Chapter One

Introduction

1.1 Background to the Study

Electronic Information Resources (EIRs) are resources in electronic form that enhance the ease of search of resources for man or library users' consumption or use for whatever purpose, either for research or knowledge acquirement. Electronic information resources are often networked which means that their access is not restricted to the four walls of a library. This also means that access to them is not time-bound as users can easily access them around the clock, something which is not possible with printed library resources which can only be used during library opening hours.

Electronic Information Resources (EIRs) are the digital representation of information that can be accessed via electronic systems and computer networks[1]. Electronic information resources are the widely wide-spread time period that encompasses abstracting and indexing, digital journals, and different full-textual content cloth and the presenting of facts aggregators, article shipping offerings that may be accessed through faraway networks from facts carriers or regionally set up with the aid of using a consortium or one in all its member libraries[2]. Electronic information resources have been described as any information resource in digital form that can only be accessed through computers and other electronic devices such as mobile phones, tablets, and DVD players, among others[3]. These resources include electronic books, journals, CD-ROMs, software, models, e-theses, e-newspapers, etc. They are available from various sources such as digital libraries, online databases, institutional repositories, library websites, online journal sites, and online web pages of institutions and organizations. These electronic resources possess various features

that have contributed to their popularity among different user groups including seminarians.

Furthermore, experts have reported that electronic materials provide users with broad functionality features beyond what can be achieved in printed format[4]. Electronic resources are often enriched with multimedia, combining textual as well as audio and videos to make the information they contain more understandable and attractive to the information user. Apart from easy access and diverse contents, another feature of electronic resources is the comparative ease of use when compared to printed books and journals.

It is considered easier for users to simply retrieve a few pages of needed information instead of having to read through the whole volume. Electronic information resources are also searchable which means that users can search for words, phrases, and sections of interest in an electronic document. Another advantage that comes with the networked nature of electronic information resources is the global access it provides for a wide range of information resources that extends beyond the immediate environment of the information user. This has the potential to positively affect the quality of scholarship in the institution where students and lecturers have access to electronic information resources.

As a result of all these manifested advantages, some experts believe that the provision of access to electronic information resources by academic libraries is a guaranteed tactic of attracting new users and meeting their information needs when they make use of the library[5]. In line with this, many academic libraries including those found in theological institutions have invested heavily in the infrastructure and resources necessary to provide electronic information resources to their students. However, despite the benefits that users

stand to gain from the use of electronic information resources, there are numerous reports that the considerable financial outlays by libraries in acquiring and providing access to electronic information resources have not been met by the expected enthusiasm which can drive a high level of use among the target users, especially the undergraduate students[6].

Librarians in charge of electronic databases in academic libraries have reported that metrics derived from usage statistics of these databases indicate that students do not utilize journal publications for their research work. It is observed that undergraduate students mostly resort to either Google and other search engines or other printed resources when they need information resources for academic purposes such as; completing class assignments, preparing for the examination, and finding supplementary course materials[7]. This low level of electronic information resource use among undergraduates has been attributed to various factors seen as a hindrance to the use of electronic information resources[8]. Some of the factors that have been considered as affecting the use of electronic information resources include, lack of ICT skills, lack of awareness, and inadequate infrastructure, among others.

However, context is very important in understanding what drives user behavior. Electronic information resources in the context of theological institutions should be viewed from the perspective of new technology and any researcher would do well to adopt established technology acceptance models to effectively study the adoption and use of electronic information resources. In theological institutions, the library collections are mainly based on printed resources until recently when electronic information resources were introduced. As a result, there is a tendency for theologians to assess these resources against what they were used to and decide whether they would adopt and use them or stay

with what they are already familiar with. Technology acceptance models focus on how user perception of new technologies, in this case, electronic information resources affect their decision to adopt and use them[9].

One of the main considerations for adopting electronic information is perceived ease of use. This refers to the perception of the information user regarding easy it is to use electronic information resources compared to the printed resources they are already used to. However, perceived ease of use is a subjective matter. It does not measure how actually easy it is to use the system but how each user or a group of information users perceived it to be. The perception of information users about ease of use of electronic information resources is likely to be influenced by several factors ranging from personal, to technical and institutional.

The first condition that determines perceived ease of use is availability. The concept of availability of electronic information resources is different from that of print resources. For instance, while availability means that books and other printed resources are physically available on the shelves, electronic information resources are considered available in a given library when the library is able to include such resources in its collection and put them at the disposal of its user's availability electronic information resources is also seen as the extent to which they are made accessible for use by Bonafede users of a particular library[10]. In other words, the availability of electronic resources means the provision of access to authentic, reliable, and timely information. However, availability can be of little effect without awareness.

Several authors have linked the perceived ease of use of electronic information resources to the level of awareness of electronic resources among the intended users. This is logical

because people are unlikely to be positively disposed to something they do not know. Towards this end, researchers have paid considerable attention to the relationship that exists between the awareness and use of electronic information resources[11]. It is assumed that the existence and usefulness of electronic information resources will lead to a positive perception of and attitude toward them. This has led many researchers to recommend that libraries should include continuous awareness programs as an integral part of the plan to provide electronic information resources to their users.

Some institutions often fail to provide the necessary awareness and user orientation to facilitate the easy retrieval of information resources from electronic systems. There are also instances where the library has failed to circulate the access codes to the databases to all users restricting the use of information to the library premises often without providing adequate facilities such as computer systems and internet services to ensure easy retrieval of information. This can defeat the essence of providing electronic information resources.

Apart from awareness, the perception of the users can also be influenced by the level of stress they have to go through in order to access the electronic information resources.

Electronic information resources, unlike printed materials, are domiciled in networked or stand-alone computer systems which often require the information seeker to go through certain protocols such as logging in and authentication before they can access the needed information. The simplicity or complexity of the access protocol as well as the availability of infrastructure and technical support for the use of electronic information resources have the potential to influence users' attitudes towards electronic resources. Information users have been fed with the notion that electronic information resources are very easy to use so they are not likely to judge any information system which is difficult to use favorably.

Despite the fact that undergraduate students are often referred to as 'digital natives, several studies have shown that a significant percentage of undergraduates lack the proper information retrieval skills needed to obtain relevant information from electronic databases. This absence or inadequate information retrieval skills can make it seem difficult to retrieve information from online information systems which may lead the student to develop a negative attitude towards electronic information resources. On the other hand, those with the required information retrieval skills can be exposed to a wealth of relevant and easy-to-use information resources which may prompt them to develop a positive attitude towards electronic information resources. The good thing about skills however is that they can be acquired. However, it has also been noted that some information systems are poorly designed or too complex to use even for the skill users.

The most relevant and authoritative information resources are not always available on the open internet but on information systems created by publishers, institutions, and libraries for the use of a specific group of users. In some cases, the restrictions placed on the use of information can frustrate library users used to browsing open library shelves or using search engines on the open internet. Some databases often demand various levels of authentication before users can download full texts while some interfaces are not attractive or too cumbersome for users to navigate easily. Apart from all these, some information systems provide electronically in formats that may require the users to acquire compatible devices such as e-pub readers before they can read the contents. Added to this are some institutional factors which may affect easy access to the information resources

There have been several attempts by libraries to teach information literacy and information retrieval skills to students as a way to familiarize them with available resources and boost

the effective use of electronic information resources. These programs have met with various levels of success and have achieved varying outcomes. However, the consensus remains that when students learn how to effectively make use of information systems and when they have the necessary technical support to guide them in using the system, it may affect their perceived ease of use of that system.

Therefore, Academic institutions including seminaries are established to impart educational knowledge and understand the value of relevant information resources to their teaching, learning, and research activities. This is why they usually invest in academic libraries, a type of library that mission to support the creation and dissemination of knowledge through the provision of relevant collection and services. The major objective of any academic library is to provide the right information to aid various categories of users in the institution. This is not different from seminary libraries which are established to cater to the information needs of lecturers, researchers, and various categories of students in theological institutions. In order to achieve this objective, seminary libraries are focused on the provision of relevant information resources and services.

Theological institutions are specialized institutions where potential clerics who believes they have the special calling to serve God and the society at large as pastors and priests are prepared for various positions in the church. Today, various Christian denominations have established theological institutions to train interested people on their doctrines and prepare them for spiritual leadership positions. This institution of various courses and programs that lead to the award of various certificates such as Diplomas, certificates, Bachelor of Theology, Master's Degree in Theology as well as Doctorate Degrees in various areas of specialization.

Due to difference in doctrine, the duration of training in these institutions vary. For instance, catholic priests in St Albert the Great Seminary, Abeokuta spend up to nine years in training. The first seven years are mainly for serious academic studies in philosophy and Theology[12]. The theology aspect of the training is guided by the doctrine of the Catholic Church while the Philosophy element follows the conventional curriculum which meets the requirements for the award of a Bachelor's Degree in Philosophy in affiliation with the University of Benin, Benin City[13]. Students in other institutions spend less but their curriculum is no less deep with students having to go through rigorous academic work and research which requires the use of a lot of information resources[14]. As a result of this, theological institutions usually established well-stocked libraries run by professional librarians to meet the information needs of their students

While the traditional library collections were in printed format, the rapid development of information and communication technology and the resultant creation of information in digit formats has led to more attention being paid to electronic information resources to complement the printed resources in libraries at present. Interacting with many of these sets of people (seminarians or theologians as the case may be) shows that the usage of electronic information resources is not effective as the traditional style of searching for information.

However, while various studies have examined the effect of perceived ease of use on the usage of electronic information in university and polytechnic libraries as well as other types of libraries, there are few such studies focusing on theological students in Nigeria. In particular, there is a dearth of such studies in the context of students in theological institutions. In light of these, the current study investigates the effect of perceived ease of

use and seminarian attitude as predictors of electronic information resource use among postgraduate students in theological seminaries in Ogun State.

1.2 Statement of the problem

The world is in a digital age where information resources in electronic format have come to take center stage. Several experts have outlined various benefits that tertiary institution students including those in the theological institution can derive from making use of these resources. As institutions dedicated to the provision of necessary support for the creation of new knowledge, academic libraries attached to theological institutions can access electronic information resources. They can also have curated relevant information resources from various online sources and organized them in their own digital libraries. This is meant to support learning, teaching, and research activities going on in their parent institutions. The e-resources are accessible on the Internet and on stand-alone systems provided by the libraries.

Majorly, seminarians carry out research basically using the traditional way of sourcing information and this has limited them to acquiring obsolete information. Many of the seminaries are accustomed to depending on donations of used books, they are used to the system of not buying books and this makes the information resources not to be up to date.

However, while many of the libraries have analyzed their communities based on subject interest and provided information in various formats relevant to all the subjects of interest to their institutions, little effort has been made to evaluate the perception of the students about how easy it is to use these resources and how this has affected their usage of the

available electronic information resources. It has been established that understanding users' perceptions and factors driving those perceptions can provide an insight into how best to encourage the use of electronic information resources among information users. In line with this, the study focuses on the perceived ease of use and seminarian attitudes as predictors of electronic information resource use among postgraduate students in theological institutions in Ogun State, Nigeria.

1.3 Aim and Objectives of the Study

The aim of the study is to investigate the influence of perceived ease of use, Seminarian attitude, and usage of electronic information resources by postgraduate students of theological seminaries in Ogun state, Nigeria. The following objectives guided the study:

i. identify the various types of electronic information resources existing in the theological seminary libraries in Ogun state, Nigeria;
ii. determine the purpose of use of electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria;
iii. establish the frequency of use of electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria;
iv. examine the attitude toward electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria;
v. determine the influence of perceived ease of use on the usage of electronic information resources of postgraduate students of theological seminaries in Ogun state, Nigeria;
vi. examine the influence of postgraduate students' attitude on the usage of electronic information resources in theological seminaries in Ogun state, Nigeria; and

vii. ascertain the combined influence of perceived ease of use components (availability, awareness, and, ease of handling) and attitude on the usage of electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria.

1.4 Research Questions

i. What are the types of electronic information resources available for postgraduate students of theological seminaries in Ogun state, Nigeria?

ii. What are the purposes of using electronic resources by postgraduate students of theological seminaries in Ogun state, Nigeria?

iii. What is the frequency of use of electronic information resources by postgraduate students of theological seminaries in Ogun state, Nigeria?

iv. What is the attitude of postgraduate students to the use of electronic information resources in theological seminaries in Ogun state, Nigeria?

1.5 Hypotheses

The following null hypotheses were tested at a 0.05 level of significance;

1. There is no significant influence of perceived ease of use on the usage of electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria.

2. There is no significant influence of seminarian's attitude on the usage of electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria.

3. There is no combined significant influence of perceived ease of use and seminarians' attitude toward the usage of electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria.

1.6 Scope of the Study

The scope of the study focused on the perceived ease of use and attitude of postgraduate students on electronic information resources in theological seminaries in Ogun state, Nigeria. The use of Electronic Information resources was examined in terms of a construct such as various types of Electronic Information Resources while the perceived ease of use of seminarians was also examined in terms of constructs such as the mode of handling, learning, understanding, applying and control the electronic information resources and challenges and as well the Seminarian attitude in term of the acceptance and reflection mode of attitude measures. The population include post-graduate students from three (3) accredited theological institutions in Ogun State. These institutions were focused, because they all run a postgraduate program in the theological field. The other theological institutions in Ogun state, St Albert the Great, in Abeokuta, and Assemblies of God Theological Seminary do not run postgraduate programs like others, they are only known for a Bachelor's degree in theology.

1.7 Significance of the Study

The study is highly significant because its findings have the potential to benefit various entities. First, it will provide useful information for the management of theological

institutions to make the right decision in investing in the provision of electronic information resources for their institutions' libraries.

Second, it will provide Library managers in theological institutions with an insight into the attitude of seminarians towards electronic information resources and this will guide them in the selection and acquisition of electronic information resources preferred by their users. It will also help Library managers and librarians in theological institutions develop and implement appropriate programs to promote the use of electronic information resources by students in theological institutions.

Third, the research findings will be an additional contribution to existing research on the use of electronic resources in academic and special libraries. Fourth, it will also fill the gap created by the lack of in-depth studies on the attitude of students in theological institutions towards and the use of electronic information resources.

1.8 Operational Definition of Terms

Electronic Information Resources Use: This refers to the use of information resources in digital format that can only be accessed through the use of computers and other related devices by seminarians in Ogun state.

Frequency of use of Electronic Information Resources: this is the metric used to determine the level at which information is used in the library. It is the periodic numerical count of the use of electronic information resources by seminarians in Ogun state.

Purpose of use of Electronic Information Resources: this is simply the reason for the use of electronic information resources by seminarians in Ogun state.

Perceived ease of use: refers to the extent to which a Seminarian considers that using Electronic Information Resources will be easy or free of effort. In other words, the degree to which a Postgraduate Student in a theological seminary in Ogun State thinks that making use of an information system would be stress-free.

Attitude to use of Electronic Information Resources: attitude is described as inclinations and feelings, prejudices or bias, preconceived notions, ideas, fears, and convictions about the use of electronic information resources by students of theological seminaries in Ogun state, Nigeria.

Cognitive Attitude: Cognitive attitudes refer to the beliefs, thoughts, and attributes that is associated with. It is the opinion or belief segment of an attitude. It refers to that part of attitude which is related to the general knowledge of seminarians in Ogun State, Nigeria

Affective Attitude: It deals with feelings or emotions that are brought to the surface about electronic information resources to seminarians in Ogun State, Nigeria

Conation Attitude: refers to expression of intension on the use of electronic information resources of seminarians in Ogun State, Nigeria.

Theological Seminary/Institutions: This refers to all institutions established to train people for clerical positions in Christianity in Ogun state theological institutions.

Usage: This means consulting the contents of electronic information resources to create new knowledge in the form of assignments, term papers, final projects, in seminaries in Ogun state, Nigeria.

Postgraduate Students: This refers to seminarians undergoing a second/third-degree program in any theological institution in Ogun State, Nigeria.

Seminarians: are students studying at a seminary or theological institution in order to become a priest, rabbi, or minister in seminaries in Ogun state, Nigeria.

Chapter Two

Literature Review

This chapter presents a review of existing scholarly literatures relating to the effect of users' attitude on the use of electronic information resources.

2.1 Conceptual Review

- 2.1.1 Concept of Electronic Information Resources use
- 2.1.2 Perceived ease of use of electronic information Resources
- 2.1.3 Attitude to Electronic Information Resources

2.2 Theoretical Framework

- 2.2.1 Technology Acceptance Model (TAM)
- 2.2.2 Theory of Reasoned Action (TRA)

2.3 Empirical Review

- 2.3.1 Availability of Electronic Information Resources in Academic libraries
- 2.3.2 Awareness of Electronic Information Resources among seminarians
- 2.3.3 Frequency of Use of Electronic Information Resources by seminarians

2.1. Conceptual Review

2.1.1 Concept of Electronic Information Resources

Information resources have always been evolving since human began to record their thoughts and knowledge. The earliest records were made of items that; today would seem far-fetched as what we have today would seem to those who lived in the ancient period. Human knowledge was recorded on stones, clay tablets, papyrus, velum, animal skins etc.[15]. All these formats of information resources were an improvement upon each other as scholars looked for better to preserve knowledge and also make it easier to handle, duplicate and distribute recorded information. The development of paper and the subsequent invention of the printing press (the Guttenberg Press) was a revolution in itself. Since then, the focus of information managers and scholars is to ensure that information and knowledge reach all those who need them. However, the invention of the book and other printed information resources brought tremendous changes to the creation and distribution of information, the advent of Information and Communication Technology the electronic information resources has taken information creation, presentation, access, storage, preservation, and distribution to a whole new with serious implications for information users and information managers[16]. The emergence of information and communication technology has caused a paradigm shift in the access to and use of

information resources and services; which demands a more dynamic and innovative approach to information service delivery by librarians[17].

Electronic information resource is a general term that includes information collection and indexing services, electronic journals and other full-text documents, and the provision of information aggregators, provisioning services. the content of articles accessed over the network remotely from information providers or edited locally by a consortium or one of its library members. Electronic information resources are also described as; information "product that delivers data in text, numerical, graphical as a commercial product available in digital form includes full text databases, electronic journals, image collections and multimedia products"[18].

An electronic resource is a document that requires computer mediation to access its content and make it useful. Both online and offline resources such as CD-ROMs are covered by electronic resources. The term electronic resources refer to all the products the library offers over a computer network. Electronic resources also known as online information resources include bibliographic databases, electronic reference works, full-text book search engines, and digital data collections. These include "digitally born" material produced live online. For example, e-journals, databases and printed resources have been scanned and digitized. The electronic resources, e-journals, online databases are not "owned" by the libraries as they own the print material. Ownership of electronic resources lies with the providers of these resources. Access to the electronic resources may be free via Internet or may be available against a fee[19].

Electronic Information Resources (EIRs) are those defined as those resources that deal with both born electronic and digitized materials which can be either accessible from libraries in house database or from the world-wide-web. The born electronic materials include: e-books, e-journal, e-newspaper, e-magazine, e-projects, e-thesis, e-dissertations, e-reports, website, www-resources and other related materials which can be considered necessary by the users, researchers, information professionals or even by the library management itself. On the other hand, digitized materials mean converting the materials from other formats into electronic format[20].

Scholars also referred to Electronic Information Resources (EIRs) as the new wave of air blowing many libraries globally, simply because there is increasing amount of information now available in electronic format and this is likely to have significant consequences for information retrieval. With electronic libraries abstracts and indexes are available online and there is easy access to computer-held information, together with the possibility of including sound and video. Meaning that for many other reference tools electronic format has notable advantage over print.

These electronic resources may be accessed through the electronic networks of third-party information providers or located locally within the institution or library. There is also a growing body of digital research material produced by scholars as part of their research such as research datasets. Datasets are also becoming key resources and various organizations such as the Arts and Humanities Data Service (AHDS) are now developing repositories to manage them in order to preserve them and make the available to scholars and researchers all over the world. Scholars observe that the rise of dataset management

and dataset repositories is being driven by the increasing popularity of the open access movement[21].

In order to better explore the concept of electronic information resources and issues surrounding their acquisition, management, and utilization, It is best to start by looking at the evolution of the types of electronic information resources currently available to libraries. Until relatively recently, electronic resources refer to libraries providing online search for bibliographic databases mounted on a hosting service such as Dialog or STN. Online research is usually done through a professional librarian, and often people using the service are charged a direct fee for the research. The overall management responsibility of this service usually rests with the library's public service staff, and the service does not pose any collection management problems. In the mid-1980s, some libraries began offering self-service electronic information services by subscribing to CD-ROM versions of their databases online. Access is usually from standalone or networked workstations, but some libraries have added self-service online databases, mostly in the business area and often on a subscription basis instead. for pay per use.

CD ROM

A CD-ROM is a pre-pressed optical compact disc that contains data. The name is an acronym for "Compact Disk Read-Only Memory". Computers can read CD-ROMs, but cannot write to CD-ROMs, nor write them, nor erase them. Until the mid-2000s, CD-ROMs were commonly used to distribute software for computers and video game consoles. Some CDs, called enhanced CDs, hold both computer data and audio with the latter capable of being played on a CD player, while data (such as software or digital video) is only usable on a computer (such as ISO 9660 format PC CD-ROMs)[22].

The CD-ROM database allows users to access related databases without an Internet connection. Therefore, it is more cost-effective than an online database as the information can be accessed offline without telecommunications charges. In addition, the CD-ROM database is of great value to printing if the system is networked, as patrons can access the necessary information without having to visit the library. The CD-ROM database is an important tool for identifying bibliographic details of potentially useful documents and providing easy access to large volumes of material for study. Scholars submitted that the amazing technological advancements have opened new horizons for information creation, duplication, storage, access, distribution and presentation[23].

Bibliographic databases

A bibliographic database is a database of bibliographic records; it is a curated digital reference collection to published material. It can be general in nature or it can be in a specific field. All electronic databases provide citations, providing the reader with basic information about the publication of the article or resource, such as title, author, date, and publication source. Most databases that provide citations also include abstracts, which are brief summaries of the article or resource. Users and researchers can learn a lot about an article simply by carefully reading the citations and abstracts; This will help them decide if they want to read the entire article. Simply put, summaries are widely used by researchers because they provide a fast and efficient way to check the relevance and compare articles from the rich literature available. in a particular specialty; In some cases, they may be able to offer a suitable alternative to the entire research paper.

Bibliographic databases emerged in the 1990s, through the initiative of the United Kingdom educational authorities. It was realized that there was a need for change in UK

academic libraries regarding the provision of electronic information. As a result, the university funding councils launched the BIDS (Bath Information and Data Services) ISI service[24]. BIDS-ISI provides staff and students at registered institutions with free self-service site license access to the main ISI databases: Science Citation Index, Faculty Citation Index Social Studies, Arts & Humanities Citation Index, and Science and Engineering Proceedings Index (ISTP). Access to these datasets is typically managed by the institution's library, and the datasets are made available "free of charge at the point of use" to staff and students at subscription facilities. These datasets have existed for a long time in electronic form, although their production has been printed, which makes it easier for users to access information source issues and this contributes to researchers easily receive and use the service. The scholar of the time described the effects of this initiative as 'truly revolutionary'[25] for academic libraries. The initial access to the ISI datasets tested the viability of the model of providing wide access to networked bibliographic datasets and the success of the model led to a rapid expansion in the range of datasets.

The number and range of networked bibliographic databases has increased substantially since then and there are now hundreds of bibliographic databases in place all over the world. Most of these databases are electronic versions of what has been printed by Analysis and Indexing Services and held by many libraries. Thus, because databases provide access to material that was often the purpose of libraries, libraries, not computer centers, actively managed and funded these networked datasets. However, despite the increasing availability of networked data sets, CD-ROM remains a popular medium for electronic resources, and increasingly for reference, and is a particularly attractive medium for underdeveloped IT infrastructures.

Full-Text Databases

The database provides full-text articles, book chapters, conference papers, and more. called a full-text database. Examples are Science Direct, JSTOR, John Wiley, etc. Full-text access means that users can view, save or print the full text of the article. The full text of the article can be in HTML or PDF format. The success of bibliographic databases has led to a growing appetite for full-text databases. As a result, there is a growing need for full-text articles, rather than just tutorials.

As a result, efforts to provide full-text electronic journal services began in earnest with major publishers embarking on experimentations with limited services. In 1995, a scheme to speed up this process and provide wide access to full-text journal articles called the Pilot Site License Initiative (PSLI) was launched[26]. The initial project saw the participation of major four publishers - Academic Press, Blackwell Publishers, Blackwell Scientific, and The Institute of Physics Publishing. The aims of the initiative, were to explore the issues around providing access to a critical mass of electronic full-text journals; to test a national site license concept for electronic journals between higher education institutions and publishers; and to provide libraries with a discount on the existing subscriptions to journals published by the participating publishers, so that they would consider subscribing to more titles. PSLI provides access to the full text of over 250 recent journals from the four publishers, but one of the problems associated with the PSLI was that it was publisher-led rather than subject-led; and users do not in general approach information by publisher, but rather by subject[27].

However, the initiative did stimulate libraries into embracing electronic journal developments earlier than they might otherwise have done, and did highlight some of the

collection management issues that arise from mediating access to full-text journals. 'Libraries that might otherwise have been slow to develop have been forced to embrace electronic journal developments, and library staff and users have been able to become familiar with and benefit from new services[28].

Overall, this initiative is a welcome learning experience for most libraries on issues related to the management of electronic journal collections. However, the project was also met with great skepticism by librarians, who believed that more certainty was needed about the future of the system, stable technology and storage issues. will be resolved before libraries commit to moving from paper to electronic. Of course, this initiative is not only for the benefit of librarians, but also aims to improve access to full-text journals for library users. Where libraries can get feedback from users, it's usually very positive. This is especially the case with the physics community, who are generally computer savvy and find this initiative particularly relevant for them, as it is led by a professional physics publisher - the Institute of Physics. Publishing Physics. Today, most academic libraries now subscribe to online databases of books and journals that are relevant to the University curriculum which will help to effectively facilitate teaching and learning.

E-Theses and Dissertations

Theses and dissertations are the name given to the research reports produced by candidates for higher degrees such as Masters, Master of Philosophy (MPhil) and Doctor of Philosophy (PhD). A thesis or dissertation is a document submitted as a key part of the requirements for the award of an academic degree or professional qualification. It presents work or research undertaken by a student, its results as well as its findings. Theses and dissertations are product of rigorous academic work as the research involved is expected

to follow the strictest and the most elaborate scientific procedure. As a result, the final product is highly regarded as quality scholarly work which can serve as information resources to development new products and services as well as to create new knowledge. As a result, theses and dissertations are integral parts of the library information collection especially in academic libraries where researchers often consult them in the process of creating their own scholarly works.

In the past, student researchers submit theses and dissertations to their universities/institutions in print format. Most of these print resources are collected, processed and organized by librarians in academic libraries where they are consulted by other researchers[29]. Today, ICT has also affected the production, packaging, organization and dissemination of theses and dissertations. They are now available in both printed and electronic formats. The digital form of theses and dissertations are known as e- theses and dissertations. The research scholars studying for their Masters, M.Phil. and PhDs in universities worldwide are required to submit digital or soft copies of their theses and dissertations to their various institutional libraries[19].

In addition to this, academic libraries are also digitizing the printed theses and dissertations in their collection with the objective of making them accessible on Internet[30]. This is to create improved access to these quality scholarly works for those who may not have time to visit the library or stay for an extensive period of time. The collection of digital theses and dissertations is also known as digital repository. There are many of such repositories created by different bodies where interested researchers can access theses and dissertations in their fields of study. Popular examples include is the e-theses repository of the British museum library; Theseus the repositories of theses and dissertation from all

tertiary institutions in Finland and Shodganga which is the repository for theses produced in tertiary institutions from India.

Institutional Repositories

An Institutional Repository is an online database that provides access to digital collections of theses, theses, electronic prints, etc., from a particular institution for viewing online. It provides document related metadata i.e., student name, university name, graduation year, document title, abstract, key-key etc. Institutional repositories are also known as digital archives. Universities and research institutes have established these archives to collect, organize, and highlight the intellectual contributions of their professors and scientists. These institutional repositories may also provide access to annual reports, questionnaire documents from previous years, and preprints of articles by university teachers and scientists. and institute. Many tertiary institutions in the developed world such as Harvard University, Massachusetts Institute of Technology (MIT), and the University of Idaho among many others have created institutional repositories that are being accessed by information users from all over the world[31].

Nigeria is not left out in the race to create IRs as many academic institutions in Nigeria now have functioning, web-accessible IRs that can be assessed by anyone globally. Institutional repositories have been created by the University of Ibadan, University of Jos, Covenant University, Ahmadu Bello University and the National Open University of Nigeria, which has created one of the most comprehensive and robust IRs in Nigeria[32].

Electronic Newspapers

An electronic newspaper is a serial publication containing news on current events of special or general interest, issued in a machine-readable format, and "accessed via

input/output devices connected electronically to a computer"[33]. remote access electronic newspaper is commonly called an electronic newspaper. An e-newspaper must fit the definition of both a newspaper and a remote access electronic serial. This means that electronic newspapers are accessed most frequently via the Internet. However, there are now instances where libraries and information centers curate pdf version of electronic newspapers from various publishers and make them available to library users on their local servers.

Electronic Reference Resources

The number of reference books are liberally available in the internet; the information is planned to be originate quickly when needed. Reference works are typically referred to for scrupulous portion of information, relatively than read opening to end. The inscription method used in these works is instructive. Many reference works are accumulating by a panel of donor whose work is synchronized by one or more editors rather than by an entity author. Examples: Atlas, Dictionary, handbook thesaurus, encyclopedia http://www.britannica.com/ http://dictionary.cambridge.org/ [34]

Internet resources

The internet as an international network of interconnected computer devices supported by communication infrastructure which facilitates the connection of information systems and their users by carrying their traffic using a single system of numbering, naming, addressing, identification, protocols and procedures that is defined by internet standards[35]. The internet is the most facilitating and the most powerful tool in promoting access to and use of e-resources. Researchers are of the opinion that the internet is not only a source of electronic information resources but it also presents postgraduate students with unlimited

opportunities to benefit from online communities for publishing theses and dissertations, leading to the creation and dissemination of knowledge[36].

Importance of Electronic Information Resources

Several studies have shown the fact that integrating electronic resources into a library's collection is an effective way to increase the accessibility and convenience of library use. For example, researchers in India demonstrate the effectiveness of digital libraries in universities.

Their results suggest that both students and lecturers were satisfied and increase their patronage when their academic library established a digital library which made it possible to access electronic information resources both on and off-campus[37]. Similarly, other researchers in the same environment also submitted that electronic resources are importantly in the design of modern libraries because of their relative convenience in usage[38]. Other researchers have also made attempt to highlight various features that make electronic information resources important to both the library and information user.

Several studies have shown the fact that integrating electronic resources into a library's collection is an effective way to increase the accessibility and convenience of library use. For example, researchers in India demonstrate the effectiveness of digital libraries in universities. This is because, it provides a seamless access to information from the global of knowledge which means that researchers from different parts of the world can access the same information at the same time[39] [40].

While agreeing with the position of other empirical studies on the relevance of e-resources utilization in higher educational institution libraries, a team of researchers from India further indicate that the use of electronic resources has made performance of tasks to be

very straightforward in libraries. They added that the use of e-resources in libraries make exploration of new features and experimentation with information from various sources quite feasible[41]. This flexibility was also noted in another study where it was argued that the multimedia and seamless nature of electronic resources have high propensity of attracting new users to libraries and satisfying their specific needs[42].

Other researchers have also mentioned the opportunity provided by electronic information resources for library to meet with the changing demands of the modern information users and cope with the information explosion brought about by the advent of Information and Communication Technology (ICT). Indeed, some experts are of the opinion that the challenges of higher educational institutions can be met through initiatives in e-learning, by placing much emphasis on the critical role of e-resource utilization in modern academic libraries[43]. This implies that, if the contents of Library resources are universal in coverage through e-resources technology adoption, user satisfaction will invariably be high[44].

Experts have also noted that modern information users have different chances than those who came before them because to electronic information resources. The information is obtained when it is wanted, making it "just in time" rather than "just in case," the user selects only the information needed to answer the specific question, and, finally, the information is only stored should the user need it. These are just a few of the benefits of networked information systems. Electronic information can therefore provide a number of advantages over traditional print-based sources[45].

Additional benefits include the fact that using electronic information sources is frequently faster than using print indexes, particularly when looking retrospectively, and that it is simpler to employ keyword combinations with them. They make it possible to browse

through numerous files at once, which is easier to do than with printed equivalents. Since they are updated more frequently than printed tools, electronic resources can be printed and searches saved to be repeated at a later time. One main advantage, especially to distance learners or those with limited time to access the library, is their availability from outside the library by dial-up access[46].

It was also argued that, while reading an e-journal is not the same as reading a printed one, many are beginning to acknowledge the possibility that electronic documents (e-documents) offer users advanced features and novel forms of functionality beyond what is possible in printed form. Years ago, scholars noted that the advantages of electronic resources over print include speed, ease of use, ability to search multiple files at the same time, ability to save, print and repeat searches, more frequent updating and the ability to access from outside the library.

Electronic sources are also essential research tools that complete print materials in any conventional library. Their benefits include giving users access to information that could otherwise be out of reach due to finances or location restrictions, access to up-to-date information, and extensive links to related or extra resources. E-resources could be stored electronically thereby saving space, the risk of lost, theft or damage is lessened and costs significantly reduced[47].

Use of Electronic Information Resources

The concept of use as it related to any product can be examined from three contexts namely; ‘useful’, ‘usable’ and ‘used’. So, in discussing use in general, experts have

suggested that researchers should consider whether the product is considered useful, whether it is usable and whether it is used by the target user. Most studies on electronic information resources have examined their use based on these contexts as it is obvious that they are all interconnected. In relation to the current study, the use of electronic information resources would be better understood with adequate information on their usefulness, usability and usage statistics.

A product is considered as useful when it is instrumental in making its users accomplish a task or achieve a given objective whether such objective is measurable or not. Another key condition for usefulness is that a wide majority of the people should see the product as very useful in meeting particular needs. In the case of electronic information resource, scholars have reported that information users find electronic information resources useful for various purposes.

Scholars in Sri Lanka reported that students in that country find electronic information useful in meeting academic and personal information needs as the reported using the resources for their academic works and to improve their knowledge about various concepts. It was also reported that the students use electronic resources for gathering general information regarding recreation, fashion, entertainment and others. [48] This finding is also echoed in another study focusing on academic library users in Saudi Arabia. The study reported that information users in Saudi universities found electronic information useful both as supplement and as a replacement for printed resources when printed not resources are not available or accessible[49]. It was reported that information users studied reported that they found electronic information resources useful in accomplishing tasks such as gathering research materials, completing course assignments,

obtaining additional course materials; sending e-mails. The also find them useful in keeping up with current developments in their areas of study; update their knowledge about subjects of interest as well as gathering general information.

Furthermore, studies conducted in India also buttressed that the use of electronic information resources is determined by the perception of the users regarding its usefulness to their various information needs.

Electronic information is also regarded as useful by students on the African continent. Scholars believe that electronic information resources are very useful to students as it provides them with the opportunity to access relevant and quality information that would have otherwise remained inaccessible in the absence of information technology. With the availability of electronic information resources, students can interact and deliberate on important academic issues through interactive applications such as messaging and teleconferencing applications[50]. This is backed by the submission of researchers from Ghana who observed that electronic information resources are fast becoming integral part of academic library collection s in Ghana due to their usefulness to various categories of users. Students in tertiary institutions as well as researchers and other information users are now exposed to various accesses to quality, timely and relevant information resources from a wide range of sources across the globe.

Studies by researchers in Nigeria further buttressed the argument for the usefulness of electronic information resource as it was revealed in a study focusing on lecturers in a South west university that electronic information resources have ascended to the top of the priority list of academic and research institutions around the world, particularly in developing countries. This increase attention to electronic information resource is due to their perceived usefulness among information users such as lecturers and researchers in

Nigerian tertiary institutions.[34] The implication of all these submissions is that virtually all categories of information users consider electronic information resources as useful. However, if electronic information resources pass meets the criteria of usefulness, it is also expected to be usable. That is, information users should not only find electronic resources useful, they must also be able to use the available information resources.

The context of the concept of use suggests that usefulness and usability do not always go hand in hand. Thus, the usefulness of electronic information resources does not mean that users would find them usable in all circumstances. In the words of an expert, usability focuses on how a product is to be utilized and whether it is possible for the users to make use of such product in a manner which is simple, effective and devoid of any significant level of stress[51]. Usability of electronic information resources means the ability of information users to be able to find the information, access it, retrieve and make use of it for any given purpose with minimal level of stress.

From the available literature, it can be deduced that whether information users percived of electronic information resources as easy or difficult to use depends on factors that can be roughly categories as, institutional, technical, and personal. Institutional factors refers to the policies, guidelines, facilities and support provided by institutions and their libraries to ensure that information users are able to make use of electronic information resources in the library or remotely. Studies have shown that academic institutions especially in developing countries often lack basic ICT equipment such as computers[52]. Most of the time, users are left frustrated by slow pace of article downloading due to low internet bandwidth[53]. In addition to this, some libraries have put their electronic information resources on local area networks (LAN) which can only be accessed in the library or, at

best, within the campus[54]. It was also reported that institutions often neglect to create better awareness about the availability of electronic information or fail to properly train the information users on the use of complex information systems has very few features in common with the internet search engines such as google which users are already familiar with. This makes the resources unusable for those users who are not on campus for one reason or the other. Apart from institutional factor, technical factors is also discussed in usability studies.

The technical factor here is used to represent issues relating to user interfaces, login protocols and interoperability of information systems. Studies have established the fact that some information users would rather use printed resources because they find it difficult to understand the complex protocols that they have to go through before finding the necessary information needed. Closely related to this is the access and authentication protocol followed by some academic libraries. Because of the proliferation of scholarly databases and the inability to serve all user groups, academic libraries have often has to subscribe to multiple databases in order to meet the information needs of their users.

These databases often required separate passwords and usernames which often confuse the information user to the extent that they stay away from using electronic information resources entirely. However, the extent to which technical factor affect the usability of electronic information resources depends on the personal factors of the information user such as level of ICT skills, self-efficacy, information and media literacy skills and so on.

Studies have emphasized the fact that the ability of an information user to effectively make use of electronic resource materials, depends on how well equipped they are with basic computer skills, knowledge of what is available and how to use it, and also the

ability to outline a research problem[55]. The skills possess by students regarding the use of electronic information resources and the efforts they make to achieve these skills often depend on the level of education, discipline and gender among other factors. Various studies conducted along these lines have shown that when information users have the necessary ICT skills, they tend to find the use of electronic information resources easy. Taken together, the ease of use of information resources as perceived by information users and its usability are the building blocks for the use of electronic information resource. The judgement of information users concerning whether electronic information resources can help them achieve given tasks and whether the stress associated with its use is minimal lead to the formation of certain attitudes toward the use of electronic information resources.

2.1.2 Perceived Ease of use of Electronic Information Resources

It has been suggested that one of the factors that determine the use of electronic information resources by students is their perception of how easy it is to make use of the resources. Studies have shown that the level of skills required to access general information on the internet or use social media application is far lesser than that require to make effective use of scholarly electronic information resources. Furthermore, it can be easier to search for book on the library shelves than to search scholarly databases if the information user lacks the requisite information retrieval skills. These skills include a familiarity with the structure of the database and the necessary query terms which can retrieve the desired information from the database. As a result, researchers have found that students often develop negative attitude toward electronic information resources due to

lack of information retrieval skills which makes it difficult for them to retrieve information needed.

The affective side of lack of information retrieval skill is exhibited by what is referred to as information anxiety. This is a negative and uncomfortable feeling that arises whenever a user has to make use of information systems they have come to see as complex and intimidating. Information anxiety leads to procrastination and avoidance of the negatively perceived information system.

In order to better shape students' attitude towards electronic information resources, various authors have hammered on the need to intensify effort to equip students at all levels with the right skill necessary to cope with the information age[56]. It has been emphasized that there is no alternative but students must be guide to develop a positive attitude towards the use of e-resources. By implication, the perceived ease of use of electronic information resources among any group of users depends on the level and quality of user education organized by their respective academic libraries. Students especially need to be trained and re-trained in the use of e-resources in order to immerse them in the culture of seeking quality, diverse and current information which can be provided through electronic information resources. Some of the areas identified in the literature to be focused by user education programmes include how easy is the Electronic Information resources to use, it also focused on the ease of learning, ease of handling, ease of applying and as well the ease of controlling the EIRs

Studies which evaluate users' attitude to electronic information resources also found that demographic factors such as age and gender also affect perceived ease of use of electronic information resources. Studies have indicated that young students are likely to be more

comfortable with electronic information resources than adult students who are more used to printed resources. This suggests that young students perceive electronic information resources as easy to use because they grew up with them, hence they are called digital natives. Adult students on the other hand may see electronic resources as the new innovation that it is and cling to what they are already familiar with. Furthermore, while it has been reported in various studies that female students are more likely to have negative attitude towards information systems and, by extension, electronic information resources, than male students, recent studies have suggested that this assumption is not totally solid. This is likely to be, due to the fact that the academic environment is now saturated with technology and all students, both male and female must adapt in order to cope.

Universities and other higher institutions of learning worldwide have morphed into technologically rich environments where the use of technology has been infused into every aspect from course registration to classroom learning and examinations. This has rubbed off on many students and it is pushing those students who may normally shy away from using technology to learn how to use it in order to succeed in their academic endeavor.

Perceived ease of use of electronic resources have also been connected to issues with e-resource access[57]. Students' positive views could be impacted, for example, by bad internet connections or insufficient computer equipment to access e-resources. Because of this, a number of studies have looked at the issues affecting access to e-resources. There are strong justifications for encouraging kids to use digital resources. In order to efficiently search these resources, it is important to have a sufficient understanding of computers and

retrieval methods. For these reasons, it's important to teach students how to use online databases, catalogs, journals, and other searching tools.

Initiatives to provide universities with access to electronic information services have been launched in Nigeria. Others, like the University of Nigeria, Nsukka, have already added computers and internet access while others are still in the process of doing so. There are several challenges faced by university students while attempting to access online resources, which will be discussed in greater detail below. A study on students' attitudes towards the use electronic resources revealed that several students were not given adequate orientation about the use of electronic information resources especially in a scholarly content so they often have negative experiences when making attempts to use electronic information resources which further alienate them from using the available resources in the library. As a result, large number of students leave universities without necessary skills to cope within the information-based society[58]. These group of information users are very likely to perceive electronic information resources as difficult to use.

However, research findings are mixed as other researchers observed that despite the advantages and conveniences offered by holding physical books and journal, many students now acknowledge that electronic documents offer users advanced features and innovative forms of functionality far beyond what is possible in printed information resources[59]. In addition, research conducted by Indian researchers on users' attitudes and approaches towards electronic information resources and services in academic libraries showed that there is a growing interest in electronic information resources among the information users at affiliated colleges of Pondicherry University[60]. However, this does not always translate to the use of electronic information resources

Factors Determining Perceived Ease of Use Electronic Information Resources utilization

It is generally agreed that many factors do influence users' perceptions about information resources and services [61]. Librarians and scholars in the field of library and information science has highlighted the advantages of electronic resources over printed information resources which they listed to include: speed, ease of use, ability to search multiple files at the same time and ability to access documents from outside the library among others[62]. The written research materials found in a traditional library are complemented with the important electronic resources. The availability of extensive links to additional resources or similar content is one of these benefits, as is access to information that is otherwise unavailable to the user owing to their location or financial situation. The theory of attitude shows that information users make their own judgements based on various factors that librarians are just recently taking cognizance of[63].

For instance, scholars have pointed out that the use of electronic information resources requires some level of skills on the part of the information user which is not necessarily needed in the use of print resources. To properly search databases of electronic resources, one must be familiar with computers and retrieval methods; this affects one's attitude toward e-resources. Students with high computer self-efficacy would therefore be more willing to investigate novel technologies, programs, or databases. In a similar investigation into self-efficacy and library instruction, findings also showed a positive correlation between students' self-efficacy and the frequency in the use of library electronic resources[64].

A person's assessment of his or her capacity to plan and carry out a course of action necessary to achieve a particular level of performance is known as self-efficacy. Self-efficacy beliefs influence motivation through influencing the objectives that people set for themselves, the amount of effort they put forth, how long they persist in the face of challenges, and how resilient they are to setbacks. Students who have self-confidence believe in their capabilities[65].

When make decision on whether to adopt and make use of information systems, especially electronic information resources, researchers observed that their first consideration is the usefulness of the information they are getting. Studies in developing and developed countries alike have indicated that perceived ease of use (PEoU) is a key contributor toward the usage intention for electronic information resources[66].

2.1.3 Attitude to Electronic Information Resources

Attitudes are the feelings and beliefs that largely determine how employees will perceive their environment, commit themselves to intended actions, and ultimately behave[67]. In another context, attitude is described as inclinations and feelings, prejudices or bias, preconceived notions, ideas, fears, and convictions about any specific topic or issue. The notion that an attitude is a mental and neutral state of readiness organized by experience that exerts a directive or dynamic impacts upon an individual's response to any things or situations with which it is associated is closely related to this description. A person's propensity to respond favorably or unfavorably to an item, activity, person, institution, or event is another definition of attitude. This also covers all reaction to any discriminable aspect of such individual's world[68].

Although formal definitions of attitude vary, most of contemporary theorists agree that the characteristic attribute of attitude is its evaluative (pro-con, positive-negative) dimensions.

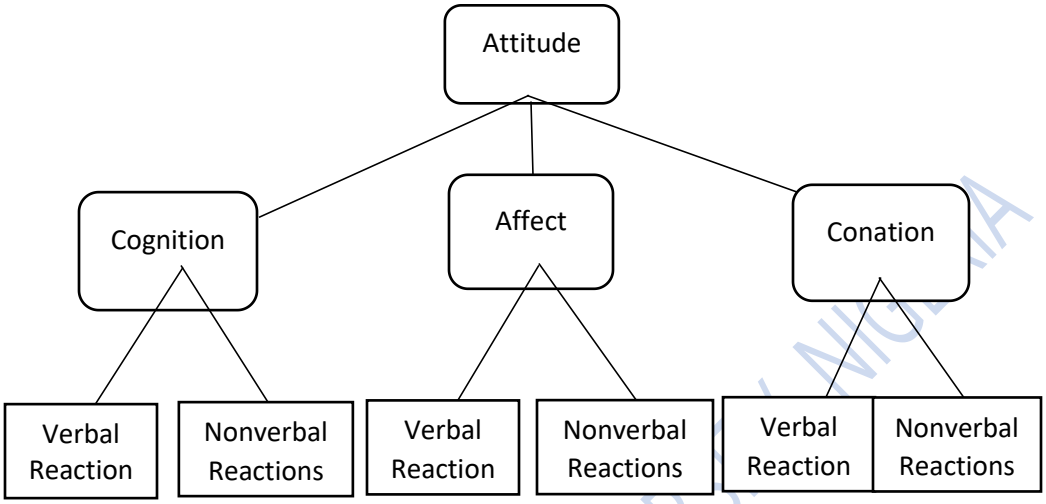


Figure 2.1: hierarchical mode of attitude. (Adapted from Fishben, 1993)

The figure shows that attitude is a combination of three key elements; cognition, affect and conation. Cognition has to do with, on the verbal reaction level, the expression of belief which arise out of knowledge about the object or entity. In the context of electronic information resources, it can be exhibited through statements such as; 'I believe the use of electronic information resources will enhance my academic performance. At the non-verbal reaction level cognition is shown through perceptual reactions[69]. The affect construct has to do with emotion or feeling induced by a given object, entity or product. The reaction is verbally shown in the expression of feelings such as anger, lover, friendship etc. when it is expressed non-verbally, it is manifested in some psychological reaction which often tell observers about the individual's attitude to the object or entity. The third construct, Conation has to do with the expression of intention. The reaction can also be non-verbal in which the individual show negative or positive attitude through reactions such as indifference, avoidance, adoption and use respectively[70].

In general, an attitude is defined as "a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object. Attitudes may be usefully distinguished from beliefs, behavioral intentions and behavior. According to experts in Human Psychology, an attitude locates a subject on an affective or evaluative dimension vis-a-vis an object. A belief places an individual on a certainty dimension associating an attribute to an object. An intention locates the individual on a probability associating an object-related action to him or herself. A behavior is clear for everyone to see and it is often the most looked for sign when determining attitude. Indeed, varying concepts of attitude have been employed in relation to the use of digital technology in general and electronic information resources in particular with correspondingly varying research results. The measurement of user attitudes is now a well-established component of current research regarding the use of electronic information systems. This interest was motivated originally by the recognition of a high rate of failure in digital information systems implementation. This has been most especially witnessed in developing countries where the responses to the development of digital libraries and investment on electronic information resources have mostly yielded less than expected results in term of patronage by the targeted users[71, 72].

Research on user attitudes as it relates to the use of electronic formation resources in the library setting has been approached from broad perspectives, with many aspects of attitude explored. However, it can be seen researches on users' attitudes towards electronic information resources in mostly based on the construct in the definitions of attitude which is that attitude is based on individual judgement of what and who they are reacting to. An individual's disposition to react with a certain degree of favorableness and

unfavourableness to an object, behavior, person, institution or event is influenced by how they judged such object, behavior, person, institution or event. So, when researchers in the field of Library and Information Science investigate users' attitude, they also make attempt to understand what shapes these attitudes[73] [74] [75].

Human approach to a phenomenon might be enhanced or harmed depending on one's attitude toward it. Positive attitudes are widely acknowledged as a prerequisite for effective information technology integration and utilization in teaching and learning. The two notions of attitude and perception regarding electronic resources have been studied[76]. According to academics, attitude toward electronic resources refers to how students respond to researching digital resources in light of their views, presumptions, and perceptions of other people. Additionally, it was stated that student attitudes toward electronic tools in the classroom can be positively or negatively evaluated in ways that affect the learning process of the respondents. Since the student's inclination to use the library's digital resources might be adapted positively or negatively, attitudinal behavior and perception towards the investigation of digital resources simply refers to that tendency.

Users Attitude towards Electronic Information Resources

As shown by the discussion in the previous section, information users must develop a particular attitude towards electronic information resources. The conceptual representation of attitude also shows that any attitude formed, whether positive or negative, is subjective. That is, the value of electronic resources is actually based on the perception in the minds of the students rather than the actual value of the resources themselves or the values ascribed to them by librarians, scholars and other information providers. This explains why attitudes are described as "inclinations and feelings, prejudices or bias, preconceived

notions, ideas, fears and convictions about any specific issue, object or entity"[77]. In respect to this information theorist often speak about perceived ease of use, perceived usefulness because the judgement and the action that follow such by the information user is based on perception or preconceived notions or expectations. Information service providers such as academic libraries are therefore concerned with things that might influence information users to perceive their information resources in a favorable light and thus form positive attitude towards them. Scholars submitted that positive attitudes are fundamental to the effective use of information resources. For effective and productive utilization of the available wealth of information from electronic information resources, students must acquire the right attitude.

It has been suggested that one of the factors that affect students' attitude to electronic information resources is their level of information retrieval kills. Studies have shown that the level of skills required to access general information on the internet or use social media application is far lesser than that require to make effective use of scholarly electronic information resources. Furthermore, it can be easier to search for book on the library shelves than to search scholarly databases if the information user lacks the requisite information retrieval skills[78]. These skills include a familiarity with the structure of the database and the necessary query terms which can retrieve the desired information from the database. As a result, researchers have found that students often develop negative attitude toward electronic information resources due to lack of information retrieval skills which makes it difficult for them to retrieve information needed.

The affective side of lack of information retrieval skill is exhibited by what is referred to as information anxiety. This is a negative and uncomfortable feeling that arises whenever

a user has to make use of information systems they have come to see as complex and intimidating. Information anxiety leads to procrastination and avoidance of the negatively perceived information system[79].

In order to better shape students' attitude towards electronic information resources, various authors have hammered on the need to intensify effort to equip students at all levels with the right skill necessary to cope with the information age. It has been emphasized that there is no alternative but students must be guide to develop a positive attitude towards the use of e-resources. By implication, the attitude of students toward electronic information resources also depends on the level and quality of user education organized by their respective academic libraries. Students especially need to be trained and re-trained in the use of e-resources in order to immerse them in the culture of seeking quality, diverse and current information which can be provided through electronic information resources. Some of the areas identified in the literature to be focused by user education programmes include how to use of search tools and technique to retrieve information from electronic databases, the use of online catalogues etc[80].

Studies that evaluate users' attitude to electronic information resources also found that demographic factors such as age and gender also affect attitude towards electronic information resources. Studies have indicated that young students are likely to be more comfortable with electronic information resources than adult students who are more used to printed resources. This suggests that young students may have positive attitude towards electronic information resources because they grew up with them, hence they are called digital natives or 'generation z[81]. Adult students on the other hand may see electronic resources as the new innovation that it is and cling to what they are already familiar with.

Furthermore, while it has been reported in various studies that female students are more likely to have negative attitude towards information systems and, by extension, electronic information resources, than male students, recent studies have suggested that this assumption is not totally solid. This is likely to due to the fact that the academic environment is now saturated with technology and all students, both male and female must adapt in order to cope[82].

Universities and other higher institutions of learning worldwide have morphed into technologically rich environments where the use of technology has been infused into every aspect from course registration to classroom learning and examinations. This has rubbed off on many students and it is pushing those students who may normally shy away from using technology to learn how to use it in order to succeed in their academic endeavour[83].

Accessibility issues with e-resources have also been ascribed to attitudes toward them. Students' positive views could be impacted, for example, by bad internet connections or insufficient computer equipment to access e-resources. Because of this, institutions address the issues affecting access to electronic resources. There are strong justifications for encouraging kids to use digital resources. In order to efficiently search these resources, it is important to have a sufficient understanding of computers and retrieval methods. For these reasons, it's important to teach students how to use online databases, catalogs, journals, and other searching tools. In Nigeria, initiatives have been undertaken to give universities access to electronic information services. Some universities are in the process of installing computers, and internet services, while some others have already installed the internet services[84].

A study on students' attitudes towards the use electronic resources revealed that several students were not given adequate orientation about the use of electronic information resources especially in a scholarly content so they often have negative experiences when making attempts to use electronic information resources which further alienate them from using the available resources in the library. As a result, large number of students leave universities without necessary skills to cope within the information-based society[85]. These group of information users are very unlikely to have a positive attitude towards the use of electronic information resources[86].

However, other researchers have noted that many students now acknowledge that electronic documents offer users advanced features and innovative forms of functionality far beyond what is possible in printed information resources, despite the benefits and conveniences associated with holding physical books and journals. There is also an increasing interest in electronic information resources among information users in Indian tertiary institutions, according to studies done by Indian researchers on users' attitudes and approaches toward electronic information resources and services in academic libraries.[87] However, this does not always translate to the use of electronic information resources.

2.2 Theoretical Framework

The study adopts the Technology Acceptance Model (TAM) and Theory of Reasoned Action (TRA).

2.2.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) was developed by Fred Davis in 1986 as a systematic approach to explain user acceptance of new technology. The major aim of the model is to provide useful insights for those in charge of selecting new technologies or information system regarding what potential users of the new technologies are likely to consider before they adopt and use the new technology. The model seeks to answer two fundamental questions: What are the factors informing the decision of potential users to adopt a new technology? And, what is the role of the features of new technologies in users' acceptance or rejection?[88]

The TAM comprises several variables explaining behavioral intentions and the use of technology directly or indirectly (i.e., perceived usefulness, perceived ease of use, attitudes toward technology), and has been extended by external variables, such as self-efficacy, subjective norms, and facilitating conditions of technology use[89]. The TAM examines the causal relationship between external stimuli, cognitive response, affective response and behavioral response. It specifies perceived usefulness and perceived ease of use as the two most important determinants of system use. Perceived Usefulness (PU) as conceptualized in TAM is used to measure the extent to which an individual believes that the adoption and use of a new technology would enable them to improve on their current performance. On the other hand, Perceived Ease of Use (PEoU) measures the degree to which a person assumes that using the new information system will be free of effort[90].

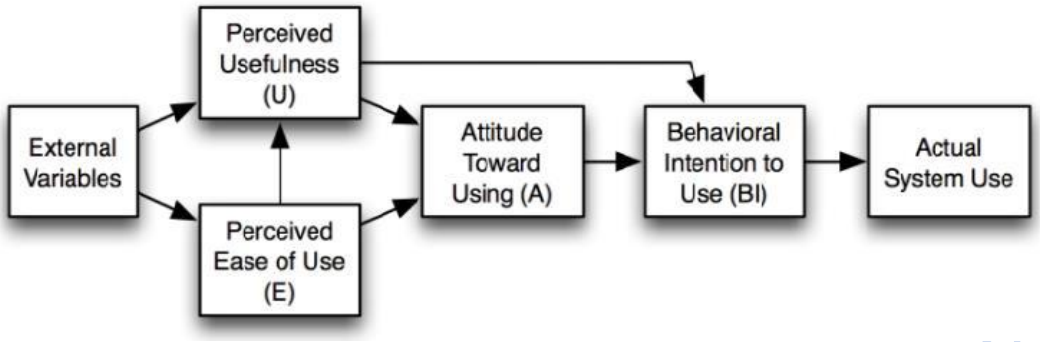


Figure 2.2: Graphical illustration of the TAM (Source: Saulus, 2017).

TAM constructs are analyzed in the following section.

Perceived Usefulness (PU): is defined as the extent to which one thinks employing a specific system will improve their performance at work. In other words, a person is more likely to adopt favorable attitudes about a new technology if they believe it to be useful.

The "perceived usefulness" (PU) of any technology or information system has to do with the extent to which a potential user thinks that making use of a particular technology or information system is likely to cause improvement in the performance of their assigned tasks. The degree to which a person feels that technology will enable him or her to carry out a specific task effectively and efficiently is referred to as the PU. The measurement of the consequences of adopting new technology on job performance or improved results in assigned tasks is therefore the primary concern of the PU construct. Therefore, it is assumed that the PU has a direct impact on both the intention to utilize and the actual usage of the technology. On the other hand, technology might assist people in achieving a goal or improving their desired performance. As a result, people would think of technology as being valuable. They might be more willing to employ the technology as a result.

Perceived Ease of Use (PEOU): refers to the extent to which an individual considers that using a particular technology will be easy or free of effort. As conceived in TAM, perceived ease of use (PEoU) means the degree to which a potential user thinks that making use of an information system would be free of stress. The idea took into account how much potential customers believe a particular technology has user-friendly features and is simple to use. On the other hand, potential users might think the technology is too complicated to grasp and utilize. This implies that people are more likely to adopt a positive attitude toward utilizing a new technology if they believe that it is simple to use. It is also mentioned that the PEoU influences the PU favorably. Simply put, people can use technology to their advantage provided it is simple to use. Therefore, it is anticipated that PEoU will play a crucial role in determining the acceptance and usage of technology among different user groups.

Attitudes towards Use (A): is focused on the evaluation of a system or technology's appeal by its users. The simultaneous influence of PU and PEOU on attitudes toward usage indicates that good attitudes toward using an information system are produced by greater perceptions of PU and PEOU of the system.

Behavioural Intension (BI): this refers to the possibility that users would engage in a specific activity, like adopting a technology or information system. The conscious judgment process unique to each potential user determines the behavioral intention. Researchers have shown a strong link between the PU and behavior inclination to utilize certain technologies. Additionally, there is a connection between behavioral intention and actual technological use.[60]

External Variables: As pointed out earlier, social, cultural, and political aspects are part of the variable affecting users' behavioural intention to adopt and use any new technology. There are also a number of social variables such as language, skills, and supportive conditions that might be considered. For instance, technological use in politics and political crises is a concern for political actors. Indirectly and directly, users' behavior intentions, attitudes, PU, and PEOU of an information system influence an individual's actual use of that system. The importance of PU in attitude formation, on the other hand, has not been established for PEOU[91].

A probable reason for this discrepancy, as suggested by several scholars is that the value of PEOU as a predictor of intention to use a technology is expected to diminish with time as the user becomes more familiar with it.

Strength of TAM

TAM is considered as one of the most effective models in measuring users' acceptance of information systems. The theory has been described as meeting basic criteria expected of any standard theory such as: parsimony, verifiability, and generalizability[92]. The first criteria which is parsimony refers to the simplicity of a theory or model which makes it easily understandable and applicable. There is also verifiability which refers to the availability of empirical data to back any assertion made. Another criterion is generalizability which refers to the capability of a given model to be applicable or adaptable to multiple contexts and environments. it is widely believed that TAM is foremost among those models and theories that fulfill these three features[93].

Further TAM has been applied by numerous studies around the world to measure a various aspects of technology acceptance due to its simplicity, adaptability, and soundness.

The relevance of the model is also seen in its adoption and application by researchers from a diverse field of study. A large number of studies have modified the original TAM for improving its applicability and validity to numerous technologies[94].

Researchers have validated TAM's overall explanatory power and measurement validity in a variety of empirical situations with distinct user groups, technology, and organizational contexts, which makes its application more appealing from an operational perspective[95]. TAM is regarded as highly effective due to its capacity to accurately forecast 40 to 50% of people' willingness to adopt new technology. It has thus The TAM has gained considerable prominence, particularly due to its transferability to various contexts and samples, its potential to explain variance in the intention to use or the use of technology, and its simplicity of specification within structural equation modeling frameworks[96]

Weakness of TAM

The Technology Acceptance Model (TAM) is a prominent model for measuring technology acceptance. However, it has been criticized for encouraging rapid and easy research, resulting in less attention being paid to the fundamental challenge of technology acceptance. A second criticism of the model is that it favors simplicity at the expense of crucial determinants of decisions and actions. It is opined that, it will be difficult for a simple model such as TAM to describe all actions and behaviors over a wide range of technologies, adoption, and decision-making settings[67].

TAM is also criticized for omitting social influence, which has proven to be very important in the acceptance and utilization of new information systems, according to the critics. Despite its weakness this study adopts the theory because its focuses and addresses the gap of making use of new innovations.

2.2.2 Theory of Reasoned Action (TRA)

The Theory of Reasoned Action (TRA) was created in 1967 and refined by Ajzen and Fishbein in the early 1970s. According to the hypothesis, attitudes are influenced by beliefs, and attitudes in turn affect intentions, which direct or cause behaviors. This shows that an individual's behavior is primarily determined by attitude and perceived norm.[97] The notion that people are rational is a cornerstone of this idea. They carefully consider the information at their disposal before acting, as well as the possible effects of their choices, before determining whether or not to take any social action.[98] Figure 2.3 shows the TRA. Because theory often aims to explain a certain collection of occurrences, it has been widely applied in a range of disciplines, including information services, education, and technology, to better understand human behavior. Therefore, the primary factor influencing interest in or avoidance of using the electronic resources in the library is the attitude that results from the students' beliefs, views, feelings, and ideas. Because it covers attitude and behavior prediction and provides a scientific explanation, TRA is derived from a social psychology context and is concerned with behavior and attention prediction.

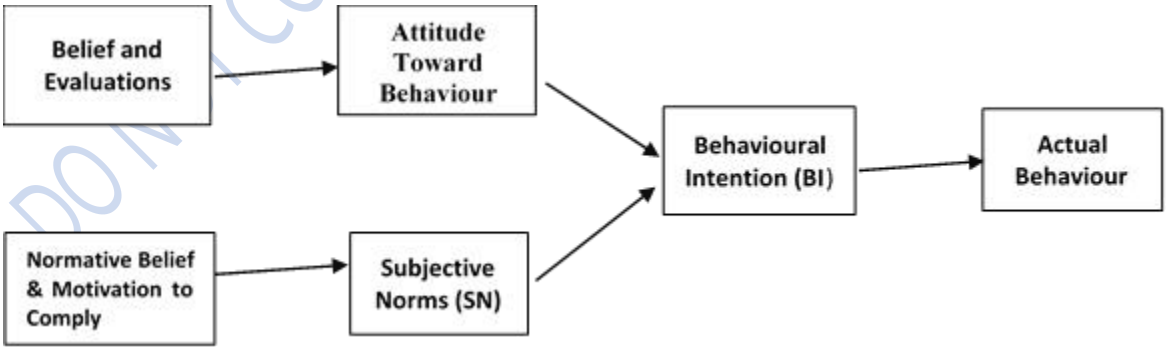


Figure 2.3: Theory of Reasoned Action, Illustration (Source: Mollel and Mwantimwa, 2019)

The TRA consists of three general constructs:

- Behavioral intention (BI)
- Attitude (A)
- Subjective norm (SN)

Behavioral Intension (BI): is a gauge of how strongly someone intends to carry out a specific behavior. The most reliable and nearby predictor of volitional behavior is BI. The subjective norms connected to the behavior in question as well as people's attitudes toward engaging in the behavior are the direct determinants of BI.[99]

Attitudes (A): is a way to quantify how strongly someone intends to act in a certain way. The best predictor of volitional behavior is BI, which is also the closest predictor. Direct drivers of BI include people's attitudes toward engaging in the behavior in issue as well as the subjective norms attached to that behavior.

Social/Subjective Norms (SN): Perceptions of individuals regarding whether or not they should engage in the behavior in question by referents or people who are significant to them. Individuals' normative beliefs determine this. A person is more likely to have a positive subjective norm if they feel that specific referents expect them to act in a certain way and are driven to do so.

The TRA is praised for being a straightforward and extremely general theory that may be used to describe almost any human behavior. The TRA intention model, which is popular and well-researched, has been successful in predicting and explaining volitional behavior in a range of circumstances. Even when used to evaluate situations and activities that do not fit the initial boundary requirements for this theory, TRA has a great capacity for prediction. In addition to being widely used, this theory has come under fire for omitting a

variety of behaviors like spontaneous, impulsive, and habitual behaviors in favor of a narrow focus on volitional behaviors.

According to TRA, an individual's behavioral intention is influenced by their attitude toward conduct and subjective norm. The relative strength of a person's intention to engage in an activity is measured by behavioral intention. To put it another way, a person's volitional, or voluntary action, is predicted by their attitude toward it and how they believe others would perceive them if they engaged in it. The combination of a person's attitude and subjective norms creates their behavioral intention. For instance, a student can think that using databases is difficult and complicated or that they are not necessary for research. It is possible that seeing other students who use databases sparingly and achieve high academic standing will have an impact on future behavior regarding database use.

2.3 Empirical Review

2.3.1 Availability of Electronic Information Resources in Academic Libraries.

Researchers have shown interest in evaluating the available information resources in Nigerian academic libraries to determine whether the libraries are meeting global standard in electronic information resources provision as well as measuring the level of digital library services being provided for students in Nigerian tertiary institutions.

In keeping with the concept that user awareness is a key measure of availability of EIRs, most of the studies on the availability of EIRs have adopted the research survey method which means that the responses of the library users and not the list of databases supplied by the library is used to judge availability. However, other studies have incorporated the view of librarians and on-the-spot assessment of what is available to determine the availability of EIRs.

One of such studies was conducted in a Zimbabwean university. The study found that electronic information resources available in Zimbabwean University libraries include both proprietary and open access databases. The study evaluated the available electronic databases in several libraries and reported that the results showed the following availability rates, AGORA (63%), ARDI (47%), HINARI (51%) and OARE (54%). The figure indicates that subscriptions by the university could not meet 60.5% of the institution's information needs, implying that without the support of the donated access schemes, the information needs could not be adequately met. The findings show that the institutions in developing countries that depend on donated schemes should begin to strategies on sustainability in case of eventual donor pull-out[100].

Similarly, Electronic Information Resources (EIRs) such as e-conference papers, e-zines, e-newsletters, e-reference materials, e-projects, e-journals, e-seminar papers, e-books, and e-dissertations were accessible in the university libraries the researcher visited, according to a study to investigate the availability and use of digital information resources in Delta and Edo States universities of Nigeria. More specifically, the John Harrison Library at the University of Benin (UNIBEN) has eight EIRs that are accessible through online subscription or interlibrary loan (ILL). Ambrose Alli University Library (AAU) has ten (10) types of EIRs. Due of the digital library's recent establishment, Federal University Petroleum Resources Library does not currently possess any EIRs; nonetheless, students are able to utilize it as a cybercafé to access academic information via the internet.[101]

In another Nigerian study conducted at the University of Science and Technology, Wudil, Kano State with the researcher focusing on 400 level undergraduate students as the study respondents. One hundred structured Questionnaires were administered to the study

sample which is one hundred students. Eighty-Seven (87%) were completed and returned. From the responses analyzed, it was concluded that the available EIRs in the institution include the E-Granary and Basic Electronic Information Library (BEIL). AGORA (82%); E-Books (81%); Science Direct (78%); The Essential Electronic Agriculture Library (TEEAL), and E-Journals (76% respectively), EBSCOHOST (61%), and African Journal Online (53%)[102].

A similar study was conducted in University of Agriculture in Makurdi, Nigeria. The study aimed at evaluating the types of electronic information resources available for research by students, extent of availability, accessibility and utilization of the available electronic information resources for research as well as problems encountered by students while accessing and utilizing the available electronic information resources for research by students. The study also adopted random sampling to select 381 respondents out of the total population of 7,952 registered library users. The researcher found that the library is able to provide different types of electronic information resources such as e-journals, e-newspapers, Online Public Access Catalogue (OPAC), CD-ROM databases, e-magazines, e-books, online databases, e-research reports, virtual library online, science direct online, and Ebscohost reference database to student for the purpose of research and learning[103].

While this study confirmed the availability of EIRs in a Nigerian university, another study focusing on the availability of law resources in Nigerian public university found the level of availability of electronic resources in the universities studied to be very low. Majority of the respondents who were drawn from 16 public universities across Nigeria submitted that EIRs are not readily available in their institutions. The researcher also interviewed librarians in the institutions concerned to complement the research questionnaire. It was

found that although several electronic information sources such as; LexisNexis Academic, Criminal Justice Abstracts, West Law, Butterworth LexisNexis, Nexus Database, Kluwer Arbitration, I-Law, Biblio Online, World Legal Information, LexisNexis professionals, Acts online, Sabinet Online, Quick Law, Jutastat and ProQuest are available, many of them are not readily available to the information users in their respective universities. The interview with the law librarians revealed that subscriptions to the resources are not regular; universities usually subscribed to some of them for the purpose of accreditations[104]. This and reports across the African continent seem to validate the assertion that, in spite of schemes dedicated to make EIRs available in African libraries, researchers in Sub-Saharan Africa beyond South Africa still complain about a lack of access to commercial electronic journals, although many of them are available through the special access schemes[105].

Researchers at the University of Ibadan conducted a study on the availability of EIRs for the use of postgraduate students in a Nigerian university. The study adopted a descriptive survey design with a study population of 1872 undergraduates in the Faculties of Education and the Social Sciences in University of Ibadan. A sample of 200 respondents were selected from each faculty using a simple random technique. Data was analyzed using the SPSS software, frequency distribution and percentages. The findings revealed that the internet services, e-mail services, online databases, electronic databases and cybercafés were the available electronic information resources often used by the undergraduate students in University of Ibadan[106].

A follow up study three years later adopted a descriptive survey design and questionnaire was administered on 300 postgraduate students who were randomly selected from seven

out of the thirteen faculties in the institution. Data collected was analyzed using descriptive statistics methods percentages, mean, and standard deviation. The study found that the available EIRs according to the ranking of the respondents are e-mail (88%); e-electronic books (77%); electronic journal (50%); Online Public Access Catalogue OPAC (86%) and DATAD (database of thesis and dissertation) (81%). What this data indicate is that resources from the open internet dominate the EIRs collection in the library[107]. This trend was also indicated in another study focusing on postgraduate students in universities in Kogi state, Nigeria. This study, like others, also adopted the survey design research method. The study sample was made up of 85 postgraduate students and 166 teaching staff from three universities across the state. The study also used a structure questionnaire for the purpose of data collection. The data analysis revealed that online databases constitute (13%) of the digital resources of the libraries. Online Public Access Catalogue constituted (10%), electronic Journal (10%), wireless network (8%), electronic books (8%), search engines (8%), Local Area Network (7%), online newspapers (7%), the World Wide Web (6%), online indexes and abstracts (5%), CD-ROM (5%). There were also fringe EIRs which constitute a small percentage of the total EIR such as institutional repository (4%), DVD Rom (4%), portal (3%) while audio resources constituted a mere 2% of the total EIR[108]. Based on this data, the researcher concluded that the EIRs available in the institution studied include; electronic Journals, online databases, Online Public Access Catalogue, wireless network, search engines, electronic books, Local Area Network (LAN), the World Wide Web (www) and online newspapers CD-ROMs and online indexes and abstracts. The study considered those items that received very low responses

as not available which is a validation of the concept that awareness is a key part of availability[109].

Another study based in Ibadan examined the use of electronic information resources among undergraduate in a private university. The population for the study consists of two thousand one hundred and seventy-one (2,171) undergraduate students from four faculties in Lead City University, Ibadan. Probability sampling techniques was used to ensure to select 10% of the total population as the sample size. The data collection instrument was adapted from The Technology Acceptance Model (TAM) scale. Result of data analysis showed that the electronic information resources available in the library include; Web Resources (90%), E-journals (82%), E-Books (80%), CD ROM (78%), OPAC (76%), Open-Source Online Databases (75%), Subscribed Online Database (72%), and Microform (68%)[110].

Researchers also investigated the level of availability of EIRs in universities in the North-East region of Nigeria. Data analysis shows that available EIRs, according to level of availability include; e-journals (91%), e-books (92%), CD-ROM (85%), online database (85%), OPAC (72.6%), Internet sources (75%) and e- (90.2%). Among the resources that were shown to be marginally available in the libraries include; e-magazines (16%), e-serials (10%), digital images (25%), e-dissertations and theses with (20%), audio visual resources (13%) and references database (9%)[111].

2.3.2 Awareness of Electronic Information Resources among Seminarians

Availability of electronic information resources in academic libraries has been found not to be a significant predictor of use especially when the targeted users are not aware of the existence of these resources or where to access them in the library. The use of the

available electronic information resources in the libraries by any group of users is highly dependent on the level of awareness about the resources among such groups. Awareness is a major factor in the use of information resources particularly electronic resources which are not visible like the print information resources that are display on the books' shelves in the library. Electronic resources can only be access through electronic devices. Those that are not familiar with these devices may not have the awareness of these resources that are can only be access through electronic devices[112].

It is observed that the level of awareness about electronic information resources differ due to factors such as geographical location, gender, discipline, experience and age[113]. Thakur (2014) for example in his research, made a comparison between trained teachers of different geographical areas and gender in relation to their awareness on modern technologies in India. The study shows that there was substantial variance in the level of awareness of ICT tools in teaching in urban and rural areas but none in relation to gender.

In another study which examined the information search strategies of seminarians in Tamil Nadu, India, it was found though GAP analysis that respondents were very much familiar with general search engines such as Google and Yahoo, Amazon and Google Books which they frequently used to locate bibliographic information. On the other hand, library catalogues, WorldCat, and OCLC are not as well known to the respondents[114].

Nearly half of respondents in Nigeria, according to researchers, use both printed and electronic resources, with print periodicals coming in second. Nearly 80% of respondents had minimal knowledge of electronic resources.

Nigerian scholars who asserted that proper knowledge about the object against which an attitude is being developed has a significant influence on attitude have also underlined the

significance of awareness. It was stated that knowledgeable library customers are aware that libraries contain a wider variety of scholarly resources than most websites. Scholarly literature that is typically not publicly available on the Web is made accessible through libraries. Users frequently learn about libraries' resources while in college, notably when they are required to write research papers. It is important to comprehend what causes one student to use the library's electronic resources while another does not consider the library as a place to find specialized resources for their papers, even if it is assumed that on average most students encounter the same number and type of papers and assignments throughout their college careers[115].

In another study conducted in one of the tertiary institutions in South West Nigeria, the researchers also measured the level of awareness of e-resources among post graduate students. The result showed that 91% of the respondents reported that they were aware of most of the available electronic resources in the library while the remaining 9% indicated that they were not aware. This indicate that majority of the postgraduates students' using the Serial's section are aware of e-resources within the section[116].

Researchers in Ghana and India likewise stated that, at the Indian Institute of Technology, Delhi, the Delhi University, and the University of the Cape Coast, Ghana, respectively, over 90% of library patrons were aware of the existence of databases. According to these studies, which were done on two separate continents, students would utilize university libraries' electronic resources to the fullest extent if they were properly instructed and given sufficient access to them via a "Google-like" site. In light of this, libraries are urged to conduct a regular evaluation of the frequency of users in their area[117].

Studies have also examined the level of awareness of electronic information resources in theological institutions' libraries. In a study which focused on seminarians in India, the results show that shows that respondents were not highly aware of subject specific open access online sources of electronic information resources such as; Biblical Studies.org.uk (https://biblicalstudies.org.uk/) (2.04), Society for Biblical Studies repository and Google Search for Theological Journals (1.89) respectively. The results shows that the respondents were not aware of a large number of open access online resources such as Tyndale House online resources, UGC Theses, OT Gateway, Princeton Theological Seminary Digital Library, GlobeTheoLib, Christian Classic Ethereal Library and several others[118].

Researchers who evaluate the level of satisfaction with the information resources and services in St. Albert the Great Major Seminary Library, Ogun Sate, Nigeria also examined the level of awareness of the seminarians regarding the available electronic resources in the library. The result showed that majorities (76%) of the respondents were aware about the e-journals, e-books (60%), e-databases (54%), e-magazines (46%), electronic theses and dissertations (49%), OPAC (55%), audio visual resources (36%)[119]. The overall picture painted indicate a moderate level of awareness among the seminarians about the electronic information resources available in their libraries.

Use of Electronic Information Resources by Seminarians

Evaluation is an integral part of librarianship. It is the technique used by librarians to obtain feedback from the patrons about library services and collections. The main objective of evaluation is to gather necessary information to guide decision making in providing services and collection to the users. In the context of electronic resources,

researchers and librarians are always willing to understand how users are making use of the provided resources and which particular resources is being preferred. The end product of these activities is that libraries are able to make selection decisions based on the preferred resources indicated by the users.

In keeping with this, a researcher looked at how the Olabisi Onabanjo University library staff in Ogun State, Nigeria, used electronic resources. The library's collection was discovered to include CD-ROM resources, electronic books, journals, and periodicals, as well as an OPAC, Internet, and e-mail capabilities. This investigation found that the librarians' most-used electronic resources were the Internet and email services. The e-resources were used for a variety of purposes, including internal administrative tasks and providing information services to their clientele.

In a different study that looks at how students at Modibbo Adama University of Technology (MAUTech) use e-resources, researchers used a mixed method research design and the Technology Acceptance Model (TAM) and Diffusion of Innovation (DoI) theories to create a conceptual framework for calculating how much students actually use the electronic resources that are available. Questionnaires were used as data gathering tools and the population of the study included both lecturers and students of the institution. The result showed that only a tiny minority of the student reported using electronic information resources in the library. On the other hand, lecturers were to be regular users of e-journals (63%), followed by e-books (57%) and e-newspapers (52%). The findings indicated that academics were not familiar with Libguides, repositories, Indexing and abstracting databases. Perhaps this could be due to lack of awareness and/or training[120].

A researcher in South West Nigeria who exclusively focused on faculty members of private universities completed a study that was similar to this one. The study used a survey research methodology and used a structured questionnaire to collect information from participants. The results showed that email (96.5%) top the list of e-resources most used by the faculty members followed by Library Management Systems (80.2%), search engines (79.1%). It was however revealed that the lecturers did not make adequate use of scholarly databases such as e- Lexis Nexis (6%) and Ebsco Host (6%) and majority of the are not aware that the library subscribe to databases such as Open Yale (53.5%); DOAJ (47.7%), annual law series (46.5%), Stanford courser (45.3%), and Law pavilion (41.9%) in that order[121].

As in other studies, a high frequency of electronic information resources usage was reported in a study focusing on students of Kwara state university. The study which aimed to evaluate the perception of students regarding electronic information sources, the types of electronic resources used, frequency of use and various challenges facing undergraduate in the use of electronic information resources adopted a survey research method. Simple random sampling technique was used to select 152 respondents from who the study data was collected using a self-designed questionnaire. Frequency count and simple percentages were used in analyzing the data collected. The study results show that 63% of the respondents use e-book regularly, 19% used e-journals occasionally, 26% use them weekly, 19% uses them daily, 15% used them monthly while 22% never use them. The frequency of use of CD ROM also showed that 15% of the respondents use them weekly, 23% use them occasionally and 62% of the respondents never use them at all. Result also reveals that 14.6% use OPAC Monthly, 33% of the respondents use it weekly

and 15% use it daily against 26% that use it occasionally and 12% of the respondents did not use it at all. Regarding the use of electronic databases, 26% of the respondents reported they use them at least once a month, 26% use once a week, 25% Daily[122].

Researchers in Ghana look at how Wa campus professors at the University for Development Studies use technological resources. An easy random sample approach was used to gather primary data from 80 lecturers. A questionnaire was used to collect the data, and a binary logistic regression model was used to analyze it. The study's findings showed that, of the 80 respondents who were chosen for research, 71—representing 88.8% of the sample—were UDS Library users, while 9—representing 11.2% of the sample—were not. The table's further analysis reveals how frequently respondents used libraries. The data thus shows that 51 respondents, or 63.2%, used the library once a while. Thirteen (13) respondents representing 16.2% also use the library weekly. It was also discovered that respondents who use the library daily or monthly in both cases were 3 representing 3.8% respectively. Also, 9 respondents never use the library while only one (1) respondent use it twice a week, representing 11.3% and 1.3% respectively[123].

In a related study, Researchers at the Cape Peninsula University of Technology in South Africa looked at how academics and postgraduate students used and valued the library's electronic resources. The study found that e-resources were typically underused by students, despite the institution having made major investments in them and related computer-based technology to enable 24/7 accessible both on and off campus. Similar findings were found in research from South Africa that found that, despite ongoing training, e-books were not being used to their full potential. Only 63% of students used e-books, and 57% preferred utilizing both paper and electronic books, even though 67% of

students were aware of e-books. The use of technology, a lack of devices to access e-books, a lack of digital literacy, a lack of infrastructure, and access restrictions to e-books were all suggested as potential barriers[124].

In Philippines, researchers also founded that Due to a lack of knowledge and instruction, students at the University of the Philippines, Diliman, seldom ever used electronic resources. Although the study showed that students used both printed and electronic forms, they firmly said that they would prefer to switch to electronic information retrieval if enough e-resources were made available.

This is consistent with research on South African students' acceptance and use of e-textbooks, which found that the majority of students preferred both printed and electronic texts. The majority of students prefer e-textbooks if they are adequately offered, even though the study found that 82% of students rarely utilize them. The study did not, however, address whether the resources were sufficiently available and how this affected people used electronic resources in the institution[125].

There are however various empirical studies which have also reported findings on the utilization of electronic resources availability in libraries from different countries. Such studies have found that clients were aware of and used the e-databases available to them[126]. For instance, results from a survey on the use of electronic journals by doctorate research researchers at Goa University in India showed that all (100%) of the participants knew about and used the Consortium's e-journals. This implies that e-resource use is encouraged by people being aware of their availability in a library. It was discovered that approximately 67.14% of the faculty members were familiar with the use of digital resources in another study that focused on the use of electronic information resources by

Indian lecturers. The majority of faculty members employed internet resources for research, according to the study's other findings. Additionally, faculty members were seen to have a strong desire to master the necessary abilities for using digital resources on their own[127].

In a study which examined the use of electronic information by post graduate students of Library and information science in southern Nigeria, the result indicated that students are quite knowledgeable and heavily rely on computerized information sources. Additionally, this survey found that students are adept at using electronic information resources, indicating a high degree of familiarity with using e-resources in libraries. Another Nigerian study, this one in South Western Nigeria, also gathered empirical data that shows a high proportion of information literacy skills knowledge and awareness of electronic information resources among the pupils, suggesting that they do use the accessible information resources[128] provided by libraries.

A study conducted in Nigeria on awareness, attitude, and use of electronic information resources by A top university's academic staff members also stated that 55% of them said they were only moderately knowledgeable with the subscribed electronic information resources in their library. According to the report, readers view the website as a reading source that is becoming more significant. While this study's findings indicate that awareness is the primary contributor to unfavorable attitudes, it also reveals that academic programs and the reading resources that information users in tertiary institutions choose differ significantly from one another.

Similarly, it was discovered that academic staff members in Egypt are familiar with and utilize academic social networking sites. Similar to this, a study that looked at how gender

affected how distance learning students used online resources in Nairobi, Kenya, it was found that awareness and utilization of e-resources was relatively high among male students than female students[129].

2.3.3 Frequency of Use of Electronic Information Resources by Seminarians

It is one thing to be aware of the available electronic information resources in the library but one of the metrics that librarians often used to judge the attitude towards the library resources is frequency of use. As a result, there are numerous empirical studies that has provided insight into the frequent measured the frequency of usage of e-resources by users in different types of libraries and in different environments.

Researchers who investigated the frequency of using electronic information resources by post-graduate students at the serial section of the of 'Nimbe Adedipe Library, Federal University of Agriculture, Abeokuta, Nigeria using a survey research method and a structured questionnaire which was administered on Four Hundred and Forty-One Students' (441) postgraduate students in the institutions. Results showed that 26% of the students make use e-resources daily, 39.2% use e-resources weekly, 19% use e-resources monthly, 10% use e-resources rarely, while 5% have never use e-resources at all in the library. Among undergraduates' findings showed that, 23% use electronic resources daily, 34% use electronic resources weekly, 16% use electronic resources monthly, 17% use electronic resources rarely, while 11% have never use e-resources available in the library[130].

In another study which examined patrons' satisfaction with the Federal University of Petroleum Resources (FUPRE) Library's information services, facilities, and resources. According to the study, 71% of respondents said they used library resources every day,

76% said they were very satisfied with the services the library provided, and 71% said they were very satisfied with the library's physical location and infrastructure.

Researchers also looked on undergraduate students' use of library electronic resources in India. A majority of respondents—260 (86.7%)—are extremely satisfied with the collection of general books, and 210 (70.0%) are extremely satisfied with the collection of electronic resources. The study's findings indicate that 177 (59.0%) of respondents have the habit of visiting the library every day to use the electronic information resources that are available. The study recommended that the library should carry out user studies at regular intervals, in order to identify user's information needs[131].

In the context of electronic resources in by students in theological institution, there are sparse empirical studies. However, some of the studies have been conducted in Nigeria. In one of the studies, researchers investigated whether users are satisfied with the information resources and services in St. Albert Major Seminary School Library. The study used a survey approach. Ninety (90) students who regularly utilize the school library were randomly selected. The study was driven by five (5) research questions, and a standardized questionnaire was used to gather data. The findings indicate that the majority of respondents—50(56%)—use the library daily, 20(22%)—two to three times per week, 10(11%)—weekly, and 10(11%)—sometimes. The remaining respondents—10(11%)—use the library materials and services rarely. This shows that the majority of registered users used the library's resources, services, and facilities on a regular basis. As a result, they are better able to describe their experiences or assess the quality of the services the library provided to them.[132].

On the other hand, researchers conducted a study to evaluate the awareness and use of electronic resources by polytechnic students in Nigeria. The study used descriptive survey methodology. 51,661 students and 12 e-resources librarians from 12 polytechnics in Nigeria make up the study's population. By proportionately dividing the sample into the strata, 1033 students were chosen as a sample from the entire student population (12 Institution). The instrument for gathering data was a questionnaire and interview schedule. The majority of students do not frequently use the accessible e-resources in the Polytechnic library, according to research. Only 37% of the students reported frequently using the libraries' electronic books, while 19.8% and 43.2% reported using them infrequently or never. 40.6% of students never use e-journals, and 18.5% only occasionally use them in libraries. 18.3% and 22.6% only said they very often and often utilized them respectively. E-Conference Proceedings fared no better, with only 18.1% of students regularly using them and 44.7% never using them in the libraries. Only 15.8% and 21.4% of the students said that they used them at libraries frequently or very frequently. 18.5% of students rarely utilized e-Thesis and e-Dissertation, while 48.9% never used them. Only 14% and 18.6% of respondents claimed to use them frequently and frequently, respectively. The polytechnic libraries' institutional repository, CD-ROMs, DVDs, and CDs, as well as their offline and online databases, follow the same pattern of reaction. The lone exception was Internet access, which 20.8% and 26.1% of the students said they used frequently and frequently in the libraries. Even at that, 21 37.9% of the students reported that they never use the internet services of the libraries while 15.2% were of the opinion that they rarely use the services[133].

2.3.4 Purpose of Using Electronic Information Resources by Scholars and Postgraduate students

Scholars have argued that theological libraries are not different from other academic libraries as they face similar challenges and have similar broad objectives. Consequently, there are alignments in the purposes behind the use of information resources in theological libraries as well as in conventional academic libraries. A review of purpose of use of electronic information in academic libraries is therefore useful in providing an insight into the use of the resource in seminary/theological libraries.

Researchers explored the level of awareness about electronic resources by scholars and students in Periyar University, India. The study also explored the usage pattern of electronic resources.

Closed ended questionnaire was employed to collect data from the study respondents. The table result showed that the purpose of using e-resources include; class assignments (55%), writing research papers (42%), preparing for seminar and conference (40%), preparation for examination (25%), updating knowledge about subjects (38% and others (22%)[134].

Similarly, another study explored the use of electronic information resources by scholars in Alagappa University, India. The study adopted the quantitative research approach with collection being a self-developed questionnaire. The results showed that the Purpose of using electronic information resources by the respondents include; for course work (43%), for research work (27%) to get current information (19%) and, to prepare assignment/Notes. (10%)[135]

In Sri-Lanka, a study which examined the use of electronic information resources among postgraduate students in a medical institution submitted that tertiary institution students

make use of electronic information resources to meet various needs. Among the purposes for which students in Sri-Lanka universities use electronic information resources include; learning and updating knowledge (99%), research work (72%), and to gather general information (71%)[136].

On the African continent, researchers in Zimbabwe evaluated the use and access of electronic journals among scholars in a Zimbabwean university. The study adopted an online survey approach which included all lecturers at the Faculty of Agriculture, University of Zimbabwe. The results show that; 48 of the respondents mainly used electronic journals for research; 46 used to supplement teaching resources and 12 of the respondents used electronic resources to gain ideas about student supervision. These results showed that electronic journals were mainly used for teaching and research and less for other reasons[137].

In Ethiopia, undergraduates are the focus of a study which sought to evaluate the use and benefits of using electronic information resources by university students. The study which included 182 students of Jimma University, Ethiopia revealed that the reason behind students' use of electronic information resources include; preparation of assignments and preparing papers for presentation (100%), for research (95%) and for keeping up to date with the latest information, which shows that they are very keen in their studies and then for their research activity[138].

In Nigeria, a study of information resources used by seminarians in Ogun State, Nigeria, some of the purposes identified for using the resources include; writing assignments (72%), and for preparing for tests and examinations (53%)[90]. Similarly, another study based on a university of agriculture in Ogun state showed that the purposes of using

electronic information resources include for research (29%), choosing project topics (24%), choosing seminar topics (22%) respectively. On the part of undergraduate students, the purpose for using electronic information resources also include; choosing project topics (31%), carrying out assignment (22%) and for research (20%) respectively[139].

The scope of the purpose which motivate users to make use of electronic information resources seems to depend on the scope and depth of programmes in the institution under study. A study of electronic information resources utilization in three Nigerian federal universities revealed that the purposes for using electronic information resources among undergraduates in the universities include access useful and relevant databases not subscribed to by their library (83%), to access online/electronic news (82%), to gain access to information materials not available in hard copies (81%) to gather information for writing and defending seminars (79%) gathering information in preparation for exams (77%), gathering information for assignment purposes (76%), gathering information for test (75%)[140].

Similarly, in a study which examined the purpose of using electronic information resources by lecturers of Federal Polytechnic, Ede, it was revealed that students used electronic information resources to enhance their research activities (3.64), to update knowledge about specific subjects (3.61), to gain quick access to information (3.51), to prepare lecture materials and for self-directed studying[141]. Another study which focused on the influence of performance expectancy and facilitating conditions on the use of digital library among lecturers. The study adopted a correlational descriptive survey research method. Population of the study included seven-hundred and fifty-nine (759) engineering lecturers drawn from ten universities across South-west Nigeria. An adapted

questionnaire based on the Unified Technology Acceptance and Use Theory (UTAUT) was used to collect data. Frequencies, percentages, mean and standard deviation were used for the analysis. Results also show that the purpose of using digital libraries by lecturers include; for gathering resources needed for collaborative study, to help in their researches; and for gathering necessary resources to prepare lecture notes[142].

2.3.5 Perceived Ease of Use and Usage of Electronic Information Resources by researchers

Several empirical studies have been conducted to determine the weather perceived ease of use has any effect on the use of information systems. These studies have presented different findings from all over the world and in relation to several new technologies and information systems and they provide insights for academic libraries to understand the need to provide easy to use electronic information systems for their users.

To learn what encourages workers to use information technologies, researchers in Indonesia performed a study. The study's theoretical foundation was the Technology Acceptance Model and the Information System Success Model.

The Warp PLS application was used to process the information that was collected from the respondents. The Average Path Coefficient (APC) = 0.245, P = 5, and preferably = 3.3, according to the fit and quality model test findings. The four indicators' values demonstrate that the study model can be deemed appropriate or that additional investigation is warranted (hypotheses testing). With a probability (P) value of 0.034, the path coefficient of the perceived usefulness on the employee's intention to use the research information system is 0.114. The researchers took this to suggest that the employee's intention to use the information system is positively and significantly impacted by

perceived usefulness. Particularly, it is revealed that the relationship between the employees' intention to use the system and perceived ease of use has a path coefficient of 0.177 and a P value of 0.002. This demonstrates that the employee's intention to use SIKEU is significantly influenced by their perception of the system's usability. The study came to the conclusion that as long as an information system is straightforward and simple to use, employees will continue to use it. This implies that people will frequently use an information system if it is simple to use. On the other hand, users will not use the system if the features are complex even though the resources it contains are very relevant and useful[143].

This submission has been echoed in several studies in which it was also proven that intention to use is affected by perceived ease of use. Previous researchers have also reported findings regarding the effects of PEoU on the adoption and use of new technologies. In a study which focus the adoption of digital marketing platforms (online shopping) among Pakistanis, the researchers reported that, Perceived Usefulness (PU) and Perceived Ease of Use (PEoU) can combine together to cause an increase in the desire of shoppers to accept digital marketing platforms.

The study submitted that shoppers are more likely to adopt digital marketing platforms if they were made to realize the intrinsic value of online shopping and if the find the platforms easy to use. On the other hand, if they find the platform too complex or difficult to use, they may abandon it which will lead to the failure of such business initiative. In view of this, the authors suggested that those who development digital marketing platforms and the marketers who put their products and services online for sale should always consider the ability and preferences of the various groups of customers they intend

to serve[144]. This should also resonate with those who develop and libraries that attract information systems. It is particularly important to consider their level of users before designing or adopting any information system.

The importance of considering the intended users was also emphasized in another study which examined factors determining the adoption and use of wearable sport devices by applying the TRAM, a theoretical model combining TR and the TAM. The findings of the study showed that PEoU has a significantly positive effect on perceived usefulness (PU) of wearable sport devices. The study also confirmed that both PEoU and PU combined to play active roles in encouraging users to adopt and use wearable sport devices[145]. This further goes to back the submissions of several studies from around the world that have all pointed to the significant contribution of perceived ease of use on the acceptance and use of several form of technologies. However, there are some studies that have reported contrary findings regarding the impact of perceived ease of use on the intention to use and actual use of various technologies among different user groups.

One of such studies was conducted by researchers in Malta who examined the adoption of educational applications by primary school students the European country. Technology acceptance model core constructs were measured using valid and reliable techniques. As potential antecedents for their behavioral intention to engage with the instructional applications in the study, students' stated enjoyment and social aspects were also looked at. Researchers discovered a strong correlation between students' behavioral intention to use mobile devices in the classroom and how valuable they perceive those devices to be. However, there was found to be a weaker correlation between the children's happiness with using educational applications and perceived ease of use.[146].

Furthermore, researchers who applied the Technology Acceptance Model (TAM) to evaluate the acceptance and use of internet banking application in India found that. perceived usefulness had significant influence on the adoption and use of e-banking facilities (β= 0:595; p, 0.001). However, while the analysis indicated that there is a significant positive correlation between PEoU and perceived usefulness (β = 0:761; p, 0.001), it was found that PEoU has no significant influence on behavioral intention (β = 0:048; p = 0:711). The total effect of PEOU on BI was 0.453 ð = 0:761* 0:595Þ. This suggests that perceived ease of use may not be a barrier where the level of perceived usefulness is high and vice versa.

Several studies have been conducted to understand how perceived ease of use affect the usage of electronic information resource among several groups of information users. However, majority of the studies have been conducted in academic environments. This is not surprising as academic libraries have made huge investment on the acquisition and provision of electronic information resources for their users and they are understandably concerned about the rate of utilization of these resources.

One of the most recent research projects looked at undergraduate students' attitudes and perceptions regarding using e-information resources at the Universities of Fort Hare and Rhodes in South Africa. The major goal was to determine whether their attitude and perception have a favorable or unfavorable effect on the use of e-resources in particular colleges in the Eastern Cape region of South Africa. The study population and sample size were chosen using the proportionate and purposeful stratified random sampling techniques, and the questionnaire and oral interview were the data gathering tools. The results showed that 100 (47.6%) respondents believed that technical knowledge is necessary to

understand e-resources. In support of this, 57 (26.6%) respondents claimed to have experienced information overload on the Internet, while 53 (24.9%) respondents lamented the high cost of Internet access. In addition, 35 (16.7%) respondents felt that the library's computer workstations were insufficient. This attitude is shared by 55 (25.8%) respondents who cited their limited ICT literacy as a challenge and 53 (26.2%) respondents who lamented their limited financial resources. The inaccessibility of some databases was another issue noted by 75 (36.2%) respondents, while 31 (14.8%) mentioned the difficulty of hiring people with sufficient experience[147].

The researchers interpreted the findings to support the assertion that the attitudes and perception of the respondents negatively affect their use of the e-resources because of various challenges they experienced. The researcher observed that previous studies have identified the responses' attitudes and perceptions around using electronic resources. It is crucial to note at this point that the use of e-resources is a result of favorable attitudes and views toward their use. From the aforementioned, it can be shown that a number of elements, such as curiosity, awareness, beliefs, acceptance, and adoption of technology, affect undergraduate students' attitudes and perceptions toward using e-resources. The study's findings show that the majority of students leave postsecondary education without having developed the abilities required to meet the difficulties presented by a more fully ICT-integrated society. In a similar vein, researchers discovered that most users prefer using electronic information resources to printed ones, which led to respondents' attitudes and perceptions favoring electronic journals, CD-ROMs, and electronic books.

An electronic resource must first be known about and accepted before it can be used; as a result, the perceived value of an electronic resource depends on that resource's knowledge,

which then leads to the behavioral intention to use an electronic information resource. This further shows how undergraduate students' disregard for using e-information resources is based on their attitudes toward using them, which are still primarily motivated by perceived utility. In the same vein, researcher in India posited that user attitude is greatly influenced by the level of satisfaction with library services and resources, so they conducted and assessment of user satisfaction with library resources and services in one of the tertiary institutions in the country using undergraduates as the study population. The study's findings indicated that the vast majority of respondents were happy with the library's collection and services. To gauge their satisfaction with library services, researchers polled postgraduate students at Mizoram University, Aizawl's school of physical sciences. Due to the accessibility and use of the items, the survey revealed that users are generally satisfied with library services and collections[148].

In a study of the influence of personal characteristics such as readers' type, gender, user category, age group and the year of study (if the user is student) was analyzed using independent samples t-test and the one-way ANOVA (f-test). The results of t-test revealed that there is a statistically significant mean difference between readers' type such as academic staff and students in terms of attitude of usage of electronic information resources ($t = 3.199$, $p < 0.05$). But, in relation to gender, both male and female readers have roughly same level of opinion with regard to the usage of electronic information resources, which is insignificant at 0.05 levels. According to the f-test, the age group's attitudes about using electronic information resources are perceived at the same level, but the user categories (Lecturer, Senior Lecturer, Professor, and Students) and the students' academic year have revealed substantial mean differences. Given the mean differences

found, awareness-raising campaigns are required to boost the use of electronic information resources.[149]

In a study conducted at Makerere University. A look at the Library and Information Science (LIS) postgraduate students' responses regarding their attitudes on e-resources, shows an encouragement. The majority (72%) of LIS postgraduate students strongly feel that the standard of their academic work would suffer without e-resources. They believe that in order to perform well, they cannot avoid the use of e-resources. Furthermore, the respondents believed that a university is not worth its name without e-resources and agree that with the advent of e-journals and e-books, CD-ROMS are becoming unpopular among students[150]

Researchers in Kenya performed a study to learn about students' perspectives and experiences with using the Internet to suit their learning needs. The study's findings showed that most students have a positive attitude toward using the Internet for academic purposes. According to research, most students believe that online materials are more up-to-date and convenient to use than print ones. Results, however, indicated that despite students' preference for the internet, a number of issues, including a shortage of access points and abilities, limit how effectively they can utilize it. The study suggests that consumers receive fundamental training in Internet search techniques. Additionally, it is advised that information literacy be included in university curriculum. Additionally, a concerted effort should be made to raise awareness of the availability of electronic information resources, especially at the library.

Studies have looked into the attitudes of students, instructors, researchers, and librarians about accessing electronic resources, information services, and using the library in

addition to reviews and studies that focused on attitude and electronic information ideas. a recent study that looked into how pupils felt about using technology in the classroom. Due of students' aversion to using the libraries' electronic resources, the survey found that EIR were mostly underutilized[151].

Problems in accessing e-resources could be the cause of negative attitudes toward using them. Students' positive views could be impacted, for example, if there aren't enough computer workstations or insufficient Internet connectivity to access e-resources. BecauNegative attitudes towards e-resources access could be attributed to problems faced when accessing e-resources. For instance, in a situation where there are inadequate computer workstations to access e-resources or poor Internet connections, students' positive attitudes could be affected. That is why the problems that affect e-resources access are addressed in higher learning institutions libraries. The arguments for students using electronic resources are compelling. An adequate knowledge of computers and retrieval techniques is desirable to search these resources effectively. It is necessary to establish what computer skills students require to access electronic information resources in libraries. se of this, libraries in institutions of higher education handle issues affecting access to e-resources. There are strong justifications for encouraging kids to use digital resources. In order to efficiently search these resources, it is important to have a sufficient understanding of computers and retrieval methods. To access electronic information resources in libraries, pupils need to have the computer abilities that need to be determined. Researchers also examine how undergraduate students at two federal universities in Eastern Nigeria—the University of Nigeria, Nsukka, and the Nnamdi Azikiwe University, Awka, located in the states of Enugu and Anambra, respectively—view the academic use

of electronic information resources. The study was led by four research questions. All enrolled undergraduate students at the two universities made up the population of the study, which used a descriptive survey approach. A sample size of 720 students was used for the investigation. A questionnaire served as the data gathering tool. To address the research issues, descriptive statistics comprising frequency tables and mean were used. According to the mean scores of their responses to the questionnaire items, the outcome demonstrates that students in the two institutions have a favorable attitude toward electronic information resources. They concurred that using electronic information resources improves access to a wider variety of information (3.65), It improves access to information (3.62). It gives users access to current information (3.59). They also disagreed with the claim that the cost of printing and downloading information is too high (2.52). Electronic resources frequently cause me to lose focus while working (2.34). Choosing the right information might be challenging (2.25). The data might not be accurate (2.21) Utilizing actual books and materials at the library takes less time (2.06). Electronic resource information is not organized (1.91). Utilizing electronic information resources takes time (1.90). Typically, the information obtained is insufficient (1.81). I doubt I'll be able to find exactly what I need (1.59). The data obtained is frequently out-of-date (1.53). The increased usage of electronic information resources by students at the universities under study is correlated with this incredibly optimistic attitude, according to the researcher.

Challenges of Using Electronic Information Resources

Several empirical studies have been conducted on the challenges faced by information users than can affect their use of electronic information resources. At Kumasi Polytechnic

in Ghana, a researcher looked at how much teachers and academic staff used computerized information resources. Investigations revealed that although the Consortium of Academic and Research Libraries in Ghana subscribed to more than twenty databases totaling three thousand e-journals, utilization was hindered by access issues, slow Internet connectivity, frequent power outages, and a lack of search skills[152].

In other studies, it was discovered that even libraries themselves face challenges in the provision of electronic information resources which are ultimately passed to the information users. Even in wealthy nations, this can occur as it was recently discovered that the University of Nevada in the United States' e-book workflow was hampered by pricing, licensing, digital rights management, design platforms, and e-book format. Another group of academics claimed that, in contrast to print purchases, license restrictions have significantly complicated interlibrary loans and have become an issue in library practice and values. Their 2012 survey of 125 research libraries found that concerns with license conditions with suppliers and publishers, as well as subscriptions from seven different publishers, had a negative impact on the availability of electronic journals in many of the libraries[153].

This was supported by the assertions of another researcher who submitted that electronic information resources vendors have failed to come up Libraries frequently struggle with the complex task of selecting the appropriate range of buying and price models to be modified in relation to access agreements, value for money, and archiving privileges because there is no standard model for packaging and selling electronic publications[154].

In another dimension, it was reported that libraries also face challenges in their attempt to integrate electronic information resources into their collections. Many libraries have

worked hard to transition from manual operations to automated services that incorporate e-resources and metadata into the library's technical services division. As a result, today's library collections are made up of a variety of materials, including physical books, electronic resources, databases with paid subscriptions, and open-access resources, some of which have their own unique access protocols. The ability to access library resources and services through a single access point is what the modern library user, however, expects[155]. So far, librarians have been unable to provide this one-window access to all of their resources. Experts have therefore pointed out that the task of managing both electronic and traditional resources is still a very challenging one for managers due to dwindling budget, low level of technical expertise, and absence of critical infrastructure[156]. Meanwhile, libraries and other information centers have formidable rivals in the form of three major corporations, namely Google, Amazon, and the Internet Archive, all of whom have digitized materials at a very large scale and made them available for information users to search and retrieve from a single access point. The millions of archived books have the advance for libraries that many can be downloaded in an open-access domain[157]. Libraries have also embarked on digitization It involves converting printed educational materials in the library's collection into digital format in order to increase access and, where necessary, aid in preservation. According to researchers, digitization makes it possible to build digital libraries by transforming analog items into digital representations. They went on to say that because university libraries have enormous amounts of priceless information resources in print, digitization has become crucial for libraries all around the world. Additionally, giving access through OPACs and digitizing print materials encouraged remote access. However, when it comes to offering electronic information

resources, libraries are barely crawling in comparison to powerful online search engines like Google. The major search engines have mastered information architecture, which is the art and science of labeling websites, intranets, online communities, and software to support usability. As a result, the work of librarians who structure and reorganize information in the library portal to assist users in finding and using the resources optimally now appears to be child's play. The upshot of this is that despite their best efforts, libraries still fall well short of being as sophisticated as search engines like Google, which consumers have grown accustomed to and now use as a benchmark to evaluate other information systems.

Apart from access challenges, the complex and multiple nature of online databases has often resulted in libraries subscribing to several databases which often do not contain enough relevant resources to meet the curriculum demands of users. According to research, librarians should take into account both library collection rules and requests as well as the significant demand for e-journals and other e-resources from users or for interlibrary loans when negotiating with publishers and suppliers.

Researchers also outlined obstacles to Internet access in Africa, including a lack of qualified labor, weak competition in the communications sector, a lack of clear laws, the expensive cost of satellite Internet infrastructure, a lack of government support, and insufficient power supplies. Furthermore, it was stated that academic communities' access to the Internet was woefully inadequate and that better Internet access would only be possible with significant funding from African regions. Wireless access with LANs at predetermined locations is the current trend in Internet access for uninterrupted.

Researchers have found that one factor contributing to the problems academic libraries in developing nations face is the lack of clear-cut policies for the collection development of e-resources regarding licenses, management, maintenance, and archiving. This is because evaluating the quality of e-resources is more difficult than evaluating the quality of printed resources due to the complexity of e-resources in general. In this context, it was suggested that libraries should approach the growth of their electronic resources collections as a systematic project that involves user research, stock appraisal, weeding, selection, and purchase. This submission complies with the recommendations of the American Library Association, which state that coordination of selection, collection evaluation, planning for resource sharing, collection management, and weeding operations constitutes library collection development[158].

To avoid the challenge of resources, Researchers list the steps that go into creating an electronic resource collection, including determining the information needs of library users, developing and implementing a selection policy to suit the library's goals, implementing acquisition programs to ensure a balanced collection, and establishing resource sharing and de-selection policies and practices. The study goes into further detail regarding the criteria for evaluating electronic resources, including content, access requirements, updateability, longevity, usability, and statistics of use, in addition to technical characteristics and quality of service factors that add value to the product with a price-formation structure. Library collections have transformed to a virtual structure that takes into account user preferences, and readers now rely more on online resources for availability, convenience, accessibility and speed.[159]. In a related study, researchers in Nigeria enumerate various e-resources that should be made available for educational

purposes. They also suggested that access codes to subscribed databases should be widely disseminated and not hidden from any student since the library has already paid for full access. According to the study's findings, the absence of strategic planning, knowledgeable staff, Internet connectivity, inconsistent training, insufficient money, subpar computers, and unstable electrical supply are barriers to the successful use of e-resources in Nigeria's higher education institutions.

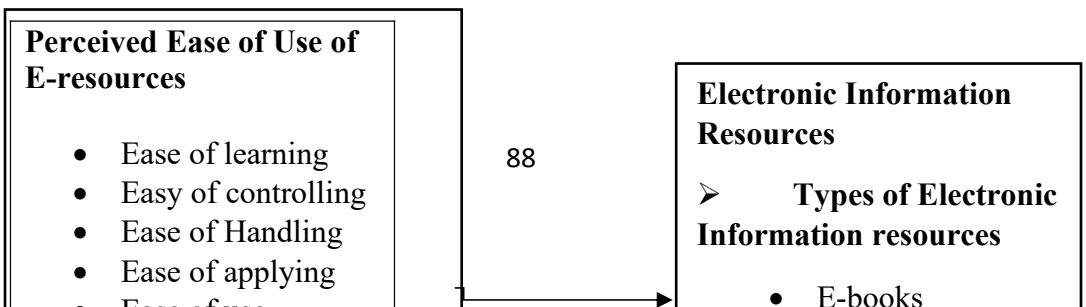
The ease of access has emerged as a common issue in the studies that looked at the barrier to using electronic information resources. This was also demonstrated in a study of a few high school libraries in the South African province of Limpopo. According to the poll, the province's instructors and students lack of access to information resources prevents active and thriving school libraries from accomplishing their goals. They proposed that the usage of electronic resources by scholars and students globally, as argued in the aforementioned studies, represents a new trend, could not be overemphasized. More so, the use and application of e-resources should be commensurate with the investments in acquiring and funding them[160].

When access for electronic resources is secure, there are still challenges that can prevent information users from making effective use of electronic resources. This was shown in a study of the use of e-resources by postgraduate students at Delta State University in Nigeria, where it was discovered that while they had access to e-resources, poor search skills, unstable electricity, a lack of space in the library, and a low bandwidth subscription proved to limit their use of them. The researchers suggested taking proactive steps to increase awareness, such as working together to provide orientation and training amongst faculties and faculty librarians. The library was also urged to set up generators to support

the provision of electricity, a separate Internet server to maintain a constant Internet connection, and an institutional repository for free access. Researchers looked into how South African academic librarians used e-books in a related study. They employed a web-based survey that was disseminated via the email list of the Library and Information Association of South Africa. The study's findings demonstrated that academic librarians in South Africa gradually adopted e-books, and that they valued both printed and electronic materials equally. They listed the high cost of e-book subscriptions and the dearth of e-books in most fields as barriers to adequate e-book availability. The cost of e-book reading equipment, the instability of Internet access, and a lack of e-book usage training were shown to be the main causes of poor use of electronic resources[161].

Although the majority of respondents had access to current and up-to-date e-resources, utilization was hindered by low bandwidth, a lack of skills, unreliable Internet access, a lack of workstations, irrelevant information in databases, and budgetary restrictions, according to more recent studies on the topic[162].

2.4 Conceptual Framework



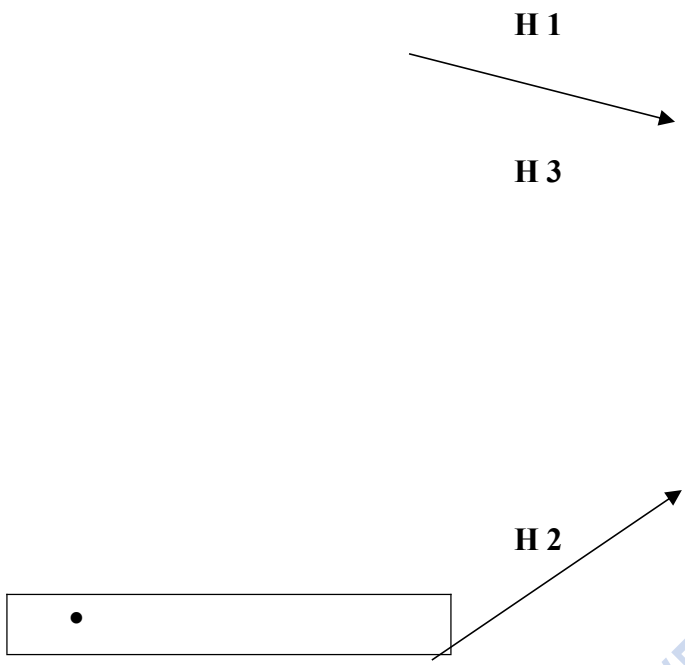


Figure 2.4: Conceptual model on Perceived ease of use, Users' attitude and usage of E-resources, Rachael"s Framework 2022.

Explanation of the Conceptual Framework

The conceptual framework shows the relationship between the independent and dependent variables as well as the constructs of the variables. It is obvious that perceived ease of use and its constructs have direct impact on usage of electronic resources among the seminarians. The model shows that perceived ease of use rests on constructs such the easy way to use, easy to learn, easy to control, ease to handle and the flexibility of the electronic information resources.

The assumption of the study is that the more resources are easily used, learn, control, handle by the seminarians.

It is also expected that when the seminarian gets to use the resources, they would make use of various kind of electronic information resources. The attitude of the seminarian towards electronic resources could be cognitive, affective or conation. Overall, ease of learning, ease of usage, ease of controlling, ease of applying and ease of handling is expected to combine together to cause positive attitude and perception of ease of use of electronic information resources and this is expected to affect the usage of electronic information resources by the seminarians.

2.5 Summary of Gaps in Literature Reviewed

The research on user's attitude access to electronic information resources in academic libraries; Across faculty analysis, finds out that undergraduate students lack awareness about the availability of the electronic resources in the library and this affects their attitude towards the use of the electronic library resources. While the finding of the study shows a key determinant of user's attitude is awareness, the study itself is not based on theoretical basis so it may be difficult to generalize the findings in a new environment. Awareness and usage of institutional repositories: A panacea for academic research the study focused a high level of awareness among postgraduate students about institutional repository research finds out the perceived effectiveness of IR, it is high as 100% of respondents strongly agreed that it facilitates academic research, 91% strongly agreed that institutional repository is a place for keeping published and unpublished academic output of an institution. The gap found in this research was that the study lacks a solid theoretical foundation.

Evaluation of Usage and User Satisfaction on Electronic Information Resources and Services: A Study at Postgraduate Institute of Medicine Library, University of Colombo

research, found out that majority of the users were satisfied with the electronic resources provided by the library. However, the students also cited lack of training, non-availability of remote access for subscribed resources were identified as significant issues, hence the gap noticed from the research is that the study did not directly measure attitude of library users towards electronic information resources. The challenges highlighted may also not affect attitude towards EIRs but can cause negative attitude to the library.

Availability, Use and Constraints to Use of Electronic Information Resources by Postgraduates Students at the University of Ibadan research also found out that internet sources was the most used in the university. A variety of limitations are associated with the low level of utilization of electronic resources, in particular, full texts databases: In addition to computer speed and capacity, retrieving records with high recall and low precision, retrieving records relevant to information, lacking knowledge of effective search techniques, lacking the necessary IT skills, and having trouble accessing the internet, interruptions in power supply received the highest ranking. sources consulted in academic settings. Low level of usage of electronic resources, in particular, full texts databases is linked to a number of constraints: Interrupted power supply was ranked highest among other factors as speed and capacity of computers, retrieval of records with high recall and low precision, retrieving records relevant to information need, lack of knowledge of search techniques to retrieve information effectively, non-possession of requisite IT skills and problems accessing the internet. The study is very detail on factors that can prevent users from using electronic resources and make them form negative opinion about them. However, it does not take into account the factors that may make electronic information resource indispensable to the users.

Another research carried out on Students' Perception of E-Resources in an Academic Library: The Federal University of Agriculture, Abeokuta Experience revealed that both postgraduate students' and undergraduate students' perception of e-resources are on the positive side because they perceive it as been useful for their research and this is having high impact on usage of these resources at the Serial Section of the library. Though The study was able to outline the attitude of the users and its effects on the use of electronic resources utilization. However, the study population is too narrow to be generalized for the whole country and this is a gap. User Satisfaction with Electronic Resources research findings shows that Individual attributes, Library Staff, Library Services and Library Technology affect attitudes towards electronic resources. The detailed in enumerating factors affecting attitude towards electronic information resource.

Students' perception, use and challenges of electronic information resources in Federal University of petroleum resources Effurun Library in Nigeria research shows that users' perception influences use of e-resources in academic libraries, while lack of awareness, lack of training, unreliable Internet connectivity, insufficient e-resources in various study areas, unavailability of e-resources on 24/7 and difficulty of identifying relevant information to meet users' needs are challenges hindering use of e-resources. Though the study examined the use of electronic resources while taking Institutional repositories simply as one of the sources of electronic resources. As a result the finding may not be generalizable in the use of EIRs.

The Attitudes of Princess Nora University Students Towards Using Electronic Information Resources of the Library research found out that although, the students reported to have positive attitude towards the use of electronic information resources, their use of the

available electronic information resources is low and the gap states; The study failed to find out the exact type of electronic information resources preferred by the students instead opting to lump all types of electronic resources together.

Assessment of user's information needs and satisfaction in selected seminary libraries Oyo State, Nigeria study revealed that the use of library services by seminarians depends on accessibility to the available services. As the seminarians found the library inaccessible, they have developed negative attitude towards it. And the gap states that the study did not specifically focus on the use of electronic information resources.

Users' acceptance of e-resources usage at the Institute of Finance Management, Tanzania Catholic University, Tanzania research shows that factors such as perceived usefulness, ease of use, users' competencies, and facilitating conditions have been found to predict the behavioral intention of faculty and students to use e-resources. Though the study is based on a solid theoretical footing and its finding is reliable however it needs to be reproduced among seminarians to determine whether the same conditions apply.

"User Perception of Electronic Information Resources: A Case Study of Alagappa College of Arts and Science, Tamilnadu, India study found that the availability of e-resources in the campus is almost sufficient for all the existing disciplines but the infrastructure to use these resources is not adequate and can hinder the ability to meet the requirement of users.

Perception of Ease and Usefulness of Electronic Information Resources among Postgraduate Students of Library and Information Science in Southern Nigeria Universities research findings, revealed that postgraduate students' have a very high positive perception toward the ease of use and usefulness of electronic information

resources. The gap seen was that the study focuses on postgraduate students. Research on Understanding the Employee's Intention to Use Information System: Technology Acceptance Model and Information System Success Model Approach and the results showed that the dimensions of TAM (perceived ease of use and perceived usefulness) had a positive and significant influence on the employee's intention to use the information system SIKEU. The study focused on an enterprise information system, the perceived usefulness and regular unavoidable exposure to the system may have influence the perceived ease of use. The Students' Readiness to Engage with Mobile Learning Apps research study found no correlation between the perceived ease of use and the children's enjoyment in engaging with the educational apps that were used at school. The study focused on school children whose perception may be influenced by significant others such as teachers and parents. The research "Use of Technology Acceptance Model (Tam) To Evaluate Library Electronic Information Resources Use by Undergraduate Students of Lead City University, Ibadan, Nigeria", findings showed that the perceived ease of use is high among the respondents and it influenced their usage of the available electronic information resources. However, there were challenges such as; slow internet access. The study is based on a conventional university environment which is quite different from a seminary environment.

The study therefore, identifies the gap of not researching on the theological institutions and as well the attitudes of the postgraduate students of theological institutions who are also refers to as seminarian.

Chapter Three

Methodology

3.1 Research design

The descriptive survey research design was adopted in the study. Descriptive research is considered appropriate because it focuses on the perception of the existing situation, describes and interprets what is concerned with the issues, conditions, practices, or relationships that exist within views, beliefs and attitudes that are held, processes that are going on and trends that are developing an event or situation.

3.2 Population of the study

The population of the study consists of two hundred and ninety (290) postgraduate students of theological seminaries in Ogun State, Nigeria. The theological seminaries in Ogun State are; Methodist Seminary, Sagamu; Albert the Great Seminary, Abeokuta, Crowther Graduate Theological Seminary, Abeokuta, Assemblies of God Theological Seminary, Word-Faith Bible School Ota, and, Redeemed Bible College, Redeemed Camp, Lagos Road, Ogun state. Among these seminaries, the study selected three Seminaries, and these include; Methodist Theological Seminary, Crowther Graduate Theological Seminary, and Redeemed Bible College. These seminaries are selected because they are known to run various Postgraduate programs and have solid academic structures including standard academic libraries. Also, the academic programs they run means that their postgraduate students are expected to find electronic information resources useful for their various academic tasks such as class assignments, term paper, thesis writing, and so on. The institutions and the population of the postgraduate students are outlined in Table 3.1

Table 3.1: List of Theological Seminaries that run Postgraduate programs in Ogun State and their Respective Students Population

S/No	Institutions	Total Postgraduate Students Population
1	Methodist Seminary, Sagamu	28
2	Crowther Graduate Theological Seminary, Abeokuta	192
3	Redeemed Bible College, Redeemed Camp	70
Total		290

The total population of postgraduate students in Methodist Seminary, Crowther Graduate Theological Seminary, and Abeokuta Redeemed Bible College, based on the records obtained from the theological institutions' academic planning and the library registration records of the institutions as of the 2021/2022 academic session is two hundred and ninety (290).

3.3 Sampling size and Sample techniques

Multi-stage sampling technique was used to select the study sample. The first stage is choosing seminaries as postgraduate students of seminaries are not too proficient in using the electronic libraries going by the records of seminary libraries and past research has shown that there is no research in the area of postgraduate seminaries also known as seminarians. The second stage is choosing Ogun state seminary libraries and the third stage is selecting postgraduate students of seminaries in Ogun state. This stage adopted the purposive sampling method to establish only institutions running postgraduate programs as there were others running just degrees in theology and some short-term courses in theology in the state. The total population of the study is (290) two hundred and ninety

respondents. Therefore, the study sample size is 75 percent of the total sample size which is two hundred and fifteen (215) students from the three theological seminaries running postgraduate programs in Ogun state, (Table 3.2). this size was structure to 75 percent due to the fact that students were not that available in school as at when the research was carried.

Table 3.2: Population of students in the selected theological institutions and sample size

S/No	Institutions	Total population of postgraduate student	Sample size
1	Methodist Seminary, Sagamu	28	21
2	Crowther Graduate Theological Seminary, Abeokuta	192	144
3	Redeemed Bible College, Redeemed Camp	70	50
Total		290	215

3.4 Research instruments

The instrument that was used in the study is a questionnaire and the questionnaire was both combination of self-construction and adapted. The questionnaire was divided into six sections, A – F as follows, the questionnaire was adapted from various validated and tested studies.

Section A -Demographic information: This contains five items on the personal data of each respondent such as the name of the institution, department, level, age, and gender.

Section B1- Types of electronic information resources: This contains 10 items of electronic information resources, which are rated on a Likert scale of 4 points

Section B2 – Purpose of use of electronic information resources: This contains information on why students use electronic information resources. The items in the

questionnaire were adapted from another study[163] [164] . It has a list of seven self-generated items covering assignments, project work, and term papers, among others measured on a four-point scale Strongly Agree (SA); Agree (A); Disagree (D); Strongly Disagree (SD).

Section C – ease of use, learning, handling, and controlling of electronic resources. The items in this section were adapted from a related study that also focused on the e use of electronic information resources[165]. Response to each statement is measured was measured using a Likert type, 4-point scale: Strongly Agree (SA); Agree (A); Disagree (D); Strongly Disagree (SD).

Section D- Attitude Toward Using electronic information. The items in this section were adapted from a related study that also focused on the e use of electronic information resources.[166] Response to each statement is measured using a Likert type, 4-point scale: Strongly Agree (SA); Agree (A); Disagree (D); Strongly Disagree (SD).

3.5 Validity of the Instrument

In order to ensure face and content validity, the adapted questionnaire was submitted to the researcher's supervisor for expert review. Also, other experts in the field of Librarianship and Library and Information Science were also consulted to check and ensure the accuracy and precision of the instrument. Based on the criticisms and corrections of the experts, the instrument was modified until it was considered fit for purpose.

3.6 Reliability of the Instrument

The draft of the questionnaire was pre-tested on postgraduate students of LIFE Theological Seminary, Ikorodu, Lagos. These students are not part of the study sample size but they share similar characteristics with the population of the study. The responses

were used to test the reliability of the questionnaire. The Cronbach Alpha reliability method was applied to determine the level of internal consistency of the research instrument of this study. The following serves as the Cronbach Alpha reliability test: Perceived ease of use – 0.75, Attitude – 0.80 and use of EIR – 0.95.

3.7 Method of Data Collection

The researcher administered the questionnaires on the respondents through their respective institutional libraries. This was done after the necessary approval was obtained from the management of the institutions. The use of the library as a center for the administration of the research instrument is to meet the student in a place where they are likely to be relaxed enough to respond to questions and fill out questionnaires. This approach also obtained further data related to the study through observation and casual interactions.

3.8 Method of Data Analysis

Descriptive statistics was used to analyze the data. Descriptive statistics tools involving frequency count and percentage were presented in tables and charts where appropriate and were used to describe the demographic characteristics and to answer the study research questions 1 –5. Multiple regression analysis was used to test the research hypotheses to determine the influence of the independent variables on the dependent variable.

Chapter Four

Results and Discussions of Findings

This chapter presents the result of the analysis of data collected from the participants of the study and thoughts of outcomes arising from the study.

4.1 Data Presentation and Analysis

Table 4.1

Response Rate:	**Frequency**	**Percent**
Sample Size:	215	100%
Total Questionnaire Distributed	**215**	**100%**
Total Questionnaire Retrieved	202	
93.95%		

Demographic Characteristics of Respondents

The demographic data of the participants were collected and surveyed using descriptive statistics

such as frequencies and percentages and presented in tables.

4.1.1 Distribution of Respondents by Gender

Table 4.1.1: Gender of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	142	70.3	70.3	70.3
Female	60	29.7	29.7	100
Total	202	100	100	

Source: Field Survey, 2022

The above table reveals the gender distribution of respondents of this study. The data in the table suggests that there are more male theological students than their female counterparts. With a total number of 202 respondents, 142 are male. This accounts for about 70.3% while there are 60 female

respondents. This accounts for about 29.7%. This clearly shows that there are more male theological students in Ogun state than female theological students. This also affirms the fact that in theological schools in the world, there seems to be more male students than female students.

Table 4.2: Age of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
16 to 20	57	28.2	28.2	28.2
21 to 25	58	28.7	28.7	56.9
26 to 30	28	13.9	13.9	70.8
31 to 35	32	15.8	15.8	86.6
36 to 40	18	8.9	8.9	95.5
41 to 45	9	4.5	4.5	100
Total	202	100	100	

Source: Field Survey, 2022

The next data set to be discussed in this study, demography wise, is that of age of respondents of this study. The table above speaks about this. Final year theological students in Ogun state are very much still in their prime of life. This is evidenced from the table above considering the fact that a total number of 58 of the students indicated that

they are within the age range of 21 to 25 years of age. 57 of the total respondents are of the view that they are within the age range of 16 to 20 years of age. 32 students are within the age range of 31 to 35 years of age. 28 of the total number of respondents expressed the fact that they are within the age range of 26 to 30 years of age. 18 students are within the age range of 36 to 40 years of age. However, 9 students fall within the age range of 41 to 45 years of age. Going by the data analysis just explained, you have a total number of 175 students falling within the gage range of 16 to 35 years of age. This is an indication that theological students in Ogun state, are very much active still in their youthfulness.

4.2 Research Questions

4.2.1 Research Question One: What are the types of electronic information resources available for postgraduate students of theological seminaries in Ogun state, Nigeria?

Availability of Electronic Resources	**NA (%)**	**MA (%)**	**A (%)**	**HA (%)**	**Std.**	**Mean**
E-Journals	19	99	47	37	.899	2.50
	9.4	49.0	23.3	18.3		
E-Newspapers and magazines	25	60	56	61	1.020	2.76
	12.4	29.7	27.7	30.2		
Online public access catalogers	30	49	51	72	1.079	2.82
	14.9	24.3	25.2	35.6		
E-bibliography databases	27	49	62	64	1.031	2.81
	13.4	21.8	24.8	40.1		
CD ROM	21	56	53	72	1.052	2.85
	10.4	27.7	26.2	35.6		

E-Books	19	56	55	72	1.073
2.92					
	9.4	27.7	27.2	35.6	
Online Databases	19	56	55	72	1.019
2.87					
	9.4	27.7	27.2	35.6	
E-Research Reports	19	56	55	72	1.002
2.89					
	9.4	27.7	27.2	35.6	
Offline Databases	31	67	49	55	1.044
2.63					
	15.3	33.2	24.3	27.2	
Electronic Reference reports	29	51	48	74	1.044
2.83					
	14.4	25.2	23.8	36.6	
Average Mean:					
2.79					

Source: Field Survey, 2022

Key: Not Available (NA) = 1, Moderately Available (MA) = 2, Available (A) = 3, Highly Available (HA) = 4
Decision Rule: 1.00 – 1.49 (Very low), 1.50 – 2.4 (Low), 2.50 – 3.49 (High), 3.50 – 4.00 (Very High)

The first research question in this study is about identifying the various electronic resources available in theological seminaries in Ogun state. The identified electronic resources are: e-journals, e-newspapers and e-magazines, Online Public Access Catalogue, e-bibliography databases, CD-ROM databases, e-books, online databases, e-research reports, Off-Line Databases and Electronic Reference Sources. E-books are the most prominent available electronic resource. This particular e-resource attracted a mean score of 2.92 on a 4-point scale. The next most prominent available electronic resource is e-research reports. Based on the response of theological seminary students, this e-resource

attracted a mean score of 2.87 on a 4-point scale. Online databases, CD-ROM databases, Online Public Access Catalogue, e-bibliography databases, e-newspapers, and e-magazines and Off-Line Databases are the next set of e-resources that are prominent, they attracted the following mean scores on a4-pointt scale: 2.87, 2.85, 2.82, 2.81, 2.76 and 2.63 respectively. The last e-resource is e-journals. This particular e-resource attracted a mean score of 2.50 on a 4-point scale. This happens to also be the only e-resource that has the least mean score. Going by this, theological seminary students are very much inclined to using e-books because they are highly available. However, with an overall mean score of 2.79 on a 4-point scale, availability of electric resources in theological seminary schools in Ogun state is quite available.

4.2.1 Research Question Two: What are the purposes of using electronic information resources by postgraduate students of theological seminaries in Ogun state, Nigeria?

Purposes of Use	**SDA (%)**	**DA (%)**	**A (%)**	**SA (%)**	**Std.**	**Mean**
I use EIRs to receive Lectures	44 21.8	61 30.2	52 25.7	45 22.3	1. 081	2.49
I majorly use EIRs for Assignments	36 17.8	67 33.2	46 22.8	53 26.2	1.089	2.60

I use EIRs for Project writing	36	67	46	53	1.064
2.57					
	17.8	33.2	22.8	26.2	
I use EIRs to write	38	48	91	25	.937
2.51					
Examinations	18.8	23.8	45.0	12.4	
I use EIRs for Personal	45	56	55	46	1.075
2.50					
development such as research, leisure etc.	22.3	27.7	27.2	22.8	
I use EIRs for Term paper	41	63	53	45	1.052
2.50					
Presentations	20.3	31.2	26.2	22.3	
Average					**Mean:**
2.53					

Source: Field Survey, 2022.

Key: Strongly Agree(SA) =4, Agree (A) = 3, Disagree (D) = 2, Strongly Disagree (SDA) = 1
Decision Rule: 1.00 – 1.49 (Very low), 1.50 – 2.4 (Low), 2.50 – 3.49 (High), 3.50 – 4.00 (Very High)

The second research question is centered on identifying various purposes of using electronic resources by postgraduate students of theological seminaries in Ogun state, Nigeria. The overall mean score was 2.53 on a scale of 4. What this implies is that various purposes associated with the use of EIRs in theological seminaries in Ogun state might not be academically driven. For instance, an item that talks about using EIRs to receive lectures attracted a mean score of 2.49 on a scale of 4. This means that lectures in theological seminaries in Ogun state is not well delivered through EIRs. Closer to it is an item that talks about using EIRs to write examinations. This item attracted a mean score of 2.51 on a scale of 1 to 4. This means that the conduct of examinations with the use of EIRs

is just at an average level. The same goes for the item in this aspect of the research question that says "I use EIRs for term paper presentations". This also attracted a mean score of 2.50 on a scale of 1 to 4. This is also at the average level. The same mean score was for the item that says "I use EIRs for personal development such as research and leisure. The highest mean score in this aspect of the research instrument was 2.60. This mean score was for the item that says "I majorly use EIRs for assignments". This is to mean that when it comes to assignments being used by EIRs, give it to the students in theological seminaries in Ogun state. They take solace in using EIRs for assignments. All this culminated to the grand mean score of 2.53 as a way to determine the various purposes of using EIRs by theological seminary students in Ogun state.

4.2.1 Research Question Three: What is the level of perceived ease of use of electronic information resources by postgraduate students of theological seminaries in Ogun state, Nigeria?

Items	**SDA (%)**	**DA (%)**	**A (%)**	**SA (%)**	**Std.**	**Mean**
I never get confused when I use the Library Electronic Information Resources	41 20.3	63 31.2	53 26.2	45 22.3	1.080	2.60
I do not make errors frequently when using Library Electronic Information Resources.	47 23.3	69 34.2	36 17.8	50 24.8	1.101	2.44
Interacting with the Library's Electronic Information Resources is easy for me.	35 17.3	68 33.7	49 24.3	50 24.8	1.045	2.56

I do not need to consult the user manual often when using Library Electronic Information Resources.	41 20.3	50 24.8	53 26.2	58 28.7	1.104 2.63
Interacting with the electronic mail system does not require mental effort.	50 24.8	57 28.2	34 16.8	61 30.2	1.164 2.52
The Library Electronic Information Resources are flexible to interact with	40 19.8	56 27.7	59 29.2	47 23.3	1.164 2.56
I find it easy to get the library Electronic Information Resources to do what I want them to do.	40 19.8	56 27.7	59 29.2	47 23.3	1.055 2.35
It is easy for me to remember how to perform tasks using the Library Electronic Information Resources.	46 22.8	41 20.3	50 24.8	65 32.2	1.150 2.66
The Library Electronic Information Resources provides helpful guidance in performing tasks.	29 14.4	64 31.7	56 27.7	53 26.2	1.153 2.66
Overall, I find the library Electronic Information Resources easy to use	29 14.4	64 31.7	56 27.7	53 26.2	1.021 2.74
Average Mean: 2.53					

Source: Field Survey, 2022.
Grand Mean:

Key: Strongly Agree(SA) =4, Agree (A) = 3, Disagree (D) = 2, Strongly Disagree (SDA) = 1
Decision Rule: 1.00 – 1.49 (Very low), 1.50 – 2.4 (Low), 2.50 – 3.49 (High), 3.50 – 4.00 (Very

High)

The third research question in this study is about the level of perceived ease of use of EIRs by postgraduate students of theological seminaries in Ogun state, Nigeria. This particular research question has about ten items on it. With a grand mean score of 2.53 on a scale of 4, the level of ease of use is just at an average level. This means that the use of EIRs is not too easy and at the same time it is not quite cumbersome. But then the students attested to the fact that they find using EIRs very easy. This item in the questionnaire attracted a mean score of 2.74 on a scale of 4. Even at this, other items in this aspect of the research question, buttressed the fact that the use of EIR may not be that easy to use by this set of students. For instance, an item in the questionnaire which says "I find it easy for me to get the library EIR to do what I want them to do" attracted a mean score of 2.35 on a scale of 4. This connotes the fact that library EIRs in theological seminary schools in Ogun state might not be functioning well for the students not to be able to use it effectively well.

4.2.1 Research Question 4: What is the attitude of seminarians to the use of electronic information resources in theological seminaries in Ogun state, Nigeria?

Attitude	**SDA (%)**	**DA (%)**	**A (%)**	**SA (%)**	**Std.**	**Mean**
Cognition Attitude						
I believe the use of EIR will enhance access to a wider range of information.	59 29.2	34 16.8	41 20.3	68 33.7	1.118	2.58
The use of EIR does not often distracts me from doing my academic work	39 19.3	53 26.2	50 24.8	60 29.7	1.228	2.65

Information accessed from EIRs is well organized	32 15.8	51 25.2	44 21.8	75 37.1	1.102	2.80
Information accessed from EIRs are always up to date.	35 17.3	73 36.1	31 15.3	63 31.2	1.106	2.60
Average					**Mean:**	**2.66**
Affective Attitude						
I use EIRs because it is less expensive.	42 20.8	71 35.1	41 20.3	48 23.8	1.103	2.47
I use EIRs because of its high quality.	44 21.8	68 33.7	39 19.3	51 25.2	1.070	2.48
I use EIRs because downloading and printing information is not too expensive	44 21.8	60 29.7	41 20.3	57 28.2	1.094	2.55
I use EIRs because it is not time consuming.	46 22.8	60 29.7	42 20.8	54 26.7	1.120	2.51
Average					**Mean:**	**2.50**
Conation Attitude						
My intention towards the use of EIRs is because Information obtained on EIR always adequate.	34 16.8	70 34.7	42 20.8	56 27.7	1.116	2.59
My intention for use of EIR is to assist my colleagues to get research materials.	45 22.3	63 31.2	51 25.2	43 21.3	1.067	2.46

My intention for use of EIR is that it provides regular information.	37 18.3	66 32.7	54 26.7	45 22.3	1.061	2.53
My intention for use of EIR is because information accessed on EIRs is speedily accessible.	43 21.3	58 28.7	55 27.2	46 22.8	1.033	2.51
Average Mean: 2.52						

Source: Field Survey, 2022.
Grand Mean: 2.56

Key: Strongly Agree (SA) =4, Agree (A) = 3, Disagree (D) = 2, Strongly Disagree (SDA) = 1
Decision Rule: 1.00 – 1.49 (Very low), 1.50 – 2.4 (Low), 2.50 – 3.49 (High), 3.50 – 4.00 (Very High)

The last research question in this study has to do with the attitude of seminarians in the use of EIR in theological seminaries in Ogun state, Nigeria. The attitude was averagely low. With a grand mean score of 2.56 on a scale of 4, this proves that the attitude of postgraduate students is just okay. Three indicators were used to measure attitude in this study. They are: Cognition, affective and conation form of attitudes. Cognition attitude attracted a mean score of 2.66 on a scale of 4, while affective attitude attracted a mean score of 2.50 on a scale of 4 and conation attitude attracted a mean score of 2.52 also on a scale of 4. With this result, it is not out of place to say that the attitude of postgraduate students in using EIRs is just something about "I just have to use it, it does not necessary help me in achieving anything". Conclusively, this attitude might have also contributed to the overall mean score of purpose on use of EIRs by student of theological seminaries in Ogun state.

4.3 Test of Hypotheses

1: There will be no significant influence of perceived ease of use on the usage of electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.028[a]	.001	-.004	.46805

a. Predictors: (Constant), perceived ease of use

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.035	1	.035	.162	.688[b]
	Residual	43.814	200	.219		
	Total	43.850	201			

a. Dependent Variable: use of EIR

b. Predictors: (Constant), perceived ease of use

Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	2.750	.152		18.092	.000
	Perceived ease of use	-.023	.058	-.028	-.402	.688

a. Dependent Variable: use of EIR

Source: Field Survey, 2022

The first null hypothesis of this study is to investigate the degree of influence of perceived ease of use on use of EIR. Perceived ease of use was found not to significantly influence use of EIR. This is attributed to the *p* value. The *p* value according to the table above was .688. This value is above the level of significance which is used in this study to determine if an independent variable influences the dependent variable or not. Therefore, based on the findings of this null hypothesis, the independent variable did not influence

the dependent variable. Going by this result, the null hypothesis was accepted. The degree of relationship between the independent variable - perceived ease of use and the dependent variable – use of EIR was at .028. This means that the relationship was just at a 28%-degree level of relationship. This means that the relationship between perceived ease of use and the dependent variable – use of EIR is just at 28% level, which also means the relationship is weak but positive. As regards the level of variation perceived ease of use has in use of EIR, the adjusted *r square* revealed this. The adjusted r square was -.004. This means that perceived ease of use has no variation at all in use of EIR. There are other factors that need to be considered to bring about variation when it comes to use of EIR.

2: There will be no significant influence of the seminarian's attitude on the usage of electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.197[a]	.039	.034	.45904

a. Predictors: (Constant), attitude

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.706	1	1.706	8.097	.005[b]
	Residual	42.144	200	.211		
	Total	43.850	201			

a. Dependent Variable: use of EIR

b. Predictors: (Constant), attitude

Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
attitude	.222	.078	.197	2.845	.005

a. Dependent Variable: use of EIR

Source: Field Survey, 2022

The second null hypothesis says "There will be no significant influence of seminarian's attitude on the usage of electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria. This null hypothesis was rejected. It was rejected based on the fact that the *p-value* was found to be below the level of significance of 0.05. According to the table above, it is evidently seen that the *p-value* is at .005 which means that truly, attitude will definitely bring about use of EIR. As regards the relationship between attitude and use of EIR, the r value was at .197. This means that there is a 19.7% level of relationship between the two variables – attitude and use of EIR. This level of relationship implies that it is positive but weak. A 34% level of variation was recorded as an explainable factor in variation between attitude and use of EIR. This is seen in the adjusted *r square* value. Therefore, the implication of this is that the remaining 66% is what other will bring about use of EIR by other factors of variation.

3: There will be no combined significant influence of perceived ease of use and seminarians' attitude toward the usage of electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria.

1	.213[a]	.045	.036	.45868

a. Predictors: (Constant), attitude, perceived ease of use

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.983	2	.991	4.712	.010[b]
	Residual	41.867	199	.210		
	Total	43.850	201			

a. Dependent Variable: use of EIR

b. Predictors: (Constant), attitude, perceived ease of use

Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	2.235	.226		9.912	.000
	Perceived ease of use	-.067	.058	-.082	-1.146	.253
	Attitude	.245	.080	.217	3.042	.003

a. Dependent Variable: use of EIR

Source: Field Survey, 2022

The third null hypothesis of this study if from a joint perspective. The null hypothesis say "There will be no combined significant influence of perceived ease of use and seminarians' attitude toward the usage of electronic information resources among postgraduate students of theological seminaries in Ogun state, Nigeria". From the above data, only attitude was found to significantly influenced use of EIR. Perceived ease of use was found not significantly influence use of EIR. This is seen from the *p* value. As regards the relationship of both the independent and dependent variables, the *r* value did justice to this. The *r* value was at .213. This means that

Both perceived ease of use and attitude has a 21.3% relationship with use of EIR. The adjusted r square which has a value of .036 means that both perceived ease of use and

attitude only accounted for 36% variation in the dependent variable – use of EIR. The remaining 64% is explained by other factors. It is therefore imperative that there should be a concentration on getting the right attitude from students towards the use of EIR.

4.4 Discussion of Findings

The first research question in this study examined the types of Electronic Information Resources available in theological seminaries in Ogun state. From the data available, E-books is revealed to be the most available form of Electronic Information Resources that is available in theological seminaries in Ogun state. Studies have actually shown that E-books lay a fundamental in higher institution of learning [1, 2, 3]. Other Electronic Information Resources were also shown to be very much available in theological seminaries in Ogun state. Electronic Information Resources such as online databases, Opacs, CD ROMS, Electronic reference reports etc. Only e-journals were found to be available at an average level. The second research question talks about purpose of Electronic Information Resources being used by postgraduate students of seminary schools in Ogun state. Studies have shown that EIRs can serve different purposes ranging from receiving lectures to assignments, examinations, research and leisure and so on [4, 5, 6, 7, 8]. These are also some of the various purposes highlighted in this aspect of the question. The third research question is about level of perceived ease of use of Electronic Information Resources. At a grand mean level of 2.53 on a scale of 4, it is concluded that perceived ease of use

of Electronic Information Resources is just at an average level. This means that it is not found to be well easily used among postgraduate students of theological seminaries in Ogun state. Studies have actually revealed that the when Electronic Information Resources

are well used or found easy to be used, it will bring about efficiency in its usage [9, 10]. The last research question is about the attitude of seminary students towards the use of Electronic Information Resources. The study found that attitude was also at an average level. This seems that the attitude of postgraduate students in theological seminaries in Ogun state was just not too okay. In terms of hypothesis being tested in this study, findings from the first null hypothesis have it that perceived ease of use did not significantly influence use of Electronic Information Resources. Studies have actually contradicted this kind of findings [11, 12]. Most studies have actually revealed that perceived ease of use do significantly influence use of Electronic Information Resources. The second hypothesis in this study was based on investigating the influence of attitude on use of Electronic Information Resources. This was found to be positive. That is, attitude will definitely bring about use of Electronic Information Resources. Studies have also affirmed this to be true, that to a large extent if there is a right attitude towards the use of Electronic Information Resources, then to a large extent, usage will also be well carried out [13, 14, 15]. The last hypothesis that was tested in this study is from a combined perspective.

The hypothesis looked at the combined influence of perceived ease of use and attitude on usage of Electronic Information Resources s. It was found that only attitude will influence usage of Electronic Information Resources.

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Chapter Five

Conclusion

5.1 Summary of Findings

This study examined the influence of perceived ease of use and attitude on usage of Electronic Information Resources (EIRs) among postgraduate students in theological seminaries in Ogun state. The study made use of final year postgraduate students in theological seminaries in Ogun state. The following were specific findings of the study:

1. E-books, E-journals, databases are the types of Electronic Information Resources (EIRs) that are available to postgraduate students use in theological seminaries in Ogun state
2. The Electronic Information Resources (EIRs) are used for term papers, research purposes and not for receiving lectures.
3. The frequency at which these resources are used is not encouraging, majorly due to the structure the producers builds it.
4. Perception on the use of Electronic Information Resources (EIRs) was also at an average level.
5. Perception on the use of Electronic Information Resources (EIRs) did not significantly influence use of Electronic Information Resources (EIRs)
6. Attitude of theological students towards the use of Electronic Information Resources (EIRs) significantly influenced use of Electronic Information Resources (EIRs)
7. Combining Perception on the use of Electronic Information Resources (EIRs) and Attitude was found not to significantly influence. Only attitude was found to significantly influence use of Electronic Information Resources (EIRs).

5.2 Conclusion

From this study, it has been established that to a large extent that attitude of theological students will significantly influence use of Electronic Information Resources (EIRs). Electronic Information Resources (EIRs) will go a long way in making students find their work easier. Since this is the case going by what was found in this study, there is every

tendency that availability of e-journals will actually contribute more to the use of Electronic Information Resources (EIRs). Electronic Information Resources (EIRs) do affect the way and manner it is being used by students. More emphasis should be made on how students having the right attitude towards the use of EIRs rather than ease of use.

5.3 Recommendations

The following recommendations are hereby postulated in this study.

1. Management of theological seminaries in Ogun state should make available the various types of Electronic Information Resources to users. subscribe to have in their libraries e-journals.
2. Students of theological seminaries in Ogun state should be orientated on having academic-oriented-purpose-driven reason in using Electronic Information Resources (EIRs).
3. Students should be given massive orientation as regards having a right attitude towards the use of Electronic Information Resources (EIRs).
4. Developers of Electronic Information Resources (EIRs) products should actually design their Electronic Information Resources (EIRs) in such a way that it will be user friendly among students.
5. There should be as many offline databases as possible subscribed for in theological seminaries in Ogun state.

5.4. Contribution to Knowledge

This study has actually brought to the fore the essence and importance of usage of Electronic Information Resources (EIRs). Academically, Electronic Information

Resources (EIRs) will enable students do their assignments very well. Having a right attitude towards the use of EIRs will definitely bring about high-level usage among students. Availability of e-journals will also enable students to do more researchable assignments in theological seminaries in Ogun state. It is imperative for Electronic Information Resources (EIRs) developers to make Electronic Information Resources (EIRs) easier to use and user friendly.

5.5 Suggestions for Further Studies

Researchers can expand the scope of this study in the following ways:

1. Gender differences and ease of use of EIRs: A case study of public and private universities in South West Nigeria.
2. Understanding user interface of EIR software among undergraduate students in higher institution of learning in South West, Nigeria.
3. Awareness and attitudinal involvement of postgraduate students towards the use of EIRs in south west, Nigeria.

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