

***EXPLORING USERS' AWARENESS OF AVAILABLE EIRS IN KWARA STATE  
POLYTECHNIC LIBRARY, ILORIN, NIGERIA***

***By***

**ABIDEEN UTHMAN AKOREDE  
ND/23/LIS/FT/0070**

**SUBMITTED TO  
DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE,  
INSTITUTE OF INFORMATION AND COMMUNICATION TECHNOLOGY,  
KWARA STATE POLYTECHNIC, ILORIN**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF  
NATIONAL DIPLOMA (ND) IN LIBRARY AND INFORMATION SCIENCE**

**JUNE, 2025**

### **CERTIFICATION**

This is to certify that this project titled “**Exploring users’ awareness of available EIRs in Kwara State Polytechnic Library, Ilorin, Nigeria**” by Abideen Uthman Akorede meet the regulations guiding the award in National Diploma in Kwara State Polytechnic Ilorin and is approved.

---

**MR. SULYMAN, A. S.**  
**Project Supervisor**

---

**Date**

---

**MR. SULYMAN, A. S.**  
**Project Coordinator**

---

**Date**

---

**MR. ISIAKA, A. O.**  
**Head of Department**

---

**Date**

---

**External Examiner**

---

**Date**

### **DEDICATION**

This project is dedicated to God for being my ultimate source of strength and inspiration. In Him, I derived all powers needed to live, weather the storms and become an embodiment of hope to myself and the people around me.

## **ACKNOWLEDGEMENT**

All praise is to God, the most beneficent, the most merciful. My sincere appreciation goes to my parents for their concern, prayers and words of encouragements towards the completion of this programme. My utmost gratitude also goes to my supervisors Mr. Sulyman, A. S. for her moral and intellectual guidance and contribution towards the possibility of this project and all other lectures of the department.

To be given the privilege to contribute stream of knowledge make me appreciate the entire management of Kwara State Polytechnic Ilorin, and my noble department of Library and Information Science and my fellow colleagues that made my stay on the citadel more interesting and all my friends without whom this great work could not be achieved.

## **TABLE OF CONTENTS**

FRONT PAGE .....	
TITLE PAGE .....	
DECLARATION .....	
CERTIFICATION .....	
DEDICATION .....	
ACKNOWLEDGEMENTS .....	
TABLE OF CONTENTS .....	
ABSTRACT .....	
CHAPTER ONE: INTRODUCTION	
1.1 Background to the study	
1.2 Statement of the problem	
1.3 Research objectives	
1.4 Research questions	
1.5 Significance of the study	
1.6 Scope and limitations of the study	
1.7 Operational definition of terms	
CHAPTER TWO: REVIEW OF RELATED LITERATURE	
2.1 Commonly Used EIRs in Academic Institution	
2.2 Types of Electronic Information Resources Used in Academic Library	
2.3 Effect of Electronic Information Resources on Library Users in Academic Institutions	
2.4 Level of Awareness of Electronic Information Resources (EIRs)	
2.5 Purpose of Using Electronic Information Resources (EIRs)	
2.6 Search Techniques Used for Accessing Electronic Information Resources (EIRs)	
2.7 Empirical Review	
CHAPTER THREE: RESEARCH METHODOLOGY	

3.1 Research Design

3.2 Population of the Study

3.3 Sampling Technique and Sample Size

3.4 Instrument for Data Collection

3.5 Reliability and Validity of Instruments

3.6 Procedure for Data Collection

3.7 Procedure for Data Analysis

#### CHAPTER FOUR: DATA PRESENTATION, ANALYSIS, DISCUSSION AND INTERPRETATIONS

4.1 Presentation of the Result

4.2 Demographic Information Staff of Respondent

4.3 Discussion of findings

#### CHAPTER FIVE: SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of findings

5.2 Conclusion

5.3 Recommendations

#### REFERENCES

#### APPENDIX

## **Abstract**

*Electronic information resources have become an indispensable resource for teaching, learning and research. This study explores users' awareness of available EIRs in Kwara State Polytechnic Library, Ilorin, Nigeria. Descriptive survey design was adopted. This study's population is the students of Library and Information Science, Kwara State Polytechnic, Ilorin. Purposive sampling was used to select 150 respondents. A questionnaire was used to gather data from the respondents. Findings revealed that the electronic information resources available to and aware of by the respondents are JSTOR, Web of Science and Scopus, which they used on a daily basis. Findings further revealed that respondents used electronic resources for literature review, assignments preparation and research projects through the strategies and techniques of filtering by date of publications, referring to subject headings and using specific keywords. However, difficulty in navigating databases and insufficient training on utilising electronic information resources are limiting the respondents from using electronic information resources. This study concludes that electronic information resources have proven to be useful to the students of Kwara State Polytechnic, Ilorin and recommends amongst others that lecturers at the Department of Library and Information Science, Kwara State Polytechnic, Ilorin, should train students on utilisation of EIRs.*

**Keywords:** Electronic information resources, Library and Information Science, Kwara State Polytechnic.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the Study**

University libraries play a pivotal role in serving the needs of students, faculty, researchers, and administrative staff within academic institutions. These libraries, which comprise students, professors, and researchers, take a leading role in delivering informational resources to their local communities, addressing the demands associated with education, learning, and research (Abubakar, 2011). By providing essential services, university libraries significantly impact the entire campus community, sustaining its role as a central hub for intellectual growth and research endeavors.

Moreover, these libraries provide comprehensive support to further the primary educational objectives of their parent organizations—specifically, the enhancement of teaching, learning, and research activities. In addition, it functions as a hub for offering its users first-rate resources and services, a platform for knowledge creation and dissemination, and an intellectual arena. Prior until now, the amount of a university library's holdings of books, journals, and other items were used to assess the library's quality. Now, however, the focus is on the networked information services offered by contemporary technologies like CD-ROM networks, the Internet, and consortiums. With information-bearing products and resources available in a variety of media, the 21st century might thus be described as an era of the information revolution (Onuoha & Awoniyi, 2011). These information resources are broadly classified into print and non-print, include books, images, bibliographic records, web pages, journals articles including databases, websites, and documents supply centers, multimedia documents or libraries; and they are

acquired, processed and made available to the library patrons to meet their information needs (Adomi, 2009).

However, EIRs as non-print information sources also include websites, CD-ROMs, e-journals, e-text or electronic books, locally loaded databases, and abstracting and indexing databases like Medline. According to the International Coalition of Library Consortia (1998), the term "electronic resources" is a broad one that includes services for abstracting and indexing, electronic journals and other full-text publications, as well as the provision of information aggregators and article delivery services that can be accessed locally by a consortium or one of its member libraries or remotely through information providers' networks.

The definition of electronic information resources has been developed by several writers and organizations. AACR-2 defined electronic information resources as “a material (data/ program) encoded for manipulation by computerized devices. Thus, material may require the use of a peripheral directly connected to a computerized device (eg CD-ROM) or a connection to a computer network (e.g Internet)”.

Similarly, International Coalition of Library Consortia (1998) defines electronic resources as “a broad term that encompasses abstracting and indexing services, electronic journals and other full text materials, the offering of information aggregators, article delivery services, Okore (2009) stated that electronic information resources includes electronic books (e-books), electronic journals (e-journal), and indexes, collections of journal articles, reference works, digital collections, databases and websites. Electronic resources can be accessed through remote networks from information providers or locally mounted by a consortium or one of its member libraries.

According to IFLA/FAIFE (2007) electronic information resources are materials that are computer controlled, including materials that required the use of a peripheral (a CD ROM player) attached to a computer; the items may or may not be used in the interactive mode. Electronic resources are defined as being publicly available information resources, which can be accessed through a personal computer. These include commercially produced resources such as bibliographic databases accessed online or through CD-ROM, electronic journals, electronic books as well as resources that are freely available through the Internet especially to higher education institutions or to the public in general.

The electronic information resources are defined from different points of view by many organizations and authors. However, for the purpose of the present study the electronic resources are considered as those materials that require computer access and may be either locally mounted or accessed remotely through the internet. On this premise, it can be deduced that EIRs are resource which requires computer access or any electronic product that delivers a collection of data, be it text referring to full text bases, electronic journals, image collections, other multimedia products and numerical, graphical or time-based, as a commercially available title that has been published with an aim to being marketed.

The electronic information resources may be delivered on CD ROM, on tape, via the internet and so on. And equally electronic information resources can be online e-resources, which may include: e-journal (Full text and bibliographic), ebooks, on-line Database and web sites, and other electronic resources may include: CD ROM, diskettes and other portable computer databases To this end, it can be concluded that University libraries are providing electronic access to a wide variety of resources to the user community, ranging from e-books, e-journals,

online database, and CD-ROM databases to other computer –based electronic networks, among other.

## **1.2 Statement of the Problem**

Despite the provision and availability of various resources in Kwara State Polytechnic library, students' lack of use or inadequate utilization of electronic information resources in the library underscores the pressing need for effective follow-up on rapidly emerging trends in library service delivery. Often, students exhibit a reluctance to use certain electronic devices in libraries. Additionally, it appears that low levels of information literacy, a lack of knowledge, inadequate supply of appropriate resources, and poor information search abilities affect students' academic achievement. Due to these factors, this research explores users' awareness of available EIRs in Kwara State Polytechnic library's electronic information resources usage in the academic context.

## **1.3 Objectives of the Study**

Explores users' awareness of available EIRs in Kwara State Polytechnic Library, Ilorin, Nigeria is the study's main goal. However, the specific goals are to:

- i. To identify the types of electronic information resources available on libraries of your choice.
- ii. To obtain the level of awareness of EIRS by students in Kwara State Polytechnic Library
- iii. To ascertain the purpose which EIRS are used by students in Kwara State Polytechnic Library
- iv. To identify search techniques uses in accessing EIRS in Kwara State Polytechnic Library
- v. To identify challenges in the usage of EIRS in Kwara State Polytechnic Library

#### **1.4 Research Questions**

1. What specific electronic databases are accessible in the Kwara State Polytechnic of Nigeria?
2. How often do students at Kwara State Polytechnic utilize electronic information resources for their academic assignments?
3. What are the primary motivations driving students at Kwara State Polytechnic to access electronic information resources?
4. What strategies do students commonly employ to refine their search queries when accessing electronic information resources?
5. What are the main obstacles faced by students when attempting to access electronic information resources in federal university libraries of the South Western State of Nigeria?

#### **1.5 Scope of Study**

This study explores users' awareness of available EIRs in Kwara State Polytechnic Library, Ilorin, Nigeria. In order to keep up with the rapidly evolving trends in library service delivery, it looked at the issues that impact the usage of electronic information resources and measures to improve that use.

#### **1.6 Significance of the Study**

The results of this investigation are poised to offer valuable insights to academic librarians, empowering them to elevate their research contributions by harnessing the accessibility and utility of electronic information resources. This, in turn, could substantially amplify the publication productivity of librarians. The discoveries stemming from this study hold profound

significance for all university librarians, illuminating the pivotal role played by electronic information resources in fortifying their research endeavors.

The research findings hold significant potential to benefit students—the primary users of academic libraries and electronic information resources. These insights can serve as a valuable resource for students themselves, empowering them to navigate and utilize electronic information resources more effectively in their academic pursuits. By understanding the challenges and opportunities presented by these resources, students can enhance their research capabilities and academic achievements.

Furthermore, the conclusions and recommendations drawn from this study can directly impact students' learning experiences and outcomes. By incorporating best practices and addressing identified challenges, students can access a wider range of information resources, improve their information literacy skills, and optimize their use of electronic resources for coursework and research projects.

Additionally, the research outcomes are poised to inform university administrators, librarians, and policymakers about the specific needs and preferences of students regarding electronic information resources. This understanding can guide the development of policies, resource allocations, and support services tailored to enhance students' access to and utilization of electronic resources in academic libraries.

In essence, the research findings are intended to directly benefit students by empowering them with the knowledge and resources needed to thrive in an increasingly digital academic environment.

## **1.7 Operational Definition of Terms**

**Information Resources:** They are devices which enhance the sharing of ideas; it could be manually or electronically. It can also be referred to as information carriers e.g. books, journals, magazines etc.

**Electronic Information Resources:** Refers to the computer mediated information resources in electronic form that are available for use among librarians in universities.

**Accessibility of Electronic Information Resources:** It is the ability to get, locate or obtain electronic information resource with ease in the conduct of research. Thus, accessibility is considered in the study as a process in which librarians can easily locate electronic information resources to aid research productivity.

**Use of Electronic Information Resources:** Refers to purpose for which these resources are used by librarians. It is also the ability to use electronic information resources in the conduct of research.

**Librarians:** They are professionally trained persons responsible for managing, organising, evaluating and disseminating information, providing support to members of an academic community including students, researchers and lecturers.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Commonly Used EIRs In Academic Institution**

In recent years, there have been a number of changes in the Tertiary education sector in Nigeria and in particular, academic institutions. The emergence of electronic information resources has tremendously transformed information-handling and management in Nigerian academic environments, and University libraries in particular (Ani and Ahiauzu 2008). These dramatic changes include the way in which information is provided to the University Communities.

A number of electronic resources initiatives have been put in place in Nigeria to assist in the development training and use of electronic resources in a number of academic institutions among who are the Morlenson Center for International Library Programs acting on behalf of MacArthur Foundation to support some selected granted university libraries; The Electronic Information for libraries Network (eiFL.Net) and MTN Foundation. Their fundamental objective has been to create interfaces with the global knowledge systems.

These initiatives notwithstanding, some inadequacies in the development provision and utilization of electronic resources had been identified in a number of academic institutions. In a study carried out by Uzuegbu et al. (2012) on creating universal resource locator (URL) links on library computers desktop page: A panacea for Students' underutilization of subscribed electronic databases in academic institutions in Nigeria using Michael Okpara University of Agriculture Library Umudike (Mouau) as a case study, it was revealed that collection development of the library is rapidly growing. Apart from access to its modest collection of books, journals and periodicals, library users have access to electronic databases subscribed by

MOUAU Library. The databases are AGORA, EBSCO Host, HINARI, OARE, NUC Virtual Library and Lan-TEEAL of 2005 CD and 2009 DVD versions. As also revealed in the study, unawareness of MOUAU students on the availability of electronic databases to a large extent is responsible for its underutilization.

Also, Oduwale et al. (2003) sought to know the electronic resources provided by Nigerian libraries. When asked what electronic resources they provide, Nigerian university libraries, he identified Online Public Access Catalog, CD-ROM, databases, electronic mail (e-mail) and Internet browsing. The study found that students constitute the major category of users of electronic services in the university libraries surveyed. In a survey of cyber cafes which are facilities established in the university environment to aid learning and research in Delta state, Adomi et...al (2003) reported that 77.8% of the customers/users cafes were students. Ojedokun and Owolabi (2003) reported that e-mail is the most used Internet resource by staff and students

## **2.2 Types of Electronic Information Resources Used in Academic Library**

The University of Chicago Library listed some of the electronic information resources that should be available at every academic library's disposal to include:

**1. CD ROM:** is a pre-pressed optical compact disc which contains data. The name is an acronym which stands for "Compact Disc Read-Only Memory". Computers can read CD-ROMs, but cannot write on the CD-ROM's which are not writable or erasable. Until the mid-2000s, CD-ROMs were popularly 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).

**2. Electronic Books:** Libraries now provides access to a variety of electronic books, as well as the other printed works (such as essays, poems, or historical documents). Some of these electronic books and texts are part of large, searchable databases.

**3. Electronic Journals:** Most academic libraries now have an offline E-Journals Database to help you find journal materials that is useful to users and an online-versions of e-journals which the library subscribe to have access to current journal publication.

**4. Online Database:** Is a web-based filing system designed to store information. It is a database accessible from a network, including from the Internet. Most academic libraries now subscribe to online databases of books and journals that are relevant to the University curriculum which will help to facilitate teaching and learning in the University environment.

**5. Online Sources:** Online sources are materials that are available online. It can be an online newspaper, magazine or television website such as NBC or CNN. Peer-reviewed journals, WebPages, forums and blogs are also online sources. Some other names for online sources are 'electronic' sources, 'web' sources and 'internet' sources. These are very useful electronic information resources which many libraries are now making available to satisfy the urgent needs of their user community.

## **2.3 Effect of Electronic Information Resources on Library Users in Academic Institutions**

The emergence of electronic resources has cut the barrier to valuable information resources which until now were difficult to access especially by scholars in the developing nations of the world. Salaam (2008) attributed the popularity of electronic resources to flexibility in searching

than their paper-based counterpart, and that they can be accessed remotely at any time. Tenopir (2003) in a major survey, analyzed the findings of over 200 studies on the use of electronic resources in libraries that were published between 1995 and 2003. The results revealed that, electronic resources have been rapidly adopted in academic spheres; however, behavior varies according to the discipline.

The importance and wide-ranging scope of these electronic information resources for general communication, information retrieval and instructional delivery to support teaching and research activities in tertiary educational institutions and academic libraries in particular is acknowledged worldwide. The literature also shows that a number of relevant studies have been carried out on the use of e-resources by lecturers, research scholars and students worldwide.

General user opinion towards the use of electronic resources, in particular CD-ROM, has been positive, with students enjoying using these sources and finding relatively few problems while using them (Ray and Day, 1998). This is clearly confirmed in the case of a survey undertaken at Oakland University by (Schulz and Salomon, 1990) into students' satisfaction with CD-ROMs. The study according to Ray and Day (1998) found out that 83% of students surveyed felt that using this source saved them time, and found it relatively easy to use. Two thirds of those surveyed stated that if the CD-ROM was busy, they would wait for it to become free rather than use the print tool.

According to Bar-Ilan, Peritz, and Wolman (2003) the most active users of electronic books and journals are the younger members of the teaching and research staff. In a related study, Bush (2004) showed that age was not an influential factor in whether the respondents read articles on paper or in electronic format. Brennan et al (2002) in studies that centered on how the adoption of electronic information resources has affected academics' information behavior revealed that

faculty make fewer visits to the library and read more of electronic books and journals than in the print era.

Most academics report use generic databases to locate information while a few rely on smaller discipline-specific databases. Corroborating this, Dilek-Kayaoglu (2008) in a research on use of electronic journals by faculty Students at Istanbul University, also revealed that majority of respondents supported the transition from print to electronic resources because of the numerous opportunity its presents to them.

Studies have also been carried out on the use of electronic resources by teachers, students and research scholars of universities and research organizations. Seventy-eight percent (78%) of the respondents feel that the use of the OPAC, e-books, e-mail, e-reference sources, e-journals etc. has created high dependency value on their research work and they needed current article alert services and electronic document supply services (Madhusudhan, 2008).

In the context of developing countries, Okello-Obura and Magara (2008) investigated electronic information access and utilization at the East African School of Library and Information Science, Makerere University, Uganda. Out of the 250 targeted students, 190 responded, giving a response rate of 76%. The study revealed that users derived a lot of benefits from electronic resources such as gaining access to a wider range of information and improved academic performance as a result of access to quality information.

Uzuegbu et...al (2012) in his study asserts that for effective utilization of electronic databases, not only is computers and internet connection necessary, creating a usable interface is indispensable. Already, Ani, et al, Abdulmumin and Waldman agree that a computer database interface aids access and retrieval of information. Hence, a URL link is an interface that can help

students overcome the problems of obtaining passwords, username, inputting error, among other things when making use of online databases. In effect, all the studies reviewed above are implemented on the assumption that the uptake of electronic resources is highly desirable to the students, lecturers and researchers in that it leads to increased productivity of work, learning, teaching and research.

#### **2.4 Level of Awareness of Electronic Information Resources (EIRs)**

The level of awareness regarding Electronic Information Resources (EIRs) among students and academic community members in educational institutions is a critical factor in their utilization. Studies such as those by Uzuegbu et al. (2012) and Oduwole et al. (2003) have highlighted the significant impact of awareness on the utilization of electronic resources. Despite the availability of a wide array of electronic resources in academic libraries, including databases, electronic journals, and online sources, there is often a lack of awareness among users regarding the existence and accessibility of these resources. This lack of awareness contributes to underutilization, as evidenced by the findings of Uzuegbu et al. (2012) regarding the underutilization of subscribed electronic databases at Michael Okpara University of Agriculture Library Umudike.

#### **2.5 Purpose of Using Electronic Information Resources (EIRs)**

Understanding the purposes for which Electronic Information Resources (EIRs) are utilized by students and academic community members is crucial for optimizing their usage and enhancing the overall learning and research experience. The literature suggests that EIRs are utilized for various purposes, including academic research, teaching support, information retrieval, and instructional delivery. Studies such as those by Salaam (2008) and Tenopir (2003) have

underscored the importance and wide-ranging scope of EIRs in supporting teaching, learning, and research activities in tertiary educational institutions. Furthermore, the transition from print to electronic resources has been positively received by users, as indicated by the findings of studies conducted by Ray and Day (1998) and Bar-Ilan et al. (2003), who reported high levels of satisfaction and increased productivity among users of electronic books and journals.

### **2.5.1 Challenges of Utilizing Electronic Information Resources in Academic Institutions**

**Infrastructure Limitations:** Despite the numerous advantages of electronic information resources and their positive impact on students' academic performance in universities, a significant number of university students are unable to fully utilize these resources due to inadequate facilities or a lack of maintenance culture. Even when such facilities are in place, potential users may not make use of electronic information resources due to a lack of awareness or insufficient skills to navigate modern technology.

**Pricing Complexities:** One of the significant challenges associated with electronic resources is the variable and often unclear pricing. Unlike printed materials with fixed prices, electronic resource pricing varies among publishers and is subject to frequent changes. This dynamic pricing model poses difficulties for institutions to stay updated and aligned with publishers' evolving pricing strategies.

**Management Issues:** Unlike traditional libraries where physical resources are readily accessible, electronic resources may be scattered across different publishers and vendors. This lack of centralized accessibility hinders users' ability to efficiently browse and search for information. Integrating these resources for seamless access becomes essential, as users may lack the time or patience to navigate multiple platforms.

**Archival Challenges:** Online resources are often hosted remotely by publishers or vendors, and their access is governed by subscription agreements and licensing policies. This arrangement raises concerns, especially when subscriptions expire. Decisions need to be made about archiving responsibilities, whether publishers or libraries should bear the costs, and how to ensure access to archived content.

**Limited Strategic Planning:** Chisenga's study (2004) on African Public Library Services highlighted inadequate strategic planning as a barrier to effective electronic information resource provision. Many libraries lacked a clear plan for implementing and offering web-based information services to users.

**Financial Constraints:** Inadequate or unreliable funding was identified by Chisenga (2004) as a hurdle to providing electronic information resources. Insufficient financial support can hinder the acquisition, maintenance, and access to these resources.

**Lack of Internet Access:** Chisenga (2004) also found that some libraries faced challenges in providing internet access to web-based information resources. Limited or unreliable internet connectivity can hinder users' ability to access these resources.

**Insufficient User Training:** Lack of consistent training for users in utilizing new ICT services and electronic resources was highlighted by Kebede (2002) and Chisenga (2004). Users' inadequate knowledge and skills in navigating and exploiting electronic resources can impede their effective use.

**Lack of Awareness:** Various studies, including those by Bashorun (2011), Abdullah (2006), and Ojo and Akande (2005), revealed that lack of awareness about the existence and availability of

electronic resources was a significant barrier. Users may not be familiar with the electronic resources offered by libraries.

**Usability Issues:** Unfriendly interfaces and usability problems with electronic resources can discourage users from fully utilizing these resources (Abdullah, 2006). Difficulties in navigating platforms and interfaces can hinder effective resource exploration.

**Lack of Computer Skills:** Several studies, including those by Ajuwon et al. (2003) and Abdullah (2006), identified a lack of computer skills among users. This lack of proficiency in using computers and databases can limit users' ability to benefit from electronic information resources.

**Inadequate Access and Infrastructure:** Oduwole and Akpati (2003) found that despite a generally positive response to electronic information resources at the University of Agriculture Library, insufficient access due to a shortage of terminals and inconsistent electricity supply were noted limitations.

In summary, the challenges surrounding the effective utilization of electronic information resources in academic institutions are multifaceted, ranging from issues related to pricing, management, and archival concerns to broader challenges of funding, user training, and technological accessibility.

## **2.6 Search Techniques Used for Accessing Electronic Information Resources (EIRs)**

Efficient search techniques play a pivotal role in accessing and retrieving Electronic Information Resources (EIRs) effectively. With the proliferation of electronic databases, online sources, and digital repositories, users need to employ appropriate search strategies to locate relevant information efficiently. The literature highlights various search techniques utilized by students

and academic community members, including keyword searches, Boolean operators, truncation, and advanced search functionalities offered by electronic databases. Studies such as those by Brennan et al. (2002) and Dilek-Kayaoglu (2008) have emphasized the importance of user training and proficiency in utilizing search techniques to maximize the benefits of EIRs. Additionally, user-friendly interfaces and usability enhancements are essential for facilitating seamless navigation and exploration of electronic resources, as identified in studies by Abdullah (2006) and Ajuwon et al. (2003).

In summary, the comprehensive exploration of the level of awareness, purpose of usage, and search techniques employed for accessing Electronic Information Resources (EIRs) provides valuable insights into the dynamics of electronic resource utilization in academic institutions. These insights inform strategies for improving awareness, optimizing usage, and enhancing search capabilities to meet the evolving needs of students and academic community members in an increasingly digital learning environment.

## **2.7 Empirical review**

There is great deal of literature devoted to different types of electronic resources. However, very few is written on electronic information resources and its problems and prospects. Efforts were made in the literature to present the problems and prospects of electronic information resources from the use of these resources in libraries by staff, students and researchers. Many academic libraries have embraced the use of electronic information resources (EIRs), including CD-ROM, the internet, and the World Wide Web (www) for provision of information services.

A number of reasons have been advanced for preference of EIRs by libraries. Some of these reasons, according to Iwehabuna (2009), he includes the ability to provide faster and access to

current information by users in various places such as homes, offices and other workplaces, hostels and dormitories, easy storage and the possibility of sharing the same information resources among many users at a time, saving space with relatively easy maintenance and easy linkage to indexing and abstracting databases, newspapers and other sources.

Evolution and growth of electronic publishing industry has given birth to electronic resources. Electronic resources encompass many genre, formats, storage and delivery mediums. It is a combination of those resources that are 'born digital' and 'made digital'. The storage refers to the medium used to store and deliver contents to the users.

The delivery medium may be a CD-ROM, a magnetic tape or a server that is accessed through the Internet (Johnson, 2004). Thus, electronic information arena involves resources covering a wide variety of materials, including indexing and abstracting services, electronic books and serials, electronic databases offered by information aggregators, document delivery services and web sites. Many of these resources may be locally mounted on a library's server or they may be accessed remotely by modem or through direct Internet connections maintained by the library.

Evolution and growth of electronic publishing industry has given birth to electronic resources. Electronic resources encompass many genre, formats, storage and delivery mediums. It is a combination of those resources that are 'born digital' and 'made digital'. The storage refers to the medium used to store and deliver contents to the users. The delivery medium may be a CD-ROM, a magnetic tape or a server that is accessed through the Internet (Johnson, 2004). Thus, electronic information arena involves resources covering a wide variety of materials, including indexing and abstracting services, electronic books and serials, electronic databases offered by information aggregators, document delivery services and web sites. Many of these resources may

be locally mounted on a library's server or they may be accessed remotely by modem or through direct Internet connections maintained by the library.

Seidu stated that (2012) the introduction of digital technologies into the processes of production, distribution and storage of information otherwise referred to as electronic information resources present new challenge to the capacity of libraries to carry out their responsibilities of organizing and preserving their resources. Similarly, in a study carried out by Nazir (2018) on management of electronic information resource in state university libraries in North West Nigeria, find out that the major challenges in managing electronic information resource includes erratic power supply, slow connectivity as a result of low bandwidth, poor finance and lack of commitment from the side of staff.

Similarly, Omeluzor, Akibu and Akinwoye (2016) analyzed students' perception, use and challenges of EIRs in Federal University of Petroleum Resources Effurun Library and found out that lack of awareness, lack of training, unreliable internet connectivity, insufficient e- resources on various study areas, and difficulty of identifying relevant information to meet user's needs are challenges hindering management of e-resources.

In the context of developing countries, Okello-Obura and Ikeja (2010) investigated electronic information access and utilization at the East African School of Library and Information Science, Makerere University, Uganda. Out of the 250 targeted students, 190 responded, giving a response rate of 76%. The study revealed that users derived a lot of benefits from electronic resources gaining access to a wider range of information and improved academic performance as a result of access to quality information.

The study of Adeoye and Popoola (2011) highlighted the effectiveness, availability, accessibility and use of library and information resources in their study. They explained that, for effective learning process, learners must have access to necessary information materials and resources. These resources might be in tangible (i.e., printed resources) and intangible (i.e., electronic resources) format. They express that librarian is responsible for providing the right information to the right person at the right time. Regarding the accessibility of library resources, authors added that the more accessible information sources that require the least effort to access. User may encounter five possible types of inaccessibility problems i.e., conceptual, linguistic, critical, bibliographic, and physical. It is in this regard that Bothmann and Holmbery (2006) identified the challenges associated with electronic resources management in libraries as consisting of planning, policies and workflow. The planning challenges were found to include staffing, budgeting, change, communication and management tools. In addition, the barriers to policy development were identified as change, decision making and communication.

Furthermore, Seidu (2012), studied the electronic information resource management in the libraries of Radio Stations in South West Zone, Nigeria. The study identified low level of electronic information resource management is connected to the lack of management skills required in managing EIRs and inability of the management of radio stations under study to employ a technically competent person or provide adequate training for the library staff in management of EIRs.

Okoye and Ugwuanyi (2012) in their study titled: management functions performed by cataloguers in the management of EIRs in Nigerian university libraries identified skills, acquisition, budgeting and communication as major challenges in the management of e-resources in university libraries. Similar to this Adebayo (2013) examined the challenges associated with

cataloguing electronic resources in six randomly selected university libraries in Southwest Nigeria and highlighted some challenges associated with cataloguing electronic resources such as lack of adequate physical description of some electronic resources, inadequate workflow in cataloguing sections, copyright issues among others.

It offers students, the opportunity to control their learning and helps them to have interactions with information pertaining to their needs (Jones et al. 2002; Healey, 2003). Electronic information resources are used for academic and research activities in higher educational institutions (Iwehabura, 2009). Internet resources such as online databases, e-book and e-journals were among the EIRs used for academic purposes. Other sources found to be used were CD-ROMs and OPAC (Online Public Access Catalogue).

Kinengyere (2007) has shown that the available information is under-utilized. The study also shows that information availability does not mean actual use because the users may not be aware of the availability of such resources, do not know how to access them or do not know what the resources offer. Generally, literature has shown that there is a positive relationship between the use of electronic information resources and improvement in the quality and quantity of research output.

Manda and Nawe (2009) stated that his relationship is influenced by several factors such as technology, infrastructure, nature of the organization and individual attributes. Nawe and Kiondo (2005) has shown that 21.7% of the respondent reported that research quality has improved significantly with the use of electronic information resources. Results of the study also revealed that quality of teaching and learning had improved significantly as a result of information and communication technology (ICT) application in library operation.

Meanwhile, despite the importance of and advantages offered by EIRs, studies have identified a number of problems associated with their use. These problems range from lack of appropriate skills among users. For instance, Ray and Day (1998) noted that the main factors affecting students' access to electronic information and using them were limited to time and lack of effective information retrieval skills.

The use of EIRs in educational institutions is further affected by lack of technical support staff, IT infrastructure and training. In addition, Johnston and McCormack (1996) posit that: "a perceived lack of various resources such as time, equipment or funds, risks associated with implementing innovations in teaching, particularly those using technologies, are the most significant barriers to academic staff using information technology in their teaching.

While other researchers have shown that the use of the internet and other EIRs by students was limited by inadequate number of computers and access points (Malekani, 2006; Luambano and Nawe, 2004; Jagboro, 2003), Hung argues that lack of skills in searching the internet is one of the limitations that affect its proper utilization (Hung, 2004). This explains why students limit themselves to searching for and reviewing information on entertainment, sports and news from around the world instead of using the internet for academic matters.

The study of Iwehabura (2009) in some aspects, including searching and evaluation affected the use of various EIRs in Tanzanian University libraries. The study recommended the development of ICT infrastructures, that librarians and teaching staff become role models and mentors to students in using EIRs, and that teaching staff adopt an active learning and student-centred approach in their teaching as well as intervention measures for improving students' skills in EIRs.

The only paper related to electronic information resources was Okoye and Ugwuanyi's (2012) paper. This paper examined the management functions performed by cataloguers in the management of EIRs in Nigerian university libraries. The recommendations made were based on the challenges and strategies identified. Bothmann and Holmberg (2006), identified the challenges of electronic resources in libraries as consisting of planning challenges were found to include staffing, budgeting, change, communication and management tools. In addition, the barriers to policy development were identified as change, decision making and communication. It must be emphasized that how each of these factors affect the management of electronic information resources in university libraries is yet to be emphatically determined in the literature. The present study is an attempt to address this issue. While discussing the challenges of prospects of EIRs

The only paper related to electronic information resources was in libraries, Okoye and Ugwuanyi (2012) identified skills, acquisition, budgeting and communication as major challenges. They summarized the situation in Nigerian university libraries thus; "the situation in the present study is that there are no librarians designated on EIRs librarian functions, particularly unique to electronic resources such as licensing, access set-up, link maintenance, inter-database linking are either non-existence or are at their embryonic stages of implementation.

Few electronic management services available are done by professionals". On the strategies for changing the situation, Okoye and Ugwuanyi (2012) were of the opinion that institutions should provide fund and that library schools in Nigeria should provide pragmatic training to students and libraries to enable them to handle e-resources. Kanyengo (2006) maintained that for effective management of digital resources in Africa, efforts should be focused on funding creating enabling policy framework and training of staff.

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter outlines the research methodology employed to achieve the objectives of the study, focusing specifically on students of Kwara State Polytechnic. It details the research design, data collection methods, data analysis techniques, and ethical considerations.

#### **3.1 Research Design**

The study employs a descriptive survey design. This approach allows for a comprehensive exploration of the challenges and opportunities related to the utilization of electronic information resources (EIRs) among students at Kwara State Polytechnic.

#### **3.2 Population and Sample Selection**

The study focuses solely on students of Kwara State Polytechnic who utilize the polytechnic library's electronic information resources. A purposive sampling technique will be used to select participants based on their academic level and their experiences with EIRs. Approximately 150 students will be invited to participate in the survey and subsequent interviews.

#### **3.3 Data Collection Methods**

Semi-structured interviews will be conducted with selected students to gain in-depth insights into their experiences and perceptions regarding the utilization of EIRs. The interviews will explore topics such as challenges faced, perceived benefits, preferred resources, and suggestions for improvement. The interviews will be audio-recorded and transcribed for analysis.

### **3.4 Data Analysis**

Descriptive statistics will be used to analyze the survey data gathered from students. Frequency distributions, percentages, and means will be calculated to provide an overview of the types of EIRs available, frequency of usage, preferred search techniques, and perceived challenges.

### **3.5 Ethical Considerations**

Ethical considerations will be adhered to throughout the research process. Informed consent will be obtained from all participants, ensuring they understand the purpose of the study and their right to withdraw at any time. Confidentiality and anonymity will be maintained by using pseudonyms for participants' names. The research will also comply with relevant data protection and privacy regulations.

### **3.6 Data Validation**

Triangulation will be used to enhance the validity and reliability of the research findings by comparing and contrasting data from different sources (surveys and interviews) and different participants (students). Peer debriefing will also be employed to ensure rigor and accuracy in the research process.

### **3.8 Summary**

This chapter outlined the research design, data collection methods, data analysis techniques, ethical considerations, and limitations of the study, focusing specifically on students of Kwara State Polytechnic. The mixed-methods approach aims to provide a comprehensive understanding of the challenges and opportunities associated with electronic information resources among this

specific student population. The next chapter will present and discuss the research findings in detail.

## **CHAPTER FOUR**

### **PRESENTATION OF RESULTS, ANALYSIS, DISCUSSION AND INTERPRETATIONS**

#### **4.1 Introduction**

This chapter presented, analysed, discussed and interpreted the data obtained from field with the aid of questionnaire. The chapter is, therefore, arranged in the following order:

4.2 Questionnaire distribution and response rate

4.3 Demographic information of respondents

4.4 Presentation, analysis, discussion and interpretations of results

#### **4.2 Questionnaire Distribution and Response Rate**

From the sample of 150 student of Library and Information Science, Kwara State Polytechnic, Ilorin, only 129 filled the questionnaire that was administered to them by the researcher and other research assistants. Out the filled questionnaires, only 117 were adequately filled and suitable for analysis. The filled questionnaire represents 78.4% return rate. The return is adequate for analysis and discussion going by the assertion of Rubin and Barbie (2011) that response rate for physically administered questionnaire is found to be appropriate for analysis, if it is up to 70% or more.

### 4.3 Demographic Information of Respondents

**Table 1: Characteristics of Respondents**

Options		F	%
<b>Gender</b>	Male	53	45.3
	Female	64	54.7
	<b>Total</b>	<b>117</b>	<b>100</b>
<b>Age range</b>	15 – 19 years	24	20.5
	20 – 24 years	93	79.5
	25 – 29 years	0	0.0
	30 – 34 years	0	0.0
	35 years and above	0	0.0
	<b>Total</b>	<b>117</b>	<b>100</b>
<b>Marital status</b>	Single	113	96.6
	Married	4	3.4
	Divorced	0	0.0
	Widow	0	0.0
	<b>Total</b>	<b>117</b>	<b>100</b>

Table 1 reveals that 64 (54.7%) of the respondents are female, while 53 (45.3%) are males. Respondents' highest range is 20 – 24 years with 79.5%, followed by 15 – 19 years with 24 (20.7%). Also, 113 (96.6%) of the respondents are single, while 4 (3.4%) are married.

#### 4.4 Presentation, Analysis, Discussion and Interpretations of Results

##### 4.4.1 RQ One: What are the specific electronic databases available in your library?

**Table 2: Identification of electronic information resources available**

Options	Available		Not available		M
	F	%	F	%	
PubMed	12	10.3	105	89.7	1.90
JSTOR	110	94.0	7	6.0	1.06
IEEE Xplore	13	11.1	104	88.9	1.89
Scopus	109	93.34	8	6.66	1.06
Web of Science	110	94.0	7	6.0	1.06

Table 2 reveals that majority 110 (94.0%) of the respondents claimed that JSTOR and Web of Science are available, followed by 109 (93.34%) for Scopus. On the other hand, 105 (88.9%) and 104 (88.9%) claimed that PubMed and IEEE Xplore are respectively not available.

The respondents' claims of availability of JSTOR, Web of Science and Scopus indicates that the respondents patronize and utilise the electronic information resources in the library in their institution. This validates the claim of Uzuegbu et al. (2012) that online databases are among the electronic information resources are very essential to the collections of academic libraries. They posited that the availability of electronic information resources such as databases and e-journals show how academic libraries are ready to support research, which is one of the core mandates of every tertiary institution.

The implications of the results of the Table is that the respondents know that electronic information resources that are relevant to the field of study are available in the library. This is validated by the respondents' responses where more than 90% of them pick available for the electronic information resources they know are available and more than 85% of them do the same for the ones they claimed are not available.

PubMed and IEEE Xplore are information resources of majorly filled with information resources (books, journal articles, reports and others) of Medicines, Science, Mathematics, Engineering and Technology. This makes it not surprising to find out that the respondents claimed they are not available because their discipline is Library and Information Science.

Considering the standards of the Kwara State Polytechnic Library and the different users (academic staff from different disciplines, non-academic staff, students and researchers) that patronised the library, this researcher can confirm that there is availability of PubMed and IEEE Xplore in the electronic databases of the library.

#### 4.4.2 RQ Two: What are the specific electronic databases you are aware of in your library?

**Table 3: Identification of awareness of electronic information resources**

Options	Aware		Not aware		M
	F	%	F	%	
PubMed	17	14.5	100	85.5	1.85
JSTOR	105	89.7	12	10.3	1.10
IEEE Xplore	21	17.9	96	82.1	1.82
Scopus	102	87.2	15	12.8	1.13
Web of Science	105	89.7	12	10.3	1.10

Table 3 indicates that majority 105 (89.7.0%) of the respondents claimed that they are aware of JSTOR and Web of Science, followed by 102 (87.2%) for Scopus. However, 100 (85.5%) and 96 (82.1%) claimed that they are not aware of PubMed and IEEE Xplore respectively.

The main point of the results of this Table is that the responses of the respondents are similar to those of Table 2, where majority of them claimed that JSTOR, Web of Science and Scopus are available in the library. This shows an acceptable level of consistency in the opinions of the respondents, since there is a nexus between awareness and availability of something. Nazir

(2018) posited that if availability of something creates an awareness for it; even when that thing is no more available, the awareness it has first created will continue to ring a bell in people's ears.

The electronic information resources the respondents are aware of fall in the category of online databases where journals' issues, journal articles, books, reports and others are stored. These results affirmed the assertion of Uzuegbu et al. (2012) that it is important for academic libraries to create awareness for the availability of databases to the students. They claimed that if the students are very aware of databases, they can come to the library to use them for their research projects, assignments and reports preparations.

The results of this Table are also similar to the findings of the study of Ojo, Muhammed, Buba and Mairiga (2019) who investigated students' use of electronic information resources of the Federal University Library, Dutse, Jigawa State. The study found that journals, newspapers, magazines, textbooks, computers (for general use), e-books, e-journals, internet services, reference materials, audio-visual materials and CD-ROM are electronic information resources students are aware of.

Finally, the students' claims of their non-awareness of PubMed and IEEE Xplore is consistent with their claims in Table 2 that the two databases are not available in their library. As has been previously argued, the students' opinions were based on the issue that the two databases don't focus much on their field of study, which their non-awareness of it may make them claim both PubMed and IEEE Xplore are not available.

#### 4.4.3 RQ Three: What is your frequency of utilisation of available academic databases for academic purpose?

**Table 4: Frequency of utilisation of available academic databases for academic purpose**

Options	Daily		Weekly		Monthly		Rarely		M
	F	%	F	%	F	%	F	%	
PubMed	3	2.6	3	2.6	10	8.5	101	86.3	1.21
JSTOR	67	57.3	44	37.6	4	3.4	2	1.7	3.50
IEEE Xplore	1	0.9	3	2.6	18	15.4	95	81.2	1.23
Scopus	74	63.2	36	30.8	5	4.3	2	1.7	3.56
Web of Science	90	76.9	21	17.9	4	3.4	2	1.7	3.70

Table 4 reveals that majority 90 (76.9%) of the respondents claimed that they utilised Web of Science daily with ( $X = 3.70$ ), followed by 74 (63.2%) for Scopus ( $X = 3.56$ ), while 67 (57.3%) utilised JSTOR daily ( $X = 3.50$ ). Nonetheless, 101 (86.3%) and 95 (81.2%) claimed that they don't utilised PubMed and IEEE Xplore respectively.

The results of this Table further indicate the consistency in the opinions of the respondents, based on its similarities with their opinions in the results of the previous tables. For instance, it was in the previous tables that PubMed and IEEE Xplore are not available and their awareness among the respondents are very low. Relying on this, it is not surprising to discover that PubMed and IEEE Xplore are rarely used by the respondents.

Considering the respondents utilisation of the electronic information resources claimed are available and aware of, it is interesting to discover a slight change here by noting that Web of Science is highly utilised daily by the respondents, which contrasts the respondents' opinions of its rank on availability and awareness of. But above all, investigating the reason why Web of Science is the database majorly utilised by the respondents is worthy to be explored.

Many studies have investigated the prospects and problems associated with utilisation of electronic information resources; but just a few of those studies attempted to investigate the frequency of utilisation of those resources. Elewode, Salami and Aborishade (2022) who reported results similar to this aspect of this study found that e-journal, e-book, medical e-reference sources and other databases like World Health Organization (WHO) library, JSTOR, NLM, Ebscohost, Hinari, Science Direct, PubMed, African Journal online (AJOL) and institutional repository (IR) were frequently utilised by students.

#### 4.4.4 RQ Four: What purposes are you using electronic information resources for?

**Table 5: Purposes for using electronic information resources**

Options	Agree		Disagree		M
	F	%	F	%	
Literature review	108	92.3	9	7.7	1.08
Assignment preparations	107	91.5	10	8.5	1.09
Research projects	105	89.7	12	10.3	1.10
Exam preparations	35	29.9	82	70.1	1.70
For making personal notes	14	12.0	103	88.0	1.88

Table 5 reveals that majority 108 (92.3%) of the respondents agreed to be using electronic information resources for literature review, followed by 107 (91.5%) for assignments preparation and 105 (89.7%) for research projects. However, 103 (88.0%) and 82 (70.1%) disagreed to be utilising electronic information resources for making personal notes and exam preparations respectively.

The implication of the results of this Table is that electronic information resources are utilised for literature review, assignments preparation and research projects by the respondents. It is not surprising to find out that the respondents utilised electronic information resources for these purposes. This is because the respondents are in 400 level, which is a stage of their academic

pursuits that requires them to write their research projects and contribute to scholarship in their discipline.

The utilisation of electronic information resources for the purposes claimed by the respondents are based on some reasons which can be attributed to the assertions of Eiriemiokhale (2020) that electronic information resources contain current information that is updated frequently; offer advanced search capabilities for users; offer flexibility in the storage of the results and improve users' access to information without the constraints of time and location.

Above all, it is worrisome to find out that majority of the respondents don't utilise electronic information resources to make notes and prepare for examinations. This contrasts the point of Emwanta and Nwalo (2013) where they posited that electronic information resources are veritable tools for preparing notes which students in the digital age can read on their own and utilise to prepare for their examinations.

#### 4.4.5 RQ Five: What strategies do you employ to refine your search queries when using electronic information resources?

**Table 6: Search techniques and strategies**

Options	Agree		Disagree		M
	F	%	F	%	
Using specific keywords	105	89.7	12	10.3	1.10
Using advanced search features	21	17.9	96	82.1	1.82
Filtering by date of publication	108	92.3	9	7.7	1.08
Filtering by types of the publications	17	14.5	100	85.5	1.85
Referring to subject headings	106	90.6	11	9.4	1.09

Table 6 indicates that majority 108 (92.3%) of the respondents agreed to be filtering by date of publications, followed by 106 (90.6%) for referring to subject headings and 105 (89.7%) for

using specific keywords. On the other hand, 100 (85.5%) and 96 (82.1%) disagreed to be filtering by types of the publications and using advanced search features respectively.

This means that the techniques and strategies utilised for searching for information on electronic resources by the respondents are filtering by date of publications, referring to subject headings and using specific keywords. The implication of this is that the respondents prioritised searching for information by using their dates of publications than any other access points.

The utilisation of specific keywords by the respondents affirmed the position of Chima-James and Ogaraku (2018) searching for information on electronic databases are straight forward when using keywords. They provide the possibility of searching multiple files at a time. Electronic databases can be searched, printed and saved to be repeated or consulted at a later date.

This shares relationships with the opinion of the respondents on the utilisation of subject headings for searching for information on electronic resources. The utilisation of subject headings by the respondents would enable them to utilise the right and globally-acceptable terms to search for information. Utilising this technique and strategy helps the respondents simplify how they search for information on electronic databases.

The minimal utilisation of filtering by types of the publications and using advanced search features by the respondents is not encouraging to discover. The respondents, being students of Library and Information Science should know that searching for information by types of publications can minimise the number of unwanted publications that will be provided by the databases they are utilising.

#### 4.4.6 RQ Six: What challenges do you faced when using electronic information resources in your library?

**Table 7: Challenges faced in using electronic information resources**

Options	Agree		Disagree		M
	F	%	F	%	
Limited access to computers	21	17.9	96	82.1	1.82
Poor access to the Internet	19	16.2	98	83.8	1.84
Difficulty in navigating databases	108	92.3	9	7.7	1.08
Insufficient training on using electronic information resources	104	88.9	13	11.1	1.11
Limited availability of relevant resources	15	12.8	102	87.2	1.87

Table 7 shows that majority 108 (92.3%) of the respondents agreed that difficulty in navigating databases is a challenge they faced in utilising electronic information resources, followed by 104 (88.9%) for insufficient training on utilising electronic information resources. However, 102 (87.2%) disagreed that limited availability of relevant resources is a challenge, followed by 98 (83.8%) for poor access to the Internet and 96 (82.1%) for limited access to computers.

The implication of the results of this Table is that the major challenges the respondents faced in the utilisation of electronic information resources are difficulty in navigating databases and insufficient training on utilising electronic information resources. The respondents challenge in navigating databases is not an independent problem, it is a problem arising from their believed of insufficient training on utilising electronic information resources.

The results are similar to the findings of Elewode, Salami and Aborishade (2022) who reported that lack of computer literacy, erratic power supply, insufficient access to medical e-resources, lack of navigating skill, lack of relevant medical e-resources, inadequate provision of computer facilities, high cost of internet service provision, limited subscribed titles and refusal to reveal password were the constraints faced while accessing and using the medical electronic

information resources in College of Health Sciences, Obafemi Awolowo University, Ile-Ife, Nigeria.

Findings of this study also contradict the results of Eiriemiokhale (2013), Mukhtar and Maidabino (2021) which reported that lack of training and insufficient technical support staff, lack of affordable tools required for electronic information resources management, lack of maintenance and poor infrastructure, lack of subscription to relevant electronic information resources and poor or inadequate funding are greatly inhibiting the availability and utilisation of EIRs in libraries.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter will summarise the findings made in this study, draw conclusion from those findings and make appropriate recommendations. This chapter is be arranged in the following order:

5.2 Summary of findings

5.3 Conclusion

5.4 Recommendations

#### **5.2 Summary of findings**

Results of this study showed that:

1. The electronic information resources available to the students of Library and Information Science, Kwara State Polytechnic are JSTOR, Web of Science and Scopus.
2. The electronic information resources students of Library and Information Science, Kwara State Polytechnic are aware of JSTOR, Web of Science and Scopus.
3. Students of Library and Information Science, Kwara State Polytechnic, Ilorin, utilised Web of Science, Scopus and JSTOR daily.
4. Students of Library and Information Science, Kwara State Polytechnic, Ilorin, utilised electronic information resources for literature review, assignments preparation and research projects.

5. The strategies and techniques utilised for searching for information on electronic resources by students of Kwara State Polytechnic, Ilorin, are filtering by date of publications, referring to subject headings and using specific keywords.
6. The challenges faced in utilising electronic information resources by students of Kwara State Polytechnic, Ilorin, are difficulty in navigating databases and insufficient training on utilising electronic information resources.

### **5.3 Conclusion**

This study has revealed that electronic information resources such as Web of Science, JSTOR and Scopus are available to the students of Library and Information Science, Kwara State Polytechnic, Ilorin. This study also shows that the students are aware of the aforementioned electronic information resources, which they utilised on a daily basis by filtering by date of publications, referring to subject headings and using specific keywords to review literature, write their assignments and research projects. The students' utilisation of electronic information resources is hindered by difficulty in navigating databases and insufficient training on utilising electronic information resources.

### **5.4 Recommendations**

Based on the findings of this study, the following recommendations are hereby made:

1. Lecturers at the Department of Library and Information Science, Kwara State Polytechnic, Ilorin, should train students on utilisation of electronic information resources. This will help the students in navigating databases they utilised by searching for information through the types of the publications and using advanced search features.

2. Lecturers of Department of Library and Information Science, Kwara State Polytechnic, Ilorin, should be encouraging their students to utilise electronic information resources for note making. By doing this, the students can develop on their own, notes they can read for examinations.

## References

- Chima-James, N. O. G. & Ogaraku, D. N. (2018). Awareness and utilization of databases subscribed to by FUTO library among FUTO academic staff. *International Journal of Library and Information Science Studies*, 4 (2), 21-31. Retrieved from [www.eajournals.org](http://www.eajournals.org).
- Eiriemiokhale, K. A. (2020). Frequency of use and awareness of electronic databases by university lecturers in South-west, Nigeria. *Library Philosophy and Practice*. (USA). Available at <https://www.digitalcommons.unl.edu/libphilprac/4106>.
- Eiriemiokhale, K.A. (2013). Lecturers' level of satisfaction with available electronic information resources in universities in Edo state, Nigeria. *The Technologist*, 9(1), 33-46.
- Elewode, T. A., Salami, A.W. & Aborishade, M. O. (2022). Access and use of available electronic information resources by medical undergraduates of College of Health Sciences, Obafemi Awolowo University, Ile-Ife. *Information Technology and Librarianship*, 2(1&2), 124-137.
- Emwanta, M. & Nwalo, K. I. V. (2013). Influence of computer literacy and subject background on use of electronic resources by undergraduate students in universities in South-Western Nigeria. *International Journal of Library and Information Science*, 5(2), 29-42. Retrieved from <http://www.academicjournals.org/IJLIS>.
- Mukhtar, A. M. & Maidabino, A. A. (2021). Management of electronic information resources in Nigerian university libraries: A critical review of literature. *Journal of Library Services and Technologies*, 3(1), 72-83. DOI: <http://doi.org/10.47524/jlst.v3i1.8>.
- Ojo, J.O., Mohammed, M., Buba, A.M. & Mairiga, H.M. (2019). Students' use of information resources of the Federal University Library, Dutse Library, Dutse, Jigawa State, Nigeria. *Library and Information Perspectives and Research*, 1(2), 71 – 79.
- Uwaifo, S. O. & Eiriemiokhale, K. A. (2013). Use of electronic information resources by university lecturers in Edo State, Nigeria. *PNLA Quarterly*, 77(2). (USA.) Available at [http:// www.pnla.org](http://www.pnla.org)

**Questionnaire**  
**Department of Library and Information Science**  
**Institute of Information and Communication Technology**  
**Kwara State Polytechnic, Ilorin**

Questionnaire on “Exploring users’ awareness of available EIRs in Kwara State Polytechnic Library, Ilorin, Nigeria”

Dear Respondent,

**Request for Response to Questionnaire**

I am an undergraduate of the above-named institution, carrying out research on the above-mentioned topic. My research is in partial fulfillment of the requirements for the award of National Diploma in Library and Information Science (ND).

Your assistance is hereby requested for timely completion of this questionnaire. I am assuring you that all data provided will be treated with utmost confidentiality and used for academic purpose only.

Thank you for your anticipated cooperation.

**Researcher**

**Part A: Demographic Characteristics of Respondents**

**Kindly select the option of your choice by ticking (✓) from the answers below**

1. Gender: Male ( ) Female ( )
2. Age range: 15 – 19 years ( ) 20 – 24 years ( ) 25 – 29 years ( )  
30 – 34 years ( ) 35 years and above ( )
3. Marital Status: Single ( ) Married ( ) Divorced ( ) Widow ( )

**Part B: Identification of Electronic Information Resources Available**

What are the specific electronic databases available in your library?

Kindly tick (✓) “A” if it is Available with the question and “NA” if Not Available and tick as many statements as applicable

S/No	Options	Available	Not Available
1.	PubMed		
2.	JSTOR		
3.	IEEE Xplore		
4.	Scopus		
5.	Web of Science		
Others, please specify.....			

**Part C: Identification of Awareness of Electronic Information Resources**

What are the specific electronic databases you are aware of in your library?

Kindly tick (✓) “A” if you are Aware of the EIRs and “NA” if you are Not Aware and tick as many statements as applicable

S/No	Options	Aware	Not Aware
1.	PubMed		
2.	JSTOR		
3.	IEEE Xplore		
4.	Scopus		
5.	Web of Science		
Others, please specify.....			

**Part D: Frequency of Utilisation of Available Academic Databases for Academic Purpose**

What is your frequency of utilisation of available academic databases for academic purpose?

Kindly tick (✓) R for “Rarely,” D for “Daily,” W for “Weekly” and M for “Monthly”

S/No	Options	R	D	W	M
1.	PubMed				
2.	JSTOR				
3.	IEEE Xplore				
4.	Scopus				
5.	Web of Science				
Others, please specify.....					

**Part E: Purposes for Using Electronic Information Resources**

What purposes are you using electronic information resources for?

Kindly tick (✓) “A” if you agree with the question and “D” if you disagree and tick as many statements as applicable

S/No	Options	A	D
1.	Literature review		
2.	Assignment preparations		
3.	Research projects		
4.	Exam preparations		
5.	For making personal notes		
Others, please specify.....			

**Part F: Search Techniques and Strategies**

What strategies do you employ to refine your search queries when using electronic information resources?

Kindly tick (✓) “A” if you agree with the question and “D” if you disagree and tick as many statements as applicable

S/No	Options	A	D
1.	Using specific keywords		
2.	Using advanced search features		
3.	Filtering by date of publication		
4.	Filtering by types of the publications		
5.	Referring to subject headings		
Others, please specify.....			

**Part G: Challenges Faced in Using Electronic Information Resources**

What challenges do you faced when using electronic information resources in your library?

Kindly tick (✓) “A” if you agree with the question and “D” if you disagree and tick as many statements as applicable

S/No	Options	A	D
1.	Limited access to computers		
2.	Poor access to the Internet		
3.	Difficulty in navigating databases		
4.	Insufficient training on using electronic information resources		
5.	Limited availability of relevant resources		
Others, please specify.....			