

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Library operations have witnessed significant transformations with the integration of technology revolutionizing the way users' access and retrieve information. In the context of polytechnic libraries, which their mandates of establishment are for the provision of efficient and qualitative collection, organisation, preservation, dissemination and utilisation of information resources. Polytechnics have been known to play a central role in development of middle-level manpower to support societies and organizations through teaching, research and knowledge development (Ojo, Mohammed, Buba & Mairiga, 2019). The achievement of polytechnics' mandates of requires robust libraries that are established for the provision of efficient and qualitative collection, organisation, preservation, dissemination and utilisation of information resources. Khanna (2014) defines polytechnic libraries as special libraries found in polytechnics with the main purpose of serving the special needs of the specialized homogenous clientele.

Polytechnic libraries can also be seen as libraries that are an integral part of the polytechnic system, administered to meet the information and research needs of its students, faculty and staff (Adenariwo & Sulyman, 2022). Polytechnic libraries, as posited by Kolawole and Igwe (2016) work together with other members of the polytechnic communities to participate in, support and achieve the educational mission of institutions by teaching the core competencies of information literacy (Unamma, 2020). Adenariwo and Sulyman (2022) opined that polytechnic libraries are the front burners of information and knowledge that any serious researcher must be in constant touch with for their information needs. Olurotimi (2015) explicitly submitted that polytechnic libraries are central and important. Their importance is hinged on the significance that they are

attached to research which is the core area in the polytechnic. Polytechnic libraries are information centres established in support of the mission of the parent institution to generate knowledge, equip people with knowledge in order to serve the society and advance the well-being of mankind (Ojo et al., 2019).

Since academic libraries are inseparable pillars for intellectual excellence, it is therefore imperative for them to possess information resources in diverse formats and one of those formats suitable for research and academic explorations of contemporary times. Chikwe, Ogidi and Nwachukwu (2015) described information resources as information agents or transporters concerning either or both conventional/outmoded source (majorly print source) and electronic sources. Information resources needed for delivery of information to users of academic libraries. Buhari (2016) refers to information resources as information bearing materials such as journals, textbooks, abstracts, indexes, magazines, newspapers and reports that exist in printed and electronic formats such as diskettes, magnetic disk, Internet/Email, video, CD-ROM databases, microforms or computer file. Okiki (2017) also described information resources as print or non-print information materials that can be accessed either manually or electronically by library users.

Olorunfemi and Ipadeola (2021) argued that academic libraries can be efficient and functional, if it is meeting the information, research, educational, and recreational needs of the users and keep ensuring that users maximally utilise the available library information resources. Kolawole and Igwe (2016) explained information resources are carriers of all forms of information. They are information bearing entities and containers of information in any medium. Elaturoti and Oniyide (2016) from educational perspective see information resources as those print and non-print information materials that are specifically selected and organised for conveying information for educational purposes. Information resources carry information in any format, be it electronic,

audio-visual or paper form, or any hardware or software that makes the provision, storage and utilisation of information in academic libraries possible (Okpeke & Odunlade, 2018). Buhari (2016) rightly noted that for a polytechnic library to be effective, it must have enough information resources and sufficiently well-trained information professionals to guide and help users exploit those resources. These information professionals include cataloguers and classifiers who will perform logical bibliographic descriptions and intellectual analysis of the contents of the information resources to facilitate easy access and retrieval.

Organization of information is germane for the access and retrieval of information. Various collection repositories use different tools to the organization of collections. However, the most essential organization and retrieval tool of libraries is catalogue. Library catalogue is a bibliographic description of information materials ranging from author, title, physical description, publication details, series, notes etc. Catalogue is the key to library collections. Library catalogue allows the user to know the information materials that are available and those unavailable in the library collections or holdings. Library catalogue has enormous benefits such as: it communicates the required information briefly about the documents in a collection; a catalogue card assists the users in retrieving information materials easily and saves time of the users: it also offers the users a variety of approaches to the collection in making use of the collection of a library (Basorun & Akorede, 2019).

Cataloguing and classification are different but interrelated activities performed in polytechnic libraries to ensure adequate bibliographic descriptions of information resources (Ajani, Amzat, James & Sulyman, 2022a). The difference between the two concepts is that cataloguing is a process of preparing a catalogue, which is a document containing the physical details of information resources; while classification is the art of arranging or organizing information

materials based on their common characteristics and assigning codes as notations to identify, locate and retrieve information resources (David-West & Angrey, 2018). Akidi and Omekwu (2019) asserted that cataloguing and classification are essential means of accessing library information materials, which in the end facilitate their usage. Cataloguing and classification are gateways to information resources' access and utilisation and they are means of organising library resources to ensure that their access and retrieval are made easy. It is the core of the library profession that requires librarians who are intelligent, skillful, resourceful, dedicated, and innovative, have initiative, and have a keen interest in the performance of routines (David-West & Wali, 2020)

The interrelationship between cataloguing and classification is that they are both used as representations of information resources, with clear, adequate, and detailed descriptions that can be used as keys to access information resources in academic libraries. The essence of cataloguing and classification is not limited to the academic libraries' users alone; as it also helps librarians in many ways with the most notable one being that it saves the time of librarians in locating and recalling information resources in their libraries. It also shows the strength and weakness of the library collections (Ajani et al, 2022). All this importance of cataloguing and classification have been enhanced through the aid of the Online Public Access Catalogues (OPAC).

The evolution of OPAC has shifted the paradigms of cataloguing and classification to the electronic processes. This has transformed the services of polytechnic libraries, triggered the concerns for the relevance and sustainability of cataloguing and classification. Ikenwe and Udem (2022) defined OPAC as the electronic versions of library catalogues that contain bibliographic details of information materials housed by different libraries. It is a database containing the library's collection that can be accessed online by users. As a database containing the library's

collection, information resources of a library or group of libraries can be accessed online irrespective of the user's location (Kamba, 2020). Akidi and Okezie (2018) noted that OPAC conserves space as compared to the large space occupied by card catalogue in libraries. The online catalogues provide additional searching possibilities, as such systems help in communicating with one another about which books are held in the libraries. Studies have nonetheless validated that despite the potential benefits of OPAC to the users, its usage has been hindered due to their low awareness and accessibility to it.

Hunter, Porter and Williams (2020) defined awareness as the recognition, interpretation and prediction of an event. Awareness can be briefly described as being aware of what is happening around you, understanding what that information means now, and predicting what it will mean in the future (Endsley, 2016). It is the quality or state of knowing that something is happening or exists. Awareness of OPAC is defined as the degree of user's knowledge and availability of the service and the extent made to use them. It is an understanding of the activities of others which provides a context for your own activity (Ezema, 2015). According to Uche and Udo-Anyanwu (2019), awareness is the consciousness of some knowledge about a situation or fact. Similarly, Hornsby (2015) defined awareness as the fact of knowing that something exists. It simply means knowing something, it is an essential factor that determines use.

In the context of OPAC, awareness of online public access catalogue means having knowledge or idea of the online public access catalogue that is available in the library for use by undergraduate students to facilitate easy accessibility and retrieval of needed information resources for learning and research. Awareness of OPAC means having knowledge of OPAC, understanding how OPAC works, appreciation of its value by undergraduates in university libraries (Uche & Udo-Anyanwu, 2019). Awareness of OPAC can be described as having

information of the existence, usefulness and purpose of OPAC, though the level of awareness varies from one user to another. Awareness of OPAC is a key step towards access and eventually increased usage of library materials in and outside the libraries. Awareness of OPAC is the knowledge of this facility and it is also a first step to increase usage of library educational resources to aid students in their learning process (Gana, Ajibili & Abel, 2019; Tella, 2019).

People's awareness of something always triggers their curiosity to access it. Access is the act of having contact with something, whether it closed around someone or somewhere else. In the case of OPAC, accessibility implies the varieties of ways at which library users enjoyed contacts with OPAC. It includes how they are allowed to relate with the OPAC and utilise it to satisfy their information needs (Hunter, Porter & Williams, 2020). Accessibility encompasses having either direct or indirect link to the OPAC of the library, searching and utilising different access points including authors, titles, subjects and others to locate and retrieve the collections of a library or group of libraries (Uche & Udo-Anyanwu, 2019). Accessibility to OPAC can greatly influence its utilisation among the users.

Bashorun and Akorede (2019) defined use to mean the act of using or putting into service or the act or practice of employing something. The normalization of use is utilisation. Utilisation in the context of OPAC is the act of exploiting OPAC to satisfy an information need. Aju and Tofi (2021) defined utilisation as the appropriate use of acquired information. According to the author, utilisation of resources means taking full advantage of available resources. Utilisation of OPAC by library users depends largely on the extent to which they are aware of its availability and impact of use (Gana, Ajibili & Dare, 2019). Utilisation of OPAC has brought about enormous changes in library practices. Furthermore, it has made the library collection easily accessible to everyone by breaking the physical boundaries of the library. It is also necessary to find out the

usage of the OPAC from time to time, so that the necessary measures can be put in place for better utilization of this service.

The need for creating awareness for OPAC has been advocated since its emergence. This is because the earlier studies on the accessibility, utilisation and satisfaction of OPAC have revealed that users of libraries do not use OPAC because of their low or poor awareness of it. This provides a basis for Fabunmi and Asubiojo (2013) to recommend that library should create more awareness and effective education for students at various levels to ensure maximum utilisation of library resources. Subsequent studies that follow suit, such as Eiriemiokhale and Oladimeji (2019), Gana, Ajibili and Abel (2019), Isa and Jumba (2021) recommended the provision of enough computers at the OPAC terminals, the university library should provide library user guide for fresh undergraduates on how to use OPAC during library registration, organise orientation programmes on how to search information resources on OPAC, the OPAC interface designed should be made simple in order to encourage its use among the students and also ensure adequate provision of alternative sources of constant power supply to the terminals at all times. Librarians should assist users in learning the use of OPAC, search engine, e-mail and CD-ROM techniques, and inform library users of the web sites available through the various networks.

In the 21st century library services, particularly in academic libraries, OPAC has significant roles to play in enhancing the library services. This makes Basorun and Akorede (2019) submitted that OPAC is the most effective information retrieval tool; yet awareness and its use among students is low. Basorun and Akorede's (2019) submission is similar to the findings of similar studies that have revealed that OPAC's awareness, accessibility, utilisation and satisfactions varied in Nigerian libraries. The need to investigate the status of awareness, accessibility and utilisation of

OPAC justified why this study will be exploring the strategies for promoting awareness, accessibility and utilisation of OPAC by students in polytechnic libraries in Kwara State, Nigeria.

1.2 Statement of the Problem

Polytechnic libraries are information centers whose major responsibilities revolved around the collection, organization, preservation, conservation, location, retrieval, dissemination and utilization of information to support the reading, research, referencing and recreational needs of the users. One of the resources needed by polytechnic libraries to achieve their mandates are information resources, which can be prints or non-prints (Kolawole & Igwe, 2016). The varieties of information resources housed in polytechnic libraries have called for the need to organize them through adequate bibliographic descriptions (cataloguing) of their physical parts and the logical analysis of their intellectual contents to assign notations that will represent the subject(s) or field of study(ies) the information resources belong.

Since the earlier centuries of the 19th millennium, information resources have been arranged and organized through the traditional means, using either the card, book or sheaf catalogues. But with the advent of technologies and its adoptions in libraries, the descriptions of information resources have been transformed (Eiriemiokhale & Oladimeji, 2019). One of the end results of this transformation is the Online Public Access Catalogues (OPAC). OPAC avails users the opportunities of identifying and locating information resources in a library collection without necessarily going to the library physically. However, despite the unlimited potential of OPAC to both the library staff and users, this researcher has observed some problems relating to its awareness, accessibility and utilisation in Nigerian libraries. The observation of this researcher has also been validated by the studies of Basorun and Akorede (2019), Emiri (2019), Isa and

Jumba (2021), Omosekejimi (2020) and Tella (2019) where they reported low awareness and accessibility of OPAC among the library users. They all concluded that the poor awareness of OPAC among the users contributes to its use among them.

Furthermore, the abundance of studies on the adoption, awareness, accessibility and utilisation of OPAC in Nigerian libraries have revealed varied problems ranging from lack of users orientation about OPAC, comfortability with the traditional catalogues, leading to resistant to changes among the library personnel and users, inadequate power supply, poor Internet connectivity and inadequate ICT infrastructure as the banes of awareness, accessibility and utilisation of OPAC (Emiri, 2019; Uche & Udo-Anyanwu, 2020). Above all, findings have revealed that there is a dearth of literature, particularly empirical studies on the strategies for creating awareness and promotion of access and utilisation of OPAC among undergraduates in Nigerian libraries. This, thus, becomes the anchor making this study to investigate awareness and accessibility as determinants of utilisation of OPAC by students in polytechnic libraries in Kwara State, Nigeria.

1.3 Research Objectives

The main objective of this study is to investigate Awareness and Accessibility as Determinants of OPAC Utilization amongst Students of Polytechnic Libraries in Kwara State, Nigeria. The specific objectives are to:

- i. Establish the channels used for awareness of OPAC among students of polytechnic libraries in Kwara State, Nigeria?
- ii. Highlight the tools used for accessing OPAC by students of polytechnic libraries in Kwara State, Nigeria?

- iii. Identify the challenges encountered when using OPAC by students of polytechnic libraries in Kwara State, Nigeria?

1.4 Research Questions

This study seems to answer the following research questions:

- i. What are the channels used for awareness of OPAC among students of polytechnic libraries in Kwara State, Nigeria?
- ii. What are the tools used for accessing OPAC by students of polytechnic libraries in Kwara State, Nigeria? and
- iii. What are the challenges encountered when using OPAC by students of polytechnic libraries in Kwara State, Nigeria?

1.5 Scope of the Study

The study focuses on awareness and accessibility as determinants of OPAC utilization amongst students of polytechnic libraries in Kwara State, Nigeria. The study covers polytechnics libraries within Kwara State. The participants of this study are students who have registered with the polytechnic libraries of Kwara State Polytechnic, Ilorin; Federal Polytechnic, Offa; Lens Polytechnic, Offa. The study covers one federal, state and private polytechnics in Kwara State. In addition, quantitative method would be adopted and survey descriptive design would be applied. Also, only questionnaire would be used as data collection instrument.

1.6 Significance of the Study

The findings of the study would be beneficial to policy makers, practicing librarians, researchers and society. The policy makers would be able to formulate policy that would promote effective utilisation of OPAC by students of the polytechnics and other users of the academic libraries. In addition, the findings of the study would expose librarians to the level of awareness of OPAC and take necessary actions to improve awareness of OPAC. Furthermore, the findings of the study would be significant to expand the frontiers of knowledge by expanding the existing literature on utilisation of OPAC for in-coming researchers to use in their related study. Specifically, the findings of the study would expose the understanding level of constraints facing the access points of OPAC.

The findings of the study would increase the existing literature on OPAC available to researchers. More so, this study would be beneficial to the management, decision and policy makers of polytechnic libraries in Kwara State, Nigeria, by revealing to them the major constraints associated with promotion of awareness, accessibility and utilisation of OPAC, which they can take realistic actions to address. Furthermore, through this study, the library personnel would understand different strategies they can adopt to promote the awareness, accessibility and utilisation of OPAC among their users. Finally, this study would be useful to the users and researchers in polytechnic libraries by exposing them to the different tools and access points they can use to access the OPAC to utilise the disparate information resources housed in their polytechnic libraries.

1.7 Operational Definition of Terms

Accessibility: This is the ease of approach to utilise OPAC by users of polytechnic libraries in Kwara State, Nigeria.

Awareness: This is the conscious knowing of OPAC, which is to be accessed and utilised by users of polytechnic libraries in Kwara State, Nigeria, based on the strategies deployed by the libraries in their respective polytechnics.

Kwara State: This is a federating unit of Nigeria, situated in the North-central geopolitical zone, where the awareness and accessibility as determinants of utilisation of OPAC in its polytechnics will be explored.

OPAC: This is the online logical arrangement of information materials of polytechnic libraries in Kwara State, Nigeria, which ought to be aware of, accessed and utilised by users based on the strategies deployed by the libraries in their respective polytechnics.

Polytechnic Libraries: These are repositories of information established to support teaching, learning and research in polytechnics in Kwara State, Nigeria, who ought to use some strategies to promote awareness, accessibility and utilisation of OPAC among their users.

Users: These are the students, teaching and non-teaching staff and researchers who attached values to the OPAC they are aware of and accessed in polytechnic libraries in Kwara State, Nigeria, based on the strategies deployed by the libraries in their respective polytechnics.

Utilisation: This is the act of attaching values to OPAC by users of polytechnic libraries in Kwara State, Nigeria, as a result of the strategies deployed to promote awareness and accessibility by the libraries in their respective polytechnics.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter is designed to point out positions, assertions, statements, opinions and conclusions of various authorities on the subject under study. Review of related literature involves the collection of ideas, views, positions and opinions expressed in various writings of recognized authorities as well as findings of previous researches in the area of investigation. The literature will be reviewed under the following sub-headings:

- 2.2 Concept of Online Public Access Catalogue (OPAC);
- 2.3 Level of Awareness of OPAC among Users of Polytechnic Libraries;
- 2.4 Information Resources Accessed Through OPAC by Users;
- 2.5 Combined Influence of Awareness and Accessibility on Utilization of OPAC;
- 2.6 Constraints Encountered towards Utilization of OPAC by Users;
- 2.7 Empirical Studies; and
- 2.8 Appraisal of Reviewed Literature

2.2 Concept of Online Public Access Catalogue (OPAC)

Cataloguing and classification are knowledge-based activities concerned with the description of bibliographic details of information materials and index and classify information materials into meaningful accessible forms (Inyang & Agwunobi, 2016). Cataloguing and classification services are the major organization functions that are performed in the technical services. The important factor here is “making available” (Kamba, 2020). After acquisition, materials become unorganized and patrons will definitely find it difficult to retrieve the material. Cataloguing and classification through its techniques make it possible for information retrieval, as the aim of every library is to obtain preserve and make available the resources. Omekwu and Anyaogu (2016) established that cataloguing and classification is the intellectual basis of providing materials for the clientele. They explained that cataloguing and classification impose order on diverse library routines with the goal of making resources easier to discover, manage and access. Cataloguing and classification permanently announces the availability of information materials in any organized library with full bibliography and location symbols because information materials acquired by the library but whose presence in the library is not known by the clientele is of no use.

Despite the commonalities of cataloguing and classification, it is important to briefly show their divergence. Cataloguing is the process of preparing a catalogue. It involves every activity of providing bibliographic description of information materials, in order to save the time of library staff and users when searching for information materials in the libraries and also enhance logical and orderly arrangement of information materials housed in libraries (Jimoh & Igwe, 2012). Cataloguing is the process of making classified materials easily accessible to those seeking information concerning them and the cataloguer is the human resource who has acquired the

skills and ability to pattern this cataloguing to suit the purpose of an information system as well as the prevalent needs of the time in terms of information accessibility and utilization. Cataloguing serves as the driving force for efficiency and speed in access to materials that in turn affect utilization that leads to user satisfaction (Omekwu & Anyaogu, 2016).

Ejiroghene (2020) maintains that the cataloging process is cumbersome and labor intensive. Updating of records is tasking. Catalog cards are produced on daily basis, yet there is no provision for filing them without disrupting the existing ones. The process of interfiling is time-consuming. Apart from that, correction of errors on already filed cards involves pulling out the cards from the trays, erasing and interfiling them. Users spend a lot of time trying to search out relevant titles from hundreds of cards filed in the cabinet. The technicalities required in cataloguing of information materials have led to the introduction of cataloguing rules such as the Anglo-American Cataloguing Rules (I & II), Resource Description Framework (RDF), the Resource Descriptive Access (RDA), and the Functional Requirement for Bibliographic Record (FRBR) (Nwosu, 2013).

On the other hand, classification, also known as subject cataloguing, is the act or process of arranging information materials according to their subjects or treatments (Jimoh & Igwe, 2012). Angrey and David-West (2018) viewed classification as the process of assigning class numbers to the information resources in the library. It is an adopted methodology by library professionals to bring together information materials that are of the same subject (Obiozor-Ekeze, 2016). Olajide and Yusuf (2010) posited that the main reason for classifying information materials in libraries is to create access to them. Madukoma, Onuoha, Omeluzor and Ogbuiyi (2013) identified accessibility as one of the prerequisites of information used because the more accessible information resources are, the more likely they are used.

Ajani, Amzat, James and Sulyman (2022b) submitted that classification is the process or act of grouping items or things into a class or classes. According to Monyela (2019), classification deals with the determination of the primary subject of a work and the assignment of specific notations. It provides a means of collating all information resources on the same subject together in a place (Orbih & Aina, 2014). This also agrees with Obiozor-Ekeze (2016) who describes classification as the methodology adopted by librarians for bringing together information materials that are of the same subject. Muhammed, Baffa and Garba (2018) on their own part viewed classification as the logical and systematic arrangement of library documents usually by subject content by their likeness and classification scheme. In other words, it is the process of putting together similar library materials according to their subject content.

Having pointed the differences between cataloguing and classification, it is critical to explain the relationship between them. Obiozor-Ekeze (2016) cataloguing and classification are methods of describing, organizing and providing access to all information materials. Both are methods and skills used to improve the end users ' experience of locating and retrieving information resources in the library, which help to identify the most appropriate materials to meet their information needs. It is a continuous and evolving practice that gives room for efficient and effective information dissemination to users. The practice focuses on the intelligibility of bibliographic records and the find ability of information material. ALA glossary of library and information science (2018) defines OPAC as a computer-based and supported library catalogue. It is designed to be accessible via terminals so that library users may directly and effectively search and retrieve bibliographic records without the assistance of a human intermediary. This implies that an OPAC is a computerized library catalogue that is available to the public which provides bibliographic information about information resources in the library.

Online Public Access Catalog (OPAC) may be defined as a database of bibliographic records describing the holdings of a library. An OPAC is a computerized library catalogue that is available to the public, which provides bibliographic information about information resources in the library. An Online Public Access Catalog (OPAC) has revolutionized traditional accessibility to resources of libraries in general and academic libraries in particular. It is an interface of information retrieval system which assist information searchers to access resources of libraries using several access points. It has made searching and retrieval of bibliographic records of materials easier and faster (Ma, 2019). OPAC is an online database retrieval tool held by a library or group of libraries. According to Narayanaswamy (2019), the OPAC is an information retrieval tool considered by short bibliographic records, mainly books, journals, audio-visual and non-book materials available in a library. OPAC is helpful to university library users to access and locate the library resources efficiently and effectively (Aju & Tofi, 2021).

Fabunmi and Asubiojo (2013) explained OPAC as an interface of information retrieval system which assist information searchers to access resources of library(ies) using several access points. Traditionally, it is concerned with searching for and retrieving bibliographic records of information items instead of full-text of the content of resources. It has made searching and retrieval of bibliographic records of materials easier and faster. Studies show that most information searchers tend to use easily available information sources rather than sources that require considerable efforts. OPAC is computer-based retrieval tool which contains all the bibliographic information of an information center or library. It serves as an electronic catalogue as well as access tool and a database which contains bibliographic records of a particular library. An Online Public Access Catalogue (OPAC) has revolutionized traditional accessibility to

resources of libraries, particularly in academic libraries. It is interface of libraries using several access points.

Traditionally, it is concerned with searching for and retrieval of bibliographic records of materials in the libraries. It is accessible via terminal, so that library users may directly and effectively search and retrieve bibliographic records without the assistance of a human intermediary. It is noteworthy that this definition specifically states that searchers use OPAC without human assistant thus suggest that information searchers should possess information skills and be computer literates. OPAC is an online database of materials held by a library or group of libraries which provides a platform for users to search and to locate books and other materials physically available in the library. Kusum and Arvind (2013), describe OPAC as the newest and sophisticated catalogue format. OPAC is an online bibliography of a library collection that is available to the public. It is a computer-based catalogue and can be accessed through computer terminals in library (Nna-Etuk, Echu & Umoh, 2021). Thirmugal, Mani and Sarvakumar (2018) described an Online Public Access Catalogue as a systematic record of the holdings of a collection in the particular library with its main purpose of enabling users of the collection find out the physical location of the information in the collection.

Narayanaswamy (2019) opined that OPAC is designed to satisfy a wide range of users. Kumar (2017) noted that OPAC has made processing of library collections more accurate, interesting and faster. OPAC is an essential information retrieval tool that helps academic library users to locate the library resources efficiently and effectively, it is an information pointer and a guided pathway to a library's resources (Basorun & Akorede, 2019). Nna-Etuk, Echu and Umoh (2021) stressed this point by noting that OPAC is an intrinsically rich tool which not only incorporates online circulation and new arrivals information of the library but also capable of providing quick,

enhanced and easy access from the work place of the user with several additional search features compared to card catalogue and hence substantially saves the time of user.

2.3 Level of Awareness of OPAC Among Users of Polytechnic Libraries

Libraries and librarians are currently exploiting the marketing and advertising strategies to promote the awareness of OPAC among the users. They also deploy some formal and informal sources. Formal sources of information include channels such as library training, books, lecturers, librarians, including browsing from the Internet. Gohain and Saikia (2013) reveals that the majority of respondents were not aware of the library catalogue and its use. The design and implementation of user education programmes such as library orientation, bibliographic instruction and information literacy to enlighten users about the existence of OPAC and other electronic information resources and services in the library is suggested in the study. Chinyere (2014) is also of the opinion that user education is one of the major undertakings of creating awareness about OPAC to students. The increasing pressure to enhance access to OPAC has created the need for libraries to keep their users abreast of the OPAC services they provide (Fati & Adetimirin, 2015). This can be achieved through adequate promotion of libraries' OPAC services.

Promotion involves the mechanisms that inform the target groups about the resources available, services and products offered by the libraries/information centers. Some possible promotional activities that a library could embark on, to include publishing and distribution of hand bills, publishing and distribution of newsletters, mailing list programs, placing posters in strategic places, use of billboards and library awareness programs such as library week or library orientation for all incoming students. The following promotional measures can also be employed

to boost awareness of university libraries' OPAC. User education is a process of activities whereby library users are trained on how to effectively and efficiently use the library and its information resources. Chalukya (2015) defines user education as various programmes of instruction, education and exploration provided by libraries to users to enable them to make more effective, efficient and independent use of information sources and services to which these libraries provide access. Among some of the commonly known user education programmes are library orientation, bibliographic instruction and information literacy. The information literacy instruction or education involves the presentation of basic information searching skills to students in general, the basics of searching techniques, and most importantly the electronic databases, as well as the OPAC tools.

Another significant strategy used by libraries to promote awareness for OPAC among their users is library guide. The library guide is a manual or handbook prepared and published by libraries containing detailed and specific information about their library. Library guide varies in libraries; nonetheless, libraries usually endeavour to ensure that their users are provided with adequate information on the different departments or sections of the library, information resources they housed and users can access them by using the right information searching tools (Azubuike & Azubuike, 2016). In recent time, libraries also promote OPAC by sending e-mails to users reminding them of the availability of OPAC in the library. Mano (2016) asserted that e-mail has been a vital communication medium for many years now. It provides speedy and efficient communication of information that can be easily and quickly created, edited, stored, discarded, organized, appended, and forwarded. Transmission of information via email is also linked to work performance.

According to Kolawole and Igwe (2012), mailing list service makes it possible for libraries to exchange messages and information about OPAC over the Internet. It allows libraries to send guides, new arrivals and files containing data/information of all types that they think users should be aware of. Using email by libraries has become paramount to reach out to users about the availability of OPAC in the library. Nahotko (2020) suggested teaching of use of library as a general course in the institution as a strategy for promoting the awareness of OPAC among the students in tertiary institutions. He suggested that tertiary institutions should design a course tailored towards teaching the students and exposing them to the libraries. by doing this, the libraries can design a specific aspect of the course to teach and train the students on how they can access and use OPAC.

Social media is another vital channel libraries are harnessing to promote the awareness among their users. Hudson (2018) viewed social media as a collection of online communication channels dedicated to community-based input, interaction, content-sharing and collaboration. The power of social media is its ability to connect and share information with anyone irrespective of Geographical location as long as they also use social media. They are applications dedicated to forums, microblogging, social networking, social bookmarking, and social curation among others.

2.4 Information Resources Accessed Through OPAC by Users

The need to clarify the ambiguities that may be surrounding the concept of information resources makes scholars to classify information resources into two major different types. The first type is print information resources, while the second type is non-print/electronic information resources (Umoh, 2019). The print information resources are the oldest type of information materials of

academic libraries. They contain information presented in print or physical format. In this class of information resource, imprint or symbols in the document can be read with the human eyes, without any need for any form of assistance of electronic devices (Umoh, 2019). Basically, information resources are materials that users consult in making decision and also for problem solving. The relevance of every academic library depends on the utilization of its information resources (Aladeniyi & Olowokole, 2018). Agboola and Bamigboye (2018) agreed that the need for good libraries in higher institutions of learning cannot be over-emphasized, as the quality of any education depends on the library, not the library as a magnificent building but the quality and up-to-dateness of its information resources. They noted that, it is important that libraries serving academic communities have the broadest possible collections of books and other essential information materials.

Information resources are regarded as information bearing materials that exists in printed and electronic formats, such as journals, textbooks, abstracts, indexes, magazines, newspapers, reports, diskettes magnetic disk, the internet/Email, video, CD-ROM databases, microforms, computers, and so on. Therefore, information resources are print, non-print as well as electronic materials that can be accessed either manually or electronically by library users. An academic library can be considered to be efficient and functional, if it is meeting the information, research, educational, and recreational needs of the users and keep ensuring that users maximally utilise the available information resources. Thus, there is need for academic library to have relevant and quality information resources in both print and electronic format. Buhari (2016) further stressed that for an academic library to be effective, it must have enough information resources.

Umoh (2019) asserted that information resources in academic libraries are not limited to books; they include other varieties of carriers of information either print or non-print. Information resources include government publications, textbooks, fictions, encyclopedias, dictionaries, maps, journals, microforms, periodicals, DVDs/CDs/VCDs, cassettes, floppy disks, pamphlets, technical reports, theses and dissertations, handbooks, seminar/conference maps/atlas, databases, etc. World Wide Web (WWW), e-mail services, e-journal, e-books, e-database and DVD/CD ROMS database, textbooks, abstract, indexes, yearbooks, atlas and internet are the resources that students mainly utilize. They often use tools for electronic content, such as databases, electronic journals, and electronic books.

According to Eserada, Okolo, and Ideh (2019), OPAC as contains information sources that the library holds, such as (but not limited to) indexes and abstracts, periodicals, bibliographies, gazetteers, directories, textbooks, yearbooks, electronic books and journals, dictionaries, encyclopaedias, biographies and manuals, manuscripts, prints, photographs and maps. All these sources can be found on OPAC and can be searched through entries such as author, title, subject, keyword and other entries, which are the means that library users employ to gain access to the materials that are available in the library (Atanda & Ugwulebo, 2017). Because of the enormity of information resources, this study therefore briefly discussed some information resource:

Books and E-books: These are long format information resources that provide comprehensive information on a topic. Books are critical resources for studying and they offer important in-depth context for topics across every field of human endeavours. Academic libraries contain both fiction (works of the imagination) to be analyzed, as well as non-fiction (fact-based works). Types of books include: monographs (single topic, often single author), series (multiple volumes published over time on a specific topics or area of study), anthologies (collections of content on a

single topic), textbooks (contain facts, theories, and knowledge on a particular subject) (Brown University Library, 2021).

Websites: This is the World Wide Web that contains hyperlinks of related web information resources by educational institutions, cooperate individuals, government, company, organisations, professional bodies and others available online. Website can be accessed with the aid of Internet, Uniform Resource Locator (URL) or intranet (Ikenwe & Udem, 2022).

Reference/E-Reference Books: These are information resources that are strictly meant for consultation and not meant to be read from page to pages. They have their electronic versions that can only be accessed through electronic gadgets. These resources include e-directories, e-dictionaries, e-abstracts, e-indexes, e-bibliographies, etc (Amadi & Igwe, 2015; Peterson, 2022).

Newspapers/E-newspapers: These are international, national, and local coverage of issues and events for a particular region, often with a distinct editorial perspective. Newspapers are important resources for current information, personal accounts, opinions on issues, and coverage of popular topics in a given community.

Journals/E-journals: These are collection of articles within a particular subject area that are published regularly. The frequency of publication can be an indicator of how current the information is. Journals are more up-to-date than books and are a good place to find the latest research on a subject. In general, journals assign a volume number to indicate each year and an issue number for each publication during that year. Journals contain articles written by different authors. Journals may be popular, scholarly, or trade oriented.

Articles: Articles are typically review or research papers written by academics or other experts on a given topic. They are most often peer-reviewed, which means that other experts have rigorously reviewed the content to ensure that it is valid. Articles provide details on research and often include methods and results. Journal articles examine more specific topics and are excellent to use for in-depth research (Brown University Library, 2021).

Open Educational Resources: These are web-based educational resources that are freely available on the Internet for use by all in the society. The OER, typically refers to as online resources, including those in multimedia formats are information materials generally released under a creative commons or similar license that supports open use of the contents in online, e-learning or hybrid environments. They can originate from colleges and universities, libraries, archival organizations, government agencies, commercial organizations such as publishers, or faculty or other individuals who develop educational resources and are willing to share with the public (Amadi & Igwe, 2015).

VCDs/DVDs/CDs: These are known as compact discs, video compact discs and digital versatile discs respectively. They are storage devices with varied storage capabilities of storing electronic information. These storage media can contain information such as videos, audios, pictures and files. The information they can contain is determined by their storage capacities (Amadi & Igwe, 2015).

Research databases: These are collections of information in a searchable format. This where you find journal articles. Each Library database has a specific content focus and offers the ability to fine-tune search results. These specialized, scholarly resources are often licensed by the

library for patrons' use. In order to access many of these resources' patrons must logged into their portal.

Special Collections, Manuscripts, and Archives: These are unique items that were created or collected that provide evidence of a time or process. These materials are typically used as primary sources.

Theses and Dissertations: These are significant research projects that are submitted for academic degrees. Dissertations are completed for doctoral degrees, and theses are completed for masters' degrees and some bachelor degrees. The work reflects new scholarship on a topic. Dissertations are available from universities around the world. These are often lengthy, detailed works on a focused topic (Cortada, 2016).

Open Access Repositories: Open access is interested in the free availability of scholarly outputs on the Internet granting the user to make legal and non-commercial use of the document and at the same time acknowledging the intellectual ownership of the author of the document (Jonathan & Udo, 2015).

2.5 Combined Influence of Awareness and Accessibility on Utilization of OPAC

The purpose of an OPAC is to serve as a guide to the collection of materials. A catalogue can be accessed using the author/title catalogue, subject catalogue, serials catalogue and OPAC (Basorun & Akorede, 2019). OPAC is accessible online without geographical constraint making it suitable for remote users. Since its inception in late 1970s, OPAC has become widely accepted as the potential information retrieval tool and the vast number of bibliographic records has been converted into computer format, using the Machine-Readable Cataloguing (MARC) form (Emiri,

2019; Umoh, 2019). OPAC is the most modern form of library catalogue, whereby bibliographic records of all the documents in a collection are stored in the computer memory disk. It is a tool designed to facilitate information retrieval process in this new age. OPAC provides great flexibility and numerous options to users to access information pertaining to library resources by combining two or more bibliographic fields or access point. The effective use of OPAC has made the library collections easily accessible to everyone by breaking the physical boundaries of the library (Aju & Tofi, 2021).

The increasing recognition worldwide is mainly because OPAC allow users to quickly and effectively search the needed bibliographical records of the materials through simple or advance searches; eliminates repetitive nature of works; improve the quality and range of services; facilitates easy and wider access to all kinds of information sources; facilitates faster information communication; increase morale and motivation of library staff; facilitates cooperation and information sharing; save time, space and resources; improve productivity and image of the library (Msagati, 2016). Eze (2016) argues that through OPACs, academic libraries now can offer full text electronic subscription-based journals to their users that can be accessed via the library's web page in addition to supplying a user name and pass word. The major advantage of this is that it allows users to access the collections of a library or group of libraries through the web, without necessarily visiting the library (Kamba, 2020).

OPAC is a device of change in today's libraries as it helps users search for library resources and to find out the availability of such documents in the library at a given point in time. OPAC system is one of the technologies that provide access to any of the information contained in the records of the library. University libraries are now moving from the manual retrieval system characterized by short bibliographic records, mainly of books, journals and audio-visual

materials available in a particular library (Ma, 2019). Fati and Adetimirin (2015) asserted that the major reason for OPAC use by undergraduates is because it saves their time and energy. With OPAC, library users need not spend time to travel from their residents to the library to know whether or not the library holds a particular book, to place book requests. They would not need to spend time scanning through the library card catalogues before they know the shelving locations of books. The import of this is that OPAC reduces the cost of travelling and number of physical presences in the library. The user will only need to pick up the requested or borrowed books from their pick-up locations or the library moves the books to the library user's location as it is the practice in some libraries in the United States. Thus, OPAC minimizes the time and stress of searching through the shelves for books thereby supporting the fourth of the Ranganathan's Laws of Library Science "save the time of the user."

2.6 Constraints Encountered Towards Utilization of OPAC by Users

In spite of the beneficial role of OPAC in information retrieval to students, there are a number of problems and challenges that students face when using it (Yeboah, 2018). Innumerable factors are constantly limiting undergraduates from its use. An insight into the environment to which the library user is attached, his or skills in identifying, locating searching and retrieving the needed information via OPAC, as well as the sources preferred for acquiring information, and barriers to information are essential for understanding the challenges and problems encountered using the system (Kumar, 2017). Several factors militate against effective utilization of OPAC, such factors may differ from one university and library to another. Research conducted by Asubiojo and Fabunmi (2013) indicated that lack of information searching skills, awareness, erratic power supply, network failure and inadequacy of computer terminals designated for the use of OPAC were among the factors inhibiting use of library OPAC.

Other challenges to the awareness, accessibility and utilisation of OPAC are problem of recall and precision faced by users. Studies have established that major constraints for the use of OPAC in some libraries were lack of awareness; non-user friendly and information technology (IT) competency among user communities. Awareness in this case may have been caused by inability of librarians to notify users since a study by Yusuf (2012) also identified lack of awareness amongst the library user's community. Other problems identified by Yusuf (2012) were lack of instruction in the use of software package, shortage of terminals, and instability of electricity supply among others as hindrance for use of OPAC at the library. Some of the factors affecting undergraduates use of online public access catalogue as reported by Ogbole and Atinmo (2017) include: lack of personnel with ICT skills in libraries, user education, maintenance, inadequate training on how to use ICT resources, erratic power supply, testing of OPAC in libraries, lack of funds to support OPAC project in libraries, poor OPAC awareness creation by library personnel, inadequate library space, ICT skills possessed by undergraduates, difficult OPAC interface design, searching capabilities of OPAC by undergraduates and user convenience/satisfaction with OPAC use.

Azubuike and Azubuike (2016) observe that most students in Nigeria have poor information literacy skills and awareness of electronic information resources resulting from inadequate library training and poor search skills. Adeleke and Emeahara (2016) also found that a low level of usage of OPAC is linked to lack of awareness and lack of search technique skills among the University of Ibadan's undergraduates. In South Africa, Civilcharran, Maharaj and Hughes (2015) found that most respondents gained their search skills through experience than through formal training. Fati and Adetimirin (2015) posited that several factors can affect the use of OPAC. For instance, OPAC interface design and library website interface design constitute a part of factors

affecting the use of OPAC. Utilisation of OPAC can be disturbed by certain personal characteristics (age and occupation), time, medium of communication, credibility of source of information, users' information need, type of information required and information seeking behaviour. Libraries with functional web-based OPACs need to periodically assess level of users' awareness of the facility.

Yeboah (2018) reveals that infrastructural issues and lack of relevant skills are deemed to be some of the challenges preventing an optimum use of the OPAC facility. Howlader and Islam (2019) at Dhaka University, Bangladesh, conducted a study on undergraduate students' information-seeking behaviour. The challenges discovered are lack of ICT knowledge, slow internet speed, lack of knowledge on how to use OPAC, inability to access electronic resources due to a lack of expertise, lack of awareness of library resources and lack of knowledge to formulate a search query. Ekenna and Iyabo (2013) note that low undergraduate students' utilisation of OPAC is associated with lack of information retrieval skills. Kumar (2017) discovers lack of basic skills among users to be the major reason for not utilising functionalities of OPAC optimally. The major cause of this problem is that some students do not fully understand OPAC's physical operation and therefore lack control over what they are trying to do.

A descriptive survey research design that was adopted by Ishola and Ojeniyi (2015) reveals inability to locate materials on the shelves indicated in the catalogue as being available, power outage causes frustration when accessing OPAC, poor understanding of meaning of information on library catalogue, poor computer skills hindering navigation when searching and difficulty in getting information from card catalogue because of poor retrieval skills. This is related to what is referred to as the state of readiness of the inquirer in the information-seeking behaviour model, which has something to do with users' level of education, experience, skills and familiarity in

searching the information retrieval system. Emiri (2019) asserted that most library users do not utilise OPAC because of their lack of knowledge of it, confusing to use, lack of output, lack of assistance from library staff, slow speed and lack of computer systems. Another study by Umoh (2019) reveals insufficient number of computers to access the catalogue. Typical library users lack the necessary knowledge and abilities to conduct efficient subject searches. Kumar (2017) discovered that a significant number of users search for information regarding the library materials through OPAC despite encountering problems. Lack of basic skills among users was found to be the major reason for not utilising functionalities of OPAC in full.

Most studies have identified major problems when conducting subject searches in the OPAC system. Gohain and Saikia (2013) researched about the use and users' satisfaction on OPAC services among B. Tech. students of School of Engineering in Tezpur University. The study revealed that respondents find it difficult to use OPAC due to a lack of skills. They stated that they were unaware of OPAC and that they had difficulty using it due to a lack of proper guidance. Some respondents cited a lack of a sufficient number of OPAC terminals and other sections as a barrier to using OPAC. These findings show lack of skills to utilise OPAC, lack of awareness about OPAC and lack of suitable supervision as key issues encountered when utilising OPAC.

2.7 Empirical Studies

Fabunmi and Asubiojo (2013) investigated the awareness and use of Online Public Access Catalogue (OPAC) by students of Obafemi Awolowo University, Nigeria. A questionnaire was distributed to 800 students at various faculties and in different levels of studies in August 2012. Five hundred and twenty copies of the questionnaire were retrieved and used for the study. The study revealed that 68.7 % of the respondents were aware of the OPAC services; students who

were aware of the library OPAC and did not use it to access library resources were statistically significant; 23.8% of the respondents used OPAC independently; only 3.2% of the respondents accessed library resources from their hostels, 0.2% access it from homes. Similarly, majority of the respondents lacked information searching skills while lack of awareness, irregular power supply, network failure and inadequacy of computer terminals designated for the use of OPAC were among the problems identified as factors inhibiting the use of library OPAC. Therefore, the study concludes that majority of the students used manual catalogues to access library resources due to lack of awareness, skills to use OPAC and problems encountered during usage. Hence, students have not been making effective and efficient use of the library OPAC.

Bamidele et al. (2014) investigated the awareness and use of Online Public Access Catalogue (OPAC) by faculty members of Babcock University, Nigeria. The study adopted descriptive survey research design. Questionnaire was distributed to 240 (60%) faculty members at various schools in August 2013 during the annual colloquium workshop. One hundred and nine-six (196) copies of the questionnaire was retrieved and used for the study. Data collected were analysed using percentage and frequency. Findings revealed that majority of the respondents (71.4%) were not aware that OPAC can be used to retrieve materials before coming to the library. Also, 65.8% of the respondents were not aware that they can access/browse Babcock University library web-based OPAC with their mobile phones before coming to the library to borrow materials; while, 59.2% of the respondents were not aware that the materials available in Babcock University library can be accessed outside the library building. Only 26% of the respondents used OPAC independently to retrieve library information resources. Majority of the respondents retrieved library information resources by perusing through the shelves and seeking the assistance of library staff. It was obvious from the findings that majority of the respondents were not aware of

OPAC. Lack of orientation from library staff/librarians also constitutes major factor that militate against awareness and use of Babcock University library OPAC.

Fati and Adetimirin (2015), in their study on OPAC awareness as a factor affecting OPAC use by undergraduate in two Nigerian libraries in South-West Nigeria. The two university libraries studied were University of Lagos and Obafemi Awolowo University. The study adopted a survey research design and also questionnaire serve the instrument of the research study. A population of 3,998 and sample sized of 431 students were used in the University of Lagos and a population of 4,625 and sample size of 231 in OAU. The result of the analysis of the study on the level of awareness of OPAC by undergraduates shows that 216 of the sample of 231 were aware of OPAC in OAU While 192 out of the sample sized of 431 were aware of OPAC in UNILAG. The findings of the study revealed that majority of the respondents in both universities have high level awareness of OPAC although that of those in OAU was higher than that of those in UNILAG.

Isa and Jumba (2021) investigated undergraduates' awareness, access and use of OPAC in federal university libraries in North-East Nigeria. The study used a quantitative research methodology using cross-sectional survey design to collect data from the respondents. A sample of 392 copies of a questionnaire were administered among undergraduates in the selected university libraries, 314 copies of the questionnaires representing 80.1% were returned completed and found usable. The data collected were analyzed using tables and frequencies. The findings showed that most of the students were highly aware about the OPAC in their libraries; that the majority of students have access to the OPAC in their libraries with majority accessing it from computer terminals in the library. Furthermore, the findings revealed that majority of

undergraduates used the OPAC daily and many of them use it to select items for assignment, class presentation and project work.

Emiri (2019) investigated awareness and use of online public access catalogue (OPAC) in university libraries by students of library and information science in the Niger-Delta region of Nigeria. A questionnaire was distributed to 326 library and information science students in the five (5) universities where library and information science is offered. Three hundred and five (305) copies of the questionnaire were retrieved and found usable and thus formed the sample size of the study. The study revealed that 80% of users are aware of the OPAC and its services, however less than 30% of the students utilise its services due to varying challenges like insufficient computer terminals, poor network and power supply. Though, user's general perception reveals that OPAC is easy, simple and faster for bibliographic information search and retrieval. However, satisfaction level was low due to reasons aforementioned.

Omoisejimi (2020) investigated undergraduates' awareness, ICT skills and use of OPAC in federal universities in South West, Nigeria. The research adopted the descriptive survey design. The population of the study was 79,336 undergraduates in four federal universities in South West, Nigeria. The probability sampling technique was used to draw out 400 samples for the study. The study found that there was low level of OPAC awareness among the undergraduates in federal university libraries in South West Nigeria. The study revealed that the use of OPAC among undergraduates in federal university libraries in South West Nigeria is low. Also, OPAC awareness will lead to its corresponding use among the undergraduates.

Gana, Ajibili and Abel (2019) explored awareness and use of online public access catalogue by patrons of Bingham University Library, Karu, Nassarawa State, Nigeria. It adopted a descriptive survey research design using questionnaire as instrument of data collection. Copies of the questionnaire were distributed to 350 patrons (student and staff users) randomly out of which 333 (85%) copies were retrieved and used for the study. The findings revealed that most 124 (37.2%) of the respondents were aware of the OPAC to a very little extent, while 133 (39.9) were not aware of the OPAC services at all, they preferred to physically browse through the library shelves; that 253 (76.0%) of the respondents used the OPAC to a very little extent and this validated the lack of awareness and use of the OPAC. Meanwhile, 62 (18.6%) of the respondent have never used the OPAC. It was obvious from the findings that the majority of the respondents were not aware of the existence of the OPAC services neither nor used it hence, the need for this study.

Basorun and Akorede (2019) investigated the awareness and use of Online Public Access Catalogue (OPAC) among postgraduate students in the Faculty of Communication and Information Sciences (CIS) of University of Ilorin. The study adopted a descriptive survey design and stratified random sampling method was applied to select 173 postgraduate students in the faculty of CIS. Questionnaire was used as an instrument for data collection. 158 out of 173 copies of questionnaire were filled and returned for analysis. The findings revealed majority (70.2%) of the respondents were aware of OPAC. Also, majority (69%) of respondents used title approach for searching information in OPAC. However, majority of the respondents lacked information searching skills. The study recommends among others, OPAC user education to ensure maximum utilization of library resources and regular training on the use of OPAC to heighten user awareness.

Nna-Etuk, Echu and Umoh (2021) investigated the influence of knowledge on the use of online public access catalogue and utilization of library resources by undergraduate students in federal universities in South-South Zone of Nigeria. The population of the study comprised 952 registered library users from three selected universities in the study area during 2017/2018 academic session. Questionnaire was the main instrument for data collection. The data collected was analyzed using Mean and Standard Deviation. The hypothesis was tested using simple linear regression and multiple regression analyses respectively. The regression model produced a regression coefficient of $R=.431$, which revealed that there is a strong positive relationship between knowledge on the use of Online Public Access Catalogue (OPAC) and utilization of library resources. The findings further revealed that knowledge on the use of OPAC is relatively low in the universities studied. It was recommended that library program currently being taught in Nigerian universities should be reviewed and taken into cognizance the important of information literacy skills required by students to enhance them access print/digital content of the library.

Aju and Tofi (2020) investigated undergraduates' awareness, utilisation and satisfaction with online public access catalogue (OPAC) in selected university libraries in Nasarawa State, Nigeria. The study adopted survey research design. The population of the study was 7,233 registered library users (undergraduates) in two (2) public universities in Nasarawa State, namely Federal University Lafia (FULAFIA) and Nasarawa State University, Keffi (NSUK). The sample size for the study was 379 drawn using Taro-Yamane's formula for sample size determination. Proportionate stratified random sampling technique was used to select the sample of respondents from the two (2) universities under study (i.e.) FULAFIA with 150 and NSUK, 299 respectively. Questionnaire was used as instrument for data collection. A total of 379 questionnaires were

distributed and 362 retrieved for analysis representing a percentage of 95.5%. Data was analyzed using frequency counts; mean scores and standard deviation. Findings of the study revealed that, undergraduates were highly aware of OPAC in selected university libraries in Nasarawa State. The finding also revealed that undergraduates in selected university libraries in Nasarawa State utilized OPAC to a little extent and students were not satisfied with the use of OPAC, hence their extent of satisfaction derived from the use of OPAC was little extent. Findings further revealed factors affecting use of OPAC by undergraduates in selected university libraries to include: library guide to explain how to use the OPAC is not available, unstable power supply, library staff not friendly, network/server problems, lack of computer systems, among others.

Eiriemiokhale and Oladimeji (2019) investigated awareness of Online Public Access Catalogue (OPAC) among students of Kwara State University (KWASU), Malete. The descriptive research design was adopted for the study. The population of the study consists of 11,855 undergraduates of Kwara State University. Sample size of 378 were drawn from the population using a multi-stage sampling technique. Questionnaire was used as the instrument for data collection and the data were analyzed using simple percentage and frequency count. The findings of the study revealed that there is a high level of OPAC awareness among Kwara State University Undergraduate Students. The study further revealed that KWASU students get to be aware of OPAC through their colleagues and through the use of library course offered as a general course in the university. The study recommended that KWASU library should organize a formal orientation program for the users which will capture the key awareness to be noted about the library OPAC and also the use of university bulletin in creating key awareness on OPAC. Lecturers in the institution should also complement the library effort by encouraging students to use the OPAC.

Adegun, Akinola, Oyewumi and Adepoju (2021) attempted to know the purpose of using OPAC, how frequently users use OPAC, the satisfaction derived and the problems faced by users while using OPAC using the Olusegun Oke Library, Ladoke Akintola University of Technology, (LAUTECH), Ogbomoso, and Oyo State, Nigeria as a case study. The study adopted the descriptive survey method. A structured questionnaire was designed to collect data. 150 questionnaires were distributed to users out of which 130 were collected representing 87% and all found useable for the study. Data collected were analyzed using simple percentage and frequency counts. Findings of the study revealed that the rate at which users use the OPAC at the Olusegun Oke Library is quite high. The findings also revealed that majority of the respondents (33.0%) use the OPAC in finding journals and other reading materials, while 23.1% use the OPAC to know the availability of books in the library. Some of the problems observed from the study revealed that OPAC is not functioning properly, searching is time consuming, failure rate is more, there is lack of instruction and proper guidance from library staff on the use of OPAC. Therefore, the study suggests that improvement of OPAC functionality and the others as a matter of urgency needs the library management attention for the effective and proper utilization of OPAC.

2.8 Appraisal of Reviewed Literature

OPAC has generated much attention since its emergence in libraries. With respect to Nigeria, abundance of literature is available with most of the literature investigated, explored, examined or assessed the awareness, accessibility, utilization and users' satisfactions with OPAC in different geo-political zones of Nigeria. The study that comes to mind is that of Nna-Etuk, Echu and Umoh (2021) where they investigated the influence of knowledge on the use of online public access catalogue and utilization of library resources by undergraduates in federal universities in

South-South Zone of Nigeria. Closely related to this is the study of Omosekejimi (2020) who investigated undergraduates' awareness, ICT skills and use of OPAC in federal universities in South West, Nigeria.

In the quest of bringing dynamic to the studying of awareness, accessibility and utilization of OPAC by users in Nigerian libraries, studies such as Aju and Tofi (2020), Eiriemiokhale and Oladimeji (2019), Fabunmi and Asubiojo (2013), Gana, Ajibili and Abel (2019) limited their studies to one or two university libraries in Nigeria. The Basorun's and Akorede's (2019) study was more narrowed to the Faculty of Communication and Information Science, University of Ilorin, Kwara State. All these studies revealed either low awareness, accessibility or utilisation of OPAC. In the studies where variations occurred, either the awareness, accessibility or utilisation is not significant.

The most important things that have been identified as the gaps of the reviewed studies is that all of them focused on university libraries and their users; they also limit their studies to just the awareness, accessibility, utilisation, satisfaction with OPAC, ICT literacy as a determinant of use of OPAC. A dearth of these studies examined or explored the strategies used in creating awareness for OPAC, tools used to access OPAC by users and the information materials accessed and used through OPAC. These loopholes are some of the gaps this study intends to cover, which makes it designed to be exploring the strategies for promoting awareness, accessibility and utilisation of OPAC by users of polytechnic libraries in Kwara State, Nigeria.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter covers research design, population of the study, sample and sampling technique. Also, data collection instrument, validity and reliability of the study, procedure for data collection, method of data analysis and ethical consideration. Research methodology provides the theory guiding this study and justifies why the theory is suitable for the study.

3.2 Research Design

The study adopted descriptive survey design. Descriptive survey design is a type of quantitative research, which accurately describes population, existing phenomena and situations. Descriptive survey research can be conducted through observations, which allow the researcher to identify numerous details regarding the research problem; case studies, which allow the researcher to study the research problem in depth and survey research, which allows researchers to create controllable questions to be asked and answered by participants (Purdy & Popan, 2020). The goal of descriptive survey research design is to describe a phenomenon and its characteristics (Nassaji, 2015) and to collect data from a sample of people about that phenomenon (McMillan & Schumacher, 2014).

3.3 Population of the Study

The population of this study comprises of 13,348 registered students that are using the polytechnic libraries of Federal Polytechnic, Offa (5,338); Kwara State Polytechnic Library (7,057) and Lens Polytechnic Library (953) as shown in Table 3.1. Tarsi and Tuff (2012) define population as a group of people of similar species living and interbreeding inside a given region. Punch (2012) defined population as the target group which is typically vast, about whom researchers seek to gain and develop knowledge or obtain information.

Table 3.1: Study Population of the Students

S/N	Polytechnic	Population
1.	Federal Polytechnic, Offa, Kwara State	5,338
2.	Kwara State Polytechnic, Ilorin, Kwara State	7,057
3.	Lens Polytechnic, Offa, Kwara State	953
Total		13,348

3.4 Sample Size and Sampling Technique

Sample is the unit or section of the population that will provide the data needed to answer the questions raised by the study. Sample sizes are the actual number of the people, things or elements chosen to represent the population. The sample size of this study was derived using Research Advisor Table. To use the Table, the researcher settled for 95% Confidence Level and 5.0 Margin Error. With this procedure, the Table advised that if a population is more than 10,000 people, 370 samples should be selected. Thus, 370 samples were picked in this study.

Sampling, on the other hand, is the process of picking the participants of the study. Turner (2020) defines sampling as the process of selecting subset of the population that the researcher is of interest called sample. Sampling is a set of strategies that are utilized to choose a sample size from a bigger population so that research should be conducted with a workable sample and extrapolated to the bigger population (Wienclaw, 2021). Since this study is quantitative in nature, probability sampling technique (simple random sampling) was used for selection of the participants. Showkat and Parveen (2017) viewed probability sampling as sampling type that allows given each sample in the population equal chances of being selected. Thus, simple random sampling was used in this study. The reason for the choice of simple random is because it allows the researcher to give equal chance of being chosen in the study to every student that have registered and used the polytechnic libraries in Kwara State.

3.5 Research Instrument(s)

Data collection involves methods that are used in a study to collect data from participants. Each research approach or methodology has its own data collection methods, although some methods can be used in both quantitative and qualitative research approaches. The most common data collection method in a quantitative study is the questionnaire. Brace (2018) defined questionnaire as a communication tool between researchers and participants. Leedy and Ormrod (2014) explained questionnaire as a research tool used to collect data from a large number of participants consisting of open and closed-ended questions.

A questionnaire is the most popular form of surveying the opinions, behaviours, attitudes and perceptions of individuals that save costs and time (Stangor, 2014). Therefore, this study adopts a questionnaire as the data collection method. A questionnaire was more advantageous over other data collection methods because it can be sent to a large number of individuals simultaneously, and is likely to involve less expensive procedures (Debois, 2019). Questionnaire allows the researcher to ask the questions namely; open-ended, closed-ended, rating and ranking questions. The questionnaire is closed-ended questions to address quantitative aspects of the study. Closed-ended questions permit respondents to choose only from the provided answers (Farrel, 2016).

3.6 Validity and Reliability of the Instrument

Validity refers to the extent at which an instrument accurately measures what it intends to measure (Dudovskiy, 2019). Validity refers to the level at which the results of the research can be generalized to a broader context. Face and content validity was used for the questionnaire adopted for this study. To do this, the questionnaire was given to the researcher's supervisor for assessment of the quality of presentation of the contents of the variables this study wishes to measure. The corrections were harmonized before the questionnaire was presented to the researcher's supervisor for assessment and corrections, before its onward distribution to the respondents.

However, reliability refers to the extent at which an instrument yields consistent results. Test and pre-test were used to generate the level of reliability of the contents of the questionnaire. Reliability deals with the stability of research findings using the same research tool more than once. This was done by distributing the questionnaire to 100 registered users in Kwara State University Library. Test and retest were used because it allowed this researcher to ensure that the

questionnaire used in this study was used more than once, and the results found were similar, thus reliability of the research instrument was accepted.

3.7 Method of Data Collection

The questionnaire was distributed to the respondents by the researcher and two research assistants. The researcher focused on Kwara State Polytechnic Library since it has the highest users, while each of the assistants focused on Federal Polytechnic Offa Library and Lens Polytechnic Library. This was done in 5 working days and during the school hours.

3.8 Method of Data Analysis

The descriptive data collected are presented and analysed in simple percentage, frequency table, mean and standard deviation by using the IBM SPSS. The reason for the choice of simple percentage and frequency tables is because it allows presentation, analysis and comparison of multiple attitudes, opinion and ideas which can enhance easy understanding of tables and the data they contained.

3.9 Ethical Considerations

Research ethics are important especially to scholars and researchers. It calls on researchers to protect the pride of their participants (Fouka & Mantzorou, 2011). This study ensured that ethical considerations are adhered to. This researcher will seek the consent of the respondents through the introduction on beginning the question, clarifying the purposes of this study and declaring to them that their confidentiality will be protected.

To maintain confidentiality, respondents will be made anonymous. Anonymity entails not identifying the ethnic background of respondents, refraining from mentioning them by their names, or revealing any other profound information about them (Mugenda, 2011). To ensure anonymity, confidentiality and privacy, the researcher informed the respondents not to write their names in the questionnaire and in the covering letter that accompanied the questionnaire.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter focused on the analysis of the data, presentation of results and discussion of findings. Data collected through questionnaires are presented in tables and analyzed using frequency counts and percentages. Also in this chapter, the major findings of the study are further discussed.

4.2 Response Rate

Table 4.1: Response Rate

Description	Frequency	Percentage (%)
Returned questionnaires	363	98.3
Unreturned questionnaires	7	1.7
Total	370	100.0

Table 4.1 shows that out of the three-hundred and seventy (370) copies of questionnaire distributed to respondents, 363 were fully completed and returned, yielding a usable response rate of 98.3%. This rate is deemed satisfactory for the study, as it exceeds the 70% threshold.

4.3 Respondents' Demographic Information

Table 4.2: Respondents' Demographic Information (N=363)

Variables	Frequency	Percentage (%)
Gender:		
Male	181	49.9
Female	182	50.1
Total	363	100
Age:		
14-19 years	21	5.8
20-24 years	233	64.2
25-29 years	84	23.1
30-34 years	18	5.0
35 years and above	7	1.9
Total	363	100.0
Polytechnic:		
Kwara State Polytechnic, Ilorin	234	66.9
Lens Polytechnic, Offa	51	14.0
Federal Polytechnic, Offa	69	19.0
Total	363	100.0
Level:		
ND I	184	50.7
ND II	35	9.6
HND I	57	15.7
HND II	87	24.0
Total	363	100.0
Marital Status:		
Single	340	93.7
Married	23	6.3
Total	363	100

Table 4.2 shows that most of the respondents were female (50.1%). Furthermore, the table shows that more than half of the respondents were within the age range of 20-24 years (64.2%), indicating that the majority of the respondents were within this age range. Additionally, the table shows that most of the respondents were from Kwara State Polytechnic, Ilorin (234 respondents, 66.9%), indicating that the majority of the respondents were from Kwara State Polytechnic, Ilorin. The table also shows that 181 (50.7%) respondents were in ND I, 35 (9.6%) respondents were in ND II, 57 (15.7%) respondents were in HND I, and 87 (24.0%) were in HND II, indicating that the majority of the respondents were in ND I. Table 4.1 exemplifies that 340 (93.7%) of the respondents were single, while 23 (6.3%) were married, indicating that the majority of the respondents were single.

4.4 Presentation of Results on the Research Questions

RQ1: What are the channels used for awareness of OPAC among students of polytechnic libraries in Kwara State, Nigeria?

Table 4.3: The channels used for awareness of OPAC among students of polytechnic libraries (N=363)

Options	Very High	High	Moderate	Low	Mean ($\bar{x}$)	SD
Library training	152(41.9%)	201(55.4%)	3(0.8%)	7(1.9%)	3.37	0.61
User education	138(38.0%)	215(59.2%)	10(2.8%)	0(0%)	3.35	0.53
Library week	94(25.9%)	237(65.3%)	25(6.9%)	7(1.9%)	3.15	0.62
Hand bills	81(22.3%)	198(54.5%)	84(23.1%)	0(0%)	2.99	0.67
Newsletters	99(27.3%)	221(60.9%)	43(11.8%)	0(0%)	3.15	0.61
Mailing list	115(31.7%)	186(51.2%)	62(17.1%)	0(0%)	3.15	0.68
Posters and banners	119(32.8%)	183(50.4%)	58(16.0%)	3(0.8%)	3.15	0.71
Billboards	107(29.5%)	228(62.8%)	24(6.6%)	4(1.1%)	3.21	0.60
Social media	150(41.3%)	206(56.7%)	4(1.1%)	3(0.8%)	3.39	0.55

Weighted Mean=3.21

Table 4.3 shows that the majority of respondents noted that the channel for promoting level of awareness of OPAC among users in the libraries include library training ($\bar{x}$ =3.37), user education ($\bar{x}$ =3.35), library week ($\bar{x}$ =3.15), newsletters ($\bar{x}$ =3.15), mailing lists ($\bar{x}$ =3.15), posters and banners ($\bar{x}$ =3.15), billboards ($\bar{x}$ =3.21), and social media ($\bar{x}$ =3.39). These strategies were often used for promoting awareness of OPAC among respondents' libraries. The table also illustrates that the majority of respondents agreed that social media (356 respondents, 98.0%) is the most widely used strategy for promoting awareness of OPAC, while handbills (279 respondents, 76.8%) had the least agreement among respondents as awareness of OPAC. The findings of the study showed that the level of awareness of OPAC by respondents is high.

RQ2: What are the tools used for accessing OPAC by students of polytechnic libraries in Kwara State, Nigeria?

Table 4.4: The tools used for accessing OPAC by users of polytechnic libraries (N=363)

Options	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean($\bar{x}$)	SD
Computers	178(49.0%)	182(50.1%)	3(0.8%)	0(0%)	3.48	0.52
Laptops	165(45.5%)	192(52.9%)	6(1.7%)	0(0%)	3.44	0.53
Websites	134(36.9%)	212(58.4%)	14(3.9%)	3(0.8%)	3.31	0.59
Personal phones	196(54.0%)	146(40.2%)	21(5.8%)	0(0%)	3.48	0.61
Tablets	155(42.7%)	183(50.4%)	25(6.9%)	0(0%)	3.36	0.61
Phablets	98(27.0%)	180(49.6%)	75(20.7%)	10(2.8%)	3.01	0.77
Palmtops	108(29.8%)	165(45.5%)	84(23.1%)	6(1.7%)	3.03	0.77
Weighted Mean=3.30						

Table 4.4 shows that most respondents agreed that the tools for accessing OPAC by users of the libraries are computers ($\bar{x}$ =3.48), laptops ($\bar{x}$ =3.44), websites ($\bar{x}$ =3.31), personal phones ($\bar{x}$ =3.48), and tablets ($\bar{x}$ =3.36). The table also shows that the majority of respondents agreed that computers

(360 respondents, 99.1%) are the most widely used tool for accessing OPAC, while phablets (273 respondents, 75.3%) had the least agreement among respondents as a tool for accessing OPAC. The findings of the study showed that

RQ3: What are the challenges encountered when using OPAC by students of polytechnic libraries in Kwara State, Nigeria?

Table 4.5: The challenges encountered when using OPAC by students of polytechnic libraries (N=363)

Options	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean ($\bar{x}$)	SD
Lack of information searching skills.	97(26.7%)	198(54.5%)	62(17.1%)	6(1.7%)	3.06	0.71
Poor awareness of OPAC.	117(32.2%)	175(48.2%)	71(19.6%)	0(0%)	3.13	0.71
Erratic power supply.	114(31.4%)	186(51.2%)	56(15.4%)	7(1.9%)	3.12	0.73
Network failure.	130(35.8%)	186(51.2%)	37(10.2%)	10(2.8%)	3.20	0.73
Inadequacy of computer terminals.	148(40.8%)	177(48.8%)	27(7.4%)	11(3.0%)	3.27	0.73
Non-user friendly.	91(25.1%)	200(55.1%)	51(14.0%)	21(5.8%)	2.99	0.79
Apprehension to access OPAC through computers or phones.	108(29.8%)	205(56.5%)	47(12.9%)	3(0.8%)	3.15	0.66
Lack of users' education.	97(26.7%)	177(48.8%)	82(22.6%)	7(1.9%)	3.00	0.76
Lack of instruction in the use of software package.	109(30.0%)	143(39.4%)	97(26.7%)	14(3.9%)	2.96	0.85
Inadequate training on how to use OPAC.	110(30.3%)	196(54.0%)	50(13.8%)	7(1.9%)	3.13	0.71
Lack of funds to support OPAC-related projects.	110(30.3%)	189(52.1%)	47(12.9%)	17(4.7%)	3.08	0.78
Inadequate library space.	105(28.9%)	170(46.8%)	70(19.3%)	18(5.0%)	3.00	0.83
Weighted Mean = 3.09						

Table 4.5 illustrates that the majority of the respondents agreed that challenges encountered by users of polytechnic libraries when using OPAC include poor awareness of OPAC ($\bar{x}$ =3.13), erratic power supply ($\bar{x}$ =3.12), network failure ($\bar{x}$ =3.20), inadequacy of computer terminals ($\bar{x}$ =3.27), apprehension to access OPAC through computers or phones ($\bar{x}$ =3.15), inadequate training on how to use OPAC ($\bar{x}$ =3.13), and lack of funds to support OPAC-related projects ($\bar{x}$ =3.08).

4.5 Discussion of Findings

The findings of the study revealed that the channels for promoting the level of awareness of OPAC among users in the polytechnic libraries include social media, library training, user education, billboards, posters, and banners. In contrast, the least effective strategy for promoting awareness of OPAC among users is handbills. This aligns with previous finding by Gohain and Saikia (2013) who reveals that the majority of respondents were not aware of the library catalogue and its use. The design and implementation of user education programmes such as library orientation, bibliographic instruction and information literacy to enlighten users about the existence of OPAC and other electronic information resources and services in the library is suggested in the study. The current findings support previous study by Hudson (2018) who viewed social media as a collection of online communication channels dedicated to community-based input, interaction, content-sharing and collaboration. Social media is another vital channel libraries are harnessing to promote the awareness among their users. The findings are also in line the findings of Nahotko (2020) who suggested teaching of use of library as a general course in the institution as a strategy for promoting the awareness of OPAC among the students in tertiary institutions.

Furthermore, the findings of the study revealed that the tools for accessing OPAC by users in the selected polytechnic libraries include computers, personal phones, laptops, tablets, and websites. In contrast, the least s tools for accessing OPAC by users are phablets. This result aligns with the findings of (Isa & Jumba, 2021; Monyela, 2019) who stressed that libraries deployed OPAC aid access to their information resources, its platform must be simple, easy to interact with and navigated for the users. This makes it possible for users to access OPAC through their personal phones, computers, laptops, tablets, phablets, palmtops and others, while Ikenwe and Udem (2022) stated that website can be accessed with the aid of Internet, Uniform Resource Locators (URLs) or intranet. The World Wide Web is used for various activities like web searching, finding resources, and e-mailing.

Lastly, the study found that the majority of respondents identified several challenges encountered by students of polytechnic libraries when using OPAC in the selected polytechnic libraries. These include inadequacy of computer terminals, network failure, apprehension to access OPAC through computers or phones, inadequate training on how to use OPAC, poor awareness of OPAC, and erratic power supply. This result agrees with the findings of previous studies that factors inhibiting the use of library OPAC include inadequate computer terminals, network failure, erratic power supply, and poor awareness of OPAC (Asubiojo & Fabunmi, 2013). Additional factors such as lack of personnel with ICT skills, inadequate training, lack of funds, and poor OPAC awareness creation also contribute to these issues (Ogbole & Atinmo, 2017). Emiri (2019) further highlighted that OPAC is underutilized due to lack of knowledge, confusing interfaces, insufficient output, lack of assistance from library staff, slow speed, and inadequate computer systems.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides an overview of the key findings in summary and discussions in line with the objectives of the study. Covered in this chapter are also conclusion and recommendations. Lastly, the chapter provides possible areas for further studies that were outside the scope of this study.

5.2 Summary

This study examined the awareness and accessibility as determinants of utilization of OPAC by students in polytechnic libraries in Kwara State. The major findings of the study, based on the study's research questions, are presented as follows:

- i. The most adopted channels for promoting the level of awareness of OPAC among users include social media, library training and user education, billboards, posters, and banners.
- ii. The study showed that in the selected libraries, the main tools for accessing OPAC by users are computers, personal phones, laptops, tablets, and websites.
- iii. The study showed that major challenges encountered by users of polytechnic libraries when using OPAC include the inadequacy of computer terminals, network failure, apprehension to access OPAC through computers or phones, inadequate training on how to use OPAC, poor awareness of OPAC, and erratic power supply.

5.3 Conclusion

Based on the findings of this study, the following conclusions were drawn about the strategies for promoting awareness, accessibility, and utilization of OPAC by students in polytechnic libraries in Kwara State, Nigeria. The study has yielded valuable insights into the channels used, tools, access points, influence, and challenges associated with OPAC usage. Social media emerged as the most effective channel for promoting OPAC level of awareness among students, closely followed by traditional methods such as library training and user education. This highlights the importance of a multifaceted approach to increasing OPAC visibility and adoption. The study concluded that computers and personal phones were identified as the primary tools used by students to interact with OPAC systems, reflecting the increasing integration of technology in academic environments.

The study also revealed that students primarily utilized OPAC to access a wide range of materials, including reference materials, open educational resources, special collections, and research databases, underscoring the system's importance in supporting diverse academic needs. These findings highlight the complex interplay of technological, educational, and infrastructural factors that influence the effectiveness of OPAC implementation. Addressing these constraints will be crucial for polytechnic libraries to maximize the benefits of their OPAC systems and improve student access to information resources.

5.4 Recommendations

The following recommendations are made based on the findings of the study:

- i. Level of awareness of OPAC: Given the effectiveness of social media in promoting OPAC awareness, libraries should develop a comprehensive social media channel to regularly showcase OPAC features, benefits, and updates across various platforms popular among students.
- ii. Tools for accessing OPAC: As computers and personal phones are the primary tools for accessing OPAC, libraries should ensure their OPAC systems are optimized for both desktop and mobile interfaces, providing a seamless user experience across devices.
- iii. Challenges encountered when using OPAC: To address the identified constraints, libraries should invest in improving their technological infrastructure, including increasing the number of computer terminals, enhancing network reliability, and providing more comprehensive training programs on OPAC usage to boost user confidence and competence.

5.5 Contribution of the Study to Knowledge

This study has no doubt contributed to the body of existing knowledge in a number of ways:

- i. The study provides valuable understandings into the most effective channels for promoting OPAC level of awareness among polytechnic students in Kwara State, Nigeria. By identifying social media, library training, and user education as the top strategies, it contributes to a better understanding of how to effectively reach and engage students in the digital age.

- ii. The research sheds light on the tools most commonly used by polytechnic students to access OPAC systems, highlighting the prevalence of computers and personal phones. This knowledge can inform library resource allocation and system design decisions to better accommodate user preferences and behaviors.
- iii. By identifying specific challenges encountered by users (such as inadequate computer terminals, network failures, and insufficient training), the study contributes to a more comprehensive understanding of the challenges facing OPAC implementation in polytechnic libraries. This knowledge is crucial for developing targeted solutions to improve OPAC accessibility and usability.

5.6 Suggestion for Future Research

Based on the findings and scope of the current study, here are three suggestions for future research:

- i. Future research could expand on this study by comparing OPAC usage patterns and challenges across different types of higher education institutions in Nigeria, such as universities, colleges of education, and polytechnics. This comparative analysis could provide insights into how institutional context affects OPAC implementation and utilization, potentially leading to more tailored strategies for different educational settings.
- ii. A long-term study could be conducted to assess the effectiveness of various OPAC training programs over time. This research could track changes in student OPAC usage patterns, search skills, and overall library resource utilization before and after implementing comprehensive training initiatives. Such a study would provide valuable data on the long-term benefits of user education and help refine training approaches.

- iii. Future research could explore the potential of integrating emerging technologies such as artificial intelligence, machine learning, or virtual reality with OPAC systems. This study could examine how these technologies might enhance OPAC functionality, improve user experience, and address some of the current challenges identified in this study. It could also assess student receptiveness to these technological advancements in library systems.

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APPENDIX

QUESTIONNAIRE ON:

AWARENESS AND ACCESSIBILITY AS DETERMINANTS OF OPAC UTILIZATION AMONGST STUDENTS OF POLYTECHNIC LIBRARIES IN KWARA STATE, NIGERIA

Dear respondent,

I am a student in the Department of Library and Information Science, Institute of Information and Communication Technology, Kwara State Polytechnic, Ilorin. I am currently undertaking research project titled: “perception and utilization of indigenous books on research productivity among Library and Information Science (LIS) lecturers in Kwara State”. I therefore, request you to kindly provide your opinions to the questions as contained in the attached questionnaire. Information provided in this questionnaire will be held confidential and used for research purpose only.

Your quick response will be highly appreciated.

Thanks for your anticipated cooperation.

MUIDEEN, Aliyat Folashade
Researcher

SECTION A: Demographic Characteristics of Respondents

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

Gender: Male (); Female ()

Age Range: 14 – 19 years (); 20 – 24 years (); 25 – 29 years (); 30 – 34 years ();
35 years and above ()

Polytechnic: Kwara State Polytechnic, Ilorin (); Federal Polytechnic, Offa (); Lens
Polytechnic, Offa ()

Level: ND I () ND II () HND I () HND II ()

Marital Status: Single (); Married ()

SECTION B: What are the channels used for awareness of OPAC among students of polytechnic libraries in Kwara State, Nigeria?

Options	Very High	High	Moderate	Low
Library training				
User education				
Library week				
Hand bills				
Newsletters				
Mailing list				
Posters and banners				
Billboards				
Social media				

SECTION C: What are the tools used for accessing OPAC by students of polytechnic libraries in Kwara State, Nigeria?

Options	Strongly Agree	Agree	Disagree	Strongly Disagree
Computers				
Laptops				
Websites				
Personal phones				
Tablets				
Phablets				
Palmtops				

SECTION D: What are the challenges encountered when using OPAC by students of polytechnic libraries in Kwara State, Nigeria?

Options	Strongly Agree	Agree	Disagree	Strongly Disagree
Lack of information searching skills.				
Poor awareness of OPAC.				
Erratic power supply.				
Network failure.				
Inadequacy of computer terminals.				
Non-user friendly.				
Apprehension to access OPAC through computers or phones.				
Lack of users' education.				
Lack of instruction in the use of software package.				
Inadequate training on how to use OPAC.				
Lack of funds to support OPAC-related projects.				
Inadequate library space.				