UTILISATION OF ELECTRONIC BOOKS (E-BOOKS) BY POSTGRADUATE LIBRARY AND INFORMATION SCIENCE (LIS) STUDENTS AND LIBRARIANS AT THE UNIVERSITY OF SOUTH AFRICA LIBRARY

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Submitted in accordance with the requirements for the degree of

MASTER OF INFORMATION SCIENCE (M INF)

In the subject

INFORMATION SCIENCE

At the

UNIVERSITY OF SOUTH AFRICA, PRETORIA

SUPERVISOR: PROF OB. ONYANCHA

MARCH 2020

DECLARATION

I declare that "utilisation of electronic books (e-books) by postgraduate library and information science students and librarians at the University of South Africa library" is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete reference.
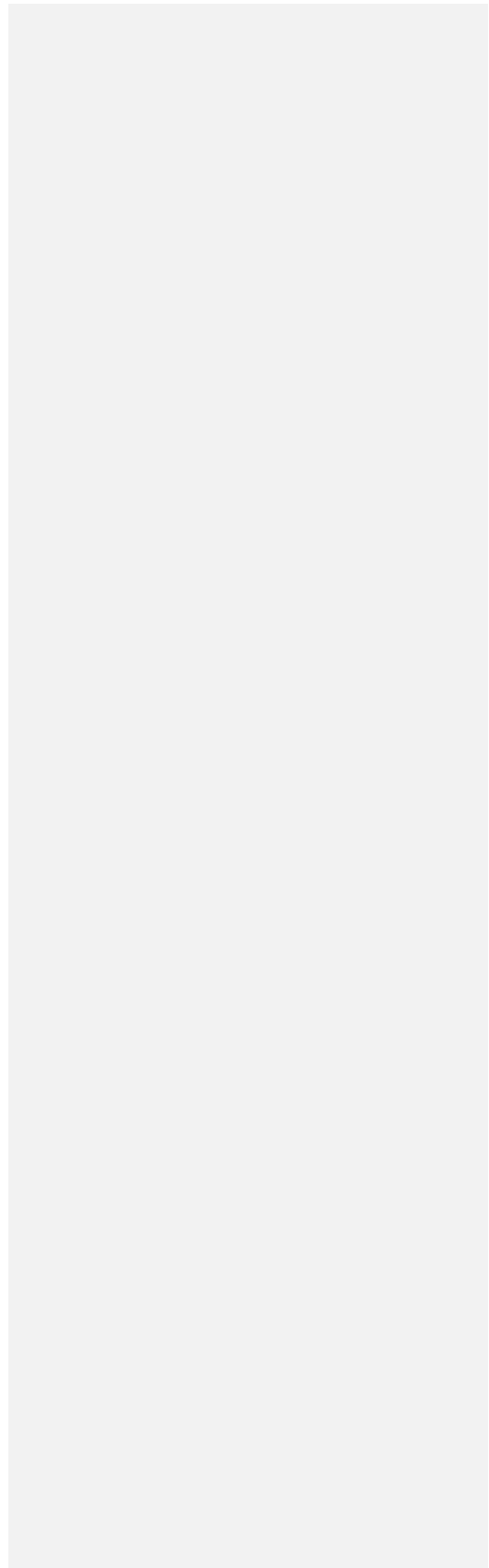

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  Signature   Date

 E. KATSIRIZIKA   MARCH 2020

DEDICATION

This work is dedicated to my late parents, Mr. Mandalasi Sikalamwa Katsirizika and Mrs. Annes Nalisowa Katsirizika.

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ACKNOWLEDGEMENTS

ABSTACT

E-books have become a common feature in academic libraries since their adoption in the early 1990s. Unisa library is no exception. The aim of this study was to assess the utilisation of e-books by postgraduate library and information science students and librarians at the University of South Africa library. The current study was largely quantitative in nature but supplemented with qualitative data, with a survey and interviews being the research designs. The total sample was 336 postgraduate students for the quantitative component and 10 librarians for the qualitative section. The response rate of 25% from respondents was achieved while participants (librrarians) achieved a 100% response rate. The response rate was low therefore was backed by empirical literature

The study revealed that library and information science postgraduate students are aware of e-books at UNISA library, with 98.00% of the respondents having used e-books. However, librarians believe that the number of postgraduate students who are aware of e-books is smaller than those who are not. A total of 36.15% of the postgraduate students indicated that the Unisa library has not made commendable efforts in creating e-books awareness. Generally, the perceptions about e-books is positive for both librarians and postgraduate students in Unisa library. Overwhelming majority of 97.59% were in favour of continued investment in e-books by Unisa library. In terms of the embracing of technology, most postgraduate students (83.13%) own desktop computers while 73.49% own smart phones. There are many factors that still discourage the utilization of e-books, for example, unstable internet and high data cost as some of the hindering factors highlighted in the findings, especially when accessing e-books off campus.

It is imperative that further training on the use of e-books at the Unisa library be provided to postgraduate students. The library should also develop a training manual which must be part of Unisa study material so that every registered student has a reference tool to help him/her in absence of personal or online training from the librarians. The research also recommended that a further study be conducted which will include all students from all colleges to find out their problems with utilisation of e-books.

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LIST OF ABBREVIATIONS

AACR:	Anglo- American Cataloguing Rules
ALA:	American Library Association
APPS:	Applications
ASCII:	American Standards Code for Information Interchange
BBC:	British Broadcasting Corporation
CD:	Compact Disc
CD-ROM:	Compact Disc Read Only Memory
CLA:	Canadian Library Association
DMCA:	Digital Millennium Copyright Act
DRM:	Digital Rights Management
E-book:	Electronic book
EM:	Electro Magnetic
E-PUB:	Electronic Publication
IBM:	International Business Machines
ICT:	Information and Communication Technology
IP:	Internet Protocol
IT:	Information Technology.
JISC:	Joint Information Systems Committee
LCD:	Liquid Crystal Diode
LIS:	Library and Information Science
MBA:	Master of Business Administration
MBS:	Manchester Business School
MHZ:	Mega Hertz
MS-DOS:	Microsoft Disk Operating System
NASA:	National Aeronautical and Space Administration
ODL:	Online distance learning
OPAC:	Online Public Access Catalogue
PDA:	Patron Driven Acquisition
PDF:	Portable Digital File
PEOU:	Perceived Ease of Use
POPI:	Protection of Personal Information
PU:	Perceived Usefulness

RFID: Radio Frequency Identification

RMIT: Royal Melbourne Institute of Technology

RRU: Royal Rhodes University

SMS: Short Messaging Services

SAICA: South African institute of chartered accountants

SBL: School of Business Leadership

TAM: Technology Acceptance Model

TRA: Theory of Reasoned Action

UAE: United Arab Emirates

UIR: University Institutional Repository

UJ: University of Johannesburg

UNISA: University of South Africa

UniSA: University of South Australia

URL: Universal Resource Locator

USA: United States of America

WI-FI: Wireless Fidelity

USB: Universal Serial Bus

WITS: University of Witwatersrand

CHAPTER ONE: INTRODUCTION AND BACKGROUND TO THE STUDY

1.1. INTRODUCTION

Introduction of e-books in academic libraries in the 1990s was a milestone for the advancement of electronic learning technologies. Its arrival shook academic libraries and the library and information science field (Loan and Nisa 2015:304). Some commentators even predicted the demise of a library as a custodian of hard copy books (Sanborn 2013:6). Libraries began to change their collection development policies to accommodate e-books in their collections. University libraries, especially from the western world were the first to adopt e-books, mainly as a supporting source of information for teaching and learning (Aharony 2013:67). However, the utilisation and perception of e-books by students in general, postgraduates, and librarians has been a bone of contention in many academic libraries because of different adoption levels and availability of information communication and technology (ICTs). For example, Victoria University of Wellington, uses patron driven acquisition (PDA) system (Wilkinson 2015:3). E-books acquired by PDA stand a greater chance of high percentage of utilisation because only books which have been used a certain number of times already are purchased by the library. Postgraduate library and information science (LIS) students are current and future librarians. Their perception and ability to utilise e-books is not only important for their careers but building effective e-books collections and operating efficient libraries as well.

In South Africa, University of South Africa (UNISA) library was one of the early adopters of e-books. They ventured into e-book worlds as early as 2005 (University of South Africa 2005). Since then, almost all university libraries in South Africa have an e-book on their collection development policies and in their libraries catalogues. Since e-books are technology based, improvement in the information communication technology (ICT), have seen a significant growth in e-books popularity. Therefore, utilization of e-books in academic libraries depends on awareness, ICTs and the ability of the user to access and utilise them. This study assesses the utilisation of e-books by postgraduate library and information science students and librarians at Unisa library.

1.2. HISTORICAL BACKGROUND

Since man perceived the idea of preserving information, different materials such as stone, metal, trees (wood, bark, bamboo, and palm leaves), glass, ivory, clay, wax, fabric, bones and skins of animals have been used to record information over a long period of time Avrin:1991:64). Series of metamorphosis have transformed recorded information into collectable items which we call books today. Pictures painted on cave walls about 50 000 years ago by early human beings have been found (Allen (1967:14). The history of the book has continuously shown that it is still evolving. Chapter two will contain more elaboration on the historical development of an e-book to the present day.

1.3. CONCEPTUAL SETTING

Concepts are central themes on which the author focuses his or her attention and energy or individual subjects, their parts and the relationship between the parts (Indexing for southern Africa 2005:22). While Bryman (2016:543), explains that a "concept is a name given to a grouping of phenomena that organizes observations and ideas by virtual of their processing common features". In this study, the main concepts are electronic books and electronic resources in general. To introduce these concepts, this section looks briefly back to the beginnings of the concepts; e-resources and e-books. Then other concepts which developed out of these two main concepts, for example, platforms they use such as e-brary and devices which enable the use of e-books such as e-book readers, will be briefly discussed. The rest of the sub concepts such as smart phones, tablets and laptops will be discussed in detail in chapter two of this study.

1.3.1. Origins of e-books concepts

Bush (1945:6), in his article "*as we may think*" conceptualised a mechanical machine which could store electronic documents, including books which could be read through screens. The machine was named Memex (Bush 1945:6). Many researchers such as Aharony (2012:67), Veith (2006:1233), Heyd (2010:13), Penaflor and Garcia (2017:1) have also attributed the origin of e-books to the concept of the Memex by Vannevar Bush. In a way, Bush (1945) visualised an idea of electronic resources. In 1967,

Andries van Dam came up with term 'electronic book' while working with his students on a project to create hypertext editing systems (Aharony 2012:67).

Michael Hart put the concept into practice in 1971 by creating what is believed to be the first e-book when he typed a United States of American declaration of independence document in a computer and then shared it with friends (project Gutternburg (2013). Project Gutternburg was set up to convert printed books into digital format. These digitized books adopted the name electronic books. Today, electronic books have established themselves to become desirable information sources in libraries. For one to make use of an e-book, one is required to have access to an e-book reading device such as an e-book reader, tablet, smart phone or a computer.

Sheehan (2013:1) states that, 'their emergence in the early 1990s triggered a rapid growth which the author referred to as 'the e-book evolution'. According to Rouse (2005:4), an e-book reader contains software application for use on a computer that is used as a reading device, such as Amazon's kindle, Sonny e-book reader or the Nook. Foasberg (2011:108), acknowledges that: e-book readers have evolved considerably in comparison with the first-generation version such as the soft book and rocket e-books of 1990s, which were dedicated only to reading e-books. Amazon kindle and other devices today, are considerably well equipped as multi-purpose devices capable of e-mailing, playing music and surfing social networks on the internet. More e-book readers are readily available today than ever before. Chapter two of this study will include more information on literature about devices which are used to access and utilise e-books in academic libraries.

1.4. *CONTEXTUAL SETTING*

In this section, context in which the study took place was elaborated by looking at Unisa library and its branches.

1.4.1. *UNISA library*

Unisa library is said to be the biggest and one of the early academic libraries to adopt e-books in South Africa. According to Suttie (2006:305), UNISA library was the first academic library in South Africa to digitise its catalogue in the early 1990s'. The researcher observed that in 2005, Unisa library made a bold move when management decided to add electronic books to current collection. This is said to be another first in

South African academic libraries. The library Functional Plan (2010-2015) indicates strong emphasis on making more electronic material in Unisa library available to users for both research and teaching purposes. This includes the UNISA institutional repository (UIR), electronic journals and e- books (University of South Africa 2010:17).

The UNISA library was established in 1946 to cater for the new role that the University of South Africa had just assumed as a teaching university. Since then, the UNISA library has expanded to a total of 14 branches namely: Cape Town, Durban, East London, Ekurhuleni, Ethiopia, Johannesburg, Nelspruit, Polokwane, Pietermaritzburg, Rustenburg, The science library (Florida), graduate school of business leadership (SBL) in Mid Rand and Sunnyside libraries. There is mobile extension of the Unisa library. It has two well equipped buses with computers and Wi-Fi connection. The two mobile library buses go to areas where branch libraries are too far apart.

The Unisa library established these branches so that it can provide better services to students within South Africa. There is one branch library outside of South Africa which is based in Addis Ababa, Ethiopia. However, an online book request system was established to serve the broader student population and give every student a fair chance of obtaining the books for their different studies regardless of geographical location. Books reserved for the online requests include recommended and prescribed books, research books, library and information science special books such as Dewey decimal classification (DDC), Sears subject organisation, Anglo American cataloguing rules (AACR) and many others are kept in locked up section of the library. Only staff members are allowed access to this section.

All administrative and technical duties such as, acquisition, cataloguing and classification of the library's resources, barcoding, Radio frequency identification (RFID) tagging, security measure enforcement for each book, takes place at the main library in Pretoria. Each branch receives a share of a collection it holds from Pretoria. All online book and articles requests are all processed at the main campus by the processing section of the library. Figure 1 is a graphical representative of the UNISA library and its branches.
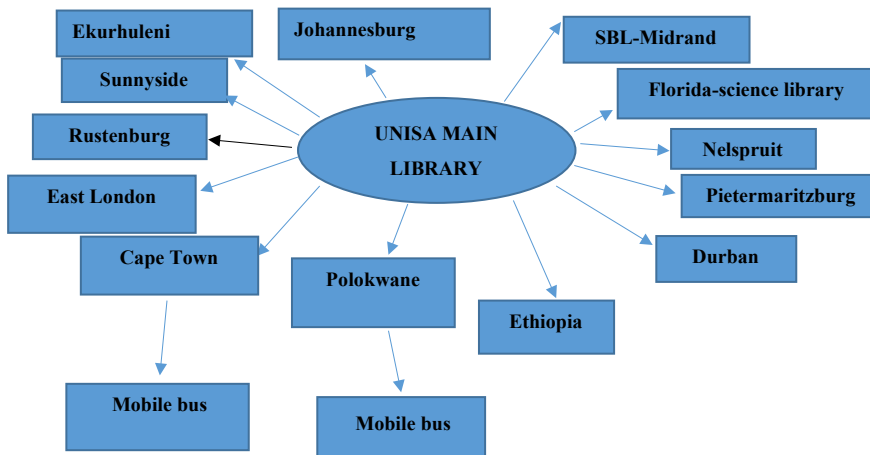
Figure 1. A representation of UNISA library and all branches

A study conducted by one of the staff members tasked with collection development at the library, indicates that e-book titles purchased by Unisa library had grown from five thousand (5000) titles in 2008 to fifty thousand (50,000) titles in 2012 (Snyman 2013). Library senate committee approved a budget of R57 050 000.00 for the 2014 academic year e-books expenditure in Unisa library (Unisa 2013). This was an 8% increase from the budget of 2013 which was R52 989 000.00. The number of e-books titles has grown up to a 100,000 by the end of 2014.

A recent document analysis revealed that e-books growth in the UNISA library has kept the momentum. There was a higher growth in 2012 and 2013. The highest growth consisted of 20,339 titles which were added to the collection. Thereafter, the figures dropped dramatically in 2014 with only 4423 titles added to the collection. The addition almost doubled in 2015, only to see another drop in 2016 and then 2017 and 2018 saw a slight increase of the new titles added to the catalogue. For e-books usage at UNISA library, see figure 5. The figure 2, shows e-books collection growth trend over time.
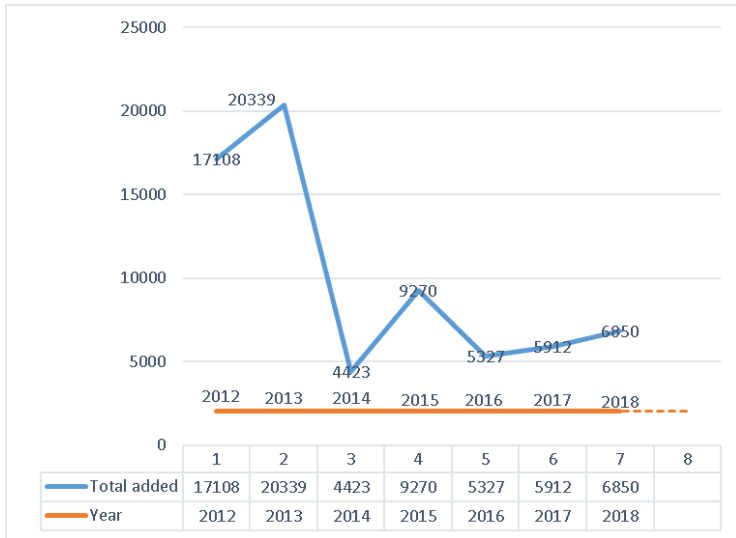
Figure 2. E-books collection growth (Source: UNISA Library)

1.5. PROBLEM STATEMENT

As outlined above, the Unisa library is building a large e-book collection to bolster existing collection of conventional (hard copy) books so that it may serve its student population and academia better. Interestingly, utilisation of e-books in academic libraries has been a bone of contention in different research findings. This is because there is still a considerable resistance to e-books, unavailability of e-books or lack of awareness and access to computers with good internet connection or other electronic devices required to access e-books (Nwagwu 2015:32). However, Universities are required to prove the relevance and value of their library collections to students and other stakeholders. According to Adebayo (2009:2), "the value of library collection is measured by usability and size of its resources". Adebayo (2009:3) continues to explain that 'there is no absolute standard for the size of a collection, but resources should adequately support particular user needs.

E-books is also the newest book technology for academic libraries. This means that users must learn new skills to use them. Study conducted by Wiese and du Plessis (2014) at University of Pretoria, revealed that it is not the number of e-books which drive students to utilisation but positive perception, awareness and correct infrastructure such as computers. This study is unique in the sense that the respondents are postgraduate students in one field of study (LIS) who are

geographically scattered. Each geographical location poses different types of challenges accessing and utilising e-books from UNISA library. This study, therefore, investigate the utilisation of e-books by postgraduate library and information science students and librarians at Unisa library.

1.6 PURPOSE OF THE STUDY

The purpose of the study is to assess the utilisation of e-books by postgraduate library and information science (LIS) students and librarians at University of South Africa library.

1.7. OBJECTIVES OF THE STUDY

The main objectives of this study were to:

- Establish to what extent the postgraduate LIS students are aware of e-books in Unisa library
- Assess the extent of postgraduate e-book usage at the Unisa library
- Establish postgraduate LIS students' perception of e-books in UNISA library
- Determine technology and skills required for effective utilization of e-books by postgraduate LIS students in UNISA library
- To establish factors that affect postgraduate LIS student's utilisation of e-books at UNISA library

1.8. RESEARCH QUESTION

The researcher will seek to answer the following research questions:

- To what extent are postgraduate (LIS) students aware of e-books at UNISA library?
- To what extent are e-books used by postgraduate (LIS) students at UNISA library?
- How do postgraduate (LIS) students perceive e-books at the UNISA library?
- What type of technology and skills do postgraduate (LIS) students need to effectively utilise e-books at UNISA library?
- Which factors affect utilisation of e-books by postgraduate (LIS) students at UNISA library?

1.9. SIGNIFICANCE OF THE STUDY

This study is significant because it forms part of a continuous process of assessing products and services at UNISA library. As UNISA library continues to grow and invest in new technologies, such as e-books, to serve its students competently, it is of great importance that the university is aware of the benefits accruing from such investments. The UNISA library may also benefit from the current study's findings as they may reveal areas of concern as far as the use of e-books and lack thereof is concerned. The library may, for example, reconsider its collection development model based on findings of the current study. Due to findings of the current study, the library may also reconsider the purchasing models to make sure that they buy relevant resources only.

The research will contribute knowledge in the field of study, which is library and information science unearthing new insights on the topic of e-books provision. Meanwhile, the study will be beneficial to students by pointing out areas of e-books provision, which are not favourable or lacking, so that the library may improve and provide better services to the students.   Furthermore, the research findings may encourage the library to think differently on how it markets e-books so that there is greater awareness of e-books among postgraduate students depending on the loopholes, which may be uncovered after the research is completed.

1.10. SCOPE AND LIMITATIONS OF THE STUDY

It is important that any project is of manageable size. Delimitation, according to Creswell (2003:148), "narrows the scope of the research project". Creswell 2003:148) further notes that "a smaller and manageable research project allows the researcher to manage and conduct research within a stipulated time slot". Students enrolled in the programs offered in the department of Library and Information Science (LIS) at the University of South Africa and members of UNISA library staff who were carefully selected took part in this study. The study was also limited to e-books and related technologies and their usage. The findings of the study may not be generalizable because of the size of the population as well as the geographic context of study. The study covers only a small fraction of UNISA student population and schools. Therefore, the findings may not be conclusive. The study may lead to further investigations.

1.11 DEFINITION OF TERMS

Codex: An early form of book like object which was made by the Romans by joining one end of wooden boards with leather or string Howard (2005:11).

Papyrus: A writing material which was made from reed like plants which used to grow in the Nile River banks in Egypt (Howard 2005:3)

Tablet: A clay type of object rectangular or cylindrical which was used in ancient time by Assyrians and Sumerians for writing purposes (Lavarie 1995:1)

Parchment: a softened and untanned skin of sheep, goat and calves. A calf skin is also known as vellum (Howard 2005:4)

Electronic books: These are books which are presented to users in electronic form which can be read on computer screen or other devices especially made for that purpose, (Divikar 2012:110).

 Academic library: An academic library is one of different types of libraries which are mostly associated with higher education institutions such as a universities or colleges. Its main aim is to deliver and disseminate information to faculty and students (Li 2013:283).

Digital rights management: These are restrictions which electronic books vendors or producers put on their products to avoid e-books from being passed on or shared easily (Sheehan 2013:12).

E-book reader: It is a device which is designed to upload, store and display e-books on a screen for users to read (Burns 2014).

1.12. ORGANISATION OF THE DISSERTATION

This thesis is made up of six chapters including the current chapter. Subsequent chapters are as follows:

1.12.1 chapter one

Introduction and background of the study – This chapter covers an introduction, historical background of the study, conceptual setting, contextual setting, problem statement, purpose of the study, objectives of the study, research question,

significance of the study, scope and limitations of the study definition of terms and organization of the dissertation.

1.12.2. Chapter Two

Literature review – this chapter reviewed the literature in more detail under the following headings: Introduction, conceptual framework, theoretical framework, the book (brief history), and the objectives of the study which are: students awareness of electronic books, creation of e-books awareness among students in university libraries, students perceptions of electronic books, devices used by students to access electronic books, factors which encourage or discourage students from utilising e-books in academic libraries.

1.12.3. Chapter Three

Research methodology – The methodology chapter includes a plan of the whole research such as: research approaches, research design and methods, population, sampling, data collection procedures and instruments, reliability and validity, data analysis and ethical considerations.

1.12.4. Chapter Four

Presentation of findings – In this chapter, all data collected was analysed and presented. The data presentation was divided into two. The first part was the quantitative data and the second part the qualitative data. The presentation also includes graphs and tables.

1.12.5. Chapter Five

Discussion of the findings – The findings were interpreted systematically and discussed in detail point by point. The discussion will start with quantitative data followed by the qualitative data. All the data will be discussed under their respective themes such as: perceptions, advantage and disadvantages of e-books, devices and or trends.

1.12.6. Chapter Six

Summary, conclusion and recommendation: This chapter provide the summary, conclusion and recommendations of the study. Findings were summarized then a conclusion drawn. Limitations and difficulties of the study were highlighted. Then, recommendations for further study were also made.

CHAPTER TWO: THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 INTRODUCTION

In this chapter, theory on which the study is based was discussed. It was followed by review of literature about early conceptualisation, developments, adoption and utilisation of e-books in academic libraries. As well as the technology which enabled the development of e-books.

2.2 THEORETICAL FRAMEWORK

Theoretical framework is described as a "set of backgrounds and theoretical assumptions guiding a specific approach in qualitative or qualitative in general" (Flick 2018:606). Meanwhile, theory is a systematic explanation for the observations that relate to a particular aspect of life (Babbie 2017:496).

Utilisation of e-books has been an area of attention since academic libraries begun adopting e-books in their collection in the early 1990s. Researchers have conducted several research projects on utilisation of e-books in academic libraries to find the best way possible of leveraging this newest book technology. As a technology-based resource, e-books have met some resistance from some sections of the user. However, developments in information and telecommunication technologies (ICT) continue to produce devices which are making the utilisation of e-books in academic libraries a viable option.

New technology requires constant persuasion for the user to see value in technology before deciding to adopt and utilise it. To understand this process, researchers have used theories to ascertain how users come to their final decision, more so in the adoption of new technologies such as e-books. This research is therefore, built based on the technology acceptance model (TAM). A theory developed to understand human attitudes towards interaction with computers (Hwang, Al-Arabiat and Shin 20161:270).

2.2.1. Technology acceptance model (TAM)

TAM was developed from the theory of reasoned action (TRA) as proposed by Fishben and Ajzen (Wu & Wang 2005:720). It was developed specifically as a computer adoption theory (Hwang et al… 20161:270). The original TAM consisted of five constructs; (i) Perceived ease of use (PEOU), (ii) Perceived usefulness (PU), (iii)

Attitude towards using (ATU), (iv) Behaviour intention to use (BI), and (v) Actual system use (AU) (Wu & Wang 2005 :720). The attitude towards using directly predicts user's behaviour intention to use which in return determine actual system use (Wu and Wang 2005:720).

PEOU and PU are TAMs most important constructs as they are regarded as determinants of system use. They explain the reasoning for adoption of technology by individuals. These two constructs theorise that the intention to use a prospective system is mainly influenced by two factors; perceived usefulness and perceived ease of use. (Hwang et al… 2016:1268; Wu and Wang 2005:720).

Perceived usefulness (PU): refers to perspective user's perception that using the technology in question will increase his / her performance.

Perceived ease of use (PEOU): is intended to capture the perceptions about whether the use of the technology will be free of effort (Hwang et al…2016:1271).

This theory informs this study about the struggles that users of e-books must go through. This is because an e-book is a technology which depends on other technologies to function. Users of e-books must decide on learning and adopting carrier technologies first, such as mobile smart phones, e-book reading devices and computers before finally adopting e-books. This implies that users of e-books must educate themselves in the complicated workings of different devices before they can adopt and meaningfully utilise e-books for any purpose.

Increasing performance of user is a big driving factor for deciding on whether to use or not use e-books. Perceived usefulness (PU) brings hope in the prospective user that an e-book is useful tool to help in accomplishing intended tasks easier and faster. While trouble free use of technology as described in the second construct is an important aspect, (PEUO) is also a big deciding factor for a prospective user of new technology. The prospective user of e-books must perceive that by adopting e-books he/she will be able to leave behind the troubles which come with the use of other technologies such as hard copy books like carrying heavy loads, limited options for searching and missing on the shelf scenarios. However, even if a prospective user of e-books is filled with anticipation of accomplishing tasks quickly and smoothly, doing so comes with an extra burden of buying and learning new skills of how to use and understand the devices which carry e-books. Figure three illustrate the original TAM model with its five variables.
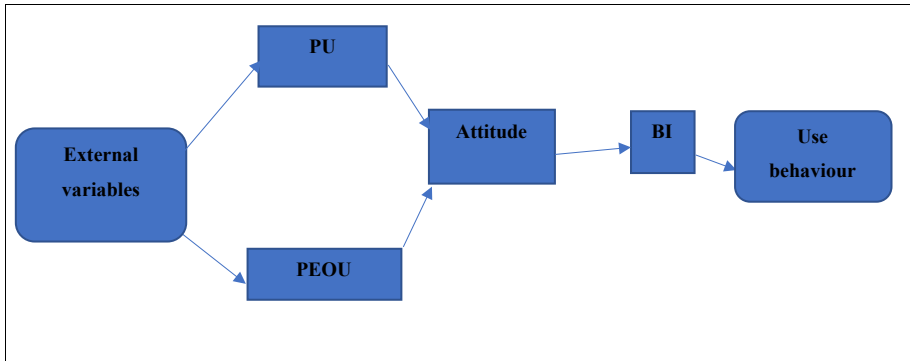
Figure 3. TAM model (Source: Davis 1989)

Key: PU (Perceived usefulness); PEOU (Perceived ease of use); BI (Behaviour intention to use)

2.3. LITERATURE REVIEW

Bryman (2016:82) describe literature review as a "process which seek to establish what is already known about the topic and to frame the review in such way that it can act as a background for own research". On the other hand, Leedy & Ormrod (2013:51), define literature review as a "process which describes theoretical perspectives, methodology and previous research findings related to the problem at hand". Combining the two perspectives, this literature review aims at establishing common practices, differences, perceptions, adoptions and other important issues highlighted in universities worldwide regarding e-book usage to assist in assessing the utilisation of e-books by library and information science postgraduate students at University of South Africa library.

Firstly, conceptualisation of an e-book is outline through a definition. It is followed by a brief history of the development of an e-book. This process helped the researcher to gain vital background information and to understand the developmental milestones of e-books. Subsequently, e-books awareness and methods of creating e-book awareness in academic libraries is explored. Student perceptions of e-books was subsequently addressed. Type of technology and skills needed to utilise e-books was also another area that was reviewed. And lastly, the researcher explored factors that affect utilisation of e-books by postgraduate LIS students in academic libraries.

2.3.1. Definition of an e-book

There are many definitions of e-books as presented by many different scholars. Defining the word 'e-book' has not been easy because the word is believed to have multiple meanings depending upon context (Manley & Holley 2012:293). Divakar (2012:110), defines an e-book as an "information technology product that facilitates reading and acquisition of information. It is a written work readable on a screen of a personal computer, or any other device specifically designed or made compatible for the purpose".

E-books may also be divided into categories. Aharony (2013:69), has the opinion that e-books can be differentiated between digitised and born digital books. The researcher further explains that a digitised book is made up of pages which have been scanned by a scanning machine turning them into digital form. This text can be manipulated and read on a screen and like the original printed book.

A born-digital e-book is one which is created for use only in digital form, with no previous paper version. It is a book planned and designed for electronic reading. While it does have essential qualities of the book- a substantive amount of related content or content with inherent continuity, it is accessible only on computers or e-book reading devices (Aharony 2013:69). Types of e-books include textbooks that contain text with embedded links, multi-media books that might contain sound and images, reference books such as dictionaries, encyclopaedias, dictionaries, and digitised versions of books which are out of print (Aharony 2013:69).

Other types of e-books can be categorised as: print books issued or re-issued in e-format; a book created through e-feedback and e-revision, whose formally issued version is in print; a print book with universal resource locators (URL) directing readers to the web for supplementary or complimentary material. An electronic – only production, primarily focusses on images, audio, and video; or a continuously updated e-reference books with text, images, audio, and videos (Aharony 2013:69; Soules (2007) as cited by Soules 2008:7). The wide range of e-book types gives academic libraries an opportunity to choose the type that suits their electronic infrastructure such as computers, software and hand-held devices in their libraries.

2.3.2. A brief history: The beginnings of an e-book

Although Michael Hart is believed to have created the first modern e-book when he typed the United States of America's declaration of independence document and

transmitted it to his colleagues in 1971 (Project Gutenberg 2013). A chain of inventions and innovations set a stage to eventual realisation of books stored and read in a hand-held-device. In 1886, a German scientist called Heinrich Hertz discovered the presence of electromagnetic radio waves in the atmosphere by using Maxwell's theories (NASA 2016). Electromagnetic waves (EM) are waves that are created as a result of vibrations between an electric field and magnetic field (The economic times (2019). Electromagnetic radio waves are measured in megahertz (MHZ) in respect to the scientist, Heinrich Hertz who discovered them (NASA 2016; BBC 2007).

The discovery of radio waves opened communication possibilities never imagined before. Radio waves were transmitted from one place to another on short distances before. However, it was an Italian inventor, Guglielmo Marconi, who dreamt big. He pioneered the trans-Atlantic transmission of radio waves by building the tallest steel aerial of the time in the northern coast of Ireland which allowed him to transmit the first transatlantic radio message to Newfound land in Canada, in 1903 (British broadcasting Cooperation 2007).

This achievement by Guglielmo Marconi, triggered the communication revolution as we know it today. Products such as Marconi wireless radios, telegrams, television sets, computers and the internet, cell phones, satellites and satellite communication, the maned voyages to the moon and the exploration of the planets and the galaxies, followed one after the other. The greatest of all being the 1977 voyager missions in which two voyager space crafts, voyager one and two were launched to explore our solar system and beyond (BBC 2007). The crafts are still going to this day. They are the first man-made objects to get out of our solar system, billions of kilometres away. Thanks to radio waves that they are still communicating with earth. The lives of more than seven hundred people who were saved from the sinking Titanic in 1912, is credited to the wireless radio which was used in the ship (BBC 2007).

Even though e-books are a latest addition to libraries, they have a long history as good as computers. The real work on e-books may be traced back to 1930s before the breakout of the Second World War (Manley & Holley 2012:293). These authors further explained that "as the printing press changed the reading behaviour of the world, e-books have the potential to change how the world reads and students learn". The possibility of digital learning was foreseen by one notable scientist. He conceptualised a digital library in a portable machine. In one of his publications he wrote:

"Consider a future device for individual use, which is sort of mechanised private file and library. It needs a name, and to coin one at random, Memex will do" (Bush 1945:6). A Memex is an imaginary device in which an individual store all his books, records, and communications and which is mechanised so that it may be consulted with exceeding speed and flexibility. It is an enlarged intimate supplement to human memory (Bush 1945:6). The Memex, the memory machine dedicated to store digital information for easy retrieval by humans, is therefore, credited to the pioneering thought of Bush (Heyd 2012:13; Aharony 2012:67 & penaflor 2017:1)

Figure 4 shows the evolution of e-books from the Memex.
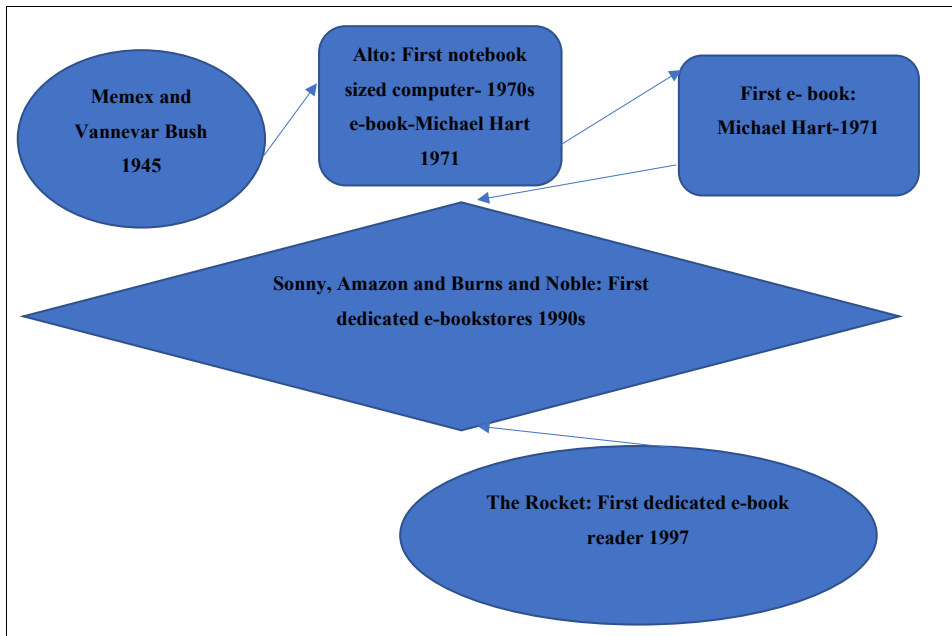
Figure 4. Evolution of an e-book from the Memex.

2.4. STUDENTS AWARENESS OF ELECTRONIC BOOKS IN ACADEMIC LIBRARIES

Awareness of e-books collections in academic libraries or lack thereof is a determining factor of how successful an e-books collection project may become. The literature reveals many instances where lack of awareness was blamed for low usage of e-books. Staiger (2012:356), reports that two studies conducted on e-books awareness, reported results which showed "highest levels of e-books awareness among undergraduate students as opposed to graduate students". However, it was

discovered upon analysing the data carefully, that a significant portion of the respondents did not know the difference between e-books and other electronic sources such as e-journals and databases. Therefore, Staiger (2012:356), concluded that a higher percentage of awareness was an indication of confusion among the undergraduate students.

In another study at the Royal Roads University, it was revealed that most students learn about e-books at the library during induction sessions in their first year. Another section of students who did not attend library induction sessions, indicated that they discovered about RRU's e-books collection on their own, during searches using resources on the website. While another notable discovery method mentioned, was the recommendation of peers and instructors (Croft & Davis 2015:553).

The research shows that not only awareness of presence of e-books in a library will make students want to use them, knowing the relevance of e-books is an important driving force to making students make positive decision on utilising their library's' e-book collection or not. Such is an inter-reliance of different levels of technologies for e-books. As e-books requires a platform as a host so that the customer may know where to search when in need of using an e-book, platforms in turn requires a device which can finally carry the e-book to the end-user consumer.

2.4.1. Visibility of electronic books in academic libraries

White (2011:282) elaborates that "for organizations, such as libraries to get maximum gain from the investments which are made in e-books, discoverability is an important factor". Patrons must be able to discover the presence of e-books in library collections. The material purchased need to be properly catalogued and indexed. Links must be established on the library's home page and titles must appear in the library's online public access catalogue (OPAC) or online web portal to maximise advantage (White 2011:282).

E-books usage is normally connected to visibility in library OPACs. Several studies have observed this phenomenon (Soderback 2011:39). In a study of e-books usage conducted at Royal Roads University in Canada in 2009, Croft & Davis (2010:552), reports that despite the fact that similar study was conducted in 2003, a great number of respondents 27.18% indicated that they did not know that RRU library had e-books collection while 25.67% indicated neutrality.

The 25.67% neutral respondents might mean that either they did not know that RRU library has e-books or did not know how to access them. If the 25.67% did not know about presence of e-books in their university library, it might mean that over fifty percent of participants did not know that their library has e-books since 27.18% indicated that they did not know. It is, therefore, important to put an extra effort in marketing e-books so that students and faculty are aware of e-books in academic libraries.

2.5. E-BOOK USAGE AMONG STUDENTS IN ACADEMIC LIBRARIES

Libraries have the duty to create not only conducive environment for their e-books collections to be used, they must as well, pro-actively create conducive access points for the students. Sanchez (2016:331) says that there is always "a need to improve access to collections and information resources". This implies helping students by providing extensive library training so that they become thorough and efficient in obtaining correct information.

Sanchez (2016:342) continues to explain that training is a crucial step of supporting student's access and awareness of library resources of any kind. Vaughan (2011:5), is advocating web scale discovery system for libraries to help students discover information easily and seamlessly. He pointed out that "students are less informed about the resources of the library than ever before because they are competing with the internet". Therefore, sensitizing students on the resources of the library forms fundamental aspect of continuing provision of sound library services.

Of the many ways of creating e-books awareness in academic libraries, Li (2016:47), listed the following as other means of creating students' e-books awareness:

(i)   Professors often linked these e-books in their required book list.

(ii)   Library created lib-guides for required and recommended books for courses and specialty resident training.

(iii)   E-books were purchased using well known databases to the users.

(iv)   E-books were made searchable from the library electronic resource management system.

While Nwagwu (2015:32), suggested in the study conducted at Delta state University, Nigeria, that postgraduate students cannot use e-books if the library does not possess any, therefore, the University creates institutional repository and purchase e-books for easy discovery by students to increase e-books usage.

In academic libraries, technical efficiency and resource optimization are major issues. According to the study above, most libraries ensure the training of their users beyond onsite training by participating in classrooms (usually at the start of the school year), to explain how services work and how to access electronic resources. In some cases, this is part of orientation exercise with ongoing training for the whole library. Training is a crucial step to reaching the goal of supporting student success (Sanchez 2016:342).

As institutions meant to support learning and research, academic libraries must pay close attention to the changes that technology imposes on learning. The inclusion of access to e-books in university libraries, requires that support teams and users are provided with competences in digital literacy (Sanchez 2016:342).
Teams must have information about the changes that digital technology brings to reading and to libraries; be familiar with the operative systems; master competences related to the use of digital contents and reading equipment; and know how to manage and produce digital content (Sanchez 2016:342).

Libraries must devise u--sers digital literacy training for students to efficiently and selectively search, choose, download, and use these documents to their academic benefit. Library training designers must take into considerations the digital resources and their use when putting training programs in place for students and other users. Training sessions, whether in the classroom context or in thematic (particular subject) modules, which students can sign up for free, are an incorporated practice in the community and have been very well received by their users because they meet students' expectations and adapt to their learning needs (Sanchez 2016:343).

2.5.1. E-books in academic libraries
Academic libraries were the early institutions to adopt e-books. Academic libraries in United States of America and the United Kingdom were the first adopters of e-books since it is a technology developed within in those countries, United States to be precise. Unisa library is one of the early adopters of e-books in South Africa. The library purchased the first e-books in 2005 ahead of most academic libraries (University of South Africa 2005). Other universities followed later. University of Johannesburg (UJ) for example, bought their first e-books in 2007 (University of Johannesburg 2007). While University of Pretoria conducted a survey to find out if e-

books could be a viable information resource for their students (Wiese & du Plessis 2014:19).

However, electronic books were found to be a technology which is not independent. It relies on other technologies to work. Like a train needs a railway line to move on, e-books require platforms where they can be offered on to users. Gudenas (2013: 208-9), assessed some of the early platforms such as Ovid and E-brary, which were created by e-books providers or vendors so that academic libraries could utilise their services in acquiring and accessing and offering e-books to students. Some of these platforms do not exist anymore, others were bought, others closed shop while some were integrated into more established ones. These surviving platforms have also developed to include more modern features.

2.6. PERCEPTIONS OF ELECTRONIC BOOKS BY STUDENTS IN ACADEMIC LIBRARIES

Positive or negative perceptions about anything, say systems, products or technology, influences how decisions are made in daily lives of users. Gregory (2008:266; Wiese and du Plessis (2014:18) found out that some students do not regard e-books as real books. It is reported that library patron was shocked when she was informed that the book that she was looking for, was, an e-book. Then the user screamed, "but I want a real book!" gesturing as she spoke (Gregory 2008:266).

The user in this case regards an e-book as something else and not a real book. It is something the user does not have faith in. Therefore, this thing called e-book cannot solve the user's information needs. It may be argued that there is a great possibility that the user may not have known the existence of e-books in this library. The library did not market their e-books collection to the user and possibly many others.

For e-books to be on a wish list, "students need to perceive the technology (e-books) as being useful, or they will not attempt to use it, regardless of how easy or difficult it is to use" (Wiese & du Plessis 2014:19). In technology acceptance model (TAM), it is expressed that users must have two main driving forces for them to use a new technology: perceived usefulness and perceived ease of use (Aharony 2015:133; Tri-Agif, Noorhidawati & Ghazal Ghalebandi 2016:22; Chun-Hua, Kai-Yu & Chien-Hung 2015:121). Many Unisa students might have such type of attitude towards e-books and may be tempted not to use them for that reason, affecting their utilisation rate in the process.

Another evidence that perception of e-books is a big contributing factor to a successful e-book collection, was revealed in a study conducted at Florida state college, Kissinger (2013:162), reveals that one of the participants in the study dropped out of a course because one of the books prescribed for the course was an e-book. The student did not put e-book value at the same level as print. E-books were regarded as having low value to help the student progress in the course.

Meanwhile, in another study conducted at Ulster University in the United Kingdom during the academic year 2010-2011, students showed a bias towards print with a significant percentage preferring both when they were asked a question about preferences between e-book and print (Smyth & Carlin 2012:188). While a research conducted at Gustavus Adolphus College in 2015, to investigate the perceived impact of future e-book collections, it was found that most of the students who took part in the research, still preferred print to e-books. And half of the respondents indicated that they owned e-book readers, tablets or had e-book reading software installed in their computer or smart phone. These students who owned e-book readers were more in favour of using e-books (Gilbert & Fister 2015:472). Meanwhile Zhang, Niu & Promann (2017:579), explains that some users "regard e-books as reference sources which are available 24/7".

This study shows that availability of tools for access such as e-book readers increases the possibility of students using e-books. The studies conducted at University of Liverpool supports the findings at Gustavus Adolphus college that students indicated strong preference for print books for long reading of cover to cover and e-books for quick reference information. The favourable features of availability, portability, 24/7 access for e-books were also mentioned. While aesthetics and pleasure of reading for long periods or entire books, the print remains the king (University of Liverpool 2010:9).

2.7. MOBILE TECHNOLOGIES WHICH INFLUENCE UTILISATION OF E-BOOKS BY STUDENTS IN ACADEMIC LIBRARIES

The history of the development of an e-book tells us that new mobile technologies enabled the development and wide spread of e-books. Devices with more memory and larger screens have emerged in recent years. This development allows for optimum utilisation of e-books. This section looks at some technologies such as, hand-

held devices i.e., e-readers, tablets, mobile phones and software which were developed and made to make using an e-book a little easier. "A multitude of software packages are available, and e-books come in these different software packages such as e-pub and PDF to facilitate the digital library of the future" (Sanborn 2013:6). Like e-books platforms discussed above, some devices and software listed in this section are no longer available on the market. The following are few devices among many which made a significant contribution to e-books development.

2.7.1. Sony

The relationship between portable music and portable books connects Sony to the e-book reader evolution. Sony was the first company to put music in the pocket of the user through the introduction of the portable music CD player on (Franzen 2014). The researcher continues to explain that in 1984, Sony released a 'Sony Walkman cassette player' which dominated the music industry for a long time.

Innovation and close observation allowed Sonny to use existing technology of the Walkman cassette player to tap into e-book potential. (Franzen 2014; Manley & Holley 2012:298) explains that, Sony engineers used the popularity of a pocket-size electronic notebook among younger employees to modify Sony's portable compact disc player to create Sony data Discman which was introduced in 1992.

"The Sony data Discman could store up to 200,000 pages of text on the same disc which once played only music". This is a disc with a 700mb of space and is standard today. "The data Discman electronic book played both audio CD singles and 8cm CD-ROMs. The Discman has a 3.4-inch diagonal LCD screen which displays 30 characters by ten lines" (Wilson 2001).

As a normal trend in technology projects, Sony came up with an upgrade on the Discman. Sony launched a CD-ROM XA player, which was also known as the Sony bookman, Sony PRS 500 and PRS 600. The bookman played full-sized CD-ROM discs on an MS DOS platform, the old operating system from Microsoft. Unlike the Discman which played smaller discs the Sony PRS 500 and 600 e-book readers were more modern Keep, McLaughlin & Parmar (2000) in (Manley & Holley 2012:298). Sony identified a gap in the industry and used its existing technology and turned it into an e-book reader where the text was stored on a disc where only music once played. Like the compact disc player also known as Walkman helped users to carry music in

the pockets, the Discman helped users to carry books in the pockets on disc like the music disc which the compact portable disc player (Walkman) used.

2.7.2. Rocket e-book reader

"The first e-book dedicated reading device was launched in 1997 by Nuvomedia" (Wilson 2001). It was called the Rocket E-book Reader. Wilson (2001), explains that the rocket e-book reader was designed to look like be the size of a paperback. It had had a 17-hour reading time of battery power and could be recharged by using a cradle attached to a personal computer. To upload the e-books in the e-reader, books were downloaded from online booksellers such as Barnes and Noble. The Rocket e-book reader could hold only ten books, about the equivalent of 4000 pages, which was a disadvantage by industry experts (Manley & Holley 2012:299).

In a study, conducted at Loughborough University and Market Harborough public library, Leicestershire, in United Kingdom, users evaluated the Rocket e-book reader and Glassbook, a software program that allowed users to view e-books on a computer. Users found that while using Rocket eBook Reader, it was "easy to find the actions required to read and annotate the material" (Dearnely & McKnight 2001:68).

2.7.3. Amazon kindle

The introduction of Amazon kindle into e-book readers market changed the perception of e-book reading devices among many users. The popularity of Kindle attracted more attention to e-book reading devices than ever before (Woodward 2013:7). The Amazon kindle connects wirelessly to Amazon bookstore and the internet. The Wi-Fi feature made kindle stand out and easy to use. Only copyrighted material available that one could buy for the Amazon kindle was the Amazon bookstore. It was also not possible, however, to put books purchased from Amazon on as many as six Kindle accounts Sontag (2008) in (Manley & Holley 2012:304).

2.7.4. The Nook

A third e-book reader brand appeared in 2009. Barnes & Noble released its e-book reader called the Nook in the United States. To remain competitive advantage, Amazon responded by releasing a second-generation Kindle 2 for international and domestic markets and reduced the price. The Nook has some features that allow it to compete with both the Amazon Kindle and Sony Reader, such as Wi-Fi capability that

allows the user to browse the Barnes and Noble book store from the device (Wexelbaum & Miltenoff 2012:271); Miliot (2009) in (Manley and Holley 2012:306).

The technological development of e-reading devices and software was so rapid. It was almost impossible for library management to keep upgrading obsolete software and e-book reading devices. This is one of the problems researchers have pointed out that adoption and utilisation of e-books had to face and still facing today. Therefore, adoption of e-books in academic libraries was slow.

The three e-books readers, Kindle by Amazon, Sonny PRS 500/600 by Sonny and the Nook by Burns and Noble were attached to e-books stores. Kindle was attached to Amazon e-books stores and could only load e-books from Amazon, Sonny PRS 500 / 600 were attached to Sonny e-book stores and could take only e-books bought from Sonny e-book stores and Burns and Noble had the Nook as their dedicated e-book reader for Burns and Noble e-book stores.

This indicates that these restrictions made it difficult for libraries and individuals to adopt either e-book readers because not all books required in a library would be provided either by Sonny, Burns and Noble or Amazon bookstores. All three devices, Sony PRS-500, the Nook and the Kindle uses E ink technology and have glare free screens (Manley & Holley 2012:304; Woodward 2013:7).

In spring 2010, Manchester business school (MBS) launched a pilot project to test viability of e-book readers for Master of Business Administration (MBA) students (Broadhurst & Watson 2012:174). A Sonny touch edition PRS – 600 e-reader was provided to the students to be tested. The research reported that the students found the e-book readers' idea for studies ideal but were not satisfied with performance of the Sonny touch PRS-600 for study purposes. They found the e-book reader not flexible enough for classroom environment but suitable for personal reading (Broadhurst & Watson 2012:177).

E-book readers, though a convenient method of accessing and using e-books, users have found them wanting in many departments. The literature indicates that no one e-book reader covers all that users' need. Apart from basic features for every e-book reader, one e-book readers offer these features while other e-book readers offer another set of features that the other do not have. It is impractical and uneconomical for one user to have multiple e-book readers just for the sake of accessing all e-book platforms and features.

2.7.5. Smart phones

In today`s mobile-tech savvy society, reading devices may be divided into three categories: Smart phones, tablets and dedicated e-book readers (Burns 2014:31). Most available e-reading device on the market today is a smart phone. The market is saturated with different models of smart phones. And individuals have smart phones with greater capabilities. In South Africa, the smart phone market is doing well. It is common to see common man in the street, including students and professionals using a smart phone. Thus, the smart phone has become most available e-reading device (Burns 2014:31).

Burns (2014:31) however, refuses to add a laptop as a fourth category because of the features such as external keyboard, size and weight. According to him, a laptop is relegated to a mobile technology of yesterday. Smart phones use simple, compact applications (Apps) which enable reading different documents including e-books. Burns (2014:32), describes an application as a software that is often downloaded as opposed to loading from a disc. Apps are much smaller, compact and less feature - rich when compared to regular software packages like adobe, Photoshop, Microsoft office or Apple's final cut pro (Burn 2014:32).

More people use smart phones to read different types of information without realising that they have an e-book reader in their hands. The commonality of smartphones makes it difficult to categorise them as e-readers. The basic use of making calls may remain the primary purpose why many people buy smart phones (Burns 2014:32). Each e-book reading device has a downside and upper side which distinguishes it from others. Here are a few examples as listed by Burns (2014:32). Table one explains the pros and cons of a few e-book reading devices.

Table 1. Pros and cons of e-reading devices

Device	Pros	cons
Smartphones	Many options and devices, highly mobile, long battery life, Wi-Fi and data plans, built in phone	Small screen and keyboard
Tablets	Computer-like features, portability, best reading interface, expandable memory, more capable hardware,	Not as powerful and capable as laptop for professional work

	apps (particularly those that support library browsing)	
Laptops / notebooks	More powerful, feature-rich, fast, web capability, software, peripherals support (e.g. printers, monitors, USB etc.)	Less portable than tablets and more expensive

Source: Burns 2014

For a very long-time, people have mediums for creating books. One of them is a tablet. Some of the oldest surviving tablets believed to have been created by Assyrians are in stone, as the king of Assyria put it.

> *I read the beautiful clay tablet from Sumer and the obscure Akkadian writing which is hard to master. I had my joy in the reading of inscriptions in stone from the time before the flood… Ashurbanipal, the king of Assyrian empire*

(Levarie 1995:1).

2.8. FACTORS AFFECTING UTILISATION OF E-BOOKS BY STUDENTS IN ACADEMIC LIBRARIES

There are different reasons why students may or may not choose to utilise e-books in their academic libraries. This section looks at advantages and disadvantages of e-books as reported in several researches conducted in different parts of the world. Literature in the field shows that students and academic staff use e-books in different ways and for different reasons.

Studies conducted by Staiger (2012:155; Wiese & du Plessis 2014:18; D`Ambra, Concepcion & Akter 2012:50; Horseth & McLure 2012:282; Wessels & Czecholowski 2011:219), indicates that "most academic users search e-books for discrete bits of information than reading entire e-book. They prefer to use, rather than read e-books".

In this analysis, the reasons that may compel students to utilise e-books are outlined as advantages while those reasons which may hinder or make students to decide on not utilising e-books are outlined as disadvantages of e-books.

2.8.1. Advantages of electronic books

In several studies e-books are portrayed to be superior to hard copy books because of the extra features that an e-book possesses but are not present in print books. Noorhiwati and Gibb (2008:2; D`Ambra, Concepcion and Akter 2012:50), in their

study, they pointed out that "e-books in academic libraries are beneficial as they are remotely accessible and available around the clock". These are some of attributes of e-books which libraries should cherish because that can lead to saving of shelf space in the library, preventing from books getting lost and damaged. It can also enhance the creation of virtual library and virtual learning spaces.

With the advent of e-books in academic libraries, the talk of virtual libraries became common among librarians and the fear of losing the shelf. Sanborn (2013:7), praise the digital library for what it brings to the research world. The author explains that in a digital library;

> *Researcher has access to a million newspaper articles, 300,000 e-books (or more, you choose the number) a million journal articles and can, in seconds, extract from all that, or just the pages, or paragraphs, or the sentences that contain their chosen search terms.*

Sanborn (2013:7) is praise singing the dream of Vannevar Bush. In his 1945 article, he talked of a researcher who is overwhelmed by research documents which he/she would not remember nor retrieve. Compression of information as the Memex would have done has taken place. The creation of virtual libraries is feasible option with e-books as a main component of its information resources. A virtual library shrinks the size of library building because e-books require no shelf space. Simply, the researcher is portraying several advantages of digital libraries which is made up of e-resources with e-books making up the book component.

> *Delightfully, powerful, scholarly e-book and digital collections bring research to wonderful new place of thoroughness and convenience. Locally, at my institution, the superiority of electronic over print seems to have been realised this past academic year (Sept. 2012-May 2013) as indicated by Rough house usage stats counting over 18,000 e-books viewed and 4,000 print books circulated. The speed, effectiveness, and availability of digital content all cause the print collection to pale in comparison. Digital simply outstrips print. The industry standard is to provide unlimited simultaneous access*

(Sanborn 2013:8).

Scholars assert various advantages of e-books as opposed to hard copy such as, constants changes (updates) to the text which may be easily made unlike hard copy. E-books are believed to be cheaper for libraries to purchase. An e-book brings some excitement to the reader because of the presence of technology. Unlike paper books,

which requires bulky machines to print and bind, an e-book keep the original digital form (Kissinger 2013:161). Other advantages were searchability, accessibility, portability and environmental sustainability Foote & Rupp-Serrano (2010) as cited in (D'Ambra et al…2012:50).

E-books may offer opportunity to open further windows that suggest additional information. The reader can shift around the text or to track other subjects, to send a message to the author and to combine other non-textual materials such as moving and still images, tables and graphs, and audio and visual clips (Armstrong 2008). Also, e-books are commonly regarded as offering great potential for teaching and learning and are attractive to scholarly communities (Aharony 2013:69).

Academic law libraries seem to be the late comers in the adoption of e-books according to (Tailor 2012:180). However, even in law academic libraries there are advantages in adoption of e-books. Tailor (2012:180) pointed out the following as positive attributes of e-books for law libraries:

> ➤ Law students and professors can access books they need without coming to the library personally.
> ➤ Many law students do a semester of study abroad and some law students also do summer internship in foreign countries, including developing countries where access to legal resources may be limited.
> ➤ Some law students have families in another city and frequently travel home on weekends, taking their schoolwork with them.
> ➤ In addition, law professors travel abroad for conferences or sabbatical (Tailor2012:180).

To sum up, all the above tells of portability, anytime and anywhere accessibility of e-books help law students to have access to books anywhere and at any time. Law professors on the go may not need to come to the library in person.

Many academic law libraries have a reserve collection where the most popular treatises, textbooks and study guides are kept. Books in reserve usually have short sign-out period, three hours or one day (Tailor 2012:180)

The Unisa library has the reserve collection in the learning centres where students can have a short loan of few hours. During exams or before a research assignment is due for a course, the demand for some of these books can soar at pick times. All the students in a course may want access to a book at the same time and circulation staff must turn people away or tell them to come back after the book is

returned. This might result in frustration and anxiety for both students and staff, not to mention that these books may get damaged from heavy use (Tailor 2012:180).

In summary, the author is trying to say that e-books save students / professors from a traffic jam at the lending section because many students may access the same e-book at the same time especially during examination preparations or assignment due dates. The superior quality of multiple access of an e-book is re-enforced with this assertion. The author also mention that e-books are durable because they do not get damaged by overuse and save money for the library. The author also mentions keyword searches functionality, and better access. E-books saves time for library staff because students/ professors access and issue the e-books they need on their own. In the study mentioned above, Kissinger (2013:161), explains that students identified unique features of an e-book such as bookmarking, key word search and mobility as advantages.   Upton (2008) in Manley & Holley (2012:306), points out that e-books have many advantages over traditional books. Not only can a single e-book reader replace many books, but e-books online distribution, has a lessened environmental impact over the distribution system for paper books Upton (2008) in (Manley &Holley 2012:306). Over a lifetime, users could greatly reduce their carbon footprint by reading electronic books instead of paper. Another advantage of e-books is that they can reach the market much more quickly and cheaply than print books (Manley & Holley 2012:306). Agreeing with Upton (2008) in (Manley & Holley 2012:306), Gilbert & Fister (2015:474), explains that students pointed out that a weight of many books may be carried in a single e-book reader and not feel it. Therefore, portability was a top advantage that was mentioned by many respondents. Smyth & Carlin (2012:177) added to advantages of e-books as, e-books cannot be lost or stolen, do not require acres of space, cannot be defaced or damaged and cannot be overdue.

Director of library and university collections at Edinburgh University had a debate with students at a UKSG conference in London in 2015. The panel put questions to students about e-books and print (Estelle 2016). The students revealed that e-books were easier to get hold of than print when they did not have an opportunity to come to the library. However, they would prefer print books if available. They added that availability is a strong side of an e-book because it is always available while the print, one must wait for other ten people who have taken them. Librarians were astonished when a law student mentioned of other people (probably students) who hide books in the library so that no one else but them, uses the books (Estelle 2016).

In an e-book environment, this kind of behaviour would not happen because it is impossible for any user to hide an e-book for him/herself because e-books lack the physical features of a print book. The librarians have some control of making an e-book available to the user or not. The fact that a user may not be able to hide an e-book for self-use can be seen as another advantage over paper books.

The e-book revolution is slowly getting to new heights in academic libraries. Library buildings are disappearing. It is creating new opportunities for information users, students, to experience new learning methodologies. A virtual library is one concept that pioneers of e-books like Bush (21945) dreamt of.

A virtual library as elaborated by Sennyey, Ross, & Mills (2009) in (Wilson, Cusker & Dietrich 2015:24) is a library system devoid of traditional key physical components: the building for reading and reference, the actual collection and the library staff.

At Cornel University, several departmental libraries such as Physical science, engineering, Entomology, Nestle Hotel, and Johnson graduate school of management libraries, closed the physical space in favour of bookless library or virtual library powered by e-books and other e-resources (Wilson eta… 2015:26).

An Uva Wellasa University study on undergraduate e-book usage, listed a unique advantage considering that the university library had no e-book collection. Most are the common advantages attributed to e-books such as: easy to find necessary information - searchability, 24/7 availability (Vithana 2015:71). The uniqueness of this study is that it was conducted on e-books which are freely available on the internet because universities in Sri Lanka did not have e-books collections at the time of the study. E-books allows students to use e-books which are not available in their libries.

Institutions which have multiple campuses can save a lot of money by deciding to add e-books to their collection because they do not have to buy same title for every campus. E-books would allow the easy sharing of resources. University of Hawaii for example, adopted e-books to cut shipping costs to their different campuses because of geographical distances and isolation of Hawaii (Chow, Shum, Kim, Leung, & Tillinghast 2014:113).

E-books have numerous advantages which the user find attractive and superior to the print book. Most studies have listed searchability, mobility, 24/7 availability and remote access as major advantages. However, e-books have been found to have some

undesirable features which makes them not so attractive to some users, more specially students. Many studies have highlighted them as disadvantages.

2.8.2. Disadvantages of electronic books

Since the invention and subsequent appearance of e-books in early 1990s, there has been a lot of attention from libraries and researchers (Folb, Wessels & Czecholowski 2011:219). Researchers have uncovered numerous problems concerning e-books usage. Frustrations have been reported by librarians because of lack of access to full e-book collections in their libraries, multiple interfaces to access e-books, ambiguous purchase models and lack of integration (White 2011:281).

In the study conducted at Colorado State University, Hoseth and McLure (2012:282), indicated that "some individuals in a focus group which was involved in the study, expressed concerns that e-books are internet-based sources and may not be available when conducting research in remote areas where internet is non-existent". In other parts of the world, especially African continent, internet connectivity is not well developed which may be a big deciding factor for e-book access and utilisation. A good number of Unisa students in South Africa and elsewhere in the world, live in such remote areas. Connectivity may strongly affect student's ability to access and utilise e-books in remote areas where they live.

In another research conducted by Wexelbaum & Miltenoff (2012:275) it is reported that in a study conducted by E-brary, the e-book vendor, in 2008 from 6492 students from colleges and universities from around the world, the students who never used e-books gave the following reasons for their not using e-books:

- E-books have not been required by my professors as part of my program
- I have not had a need for e-books
- I cannot print, annotate, highlight, or underline text in e-books
- E-books are not portable,
- I primarily use journals as a main source of information,
- I do not know how to use e-books.

One of the strong selling points for e-books is reported to be portability, according to many studies. In this study however, contrary to this belief, some students refute the portability factor of e-books. "E-books are not portable."

Digital rights management (DRM) was also fingered out as a stumbling block to successful and easy utilisation of e-books in libraries. DRM which is put on e-books

by e-book providers makes it impossible to copy or pass e-books around, although one paid for them (Sheehan 2013:15; Snyman 2012; Hoseth & McLure 2012:280).

The authors describe DRM as a "mechanism, either hardware or software, that attempts to control the use and distribution of intellectual property in digital form". There are several types of DRM systems which includes data encryption, digital watermarks and user plug-ins (Sheehan 2013:15; Snyman 2012; Hoseth & McLure 2012:280).

Libraries have little choice over DRM. However, other universities choose to avoid materials with unbearable DRM. Some university libraries avoid the restrictive powers of DRM by purchasing e-books with manageable restrictions. Unisa library for example, responded in its collection development policy by staying away from purchasing e-books with unbearable DRM (University of South Africa 2013:8).

Sanborn (2013:8) noted that there are still challenges in the e-book business. The most important challenge being that, not all titles needed by academic libraries are available yet. Backlisted titles seem to be the last to be digitised (Sanborn 2013:8).

In his research, Aharony (2013:69), lists the following as disadvantages of e-books:

(i) *There is a need of hardware and software, which are often expensive.*

(ii) *Distributors can modify or remove content from customers' e-books readers, as Amazon did with Orwell's 1984 "animal farm".*

(iii) *There is not a clear visual cue to the length and the structure of the document, and there are restrictions on printing and on downloading.*

(iv) *Other disadvantages might be the glare and eye strain, which can be caused by reading for a long time on an e-reading device screen.*

Academic law libraries have more than one business model of purchasing e-books. One of these models for e-books that legal publishers' use is often the subscription model (Tailor 2012:181). However, a drawback of this model is that the publisher returns total control of the collection as if it was not paid for. This is especially problematic for law libraries because it is important for them to return old editions of titles in their collection to support historical and point- in- time legal research. Accordingly, it might be possible for the publisher to remove a book title at any time, including old editions of titles. In addition, publishers do not allow law libraries to buy e-book titles in this collection outright. Therefore, if the library cancels the subscription to a publisher's e-book collection, the library's access to the titles in that collection is completely lost despite having paid for them (Tailor 2012:181).

Estelle (2016:31), elaborates that one student at a conference expressed dissatisfaction that he cannot own e-books out right. Therefore, he would not spend money on e-books, he cannot feel, smell, hold, print and is not his, a book you cannot lend to your friends. Estelle (2016:32), continue to explain that academic value of e-books is still in question. Literature student reported that when a student present work with 75 percent of reference with e-books, the lectures remarked "you didn't try hard enough". The researcher reports that another student was marked down ten percent of her work for using e-books. Another student mentioned DRM as an obstacle to hustle free access to e-books (Estelle 2016:36). This is worrying information because it is not a positive trend, if lecturers do not see e-books as academically valuable, it will discourage many students from wanting to use e-books. Lecturers and faculty need a lot of guidance from librarians educating them about the real value of e-books.

Many studies conducted to assess usage of e-books were carried out to assess a library's e-book collection. In Sri Lanka, the situation was different. A study was conducted at Uva Wellassa University, to evaluate the undergraduate students' use of e-books which the library does not have. The research was carried out based on undergraduate e-book usage of free available e-books on the internet. Uva Wellassa University had no e-books in its library collection (Vithana 2015:72).

In the study findings mentioned above, it revealed that undergraduate students were overwhelmingly in favour of e-books. And they are calling for Uva Wellassa University library to seriously consider procuring e-books. Contrary to many studies conducted in Western Europe and America, Uva Wellasa University findings show that e-books are regarded as expensive as compared to conventional or print books. It is hard to find relevant free e-books on the internet and the ones which are found happen to be outdated (Vithana 2015:5). The University relies on free e-books available on the internet for its students. The disadvantages found in the Uva Wellassa University study looks unique because of the unavailability of e-books collection in University libraries in Sri Lanka.

Vithana (20015:71) continues to explain that there is limited number of available free relevant e-books on the internet. Some free e-book access is limited to certain regions of the world and cannot be accessed in Sri Lanka. While some of the free e-books are not of good quality. The researcher listed the following as difficulties of e-books on the internet:

(i)   *Searching free e-books titles on the internet is time consuming.*

(ii) E-book reading facilities are not available to everyone due to hardware and software unavailability.

(iii) Use of e-books can be affected by external factors such as network failure and hardware problems.

(iv) Comparison of information in different pages in an e-book is difficult than with a printed book (Vithana 2015:89).

However, e-books are said to be such a popular offering in Sri Lanka that students believe that if university libraries do not develop e-books collections, users might abandon the libraries (Vithana 2015:90).

Despite the negative side of e-books, e-book providers and manufacturers of e-book readers are working hard on improvements to make e-books a hustle free information source. On the other hand, librarians are working on negotiating better deals of purchase for the convenience of their users.

2.9. SUMMARY OF THE CHAPTER

The book appeared as soon as man begun to make records of his knowledge. The book came in different forms at different periods. The earliest man used rock surface for painting different shapes of animals, human beings and fruits. Civilisation saw human beings become more creative and invented writing forms of different types. Some of these writings were also written on rock surfaces, clay tablets, tortoise shells, ivory, tree bulk, like the Assyrians and the Mesopotamian civilisations.

The Egyptians then invented new material for writing called papyrus which was made from papyrus reed. Scrolls were made by joining pieces of papyrus sheets. Papyrus dominated as a writing surface for a long time. Greek and Roman civilisations used papyrus. Papyrus was not durable but dry weather of the Egyptian desert preserved papyrus scrolls. Papyrus was replaced by velum also known as parchment. A leather-based writing surfaces, parchment was more durable than papyrus. Paper finally replaced parchment to this day.

Other technologies were invented for recording information. The moving printing press and the typewriter. The computer technology brought in digital age. Digital technologies run side by side with paper as typed documents can be printed on paper. Digital technologies use screens as reading surfaces and keyboard as inputting tools and the information is saved in the internal memory of electronic devices. Digital technologies made it possible for the creation of electronic books and electronic book

readers. Trends in the e-book industry shows that more libraries are adopting e-books as they become more acceptable. Libraries are changing their acquisition models to favour the purchase of e-books. New technologies keep improving the availability and utilisation of e-books growth.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. INTRODUCTION

This chapter outline the research methodology adopted to meet the objectives of the present study. According to Leavy (2017:263) research methodology refers to "the plan of how research proceeds, how the researcher combines different elements of research into a plan, and how the specific research project is carried out". This chapter describes the research approach, research design, target population and sampling, data collection methods and procedures and data analysis and presentation as well as ethical considerations as they comprise the methodology that was followed to conduct the current study.

3.2. RESEARCH APPROACH

There are three main research approaches used in social sciences research, namely; quantitative, qualitative and mixed methods research (Creswell 2018:11). A quantitative research approach values breadth, statistical descriptions and generalizability. Quantitative methods often centres on achieving objectivity, control and precise measurement (Leavy 2017:87). While qualitative research, according to Creswell & Creswell (2018:250), is "a means of exploring and understanding the meaning individuals or groups ascribe to a social or human problem".

While Leavy (2017:124), credit qualitative research as a tool used to learn about social phenomenon, robustly unpack the meanings peoples ascribe to activities, situations, events, circumstances, people or artefacts or build a depth of understanding about some dimensions of social life. . It also uses strategies of inquiry such as narratives, phenomenology, ethnographies, grounded theory studies, or case studies. The researcher collects open- ended, emerging data with the primary intent of developing themes from the data (Creswell & Creswell 2018:18).

Mixed methods research, on the other hand, may be described as research which 'strategically combine quantitative and qualitative research strengths to cover a single purpose or cover multipurpose well in a single study' (Creswell and Creswell 2018:14; Burke, Johnson & Christensen 2014:491). Mixed methods follow a pragmatic paradigm to research, taking advantage of strengths from both qualitative and quantitative approaches to solve a problem (Kumar 2014:375).

Table 2. Characteristics of the three research approaches.

Quantitative	Qualitative	Mixed method
Post positivist knowledge claims Surveys and experiments	Constructivist/ transformative knowledge claims Phenomenology, case study, grounded theory, ethnography and narrative	pragmatic knowledge claims sequential, convergent and transformative
Closed-ended questions, predetermined approaches, numeric data (may include some open-ended questions	Open ended questions, emerging approaches, text or image data	Both open and close-ended questions, both predetermined and emerging approaches, both qualitative and quantitative analysis
Test or verifies theories or explanation, identifies variables to study Relates variables in questions or hypothesis Uses standards of validity and reliability Observes and measure information numerically Employs statistical procedures Uses unbiased approaches	Researcher presents him/herself Collects participants meaning Focuses on a single meaning or phenomenon Brings personal values into the study Studies the context or setting of participants Validates accuracy of findings Makes interpretation of the data Collaborates with the participants Employs text analysis procedures	Collects both qualitative and quantitative data Develops a rationale for mixing Integrates the data at different stages of inquiry Presents visual pictures of procedure in the study Employs procedures of both qualitative and quantitative research

Researchers are detached from subjects of study	Researcher will be involved in the study	Incorporates both approaches

Source: Creswell & Creswell 2018

This study adopted a largely quantitative research approach as it was deemed appropriate in a study that targeted students who were scattered all over the world. Furthermore, the closed-ended questions demanded a quantitative approach to investigate the utilization of e-books at the UNISA library. However, qualitative methods of data collection were used to supplement the quantitative methods in the study.

3.3. RESEARCH DESIGN

Creswell and Creswell (2018:250) describe research design as type of inquiry within qualitative, quantitative and mixed method approaches that provide specific direction for procedures in a research study.   The purpose of research design is to ensure that the evidence obtained enables the researcher to effectively, address the research problem logically and unambiguously as possible (Burns and Grove (2005:195). In social science research, obtaining information relevant to the research problem generally entails specifying the type of evidence needed to test a theory, to evaluate a program or to accurately describe an observable phenomenon (Creswell and Creswell 2018:13). This study used a survey design.

According to Leedy and Ormrod (2015:159), a survey design "involves acquiring information about one or more groups of people, perhaps about their characteristics, opinions, attitudes, or previous experience, in order to learn about a large population by surveying a sample of that population". A survey is most suitable when conducting a research that involves individuals who are distributed over an expansive geographic area, just as was the case with the students in the current study. Finally, the survey design was suitable for this research because it uses a questionnaire which can accommodate a large sample and collect data from any geographical distance.

3.4. TARGET POPULATION

A population or a target population is a group of elements about which the researcher may later make claims (Leavy 2017:264). Sturgis (2012:95) states that a 'target population is the concretely specified large group of many cases or the universe of objects in the real world. Loseke (2017:113), explains that 'population does not mean people alone in research; it may refer to objects such as cars on the road, schools, events, buildings, airplanes, and or books from which the researcher is interested in and want to make his subjects of study'. And May (2011:99), explains that population is the universe to be sampled.

The target population for this study comprised all post-graduate students at department of library and information science of University of South Africa. The undergraduate students were excluded from the study because data collection took place during their examination period. The University of South Africa prohibits data collection during examination period. Therefore, only postgraduate students took part in the research. Upon request, the Department of Information and Analysis (DIA) provided a list of postgraduate qualifications and numbers of students registered for each qualification. The quantitative data collection for this study took place during examination period of October / November 2018. A total population of 455 students were registered for post graduate studies in information science in the said period. Table 3 shows the distribution of postgraduate student numbers for 2018 academic year as provided by DIA.

Table 3. Number of postgraduate students per qualifications in Department of Information Science in 2018 (Source: DIA)

Qualification	Course code	Population
Honours Bachelor of Information Science	90072	139
Master of Information Science	98410	80
Honours Bachelor of Arts in Archival science	0555X-N11	61
Doctor of Literature and Philosophy in Information Science	90035	115

Post graduate diploma in Information Science	90003	60
TOTAL		455

UNISA library is the biggest academic library in Africa. It boosts of over three million titles of resources. Among other things, the collection includes, hard copy books, DVDs, journals and e-books. The workforce is made up of senior management which are (directors and deputy directors), middle management (managers and supervisors) and librarians support staff. Table 4 provides the composition of total UNISA library staff in 2018.

Table 4: Composition of Unisa library staff 2018 (Source: Unisa)

Employment level	Titles	Number of staff
Senior management	Directors and deputy directors	9
Middle management	Managers and supervisors	13
The rest of the staff	Librarians and support staff	241
Total		263

3.5. SAMPLING PROCEDURES AND METHODS

Sampling, according to Flick (2018:73), is about how to select cases or examples from a wider population (which may be too big to be studied completely) so that the research in the end can make a statement that apply to the individual participant of the study. While a sample is a portion or subset of a larger group called a population. For example, a number of elements selected from a sample frame (Babbie 2017:211).

3.5.1. Sampling frame

A sampling frame is a list of elements from which a sample is drawn. For example, if a sample of librarians is selected from library staff register, the library staff register is the sample frame Babbie (2008:221). In the case of this study, a sample frame was deemed necessary when sampling postgraduate students. A list of post-graduate students was obtained from the DIA. The list was however, without names and addresses of individuals. The names and addresses were withheld by the

department, so as to abide by the policy on using Unisa staff and students in a research.

3.5.2. Sampling methods and procedure

There are two main sampling methods in social research, namely probability and non-probability sampling methods (Leavy 2017:268; Babbie 2008:203). Sampling methods are designs of a research plan that indicates how cases are to be selected for observation (Singleton and Straights 2010:158). In this research, the research applied three sampling techniques, namely stratified random sampling, systematic sampling (probability sampling method) and purposive sampling (non-probability sampling method) to determine the sample population for the study.

Stratified random sampling occurs when the population is divided into relatively homogenous groups, and then a proportionate sample is drawn from the groups (Leavy 2017:265; Babbie 2008:239). Stratified random sampling is recommended when the population is divided into subgroups or strata, and a researcher selects members from each group to be included in the sample (Picard & Masick 2014:155). A researcher's goal is more often to ensure that each of the sub-groups is adequately represented in the population (Gravetter and Forzano 2006:124). Stratified random sampling ensures propositional representation of the population. In this research, the strata were the different post-graduate qualifications offered in the Department of Information Science.

Systematic sampling is a strategy in which the first element in the sample frame is picked randomly and the rest of the elements are picked from an established interval by using the Kth element (Leavy 265; Maree and Pietersen 2016:195). And Bryman (2016:135) explains that a systematic sampling refers to a sampling technique where units are selected directly from the sample frame without resorting to random numbers. This research used stratified random sampling to systematically pick a sample from the student population for the quantitative part of the study.

The students were divided into groups according to different qualifications (strata). From each stratum, an independent sample was determined (see Table 5). Then, the systematic random sampling was employed to select actual participants in the study. The first student in the sample frame was selected randomly while the subsequent students were selected based on the kth element where K was the interval which was relied on by systematically select students who participated in the study (Johnson &

Christensen 2014:260). The K was determined by dividing the population size by the sample size. For example, in the case of the Honours Bachelor of Arts in archival Science qualification, K was 1.22 which meant that the first selection was made from the top 10 students and thereafter, any next student in the list was picked.

Purposive sampling was used in this research to select the librarians from the Unisa library. This sampling technique was suitable for the purpose of this study because of its unique characteristic of allowing researchers to use internalised information (knowledge) to identify appropriate candidates (Babbie 2017:196). In this case, the researcher was able to identify knowledgeable staff members from different sections of the UNISA library who were able to help answer the qualitative questions. The staff were selected on basis of their duties and responsibilities in the library as far as e-books were concerned. They were selected from different sections of the library. See section 3.5.3.

3.5.3. Sample size

According to Picard & Mesick (2014:154), a sample is a "representative group of cases from the population, ideally consisting of all the characteristics of the population. A sample is a subset of a population and can also refer to studies carried out, to places and times of observation or to documents or other objects that are examined (Loseke 2017:113). Determining the correct sample of relevant cases from a population that indicates all the necessary characteristics for a study is critical to the validity and reliability of survey research. Ideally, a researcher would want to include the whole population in a sample but that can be time consuming and expensive, particularly if the population is large.

The sample size for the postgraduate students was drawn from the 2018 registered students (population) in the Department of Information Science. The sample was drawn per qualification. Raosoft sample size calculator was used in determining the sample for each qualification. A confidence level of 90%, at a margin of error of 5% and response distribution of 50% (Raosoft 2004) were parameters used for the calculation of the samples. An overall sample size added up to 336, which accounted for 73.84% of the 455 postgraduate students who were registered in 2018. A 90 percent confidence level and a 5 percent margin of error allowed the sample to be bigger to enhance validity. The bigger the sample the better (Creswell & Creswell 2018:151). Table 5 provides samples per qualification.

Table 5: Population of strata, sample size and percentages

Qualification	Number of students (N)	Sample size (n)	Percentage of N
Honours Bachelor of Arts in archival Science	61	50	81.97%
Honours Bachelor of Information Science	139	93	66.91%
Master of Information science	80	62	77.5%
Doctor of Literature and Philosophy in Information Science	115	81	70.5%
Postgraduate diploma in library and Information Science	60	50	83.33%
Total	455	336	73.84%

Source DIA: 2018

On the part of the librarians, a total of 10 librarians were purposively selected for the study. The librarians were drawn from different sections of the library to give a wider view of utilisation of e-books from UNISA library as follows:

(i) *Junior branch librarian*: A junior branch librarian was selected from lending section. This where books are issued out to students and returned. They have everyday contact with students. They are well placed to hear students' problems concerning all types of services including e-books.

(ii) *Research commons*: Librarians in the research commons assist mainly postgraduates with research and sometimes recommend books for students

(iii) *Personal librarians: They are also known as subject librarians.* These are librarians from client services section. Each college of the University is allocated personal librarians. Each personal librarian is allocated courses to develop study aids such as lib-guides. All post graduate courses have a personal librarian to assist postgraduate students face to face or online. They also conduct library training. Two personal librarians participated in this research.

(iv)   *Specialist in reporting:* This professional comes from quality reporting section of the UNISA library. The team ensures that all data entered into library systems is correct. This include library catalogue where e-books are located. One participant was selected from this section.

(v)   *Branch librarian:* In other institutions, they are known as reference librarians. They conduct reference interviews and deal with day to queries from students on wider areas including e-books. Two branch librarians participated in this research. Branch librarians falls under client services of UNISA library.

(vi)   *Cataloger:* The cataloguer came from cataloguing and classification section of the library. This section deals with the process of cataloguing and classification of all library resources, e-books included. One participant was involved in this research.

(vii)   *Collection developer*: participant number eight was selected from collection development section of the library. In this section librarians are responsible for selecting new information resources to purchase. One participant took part in the research.

(viii)   *Marketing coordinator:* This section deals with the marketing of library services to students and other users. One participant from the section took part in the research.

3.6. DATA COLLECTION METHODS

Data collection is one of the most important processes of any research. Data collection procedures include the steps and methods which researchers follow and adopt when collecting data in a research project (Creswell 2003:3). There are several methods of data collection including questionnaires, focus group, observation and document analysis (Nieuwenhuis 2016:87). This study used questionnaires for students and interview schedule for the UNISA library staff.

3.6.1. Questionnaire

According to Babbie (2017:257), a questionnaire is a document containing questions and other types of items designed to solicit information appropriate for analysis. They are widely used because they are relatively simple to put together, and they are cheap because they often do not involve researchers having to find time to

gather data personally (Fife-Schaw 2012:115). Questionnaires are versatile because they can be used in a variety of ways right across the social science disciplines, and because they can produce data that can be used to test hypotheses as well as gather qualitative responses (Fife-Schaw 2012:115; Sturgis 2012:95).

Questionnaires may differ mainly in two ways; that is, one may contain open-ended questions while the other is made up of closed ended questions. In the open-ended questionnaire, respondents are asked to write down their responses in any form they feel like appropriate to the question while in the closed ended question questionnaire, the researcher requires to have reasonable idea of possible answers to the questions on the questionnaire. Respondents are given multiple set of possible answers (Fife-Schaw 2012:116).

This research used a questionnaire with mostly closed-ended questions. The answers from the open-ended questions that were embedded in the questionnaire were coded into themes of similar meanings then quantified to give quantitative data. The researcher prepared the questionnaire in line with the objectives of the study. The questionnaire went through quality checks before it was approved for use. It went through experts such as the research office in the UNISA library and supervisor who recommended changes to some questions before approving it for use.

There are several means of sending and delivering a questionnaire to respondents. It may be delivered by snail mail (post), self-administered to respondents, hand delivered and e-mail (Fife-Schaw 2012:135). Due to the nature of Unisa, as an open distant learning institution, students are not housed at one place making them difficult to reach. Considering the information above, the researcher used an online survey questionnaire. The questionnaire was distributed to students through the department of information and communication technologies (ICT) of the University of South Africa. This arrangement was made by the registrar of students at Unisa to protect students' personal information in accordance with the protection of personal information act (POPI). ICT department e-mailed a link to the researcher to access the results.

Even though a questionnaire is a versatile data collection tool, it suffers from a low response rate because of its autonomous nature and anyone can answer the questions apart from the intended respondent (Collie and Rine 2009). UNISA students

live in a large geographical area in and outside South Africa. The questionnaire was, therefore, an ideal tool for collection of quantitative data. The disadvantage of using an online questionnaire with e-mail as a means of delivery, is that respondents may ignore the questionnaire all together thinking that it is unsolicited mail. Some may stay long time without checking their e-mail addresses, resulting in low response rate. This may jeopardize the success of the research. To avoid total failure, reminder e-mails were sent to respondents. The questionnaire included introduction about the researcher, why he was conducting this study and the possible benefit of the study to the respondent. This section also included brief general instructions on how to respond to the questions.

The questionnaire is made up twenty-eight questions and divided into six sections. The first five questions were constructed to solicit bibliographic information of the respondents while questions six to twenty-eight were designed to help answer the research questions posed in each of the five objectives.
Objective one had four questions attempting to understand postgraduate students' e-books awareness levels at UNISA library. The second objective had eight questions relating to e-books usage by postgraduate students at UNISA library. While four questions were posed to enquire about postgraduate students' perceptions of e-books in UNISA library. Devices and skills required for effective utilization of e-books by postgraduate students in UNISA library came into focus in objective four, five questions were posed. In the last objective, two questions were posed to investigate factors affecting postgraduate students' effective utilization of e-books at UNISA library (see appendix III) .The questions in the questionnaire were constructed and spread in a manner that helped to answer questions from each of the five objectives.

3.6.2 Interview

According to Babbie (2017:491), an interview in research is a data collection encounter in which one person (an interviewer) asks questions to another (a respondent). Interviews may be conducted face to face or by telephone. The interviewer is usually a professional or a paid researcher. May (2011:132), identified four main types of interviews in social research, namely; structured interview, semi-structured interview, unstructured or focused interview and group interview and focus group.

Semi-structured interviews allow the researcher to intervene or probe further if answers from participants are not clear or there is a need for information. Each question is normally specified, but the interviewer is free to probe beyond the answers in a manner which would appear to be prejudicial to the aims of standardisation and comparability. Information about age, sex, occupation, type of household and so on, can be asked in a standardised format. The interviewer who can seek both clarification and elaboration on the answers given, can then record qualitative information about the topic. This allows the interviewer to have more latitude to probe beyond the answers and thus enter a conversation with the interviewee May (2011:134).

This study employed semi-structured interviews to collect qualitative data from librarians at the UNISA library. The interviewer was at liberty to intervene and probe further for clarification of a point or where more information was needed (May 2011:134). The interviews were recorded using a Samsung J4 smart phone. The interviewees were all asked the same questions. The researcher transcribed all the voice recordings into text, meticulously writing each word as it was said by the interviewee. Then the data was coded and analysed to develop recurring themes for easy interpretation.

The interview guide was composed of twenty-two questions. Interview guide is described by Bryman (2016:546), as a "vague term that is used to refer to brief list of memory prompts of areas to be covered that is often employed in unstructured interview or to the somewhat more structured list of issues to be addressed or questions to be asked in a semi-structured interviewing".

The interview questions were divided into six sections. The first section was dedicated to collecting bibliographic information from the participants. A total of four questions were posed to enquire about gender, job title, highest qualification and years of work experience in UNISA library. Section two was tailored to respond to questions from objective one about postgraduate e-books awareness and four questions were posed to the participants.

On second objective, four questions were posed to the participants about e-books usage among postgraduate students at UNISA library. While two questions were posed on technologies and skills required by postgraduate students for the effective utilisation of e-books at UNISA library.

Objective three on librarians' perceptions about e-books, three questions were posed.

On the fourth objective two questions were posed to the participants to enquire about information communication technologies used by postgraduate students to access and use e-books at UNISA library. In this objective, two questions were posed to the librarians. The fifth objective on factors affecting postgraduate student utilisation of e-books at UNISA library, two questions were posed.

3.6.3. Data collection procedure

Proper procedures must be followed before any researcher collects data. Before commencing with the data collection process, the researcher sought permission from the University of South Africa's research committee and the University of South Africa research ethics committee to conduct research at University of South Africa, to use Unisa student's information and Unisa library staff. Both permissions were issued and have been attached as appendices. Another request was launched to the registrar of students to gain access to Unisa students' information. This permission was denied. Instead the researcher was advised to send the questionnaire to department of information and communication technology (ICT) for distribution.

Furthermore, this meant that the researcher was not able to send the questionnaires by himself. Instead, the department of information and communication technologies (ICT) was tasked to send the online questionnaire to respondents. This arrangement was made by the registrar of students to minimise the risks of students' information falling into wrong hands. ICT received a complete sample from the researcher to send to individual respondents.

The department of information and communication technology sent the questionnaire to the respondents using the university's bulk e-mail facilities. Then ICT sent a link to the researcher for access to the results. UNISA's bulk e-mail facility does not take attachments. Therefore, the consent letter was embedded into the questionnaire as part of introduction. Any respondent who read the introduction was informed that by continuing with answering the questions had consented to taking part in the survey.

Two sets of data were collected in this research. The researcher collected quantitative data from postgraduate students and qualitative data from UNISA library staff. In the quantitative data collection, Survey monkey was used as a vehicle on which the questionnaire was uploaded and delivered to respondents. Respondents were able to answer the questions online and return them to the researcher by clicking

on a submit button at the end of the questionnaire. This allowed the researcher to conduct this research easily and cheaply using available technology and resources. Both sample and the link to the questionnaire was then sent to ICT department of the University of South Africa. The ICT used the university's bulk e-mail services to send the questionnaire to the selected sample.

The procedure for qualitative data collection was straight forward because the researcher had access to all UNISA library staff members. To conduct the interviews in the library, the researcher obtained in house permission from the library administration. Then the researcher personally contacted the staff members who were picked to take part in the research. He approached each participant to seek consent and arrange time and date for the interviews. The participants were informed that the researcher would record the interviews and transcribe for interpretation and application to the research project. All participants participated in the interviews voluntarily. There were no incentives promised to anyone. The interviews took place over several days due to availability of participants on different days. Each interview lasted between 15 to 30 minutes. Ten participants took part in the research. The interviews took place in UNISA library, Muckleneuk campus in Pretoria.

3.7. RESPONSE RATE

Literature in the field shows that online survey research, regardless of geographical area where it takes place, suffers from low response rate (Sivio, Saunders, Chang and Jiang 2006; Aerny-Perreten, Dominguez-Berjon, Esteban-Vasallo and Garcia-Riolobos 2015:688; Languilles, William and Saunders 2011). Phillips, Ready, Shalini, and Durning (2016:218), describe response rate as "simply the number of people (respondents) who responded to a survey divided by the total number of potential respondents".

Several factors affect response rate in an online survey. A low response rate in an online survey may be attributed to among other things, mistakes in the e-mail addresses of respondents, survey fatigue, more educated people disregarding surveys, fear of spam and viruses (Phillips, Reddy & Durning 2016). Over surveying of internet users is may be another phenomenon which may negatively affect the willingness of participants to participate (Manfreda, Berzelak, Vehovar, Bornjak and Haas 2008:79). Perreten et al… 2015:688, mention easy access to respondents, speed of data collection and low costs part of undeniable advantages, however, the

researchers also mention low response rate as prominent setback associated with online surveys.

The online research which may also be known as internet mediated research is attractive because of its superior sample representative and low cost (Kalb, Cohen, Lehman, and Law 2012:668). One major downside of internet or online research survey is low response rate. Kalb et al… (2012:668), reports that a low response rate of between 6% and 75% were observed in several research finding they analylised. While Monroe and Adams (2012), observed that an online survey has an average response rate of 11% which is lower than mail and telephone surveys. This research had a low response rate that is 25% (see Table 6). The respondents were postgraduate students. A suspect in this research may be survey fatigue or just reluctance to respond to survey because of lack of time. This quantitative data was compensated and supplemented by the qualitative data collected through the interview schedules. Based on various research findings outlined in this section, this study could proceed.

TABLE 6: COMPOSITION OF POPULATION AND RESPONSE RATE

Respondents	Target Population	Sample	Response rate
Students	455	336	83 (25%)
Unisa library Staff	263	10	10 (100%)

3.8. DATA ANALYSIS AND PRESENTATION

Creef (2011:333) describes 'data analysis as the process of bringing order, structure and meaning to the mass of collected data'. Data analysis involves breaking up the data into manageable themes, patterns, trends and relationships (Mouton 2001:108). Silverman (2003:187), points out that the 'reliability of the interpretation of transcripts may be greatly weakened by a failure to transcribe apparently trivial, but often crucial pauses and overlaps in voice recordings. While data presentation is art of writing researching research findings to funding organisations or for examination purposes, to examination officials for evaluation.

Quantitative data was collected through the online survey data collection tool called survey monkey. The software collects data from respondents and give feedback per variable in each question. The results are given in numbers and percentages of

responses for each answer on a question. The researcher used these figures and percentages to analyse and interpret the information to give meaning to the results in the effort to answer the research questions.

In this study the results cannot be generalised to the whole student population in the department of information science because the sample represented only postgraduate students. Furthermore, the sample used cannot represent all colleges of the University of South Africa because all respondents were information science students representing only one field of study. A broader study on the topic is required to assess the mood of the whole university on utilisation of e-books.

Qualitative data was analysed by using thematic analysis. Thematic analysis underpins most qualitative research analysis, whether or not, it is explicitly stated. It draws on the organization of data into themes (Barbour 2014:338). While a code in qualitative inquiry, is described as a" word or a short phrase that symbolically assigns a summative, salient, essence capturing and or evocative attribute for a portion of language-based or visual data" (Saldanha 2013:3). The recordings from the interviews were first transcribed into text. Then the text was checked to identify themes or patterns belonging to a certain term of similar meaning and underlining them. Then the terms were put in groups according to the themes each group represented. The researcher used the themes, to analyse and   interpret the text to attach some meaning to it.

3.9. VALIDITY AND RELIABILITY OF THE STUDY

Addressing issues of validity and reliability in one's research would assist in making one's research process a useful and successful endeavour (Lee 2004:211). Validity is a term that accurately reflects the concept it intends to measure (Babbie 2017:497). While reliability refers to quality of measurement methods that suggest that the same data would be collected each time in repeated observations of the same phenomenon (Babbie 2017:495). Reliability can be in danger if the wording of a survey is confusing or if the survey interviewer misinterprets a question (Lee 2004:211). The author continues to say that it is easy to damage survey`s reliability. Words, which seem to be clear and simple but may be misinterpreted or misunderstood by the end-user (Lee 2004:211).

To ensure reliability of the data, the data collection instrument was carefully constructed. It was constructed guided by the objectives of the study. Consultations

with experts were made on the questionnaire. First consultations were made with librarians in the research commons of Unisa library. Then the research office in UNISA library was consulted for further inputs. The questionnaire was then sent to supervisor for further advice and approval before it was sent to the respondents. Changes were made to the original draft of the questionnaire according to the recommendations of supervisor to an improved standard so that it could measure what it was supposed to measure.

On the other hand, validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration or the ability of a survey questions to accurately measure what they claim to measure. An item designed to measure customer awareness of a given service should measure awareness and not another related concept (Babbie 2017:152; Lee 2004:211).

Four types of validity are listed and defined as follows:

(i)   *Content validity:* the degree to which a measure covers the range of meanings included within a concept.

(ii)   (ii) *Criterion-related validity*: the degree to which a measure relates to some external criterion.

(iii)   *(iii) construct validity* is the degree to which a measure to other variables as expected within a system of theoretical relationships. An

(iv)   *Face validity:* which is a quality of an indicator that makes it seem a reasonable measure of some variable (Babbie 2017:153).

Validity in this study was ensured by using clear questions in simple to understand language in the questionnaire, though clear questions and language alone does not stop respondents from misinterpreting the questions. This ensured that respondents understand the questions and give them a good chance of answering them correctly. Williman (2011:204), stipulates that "faulty measuring instruments can jeopardise validity of data in a research".

3.10. ETHICAL CONSIDERATIONS

Research ethics concern the responsibilities of researchers to be honest and respectful to all individuals who are affected by their research studies or their reports of the studies` results. Researchers are usually governed by a set of ethical guidelines and to assist them to make proper decision and choose proper actions (Gravetter &

Forzano 2006:89). Social science research is carried out within communities that are made up of individuals who need protection when participating in any research.

Walliman (2011:240) explains that 'there are two perspectives of ethical issues (a) protection of subjects, which are taking part in the research and (b) personal integrity of the researcher'. Gravetter & Forzano (2006:90) add that "the researcher has no right to harm or abuse participants physically, emotionally or psychologically". For example, all the interviews were conducted on the terms of interviewees. They dictated when, and where each interview would take place. Both the interviews and the questionnaire were a voluntary affair. No one was forced to take part in the research. According to Unisa (2014:5), researchers may only undertake research that has been approved by an appropriate ethics committee. As a result, a written application was made to the Unisa research ethics committee requesting for approval before commencing with data collection. During the study, precautions were taken into consideration to make sure that participants were not affected negatively in any way as recommended by the University of South Africa research ethics committee. The ethics clearance certificate and permission were granted for this study and they are attached as appendices.

3.11. SUMMARY OF THE CHAPTER

This chapter covered methodology and the steps and activities, which took place inside project such as research approaches, research design, target population, sampling, data collection, data analysis, validity and reliability of the study and ethical measures. It explained where this research took place and how this research was done using the chosen approaches. It further explained why the approaches were selected and are suitable for conducting such type of research.

CHAPTER FOUR: PRESENTATION OF FINDINGS

4.1. INTRODUCTION

This chapter presents findings on the 'utilisation and perceptions of e-books by postgraduate students in the department of information science of the University of South Africa. The findings are presented here based on the five main objectives of the study, namely:

- To establish the extent of postgraduate LIS students` awareness of e-books at UNISA library
- To assess usage of e-books by postgraduate LIS students at UNISA library
- To establish LIS postgraduate student's perception of e-books at UNISA library
- To determine the type of technology and skills which postgraduate students employ to utilise e-books at UNISA library
- To establish factors affecting postgraduates' students utilisation of e-books in UNISA library

4.2. FINDINGS BASED ON THE QUESTIONNAIRES

This section presents the quantitative data which was collected from students through a questionnaire. The first section presented is about demographic profile of respondents the questions based on the objectives of the study follows.

The first section probes about the demographic profiles of respondents. Five questions were posed such as:

- What is your gender?
- What is your highest qualification?
- Which qualification are you currently studying?
- Which age group do you belong to?
- What is your province of residence?

4.2.1. Gender of respondents

The first question required respondents to identify themselves according to their gender. A majority of 50 (60.98%) respondents were female while 32 (38.55%) were males and one respondent (1.20%) did not identify his/her gender. Table 7 indicates the distribution of gender.

Figure 7: Gender distribution of respondents (N=83)

Gender of respondents	Responses	Percentages
Male	32	38.55%
Female	50	60.24%
Other, please clarify	1	1.20%
Total	83	100.00%

4.2.2. Highest qualification obtained by respondents

In this section, the researcher, asked the respondents to indicate the highest qualification they were holding during the time of the research and data collection. Nineteen (23.46%) respondents indicated that they had an undergraduate degree while 31 (38.27%) indicated that they were the holders of honours degree, 24 (29.63%) indicated that they had a master's degree while 3 (3.70%) respondents indicated that they had a doctoral degree and 4 (4.94%) selected other option. In the other field, two specified that they had an undergraduate degree, post graduate diploma and the third postgraduate. Two respondents did not answer the question. Table eight shows the divisions of respondents according to qualifications.

Table 8: Qualifications held by respondents (N = 83)

Qualifications held	Responses	Percentage
Undergraduate degree	19	22.89%
Honours degree	31	37.35%
Master's degree	24	28.92%
Doctorate degree	3	3.61%
Other (Please specify)	4	4.82%
Total	83	100.00%

4.2.3. Qualifications under study

The next question asked about the qualifications that each respondent was working on obtaining at the end his/her chosen course. One respondent 1(1.20%) indicated that he/she was working on an undergraduate degree. A total of 34 (40.96%) respondents indicated that they were studying towards an honour's degree. A further 21 (25.30%) respondents were registered master's students and 23 (27.71%)

indicated that they were aspiring doctors on a doctorate program. Only 4 (4.82%) chose the other option. One had just finished a doctoral degree while the other had just finished an honours degree. One did not indicate the expected qualification. Table nine showing qualifications understudy.

Table 9: Qualifications understudy by respondents (N=83)

Qualifications enrolled	Respondents	Percentages
Undergraduate degree	1	1.20%
Honours degree	34	40.96%
Master's degree	21	25.30%
Doctoral degree	23	27.71%
Other (Please specify)	4	4.82%
Total	83	100.00%

4.2.4. Age group of respondents

In the following question, the researcher sought to understand the age group in which each respondent belonged. None belonged to 16-25 and 21-25 age groups. 23(27.71%) indicated that they belonged to 26-30 age group. Then 30 (36.14%) indicated that they are in the 31-40 age range. Another 13 (15.66%) were in the 41-45 category, with 9 (10.84%) falling in the 46-50 range while 5 (6.02%), were over 50 years old. And three (3.61%) were undecided. Table ten indicates the age groups of all respondents.

Table 10: Age group of respondents (N=83)

Age of respondents	Responses	percentage
16-20 years	0	0.00%
21-25	0	0.00%
26-30	23	27.71%
31-40	30	36.14%
41-45	13	15.66%
46-50	9	10.84%
Over 50 years	5	6.02%
Other. please clarify	3	3.61%
Total	83	100.00%

4.2.5. Province of residence of respondents

This section inquired about country or province of origin of respondents. The findings show that none of the respondents indicated that they lived in Eastern Cape and Northern Cape. 1 (1.20) lived in Free State; 4 (4.82%) came from Western Cape; 6 (7.23%) came from KwaZulu Natal; 2 (2.41%) indicated that they reside in Mpumalanga; 11(13.25%) were living in Limpopo province; 4 (5.4.82%) lived in North-West province while Majority 36 (43.37%) indicated that they lived in Gauteng province of South Africa.

True to UNISA's international nature, 19 (22.89) were international students. Five respondents were from Ghana, two from United Arab Emirates (UAE), five indicated that they were from Zimbabwe, two from Botswana, two from Namibia and one from each of the following countries: Eswathini (Swaziland), United States of America (USA) and Nigeria. Table eleven shows the distribution of participant's province of origin.

Table 11: Province of residence of respondents (N=83)

Province of residence	Responses	percentages
Eastern Cape	0	0.00%%
Free State	1	1.20%
Gauteng	36	43.37%
Kwazulu Natal	6	7.23%
Limpopo	11	13.25 %
Mpumalanga	2	2.41%
Northern Cape	0	0.00%
Western Cape	4	4.82%
North West	4	4.82%
Other (Please specify)	19	22.89%
Total	83	100.00%

4.3. EXTENT OF POSTGRADUATE STUDENTS' AWARENESS OF E-BOOKS IN UNISA LIBRARY

The objective in this theme was to establish the extent of e-books awareness among postgraduate students at UNISA library. The first questions posed to the respondents was focused on how the students became aware of e-books at the Unisa library.

How did you become aware of e-books at UNISA library?

4.3.1. Students becoming aware of e-books in UNISA library

In this section, respondents were asked to indicate how they became aware of e-books in UNISA library. The findings revealed that 7 (8.43%) learned of e-books from friends; while 6 (7.43%) got news of a new technology called e-books from colleagues; yet another 4 (7.27%) indicated that their lecturers/ teacher introduced them to e-books. A further 15 (18.07%) learnt from a library other than UNISA library; a majority 32 (38.55%) discovered the world of e-books in UNISA library and 7 (8.43%) discovered e-books on UNISA website. Other commented on this question, some indicated they discovered e-books themselves and, on the job, (librarian) while others mentioned public library. Table twelve shows distribution of how students became aware of e-books.

Table 12: E-books awareness in UNISA library (N=83)

E-books awareness	Response	percentage
Friends	7	8.43%
Colleagues	6	7.23%
Lecturer/teacher	4	4.82%
My library other than UNISA library	15	18.07%
UNISA library	32	38.55%
UNISA website	7	8.43%
Other (please specify)	12	14.46%
Total	83	100.00%

4.3.2. *Methods used to create e-books awareness among postgraduate students in Unisa library*

It is the duty of academic libraries to create platforms where different types of messages may be transmitted to students. This include the creation of alert messages for new products such as new library applications, training and technologies including e-books. This subheading is a continuation of the first objective. The theme addresses different methods that UNISA library uses to create awareness of e-books among students. Three questions were posed in subheading such as:

What channels of communication does UNISA library use to convey messages about e-books to students?

How often do postgraduate students get messages from UNISA library about e-books?

Is UNISA library making enough effort to create e-books awareness among students?

4.3.2.1. *Channels of communication about e-books with postgraduate students*

In this question, respondents were asked to indicate the means of communication through which UNISA library disseminate information about e-books to students. This study found that 38 (45.78%) selected e-mail messages as communication they receive from UNISA library about e-books. And 27(32.53%) mentioned library training as means of them knowing about e-books development in the library. While 15 (18.07%) were able to see posters in the library mentioning the presence of e-books or availability of new databases with e-books in them. Only 2 (2.41%) indicated SMS messages as the way the library communicated with them about e-books. And 18 (21.69%) were undecided. Twelve comments indicated that they never received any communication from UNISA library. The other comments mentioned Facebook, leaflets and UNISA website. Respondents picked multiple answers. Eighteen were undecided. Table thirteen shows the division of different communication channels used for communication.

Table 13: Channels of communication with students N=83)

Communication channels	Response	percentage
E-mail notices	38	45.78%
SMS notices	2	2.41%
Posters in the library	15	18.07%
Library training	27	32.53%
Other, please clarify	30	36.14%
Total		

4.3.2.2 Frequency of communication from UNISA library to students on E-books

In this question therefore, the researcher aimed at investigating the frequency of communication between Unisa library and students about e-books. The findings show that 2 (2.41%) ticked once a week. Another 2 (2.41%) indicated that they receive e-book notices every two weeks. While 19 (22.89%) indicated once every beginning of the month and majority 49 (59.04%) said they never received any notice messages from the UNISA Library about e-books. And 11(13.25%) were not sure. they fall under other. The comments indicate that some respondents are not sure, others say irregular times while others say that they see posters in the library. Eight were undecided. Table fourteen shows how many times respondents receive communication.

Table 14. Frequency of communications from UNISA library (N=83)

Frequency of communication	Responses	percentage
Once a week	2	2.41%
Every two weeks	2	2.41%
Once a month	0	0.00%
Once every beginning of semester	19	22.89%
Not at all	49	59.04%
Other, please clarify	11	13.25%
Total	83	100.00%

4.3.2.3. Library's campaigns efforts to create awareness about E-books

This question sought to find out opinion on whether students agree or disagree with the statement that "UNISA library is making effort to create e-books awareness". The findings tell that 4 (4.82%) strongly agree that UNISA is making great effort to create awareness about e-books. And 22 (26.51%) picked 'agree' with the statement. Then 26 (31.33%) are neutral on this statement. They neither agree nor disagree. A further 18 (21.69%) disagree while 12 (14.46%) strongly disagree with the statement. One respondent (1.20%) was undecided. Table fifteen showing different levels agreement.

Table 15. E-books awareness campaign efforts (N=83)

Awareness campaign effort	Respondents	percentages
Strongly agree	4	4.82%
Agree	22	26.51%
Neutral	26	31.33%
Disagree	18	21.69%
Strongly disagree	12	14.46%
Other, please clarify	1	1.20%
Total	83	100%

4.4 EXTENT OF E-BOOK USAGE IN THE UNISA LIBRARY

It is important to evaluate the usage rate or trend in academic libraries for library administrators to know if the e-book collection is meeting user need. This section, through thematic questions assesses e-books usage at Unisa library. A total of eight questions were posed in this section such as:

Have you used e-books before?

What are your reasons for using e-books?

What are your reasons for not using e-books?

For what purpose do you use e-books from UNISA library?

What are your main sources of e-books?

What book format do prefer between e-books and hard copy?

Why do you prefer one format over the other?

How can UNISA library improve utilization of e-books?

4.4.1 Postgraduate students who used e-books at UNISA library

In this question respondents were asked to indicate if they had used e-books. It was noted that 81 (97.59%) indicated that they had used an e-book. However, 2 (2.41%) of the respondents indicated that they had never used e-books. Table sixteen showing yes or no responses on e-books usage.

Table 16: Postgraduate students who used e-books in UNISA library (N=83)

Utilising e-books at UNISA library	Response	Percentage
Yes	81	97.59%
No	2	2.41%
Total	83	100.00%

4.4.2. Reasons for using e-books

In this question respondents were asked to indicate from a list of options, the reasons why they use e-books. The finding tells that 20 (24.10%) chose they are portable. At the same time, 32 (38.55 %) indicated that the fact that 'one e-book reading device can carry multiple copies of e-books. Moreover, a further 27 (32.53%) think that e-books are up to date sources of information. Another 36 (43.37 %) chose, they can be used by multiple users at the same time.

Furthermore, 10 (12.05%) said they use e-books because they are visible in UNISA library and UNISA catalogue while 7(8.43%) use e-books because of training they received from the UNISA library. Eight (9.64%) were undecided on the question. In the comment window, some respondents mentioned flexibility, up to date, used as an option and creating home library. Respondents picked multiple answers in this question. Table seventeen shows the distribution of reasons why respondents use e-books.

Table 17: Reasons for using e-books (N=83)

Using e-books	Responses	Percentage
They are portable	20	24.10%
One gadget can carry more e-books	32	38.55%
They are up to date	27	32.53%
They can be used by multiple users at the same time	36	43.37%
Visibility of e-books	10	12.05%
Library training	7	8.43%
Other, please clarify	8	9.64%
Total		

4.4.3. Reasons for not using e-books by UNISA students

In responding to students' reasons for not utilising e-books at times or at all, it was found that 13 (15.66%) pointed out that e-books cannot be used independently without a device. 1 (1.20%) said that e-books reading devices are expensive to buy. Meanwhile, 10 (12.05%) chose 'cannot be accessed without battery power or electricity'. Then 6 (7.23%) indicated that they might not use e-books because one cannot open multiple pages of an e-book at the same time. Another 6 (7.23) indicated that a real book in their hands, is what they need. And 3 (3.61%) indicated that they did not know how to search for individual e-books in UNISA library. And 19 (22.89%) indicated that they do not like reading on the screen. Finally, 46 (55.42%) were undecided. In the comment window, respondents indicated that they have used e-books, they love hard copy and not applicable to them. Respondents picked multiple answers. Table fifteen showing why some students may not want to use e-books.

Table 18: Reasons for not using e-books (N=83)

Reasons for not using e-books	Response	Percentage
Cannot be used independently without gadget	13	15.66%
Gargets are expensive to buy	1	1.20%
Cannot be accessed without electricity	10	12.05%
Cannot open multiple pages at the same time	6	7.23%

I need to see the real book	6	7.23%
I am not aware UNISA has e-books	0	0.00%
I do not know how to search UNISA catalogue for e-books	3	3.61%
I do not like reading on the screen	19.	22.89%
Other, please clarify	46	55.42%
Total		

4.4.4. Purposes for which e-books are used by UNISA students

In this question, the researcher asked the respondents to choose from a list of optional answers, for 'which purpose do they use e-books'. Research and studies scored 43 (51.81%) and 32 (38.55%) of the responses respectively, with only 7 (8.43%) indicating that they use e-books for leisure reading. No one indicated that he/she uses e-books for training purposes. One respondent (1.20%) was undecided. In the comments, some respondents indicated that they use e-books for both leisure reading, studies and research and as an option to hard copy. Table nineteen shows figures and percentages of purposes e-books are used for.

Table 19: Purpose for *which e-books are used (N=83)*

Purpose for using e-books	Responses	percentage
Studies	32	38.55%
Leisure reading	7	8.43%
Research	43	51.81%
Training	0.00	00.00%
Other, please clarify	1	1.20%
Total	83	100.00%

4.4.5. Main sources of e-books for UNISA students

In this section, the respondents who indicated that they accessed e-books were asked to indicate the sources from where they accessed or access the e-book they use. The findings show that respondents use multiple sources to get e-books. Majority of the

respondents 65 (82.28%) indicated that they find their e-books from UNISA library. Second majority, 42 (53.16%) get their e-books from google books. Yet Another 14 (17.72%) chose Amazon as the entity where they get their e-books and lastly 3 (3.80%) indicated that their source of e-books is Takealot.com. From the total responses, fourteen were undecided and comments indicated that some respondents access e-books on internet websites, a combination of UNISA library, Amazon, and Take- a-lot, public library and own university library. Four were undecided. Respondents picked multiple answers. Table twenty shows distribution of e-books sources for respondents.

Table 20: Sources from which respondents get e-books (N=83)

E-book sources	Response	Percentage
UNISA library	65	82.28%
Google books	42	53.16%
Amazon.com	14	17.72%
Takealot.com	3	3.61%
Other, please clarify	14	17.72%
Total		

4.4.6. Preference of book format by UNISA students

On preference question, respondents were asked to indicate their preference between e-books and hard copy. The respondents were split almost in the middle with e-books taking a narrow lead as 43 (51.81%) indicated that they prefer using e-books while 40 (48.19%) indicated that they prefer using hard copy. The figure below shows the division for and against e-books. Table twenty-one showing a yes and no responses for book preference.

Table 21: Preference for books format by respondents (n=83)

Book format preference	Responses	Percentage
E-books	43	51.81%
Hard copy books	40	48.19%
Other, please clarify	00	00.00%

Total	83	100.00%

4.4.7. Reasons for preferring one book format over the other

This section required the respondents to give reasons why they still prefer the hard copy book format to e-books. A list options to choose from were put forward as answers. The findings show that 22 (26.51%) indicated 'easy to use more than one book at the same time', as one of the reasons why they use printed books. While 4 (4.82%), said that it is 'easy to put makers in the book' while majority 35 (42.17%), chose 'convenience and can be used without depending on devices and electricity' as reasons why they prefer hard copy to e-books. In the comments, some respondents said that they prefer e-books while others prefer hard copy and yet some prefer both. Twenty-two (26.51%) were undecided. Table twenty-two showing the responses for preferring one book format over the other.

Table 22: Reasons for preferring one book format over the other (N=83)

Reasons for preferring book format	Response	Percentage
Easy to use more than one book at a time	22	26.51%
Easy to put markers in the book	4	4.82%
Convenience, Can be used without depending on gadgets and electricity	35	42.17%
Other, please clarify	22	26.51%
Total	83	100%

4.4.8. Improving utilization of e-books in UNISA library

An open question was posed to find out ideas on how UNISA library could improve utilisation of e-books. Respondents were free to give opinion on multiple ideas to answer this question. Sixty-five (78.31%) reported that they are in favour of the UNISA library to conduct more awareness campaigns so that they can improve utilisation of e-books; 32 (38.55%) think that purchasing e-books which are relevant to studies would improve utilisation of e-book. This is because the relevant e-books will attract users on their own; 22 (26.51%) of respondents agree that creating slogans about

utilising e-books may help improve utilisation of e-books among students.   While 49.40 % looks at conducting more training as more viable way of improving utilisation of e-books in UNISA library, 5 (6.02%) respondents indicated other. Meanwhile, there were 6 comments in the comments window. The comments included, providing assistive software for finding information, keeping library website up to date, conducting more training and one comment agrees with the all the optional answers. Table twenty-three shows the division of responses on improving e-book usage in UNISA library.

Table 23: Improving utilisation of e-books in UNISA library (N=83)

Improving utilization of e-books	Responses	Percentage
Conduct more awareness campaigns	65	78.31%
Purchase e-books which are relevant to studies	32	38.55%
Create slogans about utilising e-books	22	26.51%
Conduct more library training	41	49.40%
Other, please specify	5	6.02%
Total		

4.5. POSTGRADUATE STUDENTS' PERCEPTIONS ABOUT E-BOOKS AT UNISA LIBRARY

Perception is the major contributor to a person's decision-making process. It informs a person on a type of action an individual takes next. It is a cognitive process for the understanding of a situation. In TAM, perception is recognised as a catalyst for adopting or refusing a new technology (Hwang, Al-Arabiat and Shin 2016:270). The finding in section 4.4.1 shows a big percentage of respondents who used e-books. This is backed by findings on sections 4.5.1 and 4.5.3 which indicates positive perception of e-books by postgraduate students at UNISA library. These findings supports the theory of technology adoption as explained TAM.   This theme addresses postgraduate student's perceptions about e-books at Unisa library. Four questions were posed for this theme such as:

> What is your level of agreement that e-books are good information source for education?

How have e-books contributed to your studies?

Should UNISA library continue investing in e-books?

Why do you think UNISA library should continue investing in e-books?

4.5.1. E-books as a good information resource for education

In this question, respondents were asked to show their levels of agreement from strongly agree to strongly disagree on the statement that 'e-books are good information sources for education'. The findings point out that 41(49.40%) indicated that they strongly agree with the statement. Again 30 (36.14%) agreed with the statement that e-books are good information sources for education while 11(13.25%) of respondents were neutral. And 1(1.20%) was undecided respondent. No one pointed that he/she disagree or strongly disagree with the statement. Table twenty-four indicates findings in numbers and percentages on levels of agreement.

Table 24: E-books: good information sources for education (n=83)

E-books as information source	Responses	Percentage
Strongly agree	41	49.40%
Agree	30	36.14%
Neutral	11	13.25%
Disagree	0	0.00%
Strongly disagree	0	0.00%
Other, please clarify	1	1.20%
Total	83	100%

4.5.2. Perceptions about E-books' contribution to research and studies

This question sought to find out how e-books have helped the respondents in their studies. A majority of 48 (57.83%), indicated portability as the major benefit of e-books because they can carry them anywhere, they want. While 20 (24.10%) pointed out convenience, in the sense that they do not need to come to the library for them to read or utilise e-books. A further 5 (6.02%) highlighted the ability to download an e-book and read offline and another 7 (8.43%) said they can read frequently because they have electronic devices which they use to read e-books. And three (3.61) were undecided and opted for other. Five respondents added extra views on the comment

window. In the comments, some respondents agree with all the options given while others indicated that they read a lot and use e-books when necessary. Table twenty-five shows the respondent's opinions on e-books.

Table 25: The benefits of e-books towards studies (N=83)

E-books perception by respondents	Responses	Percentages
I can access and read e-books anywhere I want	48	57.83%
Do not have to come to UNISA library to read e-books	20	24.10%
I can download e-books anytime and read offline	5	6.02%
I read more frequently because I have an electronic reading device	7	8.43%
Other, please clarify	3	3.61%
Total	83	100%

4.5.3. Perceptions on continued investment in e-books at UNISA library

This question asked the respondents if they think that UNISA library should continue investing in E-books. Overwhelming majority 80 (96.39%) said yes. They think UNISA library should continue investing in e-books. Only a single respondent 1(1.20%) thinks that UNISA library is wasting money and they should stop investing in the e-books project. While 2 respondents were undecided. Table twenty-six show the numerical representation of responses e-book investment.

Table 26: Continuing investment on e-books (n=83)

E-books continued investment	Respondents	Percentage
Yes	80	96.39%
No	1	1.20%
Other, please clarify	2	2.41%
Total	83	100%

4.5.4. Reasons for UNISA library's continued investment in e-books

This question requested the respondents to indicate reasons why UNISA library should continue investing in e-books? The findings show that respondents have multiple reasons why UNISA library should continue investing in e-books. Respondents could choose multiple answers in this question. Majority of 57 (70.37%) said e-books are good for long distance institutions like UNISA. Whereas 25 (30.86%), believe that e-books are cheaper and quick because there are no shipping costs involved. A healthy number of 56 (69.14) pointed out that students who are far away from UNISA library can access e-books at any time. Finally, yet importantly 9 (11.11%) respondents commented and 2 (2.41%) were undecided. The comments included convenient and always available, easy to use and up to date, save time and it's a trend and all of the above. Table twenty-seven shows the distribution of opinion on continued investment in e-books.

Table 27: Reasons for continued investment in e-books at UNISA library (N=83)

Reasons for continued investment	Respondents	Percentages
They are good for long distance institutions	57	70.37%
They are cheaper and quick to deliver because there are no transportation costs	25	30.86%
Students who are away from UNISA library can still access e-books anytime	56	69.14%
They save library space	36	44.44%
Other, please clarify	11	13.25%
Total		

4.6 TYPE OF ICT DEVICES AND SKILLS WHICH POSTGRADUATE STUDENTS NEED TO UTILISE E-BOOKS IN UNISA LIBRARY

Students require both technology and skills in academic libraries so that they can utilise its resources optimally. Libraries may provide skills by offering training on how to use resources and information and communication technologies (ICT). This theme

presents different technologies available for use by students to utilise e-books. Five questions were posed in this section such as:

Which ICT device do you own?

Which ICT device do you use for reading e-books?

Where do you access computers used for reading e-books?

Which skills are required to utilise e-books at UNISA library?

Has library training improved your ability to utilise e-books?

4.6.1. Ownership of Mobile devices by UNISA students

The finding shows that respondents owned multiple devices. Sixty-nine (83.13%) of the respondents indicated that they own desktop computers, while 42 (50.60%) owns laptop computers. Only 10 (12.05%) have e-readers in their homes. A sizeable 30 (36.14%) owns a tablet of this kind or that. Surprisingly, only 61 (73.49%) own smart phones. And one (1.20%) respondent could not make his/her mind and opted for the other. Table twenty-eight is the quantitative representation of the findings on ownership of mobile devices.

Table 28: Devices owned by respondents (N= 83)

Type devices owned	Responses	Percentage
Desk top computer	69	83.13%
Lap top computer	42	50.60%
E-book reader	10	12.05%
Tablet	30	36.14%
Smart phone	61	73.49%
Other, please clarify	1	1.20%
Total		

4.6.2. Electronic devices used by UNISA students for reading e-books

In this question, the researcher wanted to know from the respondents, which one from the list of devices listed on 4.8.1 are used for reading e-books. The findings point out that 59 (71.08%) read their e-books using a lap top computer. While 32 (38.55%) uses desk top computers to access and utilise e-books from UNISA library. And 6 (7.22%) uses e-readers to utilise e-books then 21 (25.30%) use tablet computers to access and utilise e-books from UNISA library. Only 2 (2.40%) respondents were undecided

and opted for other. Meanwhile, a respondent indicated a smart phone and a laptop computer while another pointed out that e-book reader was listed twice in the answer list. Respondents showed that they use multiple devices, hence they picked multiple use of devices. Table twenty-nine shows the distribution of devices used for e-books reading.

Table 29: Devices used for reading e-books by UNISA students (N=83)

Type of devices used	Response	Percentage
Laptop computer	59	71.08%
Desk top computer	32	38.55%
E-book reader	6	7.22%
Tablet	21	25.30%
E-book reader	4	4.824%
Other, please clarify	2	2.40%
Total		

4.6.3. Access points for computers that are used to utilise e-books

Considering information highlighted above, the respondents were requested to share information about places where they access computers, which they use for accessing and utilising e-books. The findings indicate that 8 (9.64%) indicated that they use UNISA computers in the UNISA library. While 31 (37.35%) indicated that they access computers at their workplaces. And a bigger number of 34 (40.96%) use their own computers. Surprisingly, no one indicated that they use computers from internet café. 10 (12.05%) opted for other. The comments show own computer, own computer, work and UNISA computers. One comment says not applicable. Table thirty shows the representation of the responses in figures on access points for computers.

Table 30: Computers used to access e-books from UNISA library (N=83)

Source of access	Responses	Percentage
UNISA library computers	8	9.64%
Own computer	34	40.96%
Computer at my workplace	31	37.35%

Internet café	0	0.00%
Other, please clarify	10	12.05%
Total	83	100.00%

4.6.4. Skills required for the utilization of e-books on campus

This questioned inquired about skills which are required to utilise e-books on UNISA campus. All respondents were computer literate in this research because 0 (0.00%) indicated to be computer illiterate, but 10 (12.05%) pointed to difficulties navigating databases. While 4 (4.89%) indicated that they do not know how to identify the right information. Another 9 (10.84%) find UNISA catalogue complicated to navigate. Nevertheless, 44 (53.01%) do not find any problem utilising e-books from UNISA library and indicated that the question was not applicable to them. While 16 (19.28%) were undecided. The comments mentioned downloads are restricted, navigation of the catalogue is complicated, UNISA servers not always available and some respondents indicated no problem using UNISA computers. Table thirty-one show responses skills required for e-books.

Table 31: Skills required for the utilisation of e-books on campus (N=83)

Skills required for postgraduate students	Respondents	Percentages
I am not computer literate	0	0.00%
I am unable to navigate databases	10	12.05%
I do not know how to identify the right information	4	4.89%
UNISA library catalogue is complicated	9	10.84%
Question not applicable to me	44	53.01%
Other, please clarify	16	19.28%
Total	83	100.00%

4.6.5 Library training on the use of E-books in UNISA library

This question sought to find how library training improved students' ability to utilise e-books in UNISA library. The findings in this research show that majority 37 (44.58%) is acknowledging that library training has improved their e-books awareness and their ability to use the library resources has improved too. While 18 (21.69%) percent said

that they never received any library training. Then 2 (2.41%) percent indicated that they already had library skills before coming to UNISA. Another 3 (3.61) percent pointed out that UNISA library has improved communication, and 1 (1.20%) had knowledge about e-books before coming to UNISA and lastly, 22 (26.51%) were undecided on the question. Table thirty-two shows distribution of respondents on library training.

Table 32. Training on the use of library resources in UNISA library (N=83)

Training on use of e-books	Respondents	Percentage
Training has improved student ability to use library resources	37	44.58%
Never received any training from UNISA library	18	21.69%
Ready knowledge of library usage	2	2.41%
Library improved communication	3	3.61%
I already knew about e-books before coming to UNISA	1	1.20%
Other, please clarity	22	26.51%
Total	83	100%

4.7. FACTORS AFFECTING POSTGRADUATE STUDENTS UTILISATION OF E-BOOKS AT UNISA LIBRARY

This section addresses factors which affect postgraduate students utilisation of e-books at UNISA library. In this last objective, only two questions were posed such as:

What type of problems do you encounter in using UNISA library computers to access e-books?

What type of problems do you encounter utilising e-books from UNISA library off-campus?

4.7.1. Problems associated with using the UNISA library computers to use e-books

This question sought to find out the type of problems that users encounter when using UNISA library computers on campus to access and utilise e-books. Respondents had multiples answers to select from. The findings tell that 6 (7.23%) indicated that there

is not enough computer time allocated per student. A further 12 (41.46%) mentioned problems with multiple logins in databases. As many as 25 (30.12%) indicated complicated navigation of databases. And majority 36 (43.37%) sited restrictions on downloads. They indicated that they cannot download the whole e-book if they want to. And 27 (32.53%) belongs to the other option. Majority in the comment window indicated that they use their own computers. Others mentioned that that librarians are not helpful in the library. While others mentioned that they do not like page restrictions and last comment said like download and read later. Respondents picked multiple answers. Table thirty-three shows the distribution of the respondents while problems using UNISA library computers.

Table 33: Problems associated with using the UNISA computers to utilise e-books (N=83)

Problems with using UNISA library computers	Responses	Percentage
Not enough time allocated for computer session for undergraduates	6	7.23%
Multiple login on databases	12	14.46%
Some databases are complicated to navigate	25	30.12%
Cannot download the whole book	36	43.37%
Other, please clarify	27	32.53%
Total		

4.7.2. Off campus-associated problems encountered when accessing E-books

The question was to find out the type of problems that students encounter off campus when utilising e-books from UNISA library. Respondents were not restricted to one answer. The finding tells that 29 (34.94%) indicated unstable internet connection as the problem off-campus. A bigger number of 40 (48.19%) cited cost of data for internet connection as expensive. And 5 (6.02%) pointed out that time is always not enough, especially when using an internet café for internet access. Additional 28 (33.73%) indicated that some books do not open properly off campus. And 8 (9.64%) were undecided and opted for other. Comments given included, databases do not open, Unisa server is sometimes down, slow loading and lack of guidance, some book titles

are not available, some book lay out is not nice and few indicated that the question was not applicable. Table thirty-four shows the figures and percentages of off-campus problems when using e-books.

Table 34: Utilising e-books off campus (N=83)

Accessing e-books off-campus	Responses	Percentage
Unstable internet connection	29	34.94%
Cost of data to access and use e-books is expensive	40	48.19%
Time is always not enough, especially when using the internet café for access	5	6.02%
Some books do not open properly off campus	28	33.73%
Other, please clarify	8	9.64%
Total		

4.8. FINDINGS BASED ON INTERVIEWS

This section presents the findings based on the interviews that were conducted with the UNISA library staff. The qualitative data complemented and supplemented the quantitative data as advised by Richie (2003:40). The qualitative data was recorded and herein presented in text as opposed to numbers which were presented in the section 4.9. The data is presented using the questions that were posed to participants.

4.8.1. Participants profiles

This section profiles the participants who were interviewed to obtain the qualitative data. The table reveals that the participants had library and information science qualifications except for two. One had a communication science degree and pursuing a master's degree in media studies; the other had a theology post-graduate degree. Most were pursuing a higher qualification in library science. The participants were asked about their job titles, highest qualifications and years of service. The findings for these questions are presented in Table thirty-five.

Table 35: *Participant's qualification, job title, gender and years of service*

Participant	Gender	Job title	Highest Qualification	Years of service
1	Male	Junior branch librarian	BINF (Current honours student)	15+
2	Female	Research commons branch librarian	BINF Honours (current master's student)	4
3	Female	Personal librarian	BBIL	26
4	Female	Specialist in internal reporting	MINF (current PhD student)	15
5	Female	Branch librarian	BINF Honours	18
6	Male	Branch librarian	BA Honours in theology	20+
7	Female	Cataloguer	BBIL	43
8	Female	Collection developer	BINF Honours	35
9	Female	Marketing coordinator	BA Honours	9
10	Female	Personal librarian	BINF Honours	30

4.9. EXTENT OF POSTGRADUATES STUDENTS` AWARENESS OF E-BOOKS IN UNISA LIBRARY

The theme of these questions was students' awareness of e-books. The researcher sought to explore the librarians' knowledge about students' e-books awareness in UNISA library.

4.9.1. Librarians' knowledge of students' e-books awareness in UNISA library

The librarians were asked the question:

Do you think students are aware of e-books in the UNISA library?

Most of the librarians said that students are aware of the presence of e-books in UNISA library. However, they thought that the number of students who are aware of e-books is small when compared to the number of those who are not aware. The findings

revealed that librarians inform students that they have an option for an e-book if a hard copy is not available. One librarian put it like this:

> *Majority, no. Majority don't know about e-books in the library. I find out when they ask questions that they want hard copies and I introduce them to e-books. They react differently and surprised.   I see in their faces.*

One librarian reported that students do not attend library training in the use of library resources in large numbers. Another librarian indicated that it is up to the student to find out what collection his/ her library is having.

Yet, another librarian said that students are aware of e-books in UNISA library and are ready to utilise them. He however, lamented that there is a shortage of e-books because not all books in UNISA library have an e-book version. One other librarian said that students in UNISA library are aware of e-books, but they confuse e-books with electronic journals. They cannot tell the difference between e-books and electronic journals. The rest of the librarians interviewed, had the view that the library needs more e-books awareness initiatives so that more students become aware of them.

4.9.1.1 Methods used by Unisa library for the creation of e-books awareness among postgraduate students

There are different ways of creating student awareness of library services and products. In continuation of awareness theme, this part of the investigation discussed methods of creating awareness about e-books among postgraduate LIS students at the UNISA library. The following questions were posed to librarians:

- What methods does the library use to create e-books awareness among students?
- How effective do you think, are the methods used by the UNISA library to create e-books awareness?
- In your opinion, are UNISA library's methods of creating awareness of e-books adequate?

Methods used for the creation of e-books awareness among students

When asked about the methods used to create awareness in the UNISA library, the librarians gave varied responses.

One participant said that library put displays of information on e-books on different floors of the library and at the foyer in the form of brochures. The research discovered

from the librarians that UNISA library does not have special programs or initiatives to create e-book awareness among students despite concerted effort to go digital. As one librarian said,

> There is no e-book day in this library nor posters everywhere.

Another librarian said,

> Not to my knowledge, there is nothing

While the other librarian put it like this,

> They are doing nothing about e-books. It has never been discussed in meetings.

Another librarian pointed out that UNISA is a long-distance education institution. The training sessions, which take place at the main library, are not enough. They miss most students who are outside main campus. UNISA library must find a broader way of reaching out to every student in terms of training. Though majority of the library staff said that there are no methods of creating e-books awareness among students, one librarian revealed that the library is present on social media platforms such as Facebook and Twitter, and they are used to create awareness of e-books.

Effectiveness of e-books awareness methods used by UNISA library to create awareness among students

University libraries are expected to create effective awareness methods if the investments they make in e-books must produce best value for money. In this section, the researcher wanted to understand the effectiveness of the methods that UNISA library use to create e-books awareness among students. Some participants indicated that the methods that UNISA library use to create e-books awareness are not effective enough.

"E-books are not visible enough in this library". One participant commented. She explained that the library needs aggressive e-books awareness campaigns.

Another participant elaborated that e-books are integrated into the main collection in the library catalogue. Therefore, students must be able to identify e-books within the bigger scheme of library catalogue.

A participant explained in this way:

> We send e-mails to students via their official… their official e-mail address (@mylife.unisa.ac.za) sometimes. There is always room for improvement. We can do better.

Another participant expressed disappointment with the methods that UNISA library use to create e-books awareness to student. This participant believes that the library's methods of creating e-books awareness are not effective at all. This is what he said:

> *I don't think it is effective based on two things:*
>
>> *(i) Students are not aware of displays*
>>
>> *(ii) Our training sessions are not so well attended.*
>
> *Students don't want to attend. Because they think, they think, maybe, it is the basic things about library that we will tell them, like how to use the catalogue.*

Adequacy of e-books awareness methods used by UNISA library

By asking the question on adequacy of the methods, the researcher wanted to know if the librarians think that the methods that UNISA library use to create awareness about e-books are adequate. Most participants strongly felt that the methods that UNISA library uses to create e-books awareness are not adequate but one. A sample of their responses include the following:

> *Yes, the methods of creating awareness are adequate. Because we promote them through lib-guides so each personal librarian of a specific department, of a specific collage will promote in that way. Aam, and we also have lecturers who collaborate with librarians to make sure that those departments, students in those departments have got necessary books that they need.*
>
> *Particularly lib-guides, which are send aam… which are updated daily aam,.. our social media but also through the training that the personal librarians give to students in the specific college that they host.*

Most participants felt differently. They disagreed by saying that UNISA's methods for creating e-books awareness are not adequate. They explained that they do not see active programmes dedicated to e-books awareness activities. There are inadequate signboards, for example, in and around the library about e-books.

4.10 E-BOOKS USAGE BY POSTGRADUATE STUDENTS AT UNISA LIBRARY

Librarians work with students constantly. They help students with training, information searches and retrieval of information sources such books. They are in a good position to know if the library resources are being used. This section seeks to assess librarian's knowledge about usage of e-books at UNISA library. The following questions were posed to the librarians:

How would you rate e-books usage at UNISA library?

Do you know if students prefer e-books to other formats of books?

Has UNISA library put any guidelines and policies specific to the use of e-books?

In your opinion, how do these policies affect utlisation of e-books at UNISA library?

How does UNISA library use user feedback to improve service provision?

4.10.1. E-book usage rate in UNISA library

Then again, the librarians were asked to use their observational knowledge to rate e-book usage by students on a scale of 1-10. One being the lowest and ten the highest. E-books providers normally provide e-books usage statistics in percentages or figures. This question was crafted to tap into lived experiences of the librarians. They rated e-books usage very low among students. One gave the usage at two out of ten. Another one gave it three out of ten. One gave six out of ten. While another librarian sighted absence of e-books enquiry from post graduate students as basis for giving low rate.

> *No one has ever come to me to ask about e-books. Therefore, I have no idea whether they are using them or not.* The librarian said.

It is difficult to rate e-books usage without statistics. One librarian said. However, from my observation, e-books usage in the library is low.

Although the librarians believe that e-books usage at UNISA library is relatively low, documents obtained from library management on utilization of e-books shows a steady increase in the use of e-books. Figure 6 below, shows a steady growth in usage over a period.
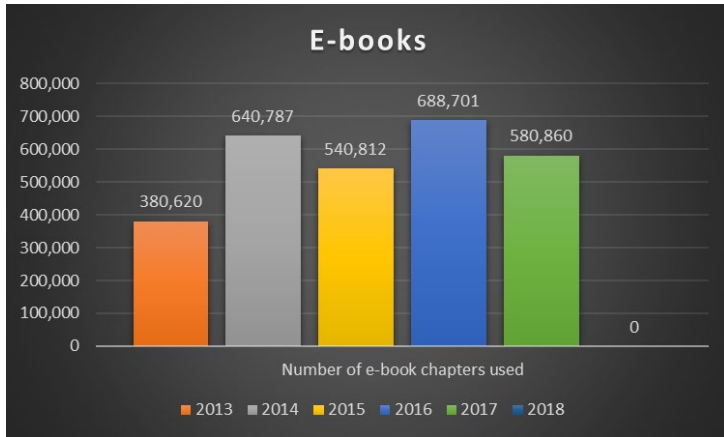
Figure 5. E-books collection usage (Source: UNISA Library)

Figure 6 shows e-books usage in the UNISA library. The statistics show chapters which were downloaded from library catalogue. The chapter usage surpasses the e-books title growth. So far, 2017 saw the highest number of chapters used growing up to 688,701 by the end of the academic year.

4.10.2. Librarian's observations on students' preference of e-books in UNISA library

This question was tapping on the observed knowledge of librarians again. They were asked to offer their knowledge about the students' preferences of e-books to other information sources. They provided mixed answers.

Librarians observed that students prefer e-books when looking for a specific piece of information but prefer hard copy books for long reading. They prefer to buy hard copy to keep for future reference. Another participant explained that students prefer hard copies because he sees them printing or wanting to print the chapters, they have downloaded from an e-book.

Yet other librarians explained that students prefer hard copies because they can take the whole book home. This luxury is not possible with e-books because they are not allowed to download the entire book but only ten percent according to copyright laws. DRM prevents them from keeping the book indefinitely. The chapters disappear after few days from the storage. This is prominent in e-books provided by EBSCOhost.

One librarian also explained it this way:

Yes, they prefer e-books. They just download the chapters on their laptops and memory stick.

Another librarian explained that UNISA has changed. The student population has more young people than ever before. These young people are technology generation. Technology drives their lives. Therefore, they get so excited when they encounter e-books. E-books does not take them away from their mobile gadgets. That is a plus for them.

4.10.3. Library policies and guidelines at UNISA library

The researcher wanted to know if UNISA library has policies and guidelines specifically designed for the use of e-books. In addition, what impact would such policies have on utilisation of E-books?

The librarians indicated that UNISA library has no specific policies related to the use of e-books. The library offers e-books to students according to the purchasing license agreement with e-book providers. DRM software and copyright laws prevent students from downloading the entire book from the library catalogue. The only policies that one librarian mentioned are put in place for the use of general e-resources from UNISA library. E-books makes one section of the entire electronic resources provided by UNISA library. They are presented as terms and conditions of use for all users in the UNISA library catalogue. A user must accept by clicking "I agree" button on the library catalogue page before given access.

4.10.3.1. Terms and conditions of utilising electronic sources at UNISA library

Access and usage of electronic resources made available by the UNISA library are governed by licence agreements between the University of South Africa and the publishers and providers of electronic resources.

Licensed electronic resources are restricted to authorised members of the UNISA community and on-site users of UNISA library. The resources may only be used for the purposes of research, teaching and private.

(a) It is acceptable for an authorised UNISA library user to:

- Search, view, retrieve and display the resources for the purpose of non-commercial research, teaching and private study.

- Save, print, download or make copies of reasonable amount or parts of a resource (Such as individual journal articles or chapters) for non-commercial personal use.
- Share content only with other UNISA faculty, staff or registered students.
- Post links to specific content in such a way that it is available only to other authorised UNISA users.

(b) It is not acceptable for an authorised UNISA library user to:

- Use the electronic sources for commercial purposes by selling or re-distribution of content to users outside the UNISA community.
- Permit anyone other than authorised UNISA users to access the licensed content.
- Engage in systematic and substantial printing, copping or downloading of content such as entire journal issues, Financial or dataset or complete book titles.
- Post actual content or journal articles to a website or listservs, (private, e.g. corporate internet) or public.
- Copy, remove, obscure or modify any copyright or ownership marks included in the licensed resources (University of South Africa 2004).

4.10.4. Effects of guidelines and policies on utilisation of e-books in UNISA library

On this section, the librarians informed the researcher that there is no policies and guidelines in UNISA library for the utilisation of e-books. In their view, favourable policies would make using e-books in UNISA library easier and attractive. While guidelines would help those, who are not in the know, adapt e-books easily. As a result, usage would grow substantially.

4.10.5. Library's use of user feedback to improve service provision

For the delivery of services to improve in any organisation, a coordinated effort is required to collect and process information from the client so that the services are tailored according to their needs. UNISA library is no exception. The researcher asked the librarians for information on the library's use of user feedback systems to improve service provision.

Some librarians reported that top down style of decision making is taking place in UNISA library. Consultations do not happen, especially with junior staff when it comes to decision making processes on technology adoption. Top management take decisions and impose them on the rest of the staff.

One librarian said;

> *Librarians who are interacting with students every day are the right people to consult to improve services in the library. They have information and ideas, which may improve services such as e-books provision, but there are no channels where they can put their ideas forward to management.*

Others reported that apart from user satisfaction surveys which take place now and again, there is no platform for librarians to give feedback to management about the needs of the library.

4.11. LIBRARIANS' PERCEPTIONS OF E-BOOKS AT UNISA LIBRARY

Three questions were posed to ascertain the librarians' perceptions of e-books at UNISA library.

> Do you think e-books are important information sources for a long-distance institution like UNISA?
>
> Why do you support the use of e-book at UNISA library?
>
> How would you rate the student excitement for e-books at UNISA library?

The following are the findings for these questions:

4.11.1. Importance of e-books as an information source for UNISA students

The participants were asked if they think that e-books are an important information source for a long-distance institution like UNISA. There was an overwhelming agreement on importance of e-books to UNISA library. All the participants agreed that e-books are important source of information for UNISA students. They explained that UNISA is a long-distance education institution, which means that not all students live around the campus or town. In its nature as an ODL, it attracts students from all over the world. Some of their observations are reproduced below:

o *Yes, absolutely. Yes of course they are. They are very important. Because the students can access them 24/7 without having to come into the library or relying on library services. No. it's very important.*

- o *Definitely! It's a distance education. We have to use e-books but besides, this is twenty first century. We must move with the trends. That's the latest trend.*
- o *Students are always happy to find e-books which are readily available to use. They don't have to come to the library to get a book. So, yes, e-books are very important information source for UNISA library.*

These types of sentiments were voiced by every librarian who was involved in this research.

4.11.2. Reasons for supporting or not supporting e-books in UNISA library

On the question on the possible reasons for supporting or not supporting the use of e-books at the library, the librarians had the following to say:

- o *E-books are very important to a long-distance institution like UNISA because they are available around the clock, 24 hours a day.*
- o *They cut the risk of UNISA books getting delayed, lost or damaged through the postal system.*
- o *E-books allows real time access. Students do not have to walk to the library to borrow books.*

E-books cut out the need for extra space for shelving. Depending on the type of license, more than one student can use the same copy at the same time. No one can hide e-book for himself as students do with hard copies. E-books reaches students wherever they are if there is an internet connection. They save on time and cost.

- o *There is critical aspect of space in libraries as collection grows. E-books are advantageous because they do not require a lot of space to store.*
- o *The library stores e-books in computers, which are also used for other functionalities of the library.*
- o *Students are delighted that they can have material in e-books which is always there. One other important aspect that we must not forget is that, e-books is an embodiment of latest trends in libraries, both academic and public.*
- o *No library is sitting without e-books or considering of purchasing e-books.*
- o *Libraries are pushing for a future with libraries without shelved books.*
- o *It is a trend*

4.11.3. Librarian's observation on students' excitement for e-books in UNISA library

The librarians were asked to rate the student's excitement for e-books in UNISA library. The answers were varied. One librarian explained it like this:

- *Mmm.. the excitement? Usage of e-books, it's a convenience. It's a convenience for other students. But like you and I know, or we say is a preference as well. Some students will be excited to be using e-books, but it goes with the strain of reading from a small screen. Others would prefer print because it has different smell, feel and it's about preference.*

- *So, in terms of excitement? E-books will excite those who are into e-books. Definitely, those who are not into e-books will not get excited. They will always find a reason why not to use e-books.*

Yet, another participant expressed her views this way:

> *Aaaam! Okay. I think we have to be divided into two, but, because we do have, remember, UNISA carters for young adults, senior citizens, and my age group, some, they really feel that they need hard copies. They are intimidated by technology. And the other students, the young adults, they are really excited about e-books. That's what they want. They just want the click, click. Those are the Y generation of the click. They are really, excited about e-books*

Others though, had a different view on students' excitement about e-books. They cited difficulties that other students face in pursuit of utilising e-books such as internet connectivity and other social economic problems that students face.

4.12. ICT DEVICES AND SKILLS NEEDED BY POSTGRADUATE STUDENTS TO EFFECTIVELY USE E-BOOKS

Technological advances in ICT have enabled e-books to reach a level of importance for academic libraries with so many devices to support them. Companies have come up with different types of gadgets to store and make e-books better. The gadgets have appeared in different shapes and names. Apple, Sonny, IBM, Panasonic, Amazon, Barnes and Noble and Toshiba are some of technology companies which have worked so hard to develop these gadgets to make them favourable for the use of an e-book (LaMagna, Hartman-Caverly and Swenson 2015; Gibson and Gibb 2011; Griffey, 2010; Watters 2012; Wilson, 2014; Buzzeto-More, Sweat-Guy & Elobaid 2007).

As a result, the researcher wanted to know if the librarians knew the type of devices students use to access and utilise e-books in the UNISA library and if there are any mechanisms that the UNISA library has put in place to increase utilisation of e-books. Two questions were posed as follows:

What type of devices do you think UNISA students use to utilise e-books in the library?

What mechanism has the UNISA library put in place to increase utilisation of e-books?

4.12.1. Type of devices used by Unisa students to access and utilize e-books

Several types of devices were mentioned by the respondents. One participant had this to say about the devices that UNISA students use to access and utilise e-books:

Mostly laptops and their phones. Those who have smart phones. I mean that's the only way to access them. What else? IPad, those who have iPad. Then we know….

The rest of the participants agreed that laptop computers, tablets and personal computers are commonly used devices however, one participant disagreed that students do not use smart phones to access and utilise e-books from UNISA library because smart phones have small screens and they cannot do school work on such a small screen.

4.12.2. Mechanisms to increase e-books usage in UNISA library

A question was posed to understand special mechanisms or initiatives that the university library is using to increase utilisation of e-books by UNISA students. One librarian said that there is nothing that the library has put in place to make students want to use e-books. He suggested that the best way of making UNISA students wanting to use e-books is only if UNISA library stop buying hard copy books all together. He put it this way:

None. I will tell you something that I think may be UNISA abuse or is not using can be useful. Some of the books that UNISA is purchasing, maybe they need to stop buying hard copies. As far as my memory is concerned, there is not any mechanism that UNISA is using to make students aware or to make students want to use e-books. But they can, the easy mechanism, the obvious mechanism, aa on personal thinking, is not to push but to make them have no

other resource except an e-book. If the students do not have hard copy alternative, they will use the e-books.

Yet another librarian pointed out that there is no special mechanisms put in place by the library to increase e-book usage in UNISA library but takes upon herself that every time students come for assistance, she mentions availability of e-books in the library and encourages the students to utilise them .In the end, the rest of the librarians expressed same sentiment that there is no special mechanisms for increasing utilisation of e-books in UNISA library.

4.13. FACTORS THAT AFFECT POSTGRADUATE STUDENTS UTILISATION OF E-BOOKS IN UNISA LIBRAY

The researcher asked the following questions to respond to the factors affecting postgraduate students utilisation of e-books at the UNISA library from perspective of librarians:

What are the factors you think drive students to utilise e-books in UNISA library?

How easy is it to access and utitlise e-books at UNISA library?

In answering the question on factors affecting utilization of e-books, librarians explained both positive and negative factors as follows:

4.13.1. Factors that encourage students to utilizing e-books in UNISA library

In this question, the researcher wanted to enquire from the perspective of librarians, the factors that influence postgraduate information science students to utilise e-books in UNISA library. One participant pointed out portability, Absence of hard copies on the library shelves and easy access to e-books and the fact that students do not have to be in the library physically to use e-books as some driving forces pushing UNISA students into utilising e-books.

Other librarians pointed out that 24/7 availability of e-books, may be one of the driving forces behind students' use of e-books. The e-books are available from any location where there is internet connectivity. One librarian pointed out that UNISA students use e-books not out of choice. Most use them as an option when they cannot find the books they are looking for on the shelves or waiting period puts them at a disadvantage. They use them when they cannot find hard copy books they are looking

for on the shelves. Another point mentioned is that postal collection takes time to get to the students.

Another librarian pointed out that the UNISA library has a collection of books, which is only available through online request.

> *Walk in students cannot borrow from this collection. This was done to give equal opportunity to every student regardless of his or her location. These books are recommended, prescribed and research book titles of different fields. The collection is located at a secure area in the main library. Only staff is allowed access to it. Walk in students are also required to request as anyone else. The problem with this online request system,*

The librarian continued,

> *Is that, it takes time to deliver books to the students. Some books may even get lost on the way. During strikes at post office, books are not delivered at all. Therefore, a student is more than happy to find a book in an e-book form that he/she can use immediately.*

A second librarian mentioned and explained further about the special collection.

> *As a distance learning institution, UNISA needs to carter for every student by providing adequate and good services to every student regardless of geographical location. UNISA library created a special collection. They call it postal collection to bridge the massive disparity between students who can walk into the library and those who are far away. The criteria for using this collection is that a student must request a book through the online request system integrated into the library catalogue, even if one walks in and can collect it at the same time. This service is based on first come -first saved principle.*

4.13.2. Factors that may discourage postgraduate students' utilization of e-books in UNISA library

On factors which may discourage students from utilising e-books in UNISA library, librarians cited the following as hindrances that may persuade students away from utilising e-books:

- o *Lack of advanced computer knowledge*
- o *Lack of data bundles for internet connectivity*
- o *Multiple authentication stages to databases holding e-books; and students struggle with e-reader software.*

4.13.3. Ease of access and utilisation of e-books in UNISA library

Then the researcher sought to understand if it was easy for students or any user to access and use e-books from UNISA library. The librarians agreed that it is easy to use e-books in UNISA library if students visit campus.

One librarian had this to say on ease of use:

> It also depends. Here it's fine. When you are on campus it is easy. But when you are off campus, sometimes it's difficult to get to those links. Sometimes the off-campus link is not working. The publisher has changed the address, so, depending on where people are, using e-books from UNISA library can be easy for others and difficult for others.

The librarians pronounced their concern for out of campus students, especially those living in rural areas. These are students who were supposed to benefit most from e-books. One librarian explained thus:

> UNISA library has two links to the e-books. One is a link that can be used on campus while the other link is for out of campus connectivity. If the out of campus link fails, the students will not be able to use e-books.

The librarian continued to explain that;

> URLs of e-books keep on changing. Sometimes they change with notice from the e-book's providers, other times without notice. If such a thing happens, no one gets access to e-books as it happened few years ago. UNISA library lost access to thousands of e-books because Vendors changed URLs

The librarian explained that even articles do not work sometimes.

> No. even the articles. If I send you a list of articles and you are sitting somewhere in Giyani (a rural town in South Africa), you click on the link and it doesn't work. What do you say? You think I am... I have sent you wrong stuff.

Another librarian agrees in part. She put her views though, without considering anything else while participant number ten considers other elements of the e-book. This is what she said.

> Access in the library, very easy. They just go to the third floor, access those computers. If you are a senior student, you can go there on the fourth floor. Am sure they have computers. The ladies working there, they provide computers. On the information desk, the ladies and gentlemen that work over there, will definitely, help. The access is very, very easy.

4.14. SUMMARY OF THE CHAPTER

The findings have shown that UNISA library has qualified staff with qualifications in library and information science, communication science and even theology. Many of them are pursuing even higher qualifications. It has also showed that UNISA staff believes that students are aware of e-books in the UNISA library. They know that the number of students who are aware of e-books is not high as expected though. The library needs more aggressive awareness campaigns to sensitise more students about e-books.

On the other hand, the findings show that students are excited about e-books if they have the means to access them. Laptops, tablets, smart phones and personal computers are favourable devices, which UNISA postgraduate LIS students use to access and utilise e-books. The findings have also showed that librarians need to conduct more library training to give students skills they need to utilise e-books and other library resources.

Some librarians think that UNISA library should stop buying hard copy books and concentrate on e-books if they want to increase utilisation of e-books. The librarians think that UNISA students who are excited about e-books are those who have means to use them. They agreed that e-books are an important information resource for a distance learning institution like UNISA. Missing books on the shelf, 24/7 availability, up-to-date information are some of the factors which may be driving students to using e-books.

Meanwhile, students pointed out some reservations about e-books. They indicated that they are not problem free information resources. They pointed out things like e-books not opening properly outside campus, databases which are not easy to navigate, not enough awareness campaign about e-books in UNISA library as some of the areas that need some improvement. These are some factors, which may discourage some students from utilising e-books. However, most students agree that e-books are an important information resource for a distant education institution like UNISA. Therefore, UNISA library should continue investing in more e-books.

CHAPTER FIVE: INTERPRETATION AND DISCUSSIONS OF THE FINDINGS

5.1. INTRODUCTION

The previous chapter dealt with presentation and analysis of data, which was collected, from a questionnaire and interviews. In this chapter (five), data is interpreted and discussed. The researcher discussed the findings according to the objectives of the research. Themes derived from the objectives helped to structure the discussions. The first theme is the demographic information of both respondents (students) and participants (librarians).

5.2. DEMOGRAPHIC INFORMATION

This section discusses demographic information of participants who were library staff and the respondents, who were library and information science students who registered in the academic year of 2018. Gender, qualifications, age group and province of residence was discussed.

5.2.1. Gender for respondents and participants

This finding shows that majority of respondents in this survey were females. Of the 25% who responded to the questionnaire, 50 (60.24%) were female respondents while 32 (38.55% were male respondents. And one (1.20%) respondent was undecided. A particular reason why there is more female respondents can be the same reason why library and information science profession is dominated by females. As we have learned from the literature review, it is a well-known secret that information science profession is dominated by females.

In the interviews, there were two males and eight females as participants from a total sample of ten library staff members. These findings correctly reflect the composition of professionals in the library and information industry. The literature reveals this kind of dominance from the beginning of modern library and information science as a profession. The legacy owed to Melville Dewey; the character believed to be father of modern librarianship (Prescott 2001).

5.2.2. Academic qualifications of respondents and participants

The findings are showing that the library and information science profession is still growing. It is still attracting more candidates to replace those who are retiring from the

profession. All the respondents have an undergraduate degree. A total of 19 (22.89%) were students who had undergraduate degrees studying towards an honour's degree. Majority 31 (37.35%) have already obtained a post graduate degree while 24 (28.92%) were doctorate students and 4(4.81%) percent ticked the" other" option and specified that one had a Bachelor of Information Science degree, the other just indicated degree while the third, said post grad and the last one indicated post graduate diploma in information science.

This probably indicates that the respondent has an honours degree in another field of study as it is common for people who do not have library and information science as their first degree to do a post graduate diploma or certificate to work in the library and information science field. According to the categories of qualifications available in the department of Information science, the post grad might mean post graduate diploma in information science.

A postgraduate qualification is necessary in the field of library and information science because some positions are only available to individuals who are highly qualified. Academics for example, one cannot lecture in department of information science without postgraduate qualification. It is not only for professional recognition, it is also a catalyst to provision of quality, professional services and professional growth. All the participants had postgraduate qualifications

5.2.3. Qualifications under study

The next question asked about the qualifications that each respondent was working on obtaining at the end his/her chosen course. One respondent 1(1.20%) indicated that he/she was working on an undergraduate degree. A total of 34 (40.96%) respondents indicated that they were studying towards an honour's degree. A further 21 (25.30%) respondents were registered master's students and 23 (27.71%) indicated that they were aspiring doctors on a doctorate program. Only 4 (4.82%) chose the other option. One had just finished a doctoral degree while the other had just finished an honours degree. One did not indicate the expected qualification. Table nine showing qualifications understudy.

All the respondents were current students studying for a new qualification. Since they were all postgraduate students, the research revealed that they were registered for a higher qualification of a certain kind from postgraduate diploma to doctoral studies. It is not known how many participants were working because such a question was not

posed to them. On the other hand, the participants were staff members of UNISA library. It was not surprising to find that not all of them were pursuing higher qualification. They might have different reasons for not embarking on obtaining higher qualifications but among those who were studying further, there were doctoral, master's and even honours students.

5.2.4. Age group of the respondents

The findings in this question show an encouraging trend. Majority of the respondents are between the ages 26-40 years old. This shows that young people do not regard University of South Africa (UNISA) as an institution that caters for old working people only as initially designed (Spies 1997:8). Library and information science students, just over the aged of twenty-five undertaking to doing postgraduate studies, might also indicate that young people are not rushing to go out looking for jobs with an undergraduate degree.

Postgraduate degree increases employability especially in the library and information profession where postgraduate qualification is encouraged. It is, therefore, Important for any undergraduate degree holder to looking at obtaining a post graduate qualification to align him/herself for better positions and occupational growth in the field. Most importantly, the profession requires a postgraduate degree for an individual to be called a professional librarian. Like in Canada and the United States of America, a minimum of master's degree qualifies and individual for a post of librarian (American library association 2018; Canadian library association 2018).

5.2.5. Province of origin of respondents

The findings show that none of the respondents live in Eastern Cape and Northern Cape provinces of South Africa. Only 1 (1.20) lived in Free State. 4 (4.82%) came from Western Cape, 6 (7.23%) came from KwaZulu Natal, 2 (2.41%) indicated that they resided in Mpumalanga; 11(13.25%) were living in Limpopo province. 4 (4.82%) lived in North-West province while Majority 36 (43.37%) indicated that they lived in Gauteng province of South Africa. True to UNISA's international nature, 19 (22.89) were international students. Five respondents were from Ghana, two from United Arab Emirates (UAE), five indicated that they were from Zimbabwe, two from Botswana, two from Namibia and one each, from the following countries: Eswatini (former Swaziland), United States of America (USA) and Nigeria.

The findings show that most respondents are residing in Gauteng province of South Africa. This is because the University of South Africa's main library is situated at the main campus in Pretoria, which is in Gauteng province. Even though UNISA is a long-distance institution of higher learning, its library is well-resourced, and has a research-commons for postgraduate students. Many students from all provinces of South Africa and outside of South Africa, for this reason, come to Pretoria to study and conduct research in UNISA library. The research commons offer postgraduate students comfortable sitting, computers and unlimited internet connection. Therefore, this may be the reason why majority of the respondents resides in Gauteng province.

The results also showed the international nature of the University of South Africa. As a result, this research involved students from nine different countries. The countries included South Africa, United States of America, United Arab Emirates, Nigeria, Ghana, Eswatini (Swaziland), Botswana, Namibia and Zimbabwe. This diversity of student population requires a library with robust type of information resources which is flexible and versatile enough to reach them all on time, and e-books, fills this role well. As e-books cut time and geographical boundaries with the use of ICTs, the UNISA library can offer services to all its student population regardless of their geographical location.

5.3. EXTENT OF POSTGRADUATE STUDENTS` AWARENESS OF E-BOOKS IN UNISA LIBRARY

This section discusses the findings under the objective "to establish extent of e-books awareness by postgraduate library and information science students in UNISA library". The research results show that awareness is an important aspect for the efficient utilisation of e-books in any academic library. The theme discussed different aspects of e-books awareness. The discussion is divided into subheadings below for better management of information and ideas.

How students become aware of e-books in UNISA library

Methods of creating awareness among students

5.3.1. How students became aware of e-books in UNISA library

On the question of how respondents became aware of e-books in UNISA library, the findings show that majority (38.55%) of respondents were introduced to e-books in UNISA library. Many factors may contribute to this finding. First, the respondents might

have studied their undergraduate degrees at UNISA. And UNISA is the only academic library they first used which has e-books collection. The only possible place to find e-books was a university library.

However, the second largest group (18.07%) of respondents shows that they were library users before coming to University of South Africa library because they came in touch with e-books at a library other than UNISA library. These might be public libraries or libraries of other universities since the population is composed of post graduate students.

The other factor may be the international nature of the University of South Africa. International students were introduced to e-books somewhere else. They may have access to e-books through their public libraries, their initial universities or even high schools. Ten percent indicated other but did not elaborate, which may mean that they were not introduced to e-books in a library of any kind.

The internet provides a platform which allows people to view or buy e-books and upload them into their reading devices. Online bookstores such as google books and Amazon have set up shop on the internet to sell different types of merchandise, including e-books. Since they are postgraduate students, it is possible that these respondents were well accomplished users of e-books even before coming to use UNISA library. They might have bought their own e-books from Amazon or google books.

The interviews revealed that there are members of staff who have worked in UNISA library for more than forty years. Way before e-books came into being as academic learning tools. E-books found these librarians in UNISA library. We can, therefore, conclude that these librarians may have learned about e-books in UNISA library or within the industry before UNISA library acquired them.

5.3.2. Methods used in creation of e-books awareness among library and information science students in UNISA library

University libraries devise different methods of communication with their users such as students to communicate messages relevant to optimal utilisation of information resources. This section discusses methods that UNISA library uses to convey messages to students about library services and resources, in this case, e-books. The theme is discussed under the following sub-headings for the convenience of knowledge segregation.

Channels of communication with students

Frequency of communication from UNISA library to students

E-books awareness campaign efforts by UNISA library

5.3.2.1. Channels of communication with students

The University of South Africa use different communication channels to get messages through to students. They use e-mails, SMSs, social media such as Facebook and twitter, the UNISA radio and posters in and around the UNISA library.

To answer the question as to what channels of communication does UNISA library use to convey messages to students about e-books, this study found that 38 (45.78%) ticked e-mail messages as communication they receive from UNISA library about e-books. And 27(32.53%) mentioned library training as means of them knowing about e-books developments in the library. While a 15 (18.07%) were able to see posters in the library mentioning the presence of e-books or availability of new databases with e-books in them. Only 2 (2.41%) indicated SMS messages as the way the library communicated with them about e-books.

The findings show that by using multiple platforms, university libraries may be able to disseminate information to students efficiently. A big chunk, (45.78) percent of respondents indicated that the library sends messages to students through e-mails. This works well for the UNISA library because every student has a university issued e-mail address. It is also true that not every student has a good internet connectivity to check e-mails, hence, the other options are available in the quest to reach all students registered at UNISA. SMSs are particularly good because they work with both smart phone and ordinary mobile phone. Students can receive SMS messages anywhere, where there is a mobile telecommunication network and they do not need to have data in their phones to receive an SMS. Meanwhile posters in and around the library work well with walk in students. In the interviews, the librarians reported that in the training provided to students, they do not only teach the students on how to use the library resource but also inform them about new technologies in the library such as e-books or new applications.

Further, the interviews revealed that UNISA library has presence on social media such as Facebook and Twitter. The UNISA library marketing section creates messages about e-books and other new materials in the library and post them on social media. The library social media platforms are up to date because they are

updated almost every day. Libraries have made great strides in using social media platforms to enhance awareness and service provision. Awareness increases intentions and utilisation of e-books (Tri-Agif et al… 2016)

This finding is in line with international trends. In a study conducted in the United States by Guo, Liu and Bielefeld (2018), found that 100% of library mobile websites display links to their social media pages such as Facebook and Twitter. As a distance learning institution, it is important for University of South Africa library to have presence on the social media networks because the internet allows transfer of information to places regardless of boundaries, time and distance.

5.3.2.2. Frequency of communication from UNISA library

University libraries communicates with students for different reasons such as alerts on expiring book loan periods, announcing new books in the library, an introduction of a new technology or for library training schedules. Some of these activities occurs multiple times over the course of an academic year.

To answer the question on the frequency of communication between UNISA library and students about e-books, the findings show that 2 (2.41%) ticked once a week. Another 2 (2.41%) indicated that they receive e-book notices every two weeks. While 19 (22.89%) indicated once every beginning of the month and majority 49 (59.04%) said they never received any notice messages from UNISA Library about e-books.

In response to a question about how often students receive communication messages from UNISA library, majority of respondents in this research revealed that they never received any communication from UNISA library about e-books. This finding is surprising that majority of respondents never received any communication from UNISA library about e-books because every registered student has his/her telephone number as an option for communication. If an e-mail does not work, the student cannot be in the library physically, a telephone number is the most viable option for communication with UNISA library.

Librarians reported in the interviews that as part of their job, they send e-mails to students to inform them about new information sources as well as materials which are already available in the library, this include e-books. They even conduct training online with students who are far away and cannot physically come to the library.

Every registered student has an e-mail address which is provided by the University. Therefore, all e-mail communications that the university make with students is through

@Mylife.unisa.ac.za e-mail address. The research found out that in most cases, the creation of awareness of e-books is left to individual librarians. This takes places in the contact areas of the library such as the lending desk and information desk.

Additionally, personal librarians (PL) for example, they are responsible for the creation of lib-guides. Lib-guides are uploaded on the UNISA library website. Lib-guides are carefully constructed instructions to help library users (students) to find or use the UNISA library resources such as e-books (University of South Africa 2018). Information librarians also known as reference librarians, help the students with guidance on how to find resources they need for their studies, they also point out to the students that the library has e-books collection whenever they come to ask for information about a hard copy books and other information. They are the first people to announce any new technology in the library because they are in direct contact with students every day. If students cannot find the hard copies of the books they are looking for, they are advised to try e-books. In some cases, information librarians show the students step by step process on how to navigate the library's online catalogue. The research also discovered that not all librarians are expert in e-books. Few people in the library may be considered experts in e-books. If students do not meet these few individuals on their trips to the library, they may miss important information session about e-books. However, they were found to be knowledgeable about the library's collection in general.

Students who indicated that they never receive communication from UNISA library, may be part of students who never activated their student e-mail address or open their e-mails because they either do not have access to their University issued e-mail addresses or they have no access to internet connectivity. In so doing, they miss important communication with their University.

Additional 19 (22.89) percent indicated that the UNISA library send them notices at the beginning of every semester. This is in line with personal librarians' duties. Every college has a personal librarian assigned to it. It is their duty to inform newly registered post graduate students about the services that the library offers to them. The personal librarians also create and post UNISA libraries lib-guides to all postgraduate students. In the guides, they include instructions on how to access and utilise all UNISA library resources, including e-books. This was reported during the interviews as well. Lastly 2 (3.61%) each mentioned that they receive notices once every two weeks and once a week respectively. The interviews further revealed that there is no official program

in UNISA library to create e-books awareness among students, but librarians take it upon themselves as their responsibility to disseminate information on e-books to students.

5.3.2.3. E-books awareness campaign effort by UNISA library

When libraries introduce new technologies, such as e-books, it is their duty to create awareness campaigns among students so that they are all informed about the new technology. The heightened campaign programmes help students to become aware of the new technologies and decide whether to adopt or not adopt them.

This section sought to raise the question about whether UNISA library is making enough effort to create awareness about e-books among students. Scaled answer options on degree of agreement or disagreement were provided. The highest degree of agreement was strongly agree and the lowest level of disagreement was strongly disagree.

Respondents are divided on this issue. Majority 26 (31.71%) are neutral. They do not agree or disagree with the statement. A further 22 (26.51%) agree with the statement that UNISA library is indeed, making enough effort to create e-book awareness among students. In addition, 4 (4.82%) strongly agree with statement. At least 18 (21.67%) disagree that UNISA library is making enough effort to create e-books awareness among students and 12 (14.46%) strongly disagree.

The findings in this section highlight the need for a concerted effort by UNISA library to create e-books awareness to reach the users. If we combine those in disagreement, 18+12 =? It will give us a total of 30 (36.14%) of the respondents who disagree with the statement that UNISA library is making enough effort to create e-books awareness.   It is convincing that UNISA library has left other students behind in its effort to create e-books awareness. We can also be convinced that there is still work, to be done by UNISA library on e-books awareness campaigns.

The findings show that UNISA library is not putting its right foot forward first when it comes to conducting awareness campaigns for e-books in the library. In the interviews, the librarians were not convinced that the library is making good enough effort in this regard. They reported that they see no active e-books awareness campaign activities being mounted in the library. They cited inadequate effort put up by UNISA library to market its e-books collection. The librarians as well as the students believe that UNISA library is not doing enough in this regard.

The interviewees came up with a suggestion that a special e-books day, once every month or once at the beginning of every semester, would be a great visible campaign that students would pick up easily. An e-book day in UNISA library would create great hype about e-books. It would also help build interest in students to explore more about e-books. Videos from these events would be posted on the library website or social media platforms to benefit majority of students who are not physically able to be at the main library in Pretoria or branch libraries.

5.4 EXTENT OF E-BOOK USAGE AT THE UNISA LIBRARY

Success of a library collection can be measured by conducting user surveys or evaluating user statistics collected on daily use or number of visitors to the library. This section discusses the following thematic areas:

Number of students using e-books at the library

Reasons for using e-books

Reasons for not using e-books

Purpose for which e-books are used

Main sources of e-books

Preference of book format

Reasons for preferring one book format over the other

Improve utilization of e-books at UNISA library

5.4.1. *Postgraduate students' use of e-books at UNISA library*

To answer the question of whether respondents have used e-books before, 98 % indicated that they used e-books before while 2% showed that they had never used e-books. It is intriguing to find out that even at this level of study, a postgraduate stage, there are still some students who have not used e-books yet. Whether it is a question of lack of knowledge about e-books, computer illiteracy problems or just a preference, that they never use e-books is a fascinating prospect.

These two respondents who indicated that they have never used an e-book may be old school type of students who do not want to transition and adopt new technologies. Or the type of a user who never find excitement or usefulness in adopting new technology (Tri-Agif, Noorhidawati and Ghalebandi 2016). In the comments, one respondent wrote that he never used e-books because he has always used hard copy books. They are easy to use, and he/she can see them.

On the side of UNISA library, it is encouraging to see that 98% of the respondents in this study have used an e-book before. This can be translated that they are continuing using e-books in UNISA library. The finding can also be telling of the bigger picture that e-books have arrived and settling well with the users in academic libraries, especially the UNISA library. Therefore, university libraries should look at e-books as a real alternative to hard copy books.

5.4.2. Postgraduates reasons for using e-books at UNISA library

Users have compelling reasons why they choose one product over the other. Like consumers elsewhere, students have more than one type of information resources to choose from in a library. These are hard copy or print books, electronic resources, which including e- books and audio books, e-journals, e-magazines or e-papers to choose from in their libraries (Sanborn 2013). Microfiche is another additional type of information resource. Microfiche is a kind of an information source which is created by micro photographing book pages, magazine pages or newspaper pages and put them on a small film. They require special equipment to read them (Technopedia 2019; Mencic-Abradovic 2011:22).

In this question respondents were asked to indicate from a list of answer options the reasons why they tend to use e-books. This study finding tells that 20 (24.10%) chose 'portability' as a reason why they use e-books. At the same time, 32 (38.55%) indicated that the fact that 'one e-book reading device can carry multiple copies of e-books', makes it easier for them to carry and use e-books. Moreover, a further 27 (32.53%) think that e-books are 'up to date sources of information' that is why they use them. Another 36 (43.37%) considers flexibility of e-books because they can be used by more than one user at the same time and anywhere as a reason why they use them.

This gives them an opportunity to use a copy of an e-book regardless of whether someone is using it elsewhere. However, this depends on the type of licence the library opted to pay for. This flexibility serves students well during high volume periods when they are writing assignments or preparing for examinations (Sanborn 2013).

If the licence is open to multiple users at the same time, students can beat traffic jams looking for the same copy of an e- book. Furthermore, 10 (12.05%) said they use e-books because they are visible in UNISA library and UNISA catalogue while 7(8.43%) use e-books because of training they received from the UNISA library. The

training gave necessary skills to identify and utilise e-books from UNISA library. It also gave the students necessary skills to navigate the online library catalogue to find e-books. While visibility plays a greater role in enabling students for maximum usage of e-books in any library, in the interviews, librarians also reported some of the reasons why students utilise e-books as the 24/7 availability and that most students use e-books as an option when they cannot find a hard copy on the shelf.

5.4.3. Reasons for not using e-books in the UNISA library

It was revealed in the literature review, that despite popularity that e-books are gaining and the push by academic libraries to build up strong e-book's collections, there is still resistance to using them from some students and faculty (Khan & Underwood 2013:10). In answering the question why respondents may choose not to use e-books, the findings show that 13 (15.66%) pointed out that e-books cannot be used independently without a device. This applies to electronic resources in general. Unlike hard copy where a user can just pick a book and read, there is a need for an electronic device to read an e-book.

This is an extra burden on the reader and can push away students from e-books. And 1 (1.20%) said that devices are expensive to buy. Although there is a wide variety of electronic devices on the market, it does not translate into lower prices. E-reading devices are still expensive to purchase in South Africa and outside of South Africa. Meanwhile 10 (12.05%) chose 'cannot be accessed without battery power or electricity.

Constant need for charging reading devices can be a hindrance especially in places where there is no reliable power supply. A student in this situation would likely refrain from e-books. Then 6 (7.23%) indicated that they might not use e-books because one cannot open multiple pages of an e-book at the same time. In addition, another 6 (7.23) indicated that a real book in their hands, is what they need. Some people cannot work well in electronic environment. Without a book they can feel and flip the pages, they feel like working in a vacuum.

Another 3 (3.61%) indicated that they did not know how to search for individual e-books in UNISA library. Lack of computer skills can be a major hindrance to students wanting to utilise e-books in academic libraries. Training plays a crucial role in eliminating this problem. As shown in the interviews from the librarians, regular training of students to gain necessary skills to access and utilise e-books is important. As one

librarian said: "Those who do not attend library training are left behind and they struggle". Reading on a screen is a problem that many researchers pick up in their studies of utilisation of e-books. However, lack of training and skills to utilise e-books can be a major reason why one would refrain from utilising e-books.

A substantial number of respondents (i.e. 19; (28.89%) showed that they do not like reading on a screen. Reading on a computer or e-book reading device screen is not comfortable for some people. Problem with reading on a screen has been picked up by many researchers as one of disadvantages of using e-books. Interestingly, all the respondents knew that UNISA library has e-books collection.

5.4.4. Purpose for which e-books are used in UNISA library

Students use e-books for different purposes. The literature review revealed that students use e-books for leisure reading, teaching, studying and or research. In answering the question, for 'which purpose do they use e-books'. Research and studies scored 43 (51.81%) and 32 (38.55) of the responses respectively, with only 7 (8.43%) indicating that they use e-books for leisure reading. No one indicated that he/she uses e-books for training purposes.

The findings show that researchers and students are embracing e-books in their academic lives. A bigger percentage was found to use e-books for research. However, not a big percentage is using e-books for leisure reading. E-books are known for problems such as glare of computer or mobile device screens and the need to have power source to power them (Mincic-Obradovic 2011:22). The findings also suggest that more e-books are used because they are part of academic work which has been prescribed for a course. In these findings, researchers are the majority users of e-books.

This may explain the easiness' of using e-books while conducting research, as it is possible for researchers to search selective information vital to the topic of study (Grudzien and Casey 2008:455). In the interviews it was reported that it is easy to use e-books especially when one is in UNISA library because there is stable internet connection. Students may experience some difficulties utilising e-books off campus because of factors that originates from UNISA and others which are of outside nature.

5.4.5. Main sources of e-books for UNISA students

The internet has broken the monopoly that libraries enjoyed for centuries as reservoirs and providers of information resources such as books. In addition, the World Wide

Web has made distribution of information easier than ever before. Almost any type of information is available on the internet, including books in the form of e-books. Yet Libraries have played a leading role in making e-books available to a wider number of users especially students, since they were introduced in the 1990s (Mincic-Abradovic 2011:9).

In this section, respondents were asked to indicate sources where they access the e-books, they utilise. Majority number of respondents 65 (78.31%) indicated that they find their e-books from UNISA library. In addition, 42 (50.60%) get their e-books from google books. Yet Another 14 (16.87%) chose Amazon as the entity where they get their e-books and lastly 3 (3.61%) indicated that their source of e-books is Takealot.com. Seventy-nine responded to this question.

Majority of the respondents, 65 (78.31) percent indicated that they find their e-books in UNISA library. This is making sense since the respondents are UNISA students. The library is there to meet the needs of students in terms of information resources for learning, teaching and research. Postgraduate students are likely to use online resources like e-books because they require numerous sources in the work which they do to finish research projects. Therefore, carrying hard copies may prove a heavy burden on their shoulders. That may mean that most of the e-books they get from UNISA library are for academic purposes as the collection development policy stipulates that only information sources which will help the university to reach its goals of providing relevant academic material to students shall be purchased (University of South Africa 2013).

Google books comes second. Google books has a bigger collection of free e-books of different subjects. Most of them are digitised material from old prints. No wonder that second majority of this finding show that respondents get their e-books from google books. The last two options, Amazon.com and Takealot.com are online retailers just as google is. The respondents who ticked the retailers may be e-books buyers trying to build their own virtual libraries (as one of the respondents said) at home or say in their devices. In addition, the international status of University of South Africa opens an opportunity for students who are outside South Africa to access e-books from other libraries of other institutions.

5.4.6. Preference for book format by UNISA students

Although it is preference that determines the format of a book an individual might want to use, sometimes it is about what is available rather than preference. The results from a question which asked respondents to indicate the type of book format which they prefer to use between e-books and hard copy or print book in their studies, showed a split of almost in half.   E-books took a narrow lead from hard copies. This was a yes and no answer type of a question.   Majority 43 (51.81%) of the respondent indicated that they prefer using e-books while 40 (48.19%) indicated that they prefer using hard copy.   This is a significant finding taking into consideration that majority of post graduate students in the library and information science field are in favour of e-books. These are future librarians and some of them are already practicing professionals. The future of information looks digital and will need librarians who will understand the need to keep a library collection which is electronic, with e-books as a backbone. And it is also a positive finding for UNISA library because it may support UNISA library's push for greater e-books collection. Acceptance of e-books by postgraduate library and information science students is a greater indication that e-books has a backing not only by students but by future librarians too. The drivers of the e-books industry for the future.

As postgraduate students, they are believed to have a better grasp of computer usage. However, one may argue that postgraduate student population is a mix of young and old. The old section still loves or prefers hard copy to e-books. After all, the difference in the percentages between those who prefer e-books and those for hard copy is just small margin at 51.89% for e-books and 48.19% for hard copies. Hence, we can stress that there is still resistance to complete switch to e-books. According to technology adoption model (Tri-Agif et al…2016), resistance to a new technology is always attributed to the prospective user not finding excitement and perceived usefulness in adopting and using the new technology such as e-books.

The findings showed that most respondents are young people in this research. They belong to the age group of between 26 and 40 years. We can confidently rule out technophobia (the fear of technology) as a reason why young people prefer hard copy books as compared to e-books. Young people are more adaptable to technology as technology drives their lives.

In the interviews, the librarians reported that students are happy to find e-books they can use instantly without waiting for someone to return a copy on the shelves.

They further reported that students are happy to use e-books to find bits of information they can use for their assignments but prefer hard copy for longer reading and future reference. This pushes students to purchasing the books they wish to keep for future reference. E-books fills this need in the library whenever print books are not available on the shelves. However, Mincic-Abradovic (2011: 21-2), argues that there are different reasons why users may pick a copy of print book over e-books. The author listed some determinants of users' preferences as follows:

Reading devices: e-books cannot be read on their own without electronic device and software, PCs, dedicated e-book reader, laptop or a smart phone. Electronic devices require electric power. Therefore, user must stay close to a source of or charge their mobile devices in advance.

Difficulties reading on the screen: Screens on computers and mobile devices have improved but people still find it uncomfortable reading on screen. Literature in the field reports that it is difficult to concentrate and absorb information reading on a screen.

Compatibility with citational software: Reference managing software such as Mendeley, makes it easier to compile a bibliography. It facilitates locating, managing and storing bibliographies.

5.4.7. Reasons for preferring one book format over the other by UNISA students

Regardless of the notable shortcomings that e-books tend to have, there are major advantages, which many users appreciate that make e-books competitive. The trend in higher institution libraries currently is going digital, which means embracing e-books (Mincic-Abradovic 2011; Sanborn 2013). However, old habits die-hard. The print book is still finding favour with many users.

This section, therefore, requested respondents to give reasons why they still prefer the hard copy book format to e-books. A list of options to choose from were put forward as answers. The findings show that 22 (26.50%) indicated 'easy to use more than one book at the same time', as one of the reasons why they use printed books. While 4 (4.82%), said that it is 'easy to put makers in the book' while majority 35 (42.17%), chose 'convenience and can be used without depending on devices and electricity' as reasons why they prefer hard copy to e-books.

Dependence syndrome is one setback that e-books suffer from. They cannot stand on their own. A user requires a host of aids just to read an e-book (Mincic-Abradovic

2011:22). There is a need for a device, either computer, e-reader, smart phone or tablet. There is also a need for software and a power source, battery or electricity, to read the content and internet connection if the e-book is not a download stored in the device (Mincic-Abradovic 2011:22).

The findings in this research, shows that majority 35 (42.17%) have pointed out the independence of print book. Despite the burden of carrying hard copy books, which are heavy, it has been proven that they are independent sources of information. One only needs day light to use them. No electronic devices, software, electrical power source nor database host required. And they outlive all software and devices which needs to be updated and upgraded now and again (Mincic-Abradovic 2011:22).

In the interviews, the librarians reported that despite the library having e-books collection, students still prefer to buy their own hard copies, especially textbooks so that they can use them as reference in future. This is because once they finish their studies, they have no access to e-books from UNISA library and cannot obtain copies as they are not allowed to print whole books.

The findings further tell that both e-books and hard copy or printed books have advantages and disadvantages. Therefore, there will always be a demand for both formats of books since human beings do not like the same things. However, e-books will dominate the academic scene, especially in academic libraries because the current trend is in favour of e-books. The use of both formats in an academic library is competitive because they complement each other. For example, when a hard copy is not on the shelf a student can use an e-book and when a student cannot download the whole book in electronic form, the student can use the hard copy where he/she has access to the whole book and can take it home.

The librarians involved in this study observed that students looked for hard copy books first when they come to the library. Only if they find out that the hard copy is not on the shelf, then they will consider an e-book. According to the librarian's observation, students utilise e-books as an option not a choice. They continued to explain that students are happy to find an information resource they can use instantly other than waiting for someone to bring a copy on the shelf which may take long time.

This finding concurs with several researchers who have found that e-books are good for short reading, in text search, portability and up to date information. Students love them but they prefer hard copies for long reading. The researchers further explain that students prefer e-books for specific information which they can easily search within

text. Some students do not like carrying heavy books on Daily basis. E-books eliminates that burden.

5.4.8 Improving utilisation of e-books by postgraduate LIS students in UNISA library

Service providers always look for ways of improving service delivery to their customers. Academic libraries are no exception. In answering this question on how the respondents thought UNISA would be able to improve utilisation of e-books in UNISA library, an assortment of answers was given for the respondents to choose from. Many of the respondents mentioned training and visible marketing as some major activities which the university may use to increase utilisation of e-books in UNISA library.

The finding shows that 65 (78.31%) are in favour of the UNISA library to conduct more awareness campaigns so that more students know about e-books in UNISA library. A further 32 (38.55%) think that purchasing e-books which are relevant to studies would improve utilisation of e-books. This is because the relevant e-books will attract users on their own as the books will be linked to different subjects of study. While 22 (26.51%) of respondents agree that creating slogans about utilising e-books may help improve utilisation of e-books among students.   And 41(49.40%) looks at conducting more training as more viable way of improving utilisation of e-books in UNISA library because students will also learn how to use them.

The findings from the interviews shows that there is no programmes or initiatives, which are specifically dedicated to increasing the utilisation of e-books by UNISA students in the library. Librarians reported that they have never seen anything of that sort yet. A suggestion from some librarians said that the best way to improve utilisation of e-books in UNISA library, is not only by conducting more training or mounting e-book awareness campaign activities, but by cutting off purchase of hard copy books all together. With the thinking that if the students do not have an alternative, they will use e-books. This type of thinking may sound radical for UNISA library which prides itself in the number of hard copy items on the shelves. UNISA library boosts of over 2 million items so far (University of South Africa 2018).

However, this thinking is in line with some universities collection development policy shift around the world in favour of e-books. Several research findings seem to agree with the ideas of this suggestion. Watson (2008) as cited in Martin and Quan-

Haase (2013), found out that adoption rates of e-books in higher education institutions are higher because print copies are no longer made available, forcing students and faculty to adopt and utilise e-books. The research suggests that students do not choose e-books route voluntarily all the time.

Some university collection development policies have changed to favour e-books collection build up instead of print copies. Advancing the bookless library dreams as envisaged in the suggestion mentioned above. These libraries have stopped, or reduced number of hard copy books purchases and invest more in e-books.

These are some of the evidence of bookless academic libraries of the twenty first century around the world. On a tour to RMIT University library in Hanoi, Vietnam, in 2017, the researcher noticed that there were no shelves full of books in the library but wide spaces and computer workstations. There were few reference books here and there. The librarian on duty that day, explained that RMIT University library is no longer investing large amounts of money in hard copy books, instead, it is investing in more e-books.

 Florida Polytechnic University opened a fully digital library without any printed books in 2014. The director of Florida University libraries as quoted by Reuters (2014) said "It's a boldly relevant decision to go ahead without books". The University of Texas at San Antonio's engineering and technology library collection is only available online (in e-book format), while University of California at Merced and department of engineering at Stanford University have drastically reduced hard copy items in their libraries in favour of e-books (Kolowich 2010).

Thomas (2013) explains that University of South Australia changed procurement policy from pro-hard copy to pro -e-books so that the university can buy more e-books than hard copies. The policy indicates that hard copy books will be purchased only if there is no e-book equivalent available on the market. The participant is calling for a complete transformation of UNISA library procurement policy and may be, other university libraries too, from paper-based books to all digital information platforms

5.5. POSTGRADUATE STUDENTS' PERCEPTIONS OF E-BOOKS AT UNISA LIBRARY

In the world of competitive marketplace, perception about a product, influences potential customers to think and test new products. In academic library as a service delivering entity, its services and products are subjected to same measure. Students must have a positive perception of library services for them to use them. This theme discusses how UNISA students perceive e-books in UNISA library.

E-books: good information resources for education?

E-books contribution to research and studies

Continued investments into e-books

Reasons for continued investment into e-books

5.5.1. E-books: Good information source for education?

In the literature review it was shown that e-books have several problems. Fueling the arguments as to whether e-books are good information resources for education or not. However, a research conducted by JISC (2009) found that universities in the UK were happy with the quality of information that e-books provide.

In this question, respondents were asked to show their levels of agreement from strongly agree to strongly disagree on the statement that "e-books are good information sources for education". The findings point that 41(49.38%) indicated that they strongly agree with the statement. Again 30 (36.14%) agreed with the statement that e-books are good information sources for education while 11(13.25%) of respondents were neutral. No one pointed that he/she disagree or strongly disagree with the statement.

Both librarians and students who took part in this study agree that e-books are not just good information source for education, but are such an important resource for long distance institutions of high learning like University of South Africa, as it enables the UNISA library to grow a long hand that can reach students at any place in the world at a fraction of time that it takes hard copies to get there. Mincic-Abradovic (2011); Thomas (2013), concurs with the sentiments of UNISA library librarians about the advantages of e-books in the sense that they eliminate in transit losses and physical damages of books, shrinkage of time, simultaneous usage by multiple students at the same time, portability and 24/7 availability.

Majority in this question believe that e-books is the right way to go for universities like UNISA. Therefore, according to the majority in this research, UNISA library is better off with more e-books than hard copies. Second majority agrees with the statement as well. The UNISA library is receiving support from all post graduate students from library and information science department with the e-books program at the university. Only one respondent undecided on this question. Although some respondents were neutral, the results were positive.

This finding conveys the message that library and information science student at the University of South Africa perceive e-books as convenient and reliable information sources for research and learning. It is not only a trend internationally, but UNISA library seem to be on the right track by being part of e-books revolution which is sweeping the academic library world today.

5.5.2. E-books contribution to research and study of UNISA students

E-books have contributed differently to user's education since they came onto the education scene worldwide. In UNISA library, they have also made a remarkable contribution to assisting UNISA students because of the nature of UNISA as a long-distance institution of higher learning.

In answering the question of how e-books have helped the respondents in their studies, a majority of 48 (57.83%), indicated portability as the major benefit of e-books because they can carry them anywhere, they want and study whenever they want to. While 20 (24.10%) pointed out convenience, in the sense that they do not need to come to UNISA library for them to read or utilise e-books. They can sit at home, in a coffee shop, a public park or a public library, connect to Wi-Fi and still access and utilise e-books from UNISA library. A further 5 (6.02%) highlighted the ability to download an e-book and read offline and another 7 (8.43%), said they can read frequently because they have electronic devices which they use to read e-books. Five respondents added extra views on the comment window which all five comments agreed with the choice answers which were given to choose from.

Respondents show that they are reading more frequently because they can carry their books wherever they go in the devices which they own. This is an important benefit for e-books because users do not have to have a specific place to sit and read an article or a chapter. They can read in a bus, at a park or in a coffee shop. All this can be done without having a backpack full of books on their back.

In the interviews, the librarians commented that e-books have benefited students largely because they do not have to come to the library in person to seek e-books. Students can get their e-books even at home. Saving their time and transport money in the process and allowing more time to dedicate to studies.

5.5.3. Continued investment in E-books by UNISA library

In some quarters, continued investment in e-books is not certain because of the nature in which e-books are marketed and sold. Libraries do not have an outright ownership of e-books unlike print versions (Khan & Underwood 2013). Therefore, this question sought to implore opinions from the respondents on whether UNISA library should continue to invest in e-books. It was a yes or no type of a question.

Overwhelming majority 80 (96.39%) said yes. They think UNISA library should continue purchasing more e-books. That is an overwhelming vote of confidence for e-books and UNISA library decision to build e-books collection of a meaningful size. Only a single respondent 1(1.20%) thinks that UNISA library is wasting money and they should stop investing in the e-books project. While 2 (2.41%) respondents did not indicate.

The perception on e-books by students of library and information science of University of South Africa, is positive in this study. The students have shown their confidence in e-books as research and learning material for the future. It is up to UNISA library to market e-books to students so that they are all aware and utilise them in their studies and research adequately. They agree that UNISA library should invest more in e-books for their benefit and the benefit of the university.

These Findings are consistent with the findings of several other researchers. According to Mulholland and Bates (2014); Gueval and Tarnow (2015), e-books have been accepted in higher education academic libraries and acceptance levels are growing as technologies becomes better. The National e-books observation project JISC (2009) research conducted between 2008 and 2009 found out that universities in the United Kingdom (UK) regard e-books as an important part of their teaching and learning information source. The research found out that 65% of United Kingdom Universities were using e-books.

5.5.4. Reasons why UNISA library should continue investing in e-books

The students were asked to justify why UNISA library should continue investing in e-books. They were provided with predetermined answers to choose from. In answering

the question, the respondents responded strongly in that 57(70.37%) said e-books are good for long distance institutions like UNISA. As a long-distance institution of higher learning, University of South Africa stands to benefit more from e-books. UNISA library does not have to worry about books being lost or damaged in transit.

Space has always been a contentious issue with libraries, with e-books, no shelves are required, just computer workstations. Therefore, e-books save space, time, money and unending process of shelving and shelve reading and retrieving. Its delivery systems for learning material is enhanced greatly by e-books because middlemen such as post office and courier companies are eliminated in the system. Whereas 25 (30.86%), believe that e-books are cheaper and quick because there are no shipping costs involved. Shipping costs make purchase of library material expensive because most books are not published in South Africa. This means that the UNISA library can buy more e-books with the money they save from shipping expenses.

A healthy number of 56 (69.14%) pointed out that students who are far away from UNISA library can access e-books at any time.

Portability and flexibility are the main reasons why students who are far away can access the UNISA library anytime. The UNISA library website does not get full or close for any other reason but scheduled maintenance. This gives great flexibility for students who are far away from UNISA library. E-books make UNISA library a 24/7 service provider. Finally, yet importantly 9 (11.11%) respondents ticked the "other" option but did not elaborate.

As of the interviews, the finding shows that both librarians agree that UNISA library should continue to invest in e-books. Some librarians reported that e-books are the most important investment that UNISA library has made. It is not just a trend that academic libraries are going digital with e-books as their preferred source of information, it is also indicative of the willingness of a University library to transform so that it survives as well as meeting modern demands for quick access to information by students and researchers. As a distance learning institution, UNISA should find e-books more convenient source of information and get support from both the user and librarians.

The finding agrees with research conducted at University of California by Soules (2009:12), librarians gave advantages of e-books for a distance education institution as anytime, anywhere access, the possibility of more than one student using an e-

book at the same time. Easy to search information in e-books. Easy to cite, zoom and scale, multimedia, ability to e-mail text.

5.6. TYPE OF ICT DEVICES AND SKILLS WHICH POSTGRADUATE STUDENTS EMPLOY FOR EFFECTIVE UTILISATION OF E-BOOKS IN UNISA LIBRARY

A library collection is of no use if the users do not have the technology and skills to utilise its resources. More so is the case with e-books in academic libraries. This theme discusses the types of technology available to students and the skills which allows them to utilise e-books in UNISA library. The discussion is divided into the following sub-headings:

Ownership of electronic devices

Electronic devices for reading e-books

Computer usage from different e-books access points

Skills required by postgraduate students to utilise e-books at UNISA library

Library training at UNISA library

5.6.1. Ownership of electronic devices by UNISA students

E-books is a technology which cannot stand on its own. It requires support systems for it to function. Electronic equipment such as laptops, e-readers, smart phones and tablets are some of the devices which came up often in the literature review as e-book reading devices (MacWilliam 2013:3; Mincic-Abradovic 2011). To answer the question on the type of gadgets they own, the finding shows that 69 (83.13%) of the respondents indicated that they own desktop computers, while 42 (50.60%) owns laptop computers. Only 10 (12.05%) have e-readers in their homes. A sizeable 30 (36.14%) owns a tablet of this kind or that. Surprisingly only 61 (73.49%) own smart phones.

Smart phones are believed to be the most common device in the hands of citizens today, with billions sold worldwide (Burn 2014:31). The literature review tells that it is even hard to classify a smart phone as an e-book reader because of its commonality. The results in this study, however, shows contradiction from the claim by Burn (2014:31) that the smart phone is the most common device today in the hands of citizens. This research finding shows that 83.13% owns desk top computers while smart phones comes second at 73.49%. It is common for individuals to own multiple devices in their homes these days. However, in this research, majority do not own smart phones but desk top computers. It is possible that this group of UNISA students

do not own smart phones in majority but worldwide, the trend is different. This is a very limited research involving only UNISA students from one department.

Mobile devices are ubiquitous in people's lives that they have become extended part of the human body. Starting from professionals, university students, housewives even high and primary school students own a device of certain kind. Professionals are driven by work always demands and the quest to be available and reachable for business and family matters. They tend to have multiple devices such as laptop computers, mobile smart phones and tablets. While students are into social media platforms such Facebook and Twitter which demands of them having a smart mobile device. Apart from these leisurely demands and applications, students also use their devices for studies, accessing electronic information for assignments and research. And some of these devices are good for the accessing and reading of e-books.

5.6.2. Electronic devices used for reading e-books by UNISA students

Ownership of electronic mobile devices among South Africans and world over has increased in the past few years as technology improves daily. In South Africa for example, it is easy to see people in the streets and students on campus using smart phones, tablets or laptop computers. In answering the question on which devices do respondents use for reading e-books, from the list of devices listed on 5.6.1, the findings pointed out that 59 (71.08%) read their e-books using a lap top computer. While 32 (38.55%) uses desk top computers to access and utilise e-books from UNISA library. And 6 (7.23%) uses e-readers to utilise e-books and 21 (25.30%) use tablet computers to access and utilise e-books from UNISA library.

E-books users like postgraduate library and information science students at UNISA library have a multitude of gadgets to choose from to purchase and subsequently utilise them for the access and utilisation of e-books. Most devices are multi-functional (Mincic-Abradovic 2011). Many technologies are integrated into one device. A smartphone and a tablet for example, they have a camera, voice recorder, calculator, calendrer, clock, phone book and many others. Students love this multi-functionality. While they can read e-books on their devices, the other functions are also available when they need them.

According to observation by the researcher, more students are in possession of laptop computers and smart phones on main campus (Muckleneuk) in Pretoria. Few are seen

with tablets. The finding shows that the most popular e-reading device for library and information science students are laptop computers.

Laptop computers are convenient because they are not only mobile but have lager screens comparing to any other gadget other than desktop computers. Modern laptops are Wi-Fi enabled which fits the demands of a postgraduate student. The research findings suggest that since the respondents are postgraduate students, they may as well be working in libraries of different institutions. This means they earn income and can afford to purchase a laptop computer for themselves.

A desktop computer is not the most favourite device for reading e-books. This may be attributed to the inflexible nature of a desktop computer. It needs to be at home or in the office with internet connection. For this to happen, it requires the owner to purchase a wireless modem or connection through fibre cables to access internet or be at work where internet usage is not regulated.

A tablet has a higher rating because it can easily fit into the needs of a student. Most tablets have Wi-Fi connect ability and they have a bigger screen than a smart phone. Most of them have e-book reading software as a standard feature. While a smart phone is popular among students, they seem to love them for other uses even though they have e-reading software as a standard too. Since a smart phone has a smaller screen, it takes a lot of effort to read several chapters of an e-book on it. As a result, most students do not regard a smart phone as an e-book reading device. Lastly, dedicated e-book readers are not popular among students in South Africa. Therefore, numbers of students who possess and use them are few.

5.6.3. Using computers from different e-books access points by UNISA students

It is costly to buy internet data bundles in South Africa. Anyone who wants to access e-books through different platforms, including UNISA library must have stable internet connectivity. For this reason, UNISA students would prefer using a free UNISA internet connectivity available at UNISA main campus and learning centres. UNISA however, cannot provide such service to every student because it is not a residential university. Only those who are fortunate to live closer to main campus in Pretoria or learning centres across the country can fully benefit from this infrastructure.

Considering information highlighted above, the respondents were requested to share information about places where they access computers, which they use for accessing and utilising e-books. In response to this question, findings show that 8

(9.64%) indicated that they use UNISA computers in the UNISA library. While 31 (37.35%) indicated that they access computers at their workplaces. And a bigger number of 34 (40.96%) use their own computers. Surprisingly, no one indicated that they use computers from internet café.

Using own computer to access and utilise e-books from UNISA library look like the most convenient way for majority of respondents in this research. It is, however, likely to be expensive on the students if they use their own data for internet connection. Those who live in and around Pretoria or near any UNISA study centre, can Utilise Wi-Fi connectivity provided by the university without paying extra fee. Since University of South Africa is not a residential institution, it is understandable that most respondents use their own computers to access e-books.

In the developed world such as United States of America, Europe and Asia, most homes and public places such as public libraries, restaurants and parks have internet connection. It would not be a problem for the respondents who indicated that they live in such countries to access the internet. However, respondents who indicated that they live in African countries may experience some problems with internet connectivity because internet infrastructure is not well developed in most African countries. Therefore, their e-book experience might be somehow costly and negative.

A study conducted by Addisalem (2016) at a UNISA's Akaki branch library in Addis Ababa, Ethiopia, to assess utilisation of electronic resources, found that poor internet connection was the major hinderance to accessing e-resources which include e-books from UNISA library which results in poor e-books utilisation. This is due to poor internet infrastructure in the country (Ethiopia). The internet connectivity in Addis Ababa is slow and unreliable. The researcher further opined that old computer infrastructure at the learning Centre's library, added to the problem, because they were slow and outdated, making e-books not a favourable source of information for the students (Addisalem 2016).

Workplace access to computers is a big deal for the working student. And in this finding, a second highest number of respondents indicated that they access the internet on computers at work to utilise e-books from UNISA library. This practice cuts data expenses for the student. The negative side of using workplace computers is that the studies may affect work output if not managed properly. Another trick is the attitude of the employer towards employee studies. If the employer does not sanction the studies, the student might face some disciplinary challenges with authority.

The findings in this research, however, shows that second majority use workplace computers. It might be an indication that majority of postgraduate students in this research may be full time employees of different institutions.

Internet café got zero response. This is another place where students would incur extra cost to access and utilise e-books. Hence, respondents in this research avoid using such facilities. Internet cafés have the habit of cutting off users when their time runs out. Sometimes it happens in the middle of a search. A sudden cutting off of connection may result in the loss of any work done or search results if they were not saved to an outside storage device such as a USB.

This finding, however, contradicts the findings in Ethiopia at a UNISA branch library. The study conducted at this centre found that internet café was the most frequently used outlet for accessing and utilising e-books (Addesalem 2016). This may tell of the economic conditions of the students who may not be able to buy their own devices for reading e-books. Librarians in the interviews reported seeing a lot of students using their laptops in the library apart from those who use the library's computers.

5.6.4 Skills required for the utilisation of e-books on campus

Proper computer skills are important for UNISA students to utilise e-books in UNISA library. Therefore, construction of this question focused on testing respondent's skills required for the utilisation of e-books. The researcher asked the respondents about setbacks they face when utilising e-books from UNISA library on campus and those who have never been to a UNISA library had to indicate that the question was not applicable to them on the choice answers.

All respondents were computer literate in this research because 0 (0.00%) indicated to be computer illiterate, but 10 (12.05%) pointed to difficulties navigating databases. While 4 (4.82%) indicated that they do not know how to identify the right information. Another 9 (10.84%) find UNISA catalogue complicated to navigate. Nevertheless, 44 (53.01%) do not find any problem utilising e-books from UNISA library.

A majority of 44 (53.01) percent indicated that the question was not applicable to them as they have quality skills to navigate the UNISA library catalogues with ease. Or they are far away from any UNISA library. Differentiating an e-book and a hard copy in the catalogue is a very important skill for students to have. In other words, it can be interpreted that they do not use UNISA computers on campus or they are skilled enough to navigate the online catalogue and utilise e-books on campus. Information

literacy is another skill important to a successful student. The volume of information available to students is large that only the ones with enough skills can pick what they need.

Though there are lib-guides on how to use the catalogue, many students still struggle to smoothly navigate through the maze of information in the library catalogue. In this case, information searching skills are paramount. It becomes tricky especially when searching databases because all databases do not present the same challenge to the searching process.

5.6.5. UNISA Library training

Library training plays an important role in the improvement of awareness of library resources and its use by students. The following question, therefore, tended to enquire about the role that the training that is provided by the UNISA library to students has played in the heightening of students' e-books awareness and improvement in its utilisation.

As an open question, respondents were free to express themselves in articulating their opinions and thoughts. There were no pre-determined answers available to students. The analysis of this question is based on recurring themes in the responses given by respondents. Saldana (2013:175), describes a theme as an extended phrase or sentence that identifies what a unit of data is about and / or what it means.

The findings in this section shows that majority 37 (44.58) percent is acknowledging that library training has improved their e-books awareness and their ability to utilise the library resources has improved too. While 18 (21.69) percent said that they never received any library training. Then 2 (2%) percent indicated that they already had library skills before coming to UNISA. Another 2 (2.41) percent pointed out that UNISA library has improved communication, and a 1 (1.20%) had knowledge about e-books before coming to UNISA and lastly, 22 (26.51) percent was undecided on the question.

Majority (44.58) percent acknowledge that library training has improved their student awareness of e-books and other library resources. Their ability to utilise library resources has also improved. Moreover, students who attend library training have better skills for the navigation of the intricate web of information in the library catalogue. Therefore, finding e-books becomes a lesser problem.

However, (21.69) percent indicated that they did not receive any training from UNISA library. This might be attributed to the geographical location of these respondents. UNISA is distance institution of higher learning and not everyone would attend training in the UNISA library. To offset that discrepancy, the UNISA library conducts training sessions online as informed by the librarians in the interviews.

This measure might still be a problem for those who do not have steady internet connectivity because it is a prerequisite for one to have internet connectivity to attend an online library training which might last for half an hour or more. Online training can also cost money to the student; therefore, they stay away, and they are left behind. The respondents who have claimed to have never received training from UNISA library, might be the group of respondents who live far away from any UNISA library or face the problems elaborated above of not having steady internet connection and experiencing insufficient data problems.

5.7. FACTORS AFFECTING POSTGRADUATE STUDENTS UTILISATION OF E-BOOKS AT UNISA LIBRARY

E-books have become part of academic libraries life. Users of e-books on the other hand still must decide whether to use or not use them. These decisions are influenced by more than one factor. In this theme, the researcher discusses factors that may affect postgraduate utilisation of e-books e-books in UNISA library.

UNISA library computers on campus

Problems with utilisation of e-books from UNISA library off campus

5.7.1. UNISA library computers on campus

UNISA library provide computers in the main library and all branch libraries for students to use. Postgraduate students have a privilege of having a separate computer space away from under graduates, as it is at the main campus, Muckleneuk and Sunnyside campus in Pretoria. All the computers have stable internet connections for uninterrupted research and learning. However, accessing UNISA online services such as the UNISA library catalogue and databases on campus has its own challenges.

To answer the question on type of problems that users encounter when using UNISA library computers on campus to access and utilise e-books, the findings tell that 6 (7.23%) indicated that there is not enough computer time allocated per student. A further 12 (41.46%) mentioned problems with multiple logins to databases. In some

databases, the student needs to login on the database website page despites the fact that the database can detect that the student is logging in from UNISA library.

This is supposed to be easy to detect because in the interviews, librarians reported that every e-book database available to students in UNISA library is linked to the main servers of the database vendor. That is the reason why database vendors can take statistics of e-books usage. As many as 25 (30.12%) indicated complicated navigation of databases. Logging in and finding a database is one thing, identifying an e-book and using it is another. Some databases require the user to download the e-book before using it while others allow the user to just click on the title or chapter and the e-book opens. All these activities require computer skills from the student. And majority 36 (43.37%) sited restrictions on downloads. The respondents indicated that they cannot download the whole e-book if they want to.

Using UNISA library computers to access and utilise e-books should be problem free as a student is right at the centre of information source. The finding in this research shows that it is not the case, majority of respondents in this section 36 (43.37%) percent cited restriction of downloads on e-books as a major problem even if one is using UNISA library computers. They cannot download the whole e-book. E-books are protected by DRM and copyright laws just like print books. DRM stops students and other users from sharing e-books even if they purchased them while copy right law only allows ten percentage of a book to be downloaded or photocopied in case of print.

The frustration in this case comes if students believes that e-books can be downloaded in full because they are digital. It also might be because the students never attended any library training where they could have been told that e-books are no different from print when it comes to downloads. The only difference is that print books can be shared freely while e-books have restriction in that regard. Despite UNISA computers providing steady and good internet connection, students are not immune to problems when they use UNISA library computers to access and utilise e-books in UNISA library. Some respondents reported frustrations with login into databases where e-books are hosted.

In the interviews the librarians reported that it is easier to access e-books using UNISA library computers on campus for walk in students because of steady internet connection and help is at hand if needed. However, the technicality of finding and utilising e-books depends on skills of an individual student.

5.7.2. Problems with utilisation of e-books from UNISA library off-campus

Though UNISA is a distance higher education institution, many students visit the main library in Pretoria and branch libraries throughout South Africa and Addis Ababa, Ethiopia, to use its resources. However, majority of the students have never been in a UNISA library. This question, therefore, was deliberately designed to test the off-campus e-books experience.

In their response to a question about type of problems that students encounter off campus when utilising e-books from UNISA library, the finding tells that majority 40 (48.19%) reflects the special report which was published in South Africa about data costs (Fin24.com 2019; Eyewitness news 2019). The report pointed out that cost of data is a big issue for South African residents. South African mobile phone operators charge more for the same amount of data comparing to other countries, such as Nigeria, Ghana and Angola, where they are also operating in. It is, therefore, prohibitively expensive for students to use their data to connect to the internet so that they can utilise e-books from UNISA library. Even if they choose to download the chapters of the e-books they are looking for, to read offline, the expenses are still high. Data expenses, therefore, is one of the factors that may prohibit adequate utilisation of e-books from UNISA library off campus, especially for students residing in South Africa. UNISA library may be alleviating this challenge by collaborating with public libraries or other institutions of higher learning in those areas to allow for UNISA students to utilise their internet infrastructure.

And 29 (34.94%) cited unstable internet connection as a problem. Unstable internet connection is a persistent problem especially in rural areas of South Africa and Africa. In some rural areas there is little or no internet connection at all. For respondents who find themselves in such areas, life with e-books may not be easy. These are areas where mobile telephone operators do not have good coverage. In the interviews, librarians lamented of poor internet connection in rural areas of South Africa which affects utilisation of e-books. The librarians gave examples of rural villages and small towns in Limpopo and Eastern Cape provinces of South Africa.

Another 28 (33.73) percent indicated that some e-books do not open properly off campus. This finding is in line with the librarian's version of understanding during the interview part of this study. This is because of two different login settings for e-books. One setting is for off-campus access and the other is for on campus access of e-books. And it is the off campus setting that fails sometimes. They also reported that

sometimes, e-books vendors change URLs for the e-books without notifying their customers. In such cases, everybody loses access including library staff, but a student will not realise and understand that it is the vendor's problem unless they are informed. They blame the University library for such failures.

Time came up as an issue as well, 7 percent mentioned that time is limiting factor when using an internet café. Internet cafés are notorious in keeping internet session time. They cut users off as soon as their allocated session is over. They are not a good space for research. Frustrations with time in internet cafés is also linked to monetary problems. Internet cafes charge their customers differently. Some charge for every 15 minutes of use while others charge for every thirty minutes or per hour of use. If the student does not have enough money, then he cannot pay for more time. The connection will cut off as soon as the period paid for expires. It is a headache for researchers because they need more time.

5.8. SUMMARY OF THE CHAPTER

Library and information science students know about the existence of e-books in UNISA library. UNISA library uses different platforms such as e-mail, SMSs to communicate with students about e-books. There are different reasons why some students use e-books and why others do not use e-books. On preference, students are pushed to make choices between e-book and hard copy because of circumstances they find themselves in.

UNISA library employs several channels of communication, communicating frequently with students as methods for creating awareness of e-book in UNISA library. The library also uses training and awareness campaigns activities to enhance the awareness effort. Library and information science students perceive e-books positively in UNISA library. Students believe that e-books have contributed greatly to their learning and research. They agree that UNISA library should continue investing in e-books collection because e-books are a great asset for the library.

Library and information science students own different types of mobile devices which they use for reading e-books. Devices such as e-book readers, laptop computers, tablets and smart phones are among them.

Students believe that utilisation of e-books in UNISA library can be improved by continuing to train students on computer skills and how to access and use e-books in

UNISA library. While librarians think that the best way of improving utilisation of e-books is by cutting off purchases of hard copy books.

CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS OF THE RESEARCH

6 .1. INTRODUCTION

In chapter five, the research results were discussed thoroughly. Chapter six brings summery, conclusions and recommendations of the research findings. The conclusions and recommendations are presented according to the objectives of the study which are:

- To establish the extent of postgraduate LIS students` awareness of e-books in UNISA library
- To assess e-books usage by postgraduate library and information science students at UNISA library
- To establish postgraduate LIS student's perception of e-books in UNISA library
- To determine the type of technology and skills which postgraduate LIS students employ to utilise e-books at UNISA library
- To establish factors affecting postgraduate LIS students' utilisation of e-books at UNISA library

6.2. SUMMARY OF THE FINDINGS

The research was guided by the objectives listed in the introduction 6.1 above. The first set of questions concerned demographic information of respondents and participants and was followed by questions aligned to the objectives of the study. Therefore, the first findings were summarised according to demographic information followed by the five objectives.

The study employed both quantitative and qualitative methods hence two sets of data. First, are respondents who were postgraduate students registered in the department of information science in 2018 and participants who were librarians at UNISA library. The participants were professional librarians with a combined work experience of 215 years spread among them. This means that all the years that participants worked at UNISA library added up to 215 when put together. This experience allowed the participants to provide vital information about e-books and its utilisation by LIS postgraduate students in UNISA library. There were two males and eight females

6.2.3. EXTENT OF POSTGRADUATE STUDENTS' AWARENESS OF E-BOOKS AT UNISA LIBRARY

To establish the extent of e-books awareness at UNISA library, several questions were posed to the respondents under this first objective. On the question of how students became aware of e-books, the findings revealed that respondents used different channels to discover e-books. Majority of respondents discovered about e-books at UNISA library. While friends, colleagues and online Unisa website were also mentioned.

6.2.3.1. Methods used to create awareness of e-books among LIS postgraduate students in UNISA library

More than one question was posed to respondents and participants to 'establish methods used in creation of e-books awareness among postgraduate library and information science students at UNISA library'.

The first question was about channels of communication that UNISA library use to convey messages to students. In response to this question, it was found that most students agreed about receiving messages about e-books. This is understandable because every registered student has an e-mail address provided by the University. The library also uses library training, SMS and posters as other favourable methods through which messages about e-books awareness were conveyed to students.

Then frequency of communication between UNISA library and students (respondents) followed, the findings show that the university manage to get messages about e-books to postgraduate students. However, there was a strong disagreement from other students about communication. This finding requires more investigation since the UNISA library has more than one channel of communication with students.

Respondents in this next question, were asked to agree or disagree with the statement that UNISA library is making enough effort to create awareness about e-books. The findings tell that majority think that the UNISA library is not doing enough to create e-books awareness among postgraduate students. While half as much were found to be in dilemma not knowing whether the e-books awareness efforts were enough or not.

6.2.4. E-BOOKS USAGE BY POSTGRADUATE LIS STUDENTS

More than one questions were posed to assess the extent of e-books usage by postgraduate students at UNISA library.

To find out if respondents had used e-books before, the findings showed that post graduate students knew about e-books and used them before this research. This came as no surprise as the students were postgraduates. However, few were found not to have used e-books before.

In answering the question, why they used e-books, this finding tells that respondents found e-books portable and light and flexible to use. The fact that 'one e-book reading device can carry multiple copies of e-books', makes it easier for them to carry and use e-books.   They also found e-books to be information sources with current information for their studies. Others found that the training they received allowed them to identify and use e-books with ease

Why students may not use e-books, it was found that availability of devices and affordable data was an obstacle because they were expensive. This exposes the lack of independence of e-books as an information source because they depend on devices such as e-book readers to be used. Moreover, the devices require constant power supply for charging. Postgraduate students doing research love opening multiple pages at the same time, e-books do not allow this possibility, therefore is seen as drawback for some students. computer skills are an important requirement and lack of it was mentioned as another reason for not using e-books.

When asked the purpose for which they use e-books, the research revealed that e-books may be used for different purposes with research and studies as two of them. Postgraduate student mainly used e-books for the purposes of research and learning, though a few combined readings for leisure, which may strain the eyes as leisure reading covers long stretches of reading period.

Then respondents were asked about their source of e-books. The respondents showed that UNISA library, google books, Amazon and Take-a-lot are all sources where their e-books come from. The internet allows a wide choice of e-books platforms to choose from.

On preference of book format, the findings indicated that both e-books and hardcopies have big preference. The postgraduate students were split almost in half on their choice of book format. The respondents were further asked to give reasons why they still use hard copy book format over the other. This question was intended

for those who indicated a preference for prink books. The findings show that hard copy books are independent. They can be used without any aid as long as there is natural sunlight.

On the question of improving utilisation of e-books in UNISA library, the finding shows conducting more library training would improve utiisation of e-books at UNISA library. In addition, creating e-books slogans would be a creative way of keeping e-books awareness high resulting in improved utilisation of e-books as well as purchasing relevant e-books to current studies because relevant e-books would attract users automatically.

6.2.5. POSTGRADUATE LIS STUDENTS' PERCEPTIONS OF E-BOOKS IN UNISA LIBRARY

The current research has established that postgraduate library and information science students perceive e-books in the positive light. Both students and librarians agreed that e-books are important information sources for education. This came to light as respondents were asked to show their level of agreement as to whether e-books are good sources of information for education. The respondents overwhelmingly agreed that e-books are good source of information and the librarians further said that it is the greatest investment UNISA library has ever made.

When asked about e-books contribution to their research and learning, the respondents, indicated that they can have e-books all the time because they can carry them anywhere, they want. E-books saved them time and money in the sense that they do not need to come to the library in person.

Respondents can read frequently because they have electronic devices which they use to read e-books anywhere.

Another question asked whether UNISA library should continue invest in e-books. Overwhelming majority believe that UNISA library should continue investing in e-books. The next question was why should UNISA library continue investing in e-books. The findings show that e-books allow UNISA library to save all student better regardless of distance, they are cheap and save library space therefore, UNISA library should continue investing in e-books because the library has many benefits from them.

6.2.6. TYPE OF TECHNOLOGY AND SKILLS WHICH POSTGRADUATE STUDENTS EMPLOY FOR UTILISATION OF E-BOOKS AT UNISA LIBRARY

The finding shows that respondents own different types of devices because the market is awash with many types of devices to suit different budgets.

In the first question respondents were asked to indicate the type of devices they own. Due to the possibility of being in employment, it was found that many respondents (postgraduate students) had their own electronic device such as mobile phone, tablet, laptop computers and even personal computers.

In the next question, the researcher wanted to know from the respondents, the devices which are used for reading e-books. The findings point out that respondents use multiple devices to access and read e-books. This depend on which device is available to the user.

In this question, the respondents were requested to share information about places where they access computers, which they use for accessing and utilising e-books. The findings indicate that respondents use multiple points to access e-books such as UNISA library, workplace and own devices. On skills required for students to utilise e-books, the findings showed that computer literacy, ability to navigate library database are some of important skills required by postgraduate students.

To answer a question on how library training has helped the respondents, the findings shows that majority of postgraduate students acknowledged that library training has improved their e-books awareness and their ability to use the library resources. This finding highlights the importance of training to students at any stage of their studies. Unisa library should strive to provide library training frequently to cover every student because other respondents indicated that they never received any training from the library.

6.2.7. FACTORS AFFECTING POSTGRADUATE STUDENTS' UTILIZATION OF E-BOOKS AT UNISA LIBRARY

Several questions were posed under this theme too. The first question sought to find out the type of problems that users encounter when using UNISA library computers on campus to access and utilise e-books. The findings tell that some postgraduate students have problems accessing and utilising databases. Multiple logins in databases is part of the problem. In some databases, you need to login in on the database website page despites having logged in to myunisa webpage (a student

portal) for the University of South Africa, and sometimes into the library website to access an e-book. Restrictions on downloads is another common problem which students encounter.

This question was to find out type of problems that students encounter off campus when utilising e-books. The finding indicated unstable internet connection as a major problem off-campus. Data cost is a major problem in South Africa. Therefore, data cost was found to be a stumbling block to internet connection as data is expensive. The research also found that some e-books do not open properly off campus due to different links for on and off campus access.

6.3. CONCLUSIONS

This section will include the concluding remarks about the research. The conclusion follows the sequence of the objectives (see 6.1) of the study.

6.3.1. Extent of student awareness of e-books in UNISA library

Of e-books student's awareness in UNISA library, this research has shown that students are aware of e-books as they showed in the findings that they became aware of e-books at different times and from different sources. The interviews though, showed that librarians think that not a lot of students are aware of e-books in the UNISA library. UNISA library needs to reach out to make more students aware of the vast amounts of e-books available at their disposal in the UNISA library.

6.3.1.1. Methods used in creation of e-books awareness among library and information science students in UNISA library

The research identified several methods through which the UNISA library utilise to contact students. The library uses these means of communication to convey different types of messages to students including announcing the availability of e-books in the library. Not all means of communication were found to be very effective as results it was indicated that some students never received communication through one means while others showed that they received communication through another means. The current study can conclude that UNISA library has been proactive in employing more than one means of communication with students. This safeguard the library from the total failure of communication between the UNISA library and students.

6.3.2. EXTENT OF E-BOOKS USAGE BY POSTGRADUATE LIS STUDENTS AT UNISA LIBRARY

The research revealed that postgraduate students use e-books at UNISA library. The preference showed that there is still large number of students who prefer utilising hard copy books. Therefore, this research can confidently conclude that students are aware of e-books in UNISA library and they are utilising them. UNISA library can continue to invest in e-books to stay relevant and be part of the new trend.

6.3.3. POSTGRADUATE LIS STUDENTS' PERCEPTIONS OF E-BOOKS AT UNISA LIBRARY

The perception about e-books in UNISA library was found to be positive. Both respondents and participants (librarians) agreed that e-books are good information sources for education. They also agreed that UNISA library should continue investing in e-books since it is a trend in the library and information field. Both participants and respondents mentioned positive aspects of e-books as a reason why they are good information sources for education.

6.3.4. TYPE OF TECHNOLOGY AND SKILLS WHICH STUDENTS EMPLOY FOR EFFECTIVE UTILISATION OF E-BOOKS IN UNISA LIBRARY

The current study has established that postgraduate library and information science students utilise different types of information and telecommunication technologies (ICT) and skills to access and utilise e-books in UNISA library. It was established that laptop computers, desk top computers, tablets and mobile phones are all used in different degrees for accessing and utilising e-books from UNISA library. Search skills and ability to identify different types of information sources is crucial to using e-books in UNISA library. UNISA library has been providing training to assist students to build these skills.

6.3.5. FACTORS AFFECTING POSTGRADUATE LIS STUDENTS UTILISATION OF E-BOOKS AT UNISA LIBRARY

The current study established that there are several factors that may affect postgraduate students utilisation of e-books from UNISA library. High cost of data was found to be a big issue with all students who reside in South Africa. While unstable internet connection was an issue with students in rural areas of South Africa and other Africa countries as research showed in Ethiopia. Lack of computer skills is

also another contributing factor to students staying away from e-books in UNISA library.

6.4. SUGGESTIONS AND RECOMMENDATIONS

According to the outcomes of the study, the following recommendations are proposed regarding e-books in UNISA library:

(i)   UNISA library should consider establishing e-book days once or twice every semester to highlight importance and availability of e-books in the library.

This action will make sure that students are aware of e-books in the UNISA library from the onset of their commencement of studies whether postgraduate and or undergraduate students.

(ii)   UNISA library should frequently consult librarians before and after procuring new technologies for opinions and feedback.

This recommendation would ensure that coordinated strategies would be implemented by management and pushed by frontline librarians to introduce a new technology in the library

(iii)   UNISA library should establish solid mechanism to market e-books.

Marketing allows a new product to be sold to the consumers. A robust marketing of e-books in Unisa library through various mechanisms would ensure a wider reach of all students and not only post graduate students.

(iv)   UNISA library should create a comprehensive guideline for library users to be made part of study material.

Unisa send study material to all registered students either in hard or soft (digital) copy format. If a comprehensive guideline is made part of guidelines on how to access and use e-books, all students would benefit from it without waiting for the library to organise training which is time consuming and may also be expensive if done online.

6.4.1. Recommendations for future research

Taking into considerations of the findings in this study, the following recommendations are made:

A bigger research is required about utilisation, training perception and impact of e-books on research and studies involving all colleges of University of South Africa.

This study would cover all students at UNISA. Library science students learn about information, what library is all about. The same may not be said about other students in other fields. The recommended study would help the wider student population.

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APPENDICES
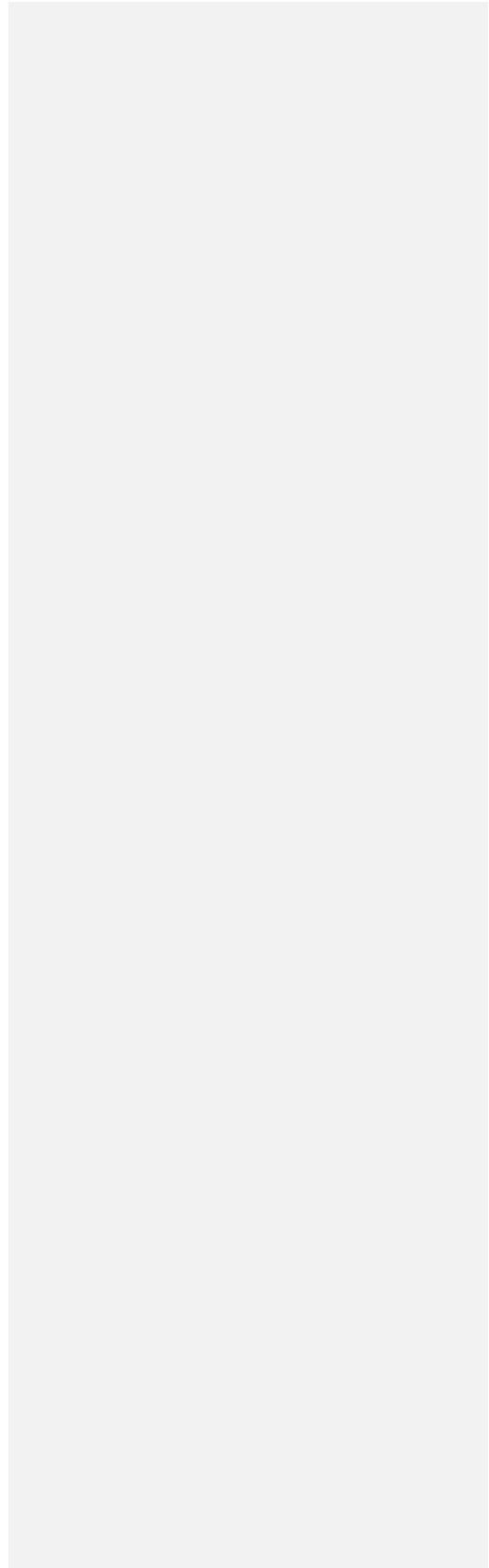
APPENDIX I: *ETHICAL CLEARANCE CERTIFICATE FROM UNISA RESEARCH PERMISSION SUB-COOMMITTEEE*

UNISA | university of south africa

RESEARCH PERMISSION SUB-COMMITTEE (RPSC) OF THE SENATE
RESEARCH, INNOVATION, POSTGRADUATE DEGREES AND
COMMERCIALISATION COMMITTEE (SRIPCC)

26 September 2018

Decision: Research Permission Approval from 26 September 2018 until 31 January 2019.	Ref #: 2018_RPSC_057 Mr. Ezekiel Katsirizika Student #: 35150815 Staff #: N/A

Principal Investigator:
Mr. Ezekiel Katsirizika
Department of Information Science
School of Arts
College of Human Sciences
35150815@mylife.unis.ac.za, 0 78 524 5553

Supervisors: Prof O. B. Onyancha, onyanob@unisa.ac.za, 012 429-6426

Utilisation and perceptions of electronic books by students in the department of information science at the University of South Africa.

Your application regarding permission to conduct research involving UNISA employees, students and data in respect of the above study has been received and was considered by the Research Permission Subcommittee (RPSC) of the UNISA Senate, Research, Innovation, Postgraduate Degrees and Commercialisation Committee (SRIPCC) on 21 September 2018.

It is my pleasure to inform you that permission for the study has been granted. You may:

1. The researcher may request a list of e-mail addresses of the library employees from Ms. Benita de Beer, through the gatekeeping assistance of his supervisor, so that he may purposively select a sample.

2. The researcher requested permission to interview five (5) Unisa library employees, but the RPSC recommends that the employee sample size should be guided by data saturation, in order to ensure data credibility. This means that the researcher may

interview more than five (5) Unisa library employees, until data saturation has been reached.

3. The researcher may gain access to the MyLife email addresses of the students registered for each course in the department of Information Science through the gatekeeping assistance of his supervisor, in order to select a sample.

4. The researcher may send an online survey link to the selected sample. The researcher may gain access to Unisa statistics showing the growth and usage of e-books.

You are requested to submit a report of the study to the Research Permission Subcommittee (RPSC@unisa.ac.za) within 3 months of completion of the study.

The personal information made available to the researcher(s)/gatekeeper(s) will only be used for the advancement of this research project as indicated and for the purpose as described in this permission letter. The researcher(s)/gatekeeper(s) must take all appropriate precautionary measures to protect the personal information given to him/her/them in good faith and it must not be passed on to third parties. The dissemination of research instruments through the use of electronic mail should strictly be through blind copying, so as to protect the participants' right of privacy. The researcher hereby indemnifies UNISA from any claim or action arising from or due to the researcher's breach of his/her information protection obligations.

Note:

*The reference number **2018_RPSC_057** should be clearly indicated on all forms of communication with the intended research participants and the Research Permission Subcommittee.*

We would like to wish you well in your research undertaking.

Kind regards,

pp. Dr. Retha Visagie – Deputy Chairperson: RPSC
Email: visagrg@unisa.ac.za, Tel: (012) 429-2478

_____

Prof Lessing Labuschagne – Chairperson: RPSC
Email: llabus@unisa.ac.za, Tel: (012) 429-6368

APPENDIX II: PERMISSION FOR THE STUDY

UNISA | university of south africa

UNISA COLLEGE OF HUMAN SCIENCES RESEARCH ETHICS COMMITTEE

01 September 2018

Dear Ezekiel Katsirizika

	NHREC Registration # : REC-240816-052
	CREC Reference # : 2018-CHS-0101
	Name : Ezekiel Katsirizika
	Student #:35150815

Decision: Ethics Approval from 01 September 2018 to 31 August 2021

Researcher: Ezekiel Katsirizika

Supervisor: OB Onyancha (Prof.)
Dept. Information Science
Unisa

Working title of research:

Utilisation and perception of electronic books (e-books) by library and information science students at the university of South Africa library

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Highest Qualification: Honours Bachelor of Information Science

Thank you for the application for research ethics clearance by the Unisa College of Human Sciences Research Ethics Committee for the above mentioned research. Ethics approval is granted for 3 years.

The **Chair of College of Human Sciences Research Ethics Committee endorsed the application**, on 01 September 2018 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 CREC 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 confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.

5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.

6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.

7. No field work activities may continue after the expiry date 31 August 2023. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number 2018-CHS-0101 should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Yours sincerely,

Signature

Dr Suryakanthie Chetty
Deputy Chair : CREC
E-mail: chetts@unisa.ac.za
Tel: (012) 429-6267

Signature

Professor A Phillips
Executive Dean : CHS
E-mail: Phillap@unisa.ac.za
Tel: (012) 429-6825

APPENDIX III: PERMISSION FROM UNISA LIBRARY MANAGEMENT

Unisa Library P.O Box 392

Unisa

0003

28 September 2018

Dear Mr Katsirizika

We have received your approval to use library staff in your study titled:

"Utilisation and perceptions of electronic books (e-books) by library and information science students at the university of South Africa library".

It is my pleasure to inform you to contact the staff member/s in the table below to schedule convenient times to release staff for interviews (subject to their consent)

Manager	Section	Email
Ms. Marie Botha	Collection Development	mcbotha@unisa.ac.za
Mr. Shokane Kwanang	Branch Librarians	shokaik@unisa.ac.za
Mr. Velaphi Kheswa	Personal Librarians	kheswva@unisa.ac.za
Mr. Surendra Jugdav	Research Commons	iugdask@unisa.ac.za

We wish you well in your research undertaking.

Contact Ms. Nnono Shai if you need any clarity and remember to share a copy of your research report with Ms. Nnono Shai (shaigs@unisa.ac.za) in the Library Research, Planning and Quality Section.

Sincere"/ Yours

Kekana Kgaladi (Ms)

Director: Library Corporate Services

University of Africa

www.unisa.ac.za

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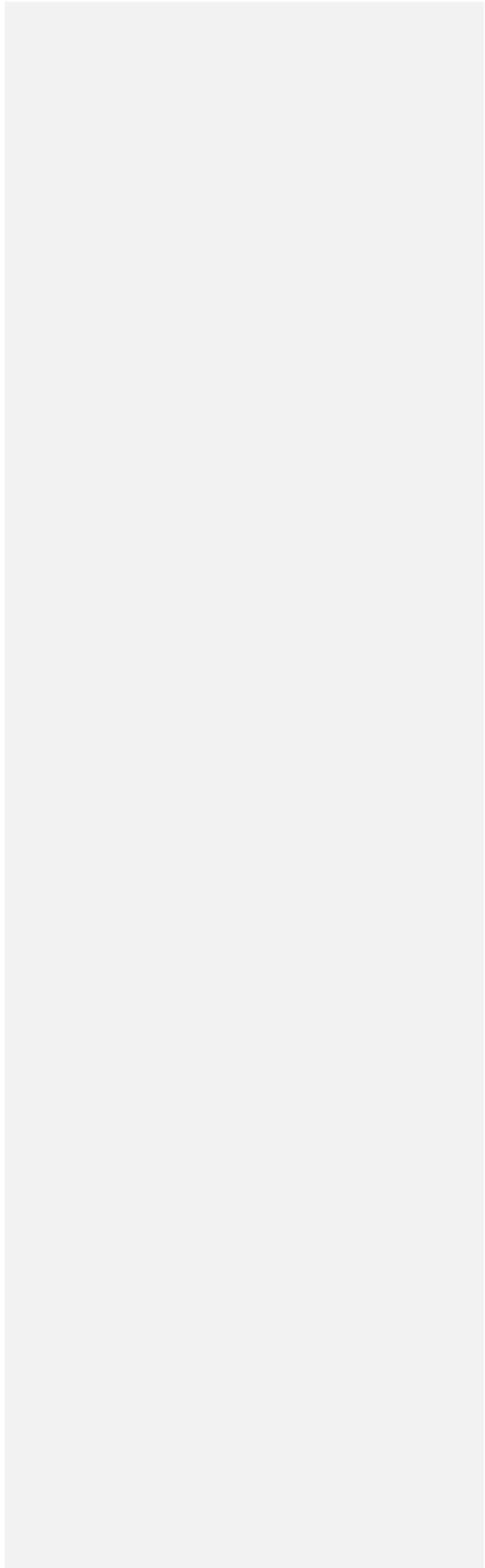
APPENDIX IV: QUESTIONNAIRE

UTILISATION OF ELECTRONIC BOOKS (E-BOOKS) BY POSTGRADUATE LIBRARY AND INFORMATION SCIENCE STUDENTS AND LIBRARIANS AT UNIVERSITY OF SOUTH AFRICA LIBRARY

Dear respondent,

My name is Ezekiel Katsirizika. I am a Master`s student in the Department of Information Science at the University of South Africa (UNISA). I am conducting research on the "utilisation of e-books by library and information science students in Unisa library". The study may benefit students by informing the Unisa library on areas needed for improvement as far as the provision of e-books and service delivery are concerned.

By accessing the survey link, you consent to participate in this survey. Please note that you will be known by a code or number in this research project to maintain confidentiality and respect for your privacy. Your name will not be displayed anywhere in the research to make sure your identity remains confidential. Your responses will be treated with highest level of confidentiality. No personal information will be disclosed to any third party. The findings will be used for research purposes only. You may withdraw from this survey at any time.

For any queries related to this study, please contact Ezekiel Katsirizika on 35150815@mylife.unisa.ac.za Phone: +27 78 524 5553 or Prof. O.B. Onyancha at onyanob@unisa.ac.za Phone: +27 12 429 6724

Thank you for sparing your valuable time to complete this questionnaire. The questionnaire will take 10–15 min of your time. Against this background you are invited to participate in a 10 -15-minute survey.

Please put an X in the box given for your preferred answer or answers

BIBLIOGRAPHIC INFORMATION

1.Please indicate your gender.

A	Male	
B	Female	
C	Other, please specify	
e	Total	

2. What is your highest qualification?

a	Undergraduate	
b	Honours	
c	Masters	
d	Doctorate	
e	Other, please specify	
f	Total	

3. Which qualification are you currently studying towards?

a	Undergraduate	
b	Honours	
c	Masters	
d	Doctorate	
e	Other, please specify	
f	Total	

4. Please select the age range that best describes your age.

a	16-20 years	
b	21-25 years	
c	26-30 years	
d	31-35 years	
e	36-40 years	
f	41-45 years	
g	46-50 years	
h	Over 50 years	

i	Total	

5. Please indicate province of residence. If you do not reside in South Africa please indicate your country of residence.

a	Eastern Cape	
b	Free state	
c	Gauteng	
d	KwaZulu Natal	
e	Limpopo	
f	Mpumalanga	
g	Northern Cape	
h	North West	
i	Western Cape	
j	Other, please specify	
k	Total	

EXTENT OF E-BOOKS AWARENESS OF BY POSTGRADUATE LIBRARY AND INFORMATION SCIENCE STUDENTS AT UNISA LIBRARY

6. How did you become aware of an e-book? Please select only one option that applies.

a	Friends	
b	Colleagues	
c	Lecturer/teacher	
d	My library other than UNISA library	
e	UNISA Library	
f	UNISA website	
g	Any other, please specify	
h	Not applicable	
i	Total	

7. Which of the following communication channels has the Unisa library sent you e-books awareness information through?

a	E-mail notices	
b	SMS notices	
c	Posters in the library	
d	Library training	
e	Other, please specify	
f	Total	

8. How often do you get notices about e-books from the Unisa Library?

a	Once a week	
b	Every two weeks	
c	Once a month	
d	Once every beginning of a semester	
e	Not at all	
f	Other, please specify	
g	Total	

9. In your opinion, is Unisa library making enough effort to raise awareness among students?

a	Strongly agree	
b	Agree	
c	Disagree	
d	Strongly disagree	
e	I do not know	
g	Other, please specify	
h	Total	

EXTENT OF E-BOOKS USAGE BY POSTGRADUATE LIBRARY AND INFORMATION SCIENCESTUDENTS AT UNISA LIBRARY

10. Have you utilised an e-book before?

a	yes	

b	No	
c	Other, please specify	
d	Total	

11. What reason/s best describes why you utilise e-books?

a	They are portable	
b	One gadget can carry more books	
c	They are up to date	
d	They can be used by multiple users at the same time	
e	Other, please specify	
f	Total	

12. Please select an option/s that best describes why you have not utilised e-books before.

a	Cannot be used independently without a gadget	
b	Gadgets are expensive to buy	
c	Cannot use e-books without power (electricity)	
d	Cannot open multiple pages at the same time	
e	I need to see the real book	
f	I am not aware that Unisa library has e-books	
g	I do not know how to search the catalogue	
h	I do not like reading on a screen	
i	I do not know where to borrow or buy them	
j	Other, please specify	
k	Total	

13. For what purpose do you frequently use e-books use e-books for?

a	Studies	
b	Leisure reading	
c	Research	
d	Training	
e	Any other, please specify	

f	Total	

14. From which sources do you get your e-books? Select all that apply.

a	Unisa library	
b	Google books	
c	Amazon.com	
d	Take a lot.com	
e	Other, please specify	
Total		

15. Which format of books do you prefer for your studies?

a	E-books	
b	Hard copy books	
C	Other, please specify	
d	Total	

16. If hard copy, why do you prefer hard copy books?

a	Easy to use more than one book at the same time	
b	Easy to put markers in the book	
c	Can be used without depending on gadgets and electricity	
d	Can keep hard copy forever for reference	
e	Other, please specify	
f	Total	

17. In your opinion, how can Unisa library improve utilisation of e-books?

a	Conduct more awareness campaigns	
b	Purchase e-books which are relevant to studies	
c	Create slogans about utilising e-books	
d	Conduct more library training	
e	Other, please specify	
f	Total	

POSTGRADUATE STUDENTS PERCEPTIONS OF E-BOOKS AT UNISA LIBRARY

18. What is your level of agreement that e-books are good information resources for education?

a	Strongly agree	
b	Agree	
c	Disagree	
d	Strongly disagree	
e	Other, please specify	
f	Total	

19. In which ways have e-books helped you in your studies?

a	I can access and use e-books anywhere I want	
b	Do not have to come to a Unisa library for me to read books	
c	I can download books anytime and read them offline	
d	I read more frequently because I have an electronic device with me all the time	
e	Other, please specify	
f	Total	

20. Do you think Unisa should continue investing in more e-books?

a	Yes	
b	No	
C	Other, please specify	
d	Total	

21. Why do you think Unisa library should continue investing in more e-books?

a	They are good for long distance learning institutions	
b	They are cheaper and quick because there is no transportation cost	
c	Students who are far away from any Unisa library can still access e-books anytime	
d	They save library space and shelving time	

e	Other, please specify	
f	Total	

TYPE OF ICT DEVICES AND SKILLS WHICH POSTGRADUATE STUDENTS NEED TO UTILISE E-BOOKS FROM UNISA LIBRARY

22. Which one of the following gadgets do you own? You may tick more than one.

a	Laptop computer	
b	Tablet	
c	Smart phone	
d	Desk top computer	
e	E-book reader	
F	Other, please specify	
g	Total	

23. If you answered computer, whose computer do use to access e-books provided by Unisa library?

a	UNISA library computers	
b	Computers at work	
c	Own computer	
d	Internet café	
e	On a tablet	
f	E-book reader	
G	Other, please specify	
h	Total	

24. Out of the gadgets you have, which ones do you use to access e-books provided by Unisa library?

a	Laptop	
b	Tablet	
c	Smart phone	

d	Desktop computer	
e	E-book reader	
f	Other, please specify	
g	Total	

25. What skills are required to use e-books at UNISA library?

a	I am not computer literate	
b	I am unable to navigate databases	
c	Do not know how to identify right information	
d	Unisa library catalogue is complicated	
e	Other, please specify	
f	Total	

26. How has library training improved your ability to use e-books? Express your opinion

………………………………………………………………………………………
………………………………………………………………………………………
………………………………………………………………………………………
………………………………………………………………………………………..

FACTORS AFFECTING UTILIZATION OF E-BOOKS BY POSTGRADUATE LIS STUDENTS AT UNISA LIBRARY

27. If you use Unisa library computers to access e-books, what challenges, if any, do you normally encounter when using e-books? Select all that apply

a	Not enough time allocated for computer session for undergraduates	
b	Multiple login on databases	
c	Some databases are complicated to navigate	
d	Cannot download the whole book	
e	Other, please specify	
f	Total	

28. If you use your computer or any other gadget off campus, what type of problems do you encounter?

A	Internet connection is unstable	
b	It is expensive to access e-books outside Unisa library	
c	Time is always not enough especially when using internet café to access e-books	
d	Some books do not open properly	
e	Other, please specify	
f	Total	

Thank you very much for your valuable time.

APPENDIX V: INTERVIEW GUIDE 2018 FOR UNISA LIBRARY STAFF.

UTILISATION OF E-BOOKS BY POSTGRADUATE LIBRARY AND INFORMATION
SCIENCE STUDENTS AND LIBRARIANS AT UNIVERSITY OF SOUTH AFRICA SA
LIBRARY

Dear participant,
My name is Ezekiel Katsirizika. I am a Master`s student in the Department of
Information Science at University of South Africa (UNISA). I am conducting research
on "Utilisation and perceptions of e-books by library and information students in Unisa
library". The study may help staff to offer outstanding services to students.

You will be known by a code or number or synonym in this research project. Your
name will not be displayed anywhere in the research to make sure that your identity
remains confidential. The interviews are voluntary, and you may withdraw at any time.
For any queries related to this study, please contact Ezekiel Katsirizika on
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Thank you for sparing your valuable time to answering these interview questions. This
interview will take between twenty and thirty minutes of your time.

In these interviews, follow up questions were asked wherever necessary
1. UNISA LIBRARY PARTICIPANTS' (STAFF) PROFILE
        What is your professional title?
         What is your highest qualification?
         How long have you worked in Unisa library?

2. POSTGRADUATE STUDENT E-BOOK AWARENESS AT UNISA LIBRARY
         Do you think students are aware of e-books in Unisa library? [Follow up
                questions]
        How does the library create awareness about e-books to students?
        How effective do you think are the methods used by the Unisa Library for
        creating e-book awareness?

In your opinion, are Unisa's methods adequate in creating e-books awareness among students?

3. E-BOOKS USAGE AT UNISA LIBRARY

How would you rate usage of e-books at UNISA library?

Do you know if students prefer e-books to other formats of books?

Has Unisa put any guidelines and policies specific to the use of e-books?

In your opinion, how do these policy guidelines affect utilisation of e-books in Unisa library?

4. LIBRARIANS PERCEPTION OF E-BOOKS IN UNISA LIBRARY

Do you think e-books are important information sources for long distance education institution like Unisa?

Why so?

How would you rate the student excitement for e-books in Unisa library? (follow up questions)

5. TECHNOLOGY USED BY POSTGRADUATE UNISA STUDENTS TO ACCESS E-BOOKS IN UNISIA LIBRARY

What type of gadgets do you think Unisa students normally use to utilise e-books from Unisa library?

What mechanisms has the library put in place to increase usage of e-books at Unisa library? (Follow up questions)

6. FACTORS AFFECTING POSTGRADUATE STUDENTS' USAGE OF E-BOOKS AT UNISA LIBRARY E-BOOKS

What are factors do you think drives students to utilise e-books from Unisa library?

How easy is it to access and use e-books at Unisa library?

Thank you very much.