking activities usually come to an end whenever they perceive that their information needs have been satisfied.

7.3.9 Conclusions reached on barriers to the postgraduates' information-seeking and utilisation of information

Below are the conclusions reached on barriers to the postgraduates' information-seeking and utilisation of information.

7.3.9.1 Barriers to the postgraduates' information needs satisfaction

- There are barriers to the postgraduates' information needs satisfaction in the hybrid library. Among such barriers are lack of ICT searching skills and lack of time.

7.3.9.2 Barriers to the postgraduates' utilisation of library ICT facilities by the postgraduates

- There are barriers to the postgraduates' utilisation of ICT facilities in the hybrid library. Among such barriers are intermittent internet service and inadequate charging points.

7.3.9.3 Barriers to the postgraduates' utilisation of library print resources

- There are barriers to the postgraduates' utilisation of print resources in the hybrid library. Among such barriers are lack of sufficient current resources and mutilated nature of some of resources in print format.

7.3.9.4 Barriers to the postgraduates' utilisation of e-books in the hybrid library

- There are barriers to the postgraduates' use of e-books in the hybrid library. Among such barriers are the inability to find relevant e-books at the library website, insufficient ICT searching skills, lack of Pcs and complex login procedures.

7.3.9.5 Barriers to utilisation of databases by the postgraduates

- There are barriers to the postgraduates' utilisation of databases in the hybrid library. Among such barriers are lack of searching skills, lack of time, and password requirements.

7.3.9.6 Barriers to utilisation of resources in the Institutional Repository

- There are barriers to the postgraduates' utilisation of resources in the IR in the hybrid library. Among such barriers are lack of students' e-theses and dissertations in the IR, and scanty nature of history and international studies resources in the IR.

7.3.9.7 Barriers to the postgraduates' information exchange activities

- There are barriers to the postgraduates' information exchange activities. Among such barriers are their busy schedules and lack of time.

7.3.9.8 Barriers to the postgraduates' information transfer activities

- There are barriers to the postgraduates' information transfer activities. Among such barriers are their busy schedules, and insufficient funds.

7.4 RECOMMENDATIONS

The following recommendations are given based on the results obtained from the discussion and the conclusions reached:

7.4.1 Recommendations to the postgraduates

1. The postgraduates should be encouraged to use the library's digital resources. Using them will improve the quality of their research works and overall academic performances. This is because the resources are from reliable sources compared to the Internet that consists of certain websites that cannot be trusted.

2. The postgraduates should also be trained adequately on how to search and access relevant digital resources in the library. By obtaining training in search techniques, they will be equipped to efficiently locate relevant digital resources. This will ensure the quality of their academic works especially the depth of their research works.

7.4.2 Recommendations to the department of history and international studies

1. The department of history and international studies should make it mandatory for the postgraduates to attend library sensitisations. This will enable the postgraduates interact more with their librarian, and be updated with new developments in the library.

2. The department should also encourage the postgraduates to use the library resources for their academic works. Since the resources are from reliable vendors unlike the resources from the Internet that might be from untrusted websites.

3. The lecturers of the department of history and international studies should be mandated to further populate the IR with their intellectual outputs. This will enable the postgraduates to access more resources in the repository.

7.4.3 Recommendations to the library

1. The library should endeavor to procure resources that would meet the needs of the postgraduates to a large extent. It is only when the needs of the postgraduates are being met in the library that they will be encouraged to use the library resources instead of internet resources.

2. The library should also train the postgraduates on how to evaluate information sources they come across in order to enable them to distinguish between trusted sources and unreliable sources.

3. The library should establish a personal librarian program. Through the progam's establishment, the library will be able to assign personal librarians to each postgraduate. By so doing, the library will be able to assist each student with using the library and its resources (especially digital resources) on a one- on-one basis. The establishment of such a program will also create avenues for proper transfer of relevant information about the library and its resources from the librarian to the postgraduates either through face-to-face communication, or through emails, phone calls, and social media chats. It will also create more avenue for the library to know the precise information needs of the postgraduates in order to better satisfy those needs.

4. Complex login procedures to some of the digital resources should be simplified. This is necessary because it will encourage the postgraduates and other library users to access the resources. It will also save the time of the postgraduates and other library users.

5. The list of passwords to library e-books and databases should be made available to the postgraduates and any changes to the passwords should be communicated to them with immediate effect.

6. The hybrid library should provide a digital version of students' theses and dissertations in the IR for accessibility by postgraduates and other library users.

7. Library should endeavour to replace the print resources in the collection of history and international studies that were burnt. This will boost the number of the print collection. Some of the burnt resources may still be relevant to the postgraduates and other library users especially resources which they might find difficult to locate in other information sources.

8. The library should consider employing interlibrary loan to borrow needed textbooks for the postgraduates and other library users. This is necessary because of the lengthy procedures involved in accessing such resources in other academic libraries.

7.4.4 Recommendation to the University

1. The university should provide more stable internet connectivity to the library. Since the Internet is required for accessing the library resources, intermittent service will affect the rate of utilisation of the resources by the postgraduates

168

especially the digital resources. If the Internet is stabilized, it might encourage the postgraduates to utilise the library and its resources at a greater rate.

7.4.5   Recommendations to the Federal Government

1. The federal government should provide sufficient funds to the library to enable the library procure more relevant resources that would meet the information needs of the postgraduates.

2. The federal government should consider rendering financial assistance in form of bursaries to the postgraduates, if such a measure is not already in place. This is necessary because the bursaries will assist them during their information-seeking activities. The bursaries will also enable them to actually access information resources they require for their research works without substituting the right information with unreliable one. This will in-turn improve the quality of their research outputs and will lead to national growth and development.

7.5   MODIFIED INFORMATION-SEEKING BEHAVIOUR MODEL

In this study, most of the results obtained are in line with the selected theoretical framework. However, there are little variations between the results and the framework. The results revealed means of accessing information by the postgraduates, suspension of the postgraduates' information-seeking activities depending on certain factors, and end of information-seeking by the postgraduates due to perceived satisfaction with acquired information. These findings were not included in the theoretical framework. However, the theoretical framework was slightly modified to include these new findings as shown in figure 6.1.
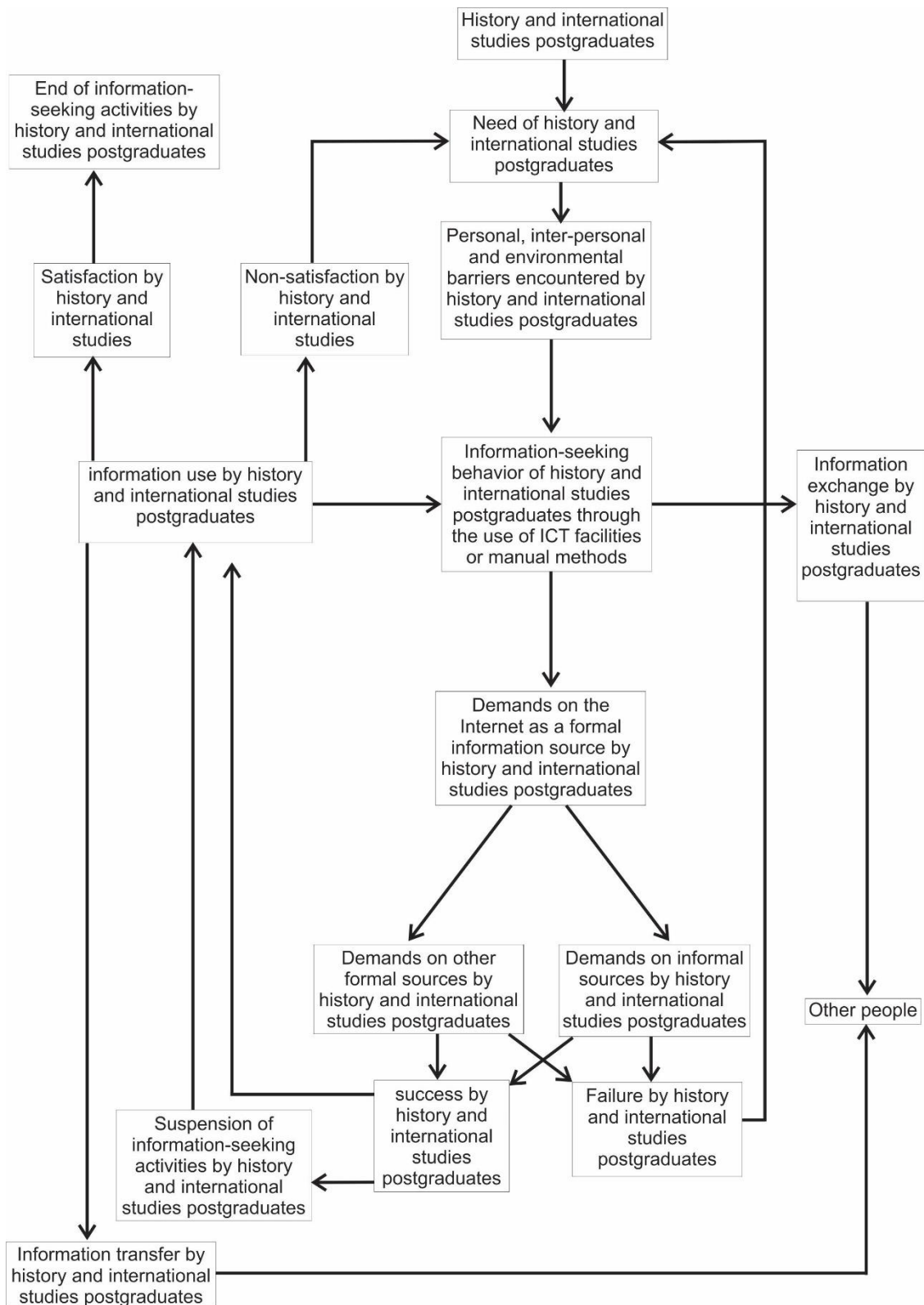
Figure 7.1: Information-seeking behaviour model for history and international studies postgraduates (adapted from Wilson's models)

The adapted model proposes the different stages of the postgraduates' ISB. As shown in the model, ISB arises from perceived needs of the postgraduates. However, during the ISB, the postgraduates usually encounter certain barriers which could be personal, task-related or environmental. During the ISB, the postgraduates employ ICT facilities or manual methods to make demands on information sources. The postgraduates usually make demands first on the Internet as a formal information source, before they make demands on other formal and informal sources. The ISB process may reiterate if the demands are not successful. However, if the demands are successful, they utilise the acquired information. Nevertheless, depending on certain situations, the postgraduates may decide to suspend the ISB briefly before they commence the utilisation of the acquired information. During the utilisation of the acquired information, the postgraduates also engage in information exchange and information transfer. The acquired information may satisfy the perceived needs of the postgraduates or may fail to satisfy their needs. Satisfaction with the acquired information ends the ISB, while non-satisfaction leads to a repeat of the ISB by the postgraduates.

7.6   CONTRIBUTIONS TO KNOWLEDGE

This study is on the ISB of history and international studies postgraduates in an academic hybrid library in Nigeria. In spite of the advancement in the literature on ISB research, Barrett (2005:324) has pointed out that the ISB of postgraduates in the humanities discipline have received little attention from library researchers. This study therefore extends the research on the ISB of postgraduates in the humanities discipline. To the best of the researcher's knowledge, no previous study has empirically investigated the ISB of history and international studies scholars. Therefore, this study has provided an insight into their ISB by adding new knowledge in terms of methodological contribution, theoretical contribution, and empirical contribution in the field of information science.

The methodological contribution of the present study lies in the selected research design, sample composition, and data collection tools which were found to be different from the ones employed in closely related literature as discussed in section 3.10 of chapter three. The theoretical contribution could be found in the modified theoretical framework of the study as discussed in section 7.5 of this chapter. In the modified theoretical framework, the means of accessing information by the postgraduates and

the end of information-seeking by the postgraduates were added based on the study's findings. The literature on ISB research is almost silent on information needs satisfaction of users. This study advances knowledge in that area because the study empirically investigated the information needs satisfaction of the postgraduates.

7.7 LIMITATIONS OF THE STUDY

The design of the present study was subject to certain limitations. During the data collection period, the researcher experienced difficulty in assembling the postgraduates for the focus group discussion. This was due to their busy academic schedules. However, this could be addressed in future research by starting early to plan for the focus group discussion. The data collection was also affected by the nature (three floors) and size of the library. Due to these factors, the researcher found it difficult to observe the postgraduates in all the library sections and floors at the same time. This is because a student might be using a particular section. Before she could visit that section, the student might have left. This could also be addressed in future research by extending the observation period. Another limitation was in the design of the study as a single case study. This limited the ability of the study's findings to be generalised. This limitation could be addressed in future research by studying multiple cases and increasing the sample size.

7.8 SUGGESTIONS FOR FURTHER STUDIES

The scope of this study covered only the ISB of the 2018/2019 set of University of Jos Department of History and International Studies postgraduates. However, in order to have a complete insight into the ISB of the entire postgraduates of history and international studies in the University, there is need to further investigate the ISB of other sets of postgraduates. Also, to have a complete insight into the ISB of all the history and international studies scholars in the University, there is a need to investigate the ISB of the lecturers and the ISB of the undergraduates.

For the findings on the ISB of history and international studies postgraduates to be generalised, it is necessary to carry out further studies on the ISB of postgraduates in multiple universities offering history and international studies as a course of study.

There are some universities that offer only international studies as a course. To the best of the researcher's knowledge, no study has empirically investigated the ISB of international studies scholars. Therefore, there is need to also investigate the ISB of international studies postgraduates and other scholars of international studies, in order to have an insight into their ISB so as to add the findings to the body of literature.

Finally, the methodology that was employed to carry out this study can be adapted and replicated in a similar study in order to validate the findings of this study. A different methodology can also be employed in order to find out if it will yield the same or different results.

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APPENDIX 1

SCHEDULE FOR FOCUS GROUP DISCUSSION

Thesis topic: Information-seeking behaviour of history and international studies postgraduates in an academic hybrid library in Nigeria.

Participants: History and international studies postgraduates

Section 1: Demographic data of history and international studies postgraduates

What is the sex of each participant?

What is the age range of each participant?

What is the area of specialisation of each participant?

What is the level of study of each participant?

Section 2: Information needs of history and international studies postgraduates in the academic hybrid library

What are the every-day information needs of the postgraduates?

What are the postgraduates' purposes of seeking information to satisfy their needs?

What are the kinds of print resources needed in the hybrid library by the postgraduates?

What are the kinds of digital resources needed in the hybrid library by the postgraduates?

Section 3: Utilisation of ICT facilities

What are the basic ICT skills possessed by the postgraduates?

What are the ICT facilities that the postgraduates use to seek information?

Are the postgraduates aware of the library ICT facilities?

What are the ICT facilities that the postgraduates utilise in the hybrid library?

Section 4: Use of the hybrid library as a formal information source, and other information sources they usually consult

Are the postgraduates using their academic hybrid library?

What are the postgraduates' purposes of seeking information from the academic hybrid library?

What are the postgraduates' perceptions about the hybrid library?

Do the postgraduates perceive the hybrid library as useful to their academic activities?

From the postgraduates' perspectives, is their faculty librarian performing any roles to their academic activities?

What are the other formal information sources consulted by the postgraduates?

Are the postgradautes utilising other academic hybrid libraries?

What are the informal information sources that the postgraduates usually consult?

What are the medium that the postgraduates usually employ to obtain informal information?

Are the postgraduates aware of the different types of print resources in the hybrid library?

What are the avenues through which they became aware of the print resources?

What are the types of library print resources often utilised by the postgraduates?

Are the postgraduates aware of the different types of digital resources in the hybrid library?

What are the avenues through which they became aware of the digital resources?

What is the postgraduates' level of utilisation of the library e- books?

What are the benefits derived from the utilisation of the e-books by the postgraduates?

What is the postgraduates' level of utilisation of library databases?

What are the benefits derived from the utilisation of the databases by the postgraduates?

What are the types of databases often utilised by the postgraduates?

What is the postgraduate's level of utilisation of resources in the IR?

What are the benefits derived from the utilisation of resources in the IR by the postgraduates?

What are the types of resources often utilised in the IR by the postgraduates?

What is the postgraduates' level of utilisation of print resources in the hybrid library?

What is the postgraduates' level of utilisation of digital resources in the hybrid library?

What is the postgraduates' preference between print and digital resources in the hybrid library?

Section 5: Roles of information exchange in the information-seeking activities of the postgraduates

Do the postgraduates engage in information exchange?

If no, why?

If yes:

what are the medium they usually employ for the exchange?

what are the roles of information exchange in the postgraduates' information-seeking activities?

Section 6: Roles of information transfer in the information-seeking activities of the postgraduates

Do the postgraduates' engage in information transfer?

If no: Why?

If yes:

What are the medium they usually employ to transfer information to other people?

What are the roles of information transfer in the information-seeking activities of the postgraduates?

Section 7: Factors that determine the postgraduates' information needs satisfaction and end of their information-seeking activities

What is the postgraduates' level of satisfaction with the hybrid library resources?

What are the factors that determine ending the postgraduates' information-seeking activities?

Section 8: Barriers to the postgraduates' information-seeking and utilisation of information

What are the barriers that the postgraduates usually encounter when utilising ICT facilities in the hybrid library?

What are the barriers that the postgraduates usually encounter during their utilisation of the hybrid library?

What are the barriers that the postgraduates usually encounter when obtaining informal information?

What are the barriers the postgraduates usually encounter during their utilisation of the print resources?

What are the barriers that the postgraduates usually encounter when utilising library e-books?

What are the barriers that the postgraduates usually encounter when utilising the library databases?

What are the barriers that the postgraduates usually encounter when utilising resources in the IR?

What are the factors affecting the postgraduates' ability to exchange information?

What are the factors affecting the postgraduates' ability to transfer information?

OBSERVATION SCHEDULE

Thesis topic: Information-seeking behaviour of history and international studies postgraduates in an academic hybrid library in Nigeria.

Participants: History and international studies postgraduates

Section 1: Use of hybrid library by the postgraduates

Where is the location of the hybrid library building?

What is the nature of the hybrid library in terms of infrastructure, resources and facilities?

What is the frequency of hybrid library use by the postgraduates?

What sections of the hybrid library are often used by the postgraduates?

Section 2: Utilisation of hybrid resources and ICT facilities

Are the postgraduates utilising the hybrid library print resources?

If yes:

What is the frequency of utilisation of the print resources?

What types of print resources are they utilising?

Are the postgraduates utilising the hybrid library digital resources?

If yes:

What is the frequency of utilisation of the digital resources?

What types of digital resources are they utilising?

Are the postgraduates utilising the hybrid library ICT facilities?

If yes:

What is the frequency of utilisation of the facilities?

What types of ICT facilities are they utilising?

APPENDIX 3

INTERVIEW SCHEDULE

Thesis topic: Information-seeking behaviour of history and international studies postgraduates in an academic hybrid library in Nigeria.

Participants: Librarians

Section 1: Demographic data of participants

What is the highest educational qualification of each participant?

What is the work experience of each participant?

Section 2: Ways of satisfying the information needs of the postgraduates in the hybrid library

What are the various ways which the library employs to satisfy the information needs of the postgraduates?

Section 3: Utilisation of hybrid library by the postgraduates

Are the postgraduates' utilising the hybrid library?

What is the frequency of utilisation of the hybrid library by the postgraduates?

Section 4: Roles of faculty librarian towards the academic activities of the postgraduates

What are the specific roles that are being played by the faculty librarian, towards the academic activities of the postgraduates?

Section 5: Available ICT facilities in the library

What types of ICT facility are available in the library?

Are the postgraduates utilising the facilities?

Section 6: Available print resources in the hybrid library

What types of print resources are available in the hybrid library?

Are the postgraduates aware of the print resources?

Are the postgraduates utilising the print resources?

Section 7: Available digital resources in the hybrid library

What types of digital resources are available in the hybrid library?

Are the postgraduates aware of the digital resources?

Are the postgraduates utilising the digital resources?

Section 7: Ratio of print to digital resources in the hybrid library

What is the ratio of print resources to digital resources in the hybrid library?

Is there any reason for the ratio?

APPENDIX 4

Department of Information Science,
Faculty of Human Sciences,
University of South Africa,
Preller Street, Muckleneuk Ridge,
City of Tshwane,
P.O. Box 392,
UNISA 0003 South Africa

1st November 2021

The University of Jos Librarian,
University of Jos,
P.M.B 2084,
Jos, Plateau State Nigeria

Dear Sir,

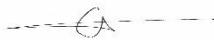**Request for permission to conduct research at the University Library**

I am Grace Iyabo Nwokedi, a student of Department of Information Science, Faculty of Human Sciences, University of South Africa. I am undertaking a doctoral study titled "Information-seeking behaviour of postgraduate historians utilising library digital information resources in a Federal University in Nigeria", and the name of my supervisor is Professor Isabel Schellnack-Kelly. The study is being funded by the University of South Africa. The fund was allocated to me to enable me carry out the research successfully.

I am inviting the Arts Librarian, Systems Librarian and Documents and Special Collections Librarian to participate in the study. These librarians were selected because they are directly in charge of the dissemination of digital resources to the postgraduates in the Department of History and International Studies. The aim of the study is to initiate the improvement of the information retrieval system of the University of Jos Library. The study will entail an interview with the above-mentioned librarians, focus group discussion with the postgraduates and unobtrusive observation of the postgraduates. The researcher intends to conduct the interviews in the offices of the librarians, while the focus groups and observation will be conducted in the postgraduate sections of the Library.

The findings of the study will assist University of Jos Library and other archival institutions to know the specific information needs of postgraduate historians with regards to their utilisation of digital information resources. The findings will also assist the library and other archival institutions to evaluate the need to improve their information systems to maximise their usage.

The study will not pose any risk to the participants, and the researcher will be ethical throughout her interaction with the participants by keeping the information that will be obtained from the participants in strict confidentially. Also, the researcher will ensure that she and her participants observe all the Covid-19 protocols in the library during the data collection process. At the completion of the thesis, two copies will be submitted to the registry to enable the University to get feedback of the study. Sir, I hope my request will be granted. Thank you in anticipation.

Yours Sincerely,

Grace Iyabo Nwokedi (Researcher)

APPENDIX 5

OFFICE OF THE UNIVERSITY LIBRARIAN

Vice Chancellor
Professor Seddi Sebastian Maimako
B.Sc., MBA, Ph.D, FCA

University Librarian
Dr. Thomas A. Adigun
B.Sc. (Hons), MLS, PhD, CLN

3rd November, 2021.

Grace Iyabo Nwokedi,
Department of Information Science,
College of Human Sciences,
University of South Africa.

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT THE UNIVERSITY LIBRARY

It is with pleasure that I convey to you approval to liaise with some Unit Librarians in the University of Jos Library: in respect of your doctoral study title: "Information Seeking Behaviour of Postgraduate Historians Utilising Library Digital Information Resources in a Federal University in Nigeria".

The Arts Librarian, Systems Unit Librarian and Documents and Special Collections Librarian are the staff to participate with you in the study.

It is hoped that the findings would be of great significance to the University of Jos Library and other archival institutions.

Thank you.

Dr. Thomas A. Adigun
University Librarian

Discipline and Dedication

Department of Information Science,
Faculty of Human Sciences,
University of South Africa,
Preller Street, Muckleneuk Ridge,
City of Tshwane,
P.O. Box 392,
UNISA 0003 South Africa,

1st November 2021.

The Head of Department,
History and International Studies,
Faculty of Arts,
University of Jos,
P.M.B 2084 Jos,
Plateau State, Nigeria.

Dear Sir,

Request for permission to conduct research at
Department of History and International Studies

I am Grace Iyabo Nwokedi, a student of Department of Information Science, Faculty of Human Sciences, University of South Africa. I am undertaking a doctoral study titled "Information-seeking behaviour of postgraduate historians utilising library digital information resources in a Federal University in Nigeria", and the name of my supervisor is Professor Isabel Schellnack-Kelly. The research is being funded by the University of South Africa. The fund was allocated to me to enable me to conduct the research successfully.

I am inviting the postgraduates in the Department of History and International Studies to participate in the study. The postgraduates were selected because they form a significant part of the University Library users, and from existing literature, no study was found that examined their information seeking behavior with respect to their utilisation of library digital resources.

The aim of the study is to initiate the improvement of the information retrieval system of the University of Jos Library. The study will entail focus group discussion with the

postgraduates in the postgraduate section of the library, and unobtrusive observation of the postgraduates during their utilisation of digital resources in the library. The study will also entail interview sessions with few librarians at the University Library. The findings of the study will assist University of Jos Library and other archival institutions to know the specific information needs of postgraduate historians with regards to their utilisation of digital information resources. The findings will also assist the library and other archival institutions to evaluate the need to improve their information retrieval systems to maximise their usage.

The research will not pose any risk to the participants, and the researcher will be ethical throughout her interaction with the participants by getting the participants to participate voluntarily, and by keeping the identities of the participants in anonymity. Also, the information obtained from the participants will be strictly confidential. The researcher will equally ensure that she and her participants observe all the Covid-19 protocols in the library during the data collection process. At the completion of the thesis, two copies will be submitted to the registry to enable the University to get feedback of the study. Sir, I hope my request will be granted. Thank you in anticipation.

Yours Sincerely,

Grace Iyabo Nwokedi (Researcher)

APPENDIX 7

DEPARTMENT OF HISTORY
&
INTERNATIONAL STUDIES
FACULTY OF ARTS
UNIVERSITY OF JOS, NIGERIA

Cable s and Telegrams: UNIJOS

☎ 073 – 610514/Ex.115
FAX: 234-73-610514

PRIVATE MAIL BAG 2084,
JOS – NIGERIA
E-MAIL: hisdep.@unijos.edu.ng

Ref: UJ/FA/HIS/107

Date: 1ᵗʰ November, 2021

Mrs. Grace Iyabo Nwokedi

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT THE DEPARTMENT OF HISTORY AND INTERNATIONAL STUDIES

The Department is pleased to approve your request for the Post Graduate Students of the Department of History and International Studies 2018/2019 set and the 2019/2020 set to participate in your study on the utilization of library digital resources.

We wait for your communication on the appropriate date and time you will want to commence the study.

Thank you.

Yours faithfully,

Dr. Jimam T. Lar 1—11—2021
Head of Department

APPENDIX 8

Consent to participate in this study

Title of study: Information seeking behaviour of history and international studies postgraduates in an academic hybrid library in Nigeria.

I, ……………………….., confirm that the person asking my consent to take part in this inquiry has told me about the nature, procedure, potential benefits and anticipated inconveniences of participation. I have read and understood the study as explained in the information sheet. I have also had sufficient opportunity to ask questions and I am prepared to participate in the study. I have also understood that my participation is voluntary, and that I am free to withdraw at any time without penalty. Furthermore, I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified. I hereby agree to voluntarily participate in the study, and I also agree to the recording of the interactive sessions. I have received a signed copy of the informed consent agreement.

Name of participant ....

Signature ....

Date ....

Name of researcher ....

Signature ....

Date ....

UNISA
university
of south africa

COLLEGE OF HUMAN SCIENCES RESEARCH ETHICS REVIEW COMMITTEE

29 November 2021

Dear Mrs. Grace Iyabo Nwokedi

| NHREC Registration # : |
| Rec-240816-052 |
| CREC Reference # : |
| 66098076_CREC_CHS_2021 |

Decision:
Ethics Approval from 29 November 2021 to 29 November 2026

Researcher(s): Name: **Mrs. Grace Iyabo Nwokedi**
Contact details: **66098076@mylife.unisa.ac.za**
Supervisor(s): Name: **Prof IS Schellnack-Kelly**
Contact details: **schelis@unisa.ac.za**

Title: Information seeking behaviour of postgraduate historians utilising library digital information resources in a Federal University in Nigeria.

Degree Purpose: PhD

Thank you for the application for research ethics clearance by the Unisa College of Human Science Ethics Committee. Ethics approval is granted for five years.

The *low risk application* was reviewed by College of Human Sciences Research Ethics Committee, in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.

2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the College Ethics Review Committee.

3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.

4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the

CERTIFICATE OF COMPLIANCE

TO WHOM IT MAY CONCERN

27 October 2022

I hereby confirm that I have applied the guidelines set out in the Information Science: Guidelines of Master's and Doctors Studies (MDCHSAL/301/0/2019) to the PhD-thesis of Ms GI Nwokedi entitled "Information seeking behaviour of history and international studies postgraduates in an academic hybrid library in Nigeria".

Yours faithfully,

Mrs EJ de Jongh
082 632 2323

APPENDIX 11

EASYDOC EDITING AND TRANSCRIBING SERVICES

CERTIFICATE OF ENGLISH EDITING

TO WHOM IT MAY CONCERN

This document certifies that the PhD Dissertation detailed below was edited for English Language, Grammar, Punctuation, and Spelling by the English Language and Grammar Editor at Easydoc Editing and Transcribing Services.

MRS Y (ROSH) CHETTY

Y Chetty

chetty.rosh@gmail.com

071 564 4306

DATE EDITED

Friday 18 November 2022

DISSERTATION TITLE

Information-Seeking Behaviour of History and International Studies Postgraduates in an Academic Hybrid Library in Nigeria

POSTGRADUATE DEGREE

Doctor Of Philosophy And Literature in Information Science (PhD) (UNISA)

DISSERTATION AUTHOR

Grace Iyabo Nwokedi

STUDENT NUMBER

66098076

REFERENCE NUMBER

GIN/PhD 01/11-2022

Appendix 12

Department of Information Science,
Faculty of Human Sciences,
University of South Africa,
Preller Street, Muckleneuk Ridge,
City of Tshwane,
P.O. Box 392,
UNISA 0003 South Africa,

26th October, 2023.

The Head of Department, History and International Studies,
University of Jos
P.M.B 2084
Jos,
Plateau State, Nigeria.

Dear sir,

Request for total population of postgraduate students

I am Mrs. Grace Iyabo Nwokedi a doctoral student at the University of South Africa. I humbly write to request for the total population of postgraduate students in your Department. This is to enable me include the information in my research work.

Thank you sir for your anticipated cooperation.

Yours faithfully,

Mrs. Grace Iyabo Nwokedi.

DEPARTMENT OF HISTORY
&
INTERNATIONAL STUDIES
FACULTY OF ARTS
UNIVERSITY OF JOS, NIGERIA

Cable's and Telegrams: UNIJOS
☎ 073 – 610514/Ex.115
FAX: 234-73-610514

PRIVATE MAIL BAG 2084,
JOS – NIGERIA

E-MAIL: hisdep.@unijos.edu.ng

Ref: UJ/FA/HIS/107

Date: 26ᵗʰ October, 2023

Dear Mrs. Grace Iyabo Nwokedi,

RE: REQUEST FOR TOTAL POPULATION OF HISTORY AND INTERNATIONAL STUDIES POSTGRADUATES

Refer to your request for statistics of our Postgraduates Students, for three sets in the department of History and International Studies. Find details as follows:

1. 2017/2018 Set   42 Masters
                     13 Ph.D

2. 2018/2019 Set   44 Masters
                     08 Ph.D

3. 2020/2021 Set   41 Masters
                     12 Ph.D

Please do not hesitate to contact us if you require any further information.

Thank you

28.10.2023

Dr. Jimam T. Lar
Head of Department

224
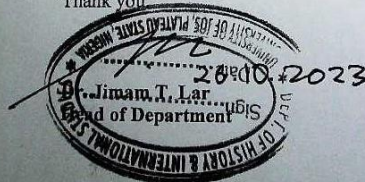
Appendix 14

Department of Information Science,
Faculty of Human Sciences,
University of South Africa,
Preller Street, Muckleneuk Ridge,
City of Tshwane,
P.O. Box 392,
UNISA 0003 South Africa,

26th October,2023.

The University Librarian
University of Jos
P.M.B 2084
Jos,
Plateau State, Nigeria.

Dear sir,

Request for total population of librarians

I am Mrs. Grace Iyabo Nwokedi a doctoral student at the University of South Africa. I humbly write to request for the total population of academic librarians in your library. This is to enable me include the information in my research work.

Thank you sir for your anticipated cooperation.

Yours faithfully,

Mrs. Grace Iyabo Nwokedi.

UNIVERSITY OF JOS, JOS-NIGERIA
OFFICE OF THE UNIVERSITY LIBRARIAN

UNIVERSITY LIBRARIAN
Dr. Thomas A. Adigun
B.Sc. (Hons), MLS, PhD, CLN

P.M.B 2084, Jos, 93001
Plateau State, Nigeria
+234 7067692238
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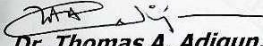librarian@unijos.edu.ng
www.unijos.edu.ng

October 30, 2023

Mrs. Grace Iyabo Nwokedi,
Department of Information Science,
University of South Africa,
Preller Street, Muckleneuk Ridge,
City of Tshwane,
P. O. Box 392,
UNISA 0003 South Africa

Dear Madam,

RE: REQUEST FOR TOTAL POPULATION OF LIBRARIANS

Following your request in your letter dated 26th October, 2023, I am pleased to inform you that the University of Jos Library has 31 Academic Librarians.

Thank you.

Dr. Thomas A. Adigun,
University Librarian,