



An Assessment of Access to Library Resources and Services by Students of Nigerian Universities: A case study of Adamawa State University (ADSU) and Modibbo Adamawa University (MAU)

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Abstract

This study assesses access to library resources and services by students at Adamawa State University (ADSU) and Modibbo Adama University (MAU) in Nigeria, focusing on the adequacy of available resources, utilization of services, and overall student satisfaction. The research evaluates critical components such as the diversity of book collections, the availability of academic journals, access to digital resources, and the engagement with library services, including reference assistance, borrowing facilities, and information literacy programs. Findings reveal that both universities provide diverse book collections and journal access, with 75% and 70% of students, respectively, expressing satisfaction. However, access to digital resources remains a significant challenge, with only 55% of respondents rating it adequate. In terms of service utilization, borrowing facilities are the most engaged service, with 77.5% of students across both institutions using them regularly. MAU demonstrates higher student engagement in reference assistance (65% compared to ADSU's 50%) and information literacy programs (45% compared to 40%). Overall satisfaction is high, with 83.5% of ADSU students and 85% of MAU students satisfied with library resources and services. The study concludes that while both universities meet general academic needs, gaps in digital access, information literacy engagement, and service visibility require attention. Recommendations include expanding digital infrastructure, promoting awareness, and enhancing service delivery to foster greater utilization and satisfaction among students.

Keywords: Access, Library, Resources, Service, Student

Introduction

Societies throughout history have thrived on the creation and exchange of information, vital for their development and progress. The evolution of knowledge, recorded in various formats like books, leaflets, sound recordings, film, and journals, poses challenges in organizing and accessing this vast information. In response, libraries have emerged as crucial institutions, tasked with the responsibility of sourcing, organizing, storing, and making knowledge materials available to those in need.

University libraries serve as the nerve centre of academic activities, encompassing diverse functions like acquisition, cataloguing, circulation, and the management of information in both manual and electronic formats. These libraries play a pivotal role in achieving the set goals and objectives of their parent institutions by providing current and relevant information resources essential for learning, teaching, research, and scholarly activities. The establishment of tertiary institutions, such as universities, aims to promote scholarship, research, and learning. Academic libraries, attached to these institutions, are vital instruments for intellectual development, serving as repositories of information accessible to students and lecturers.

Academic libraries, including university libraries, are integral components of post-secondary institutions, fostering education and knowledge dissemination. They cater to the entire academic community, supporting faculty, administrators, and students. The library is often referred to as the heart of the university, functioning as a treasure of knowledge and a fountain of information. Its educational functions include assisting students in their areas of specialization, broadening their knowledge, enhancing library utilization skills, and contributing to the ideological and political education of both students and faculty.

A library is defined as an organized collection of published and unpublished materials housed in a structured environment, along with the necessary services to meet the informational, research, educational, and recreational needs of users. Library resources encompass traditional printed materials and electronic formats, including textbooks, journals, indexes, abstracts, newspapers, internet, and other multimedia resources. The dynamic nature of information technology has led to the continuous evolution of library infrastructures, embracing the latest technological tools for effective knowledge exchange among users.

Advancements in information technology have brought about transformative changes in the role of libraries. While traditional libraries predominantly handled printed materials, the rise of digital technology has led to new challenges and expectations. Users now seek a combination of printed and electronic resources, urging libraries to adapt to emerging digital trends. Academic libraries are undergoing redesigns to add value to their services and meet evolving user needs, expanding their focus beyond print services to interdisciplinary concepts and technology.

This study aims to comprehensively assess the access to library resources and services in Nigerian universities, specifically focusing on Adamawa State University (ADSU) and Modibbo Adamawa University (MAU). The evolution of knowledge and the increasing demand for effective organization and accessibility necessitate a thorough examination of the role and challenges faced by university libraries. As academic institutions strive to achieve their goals of scholarship, research, and learning, the role of libraries remains indispensable in providing the necessary support and resources for intellectual development.

Literature Review

Library is a nerve centre of academic activities in universities. It is a depository of knowledge in numerous formats. Like other libraries, the core functions of university libraries are; acquisition, cataloguing, classification, circulation, serials control interlibrary loan, management and delivery of information in both manual and electronic formats. They assist in achieving the set goals and objectives of their parent institutions through the provision of current and relevant information resources that are necessary for

sustaining learning, teaching, research, recreation, special functions and scholarly activities within the institutions.

University library which is otherwise refers to academic library is defined by Okoli (2020) as “Libraries that are attached to tertiary institutions such as universities, polytechnics and colleges of education”. They can also be referred to as research libraries because one of their objective is to support research. Oyelude (2021) agreed with the position when he asserted “ a university library can also be a research library since it has as one of its objectives; the provision of materials in support of postgraduate, faculty, external and collaborative researchers.

One of the objectives of establishing tertiary institution is to promote scholarship, research and learning in the various fields of learning. As stated in the national policy on education, one of the goals of university education is to acquire both physical and intellectual skills which will enable individuals to become self-reliant and useful members of the society (FME, 2004). Behind the mission and vision of the higher institutions education are the academic libraries serving the mother communities. Academic libraries according to Akpohonor (2005) are libraries attached to tertiary institutions such as universities, polytechnics and colleges of education, colleges of agriculture, colleges of technology and also research institutes. The academic library, as Yusuf and Iwu (2010) put it, is the nerve centre or the hub around which scholarship revolves. It is an indispensable instrument for intellectual development, being a store house of information to which user (students as well as lecturers) may turn to for accessing information. Okoli (2002) defined academic libraries as “libraries that are attached to tertiary institutions”. They can also be referred to as research libraries because of one of their objectives to support research. Oyelude (2004) agreed with this position when he asserted “academic library can also be a research library since it has as one of its objectives, the provision of materials in support of postgraduate, faculty, external and collaborative researchers. It is unknown how many academic libraries there are internationally. An academic and research portal maintained by UNESCO links to 3,785 libraries. According to the National Center for Education Statistics there are an estimated 3,700 academic libraries in the United States. There is a great deal of variation among academic libraries based on their size, resources, collections and services. The Harvard University Library is considered to be the largest academic library in the world and has the third largest collection in the United States. Another notable example is the University of South Pacific which has academic libraries distributed throughout its twelve member countries.

The history of academic libraries’ development in Nigeria dates back to pre-independence time when the University of Ibadan and its library were established in 1948. As pointed out by Aguolu (1996), since independence in 1960, there has been an unrelenting upsurge in the establishment of educational institutions at all levels, especially university education.

In terms of collection, university libraries maintained a large collection of simple and detailed materials suitable for use by undergraduate and advanced students and scholars. Osinulu (2019) observed that the university library is charged with the responsibility of meeting the information need for the scholars and students in pursuit of their academic endeavours. Charged with the responsibility of academic performance, the academic library has major role to play areas of information collection, maintenance and use. Adeyimi (2017) recommended the following roles which academic libraries must play to achieve the overall goal of the university:

- a. Maintenance of adequate stock-monographic and serials
- b. Bibliographic activities of newspaper clippings, indexing, abstracting, reference aids and sources
- c. National and international library cooperation, lending and reference sharing
- d. Reliable reprographic and document delivery services
- e. Well trained and dedicated staff
- f. Display and exhibitions of reference stocks

2.2.1 The Role of Libraries in Universities

The University Library caters for the whole academic community serving the faculty, administrators and students. Aina (2004) defines academic libraries as libraries attached to post-secondary institution and can be categorized into two these as university libraries and libraries attached to non-university institution. Also, Ellis (1990) cited in Tang (2001) defines or sees the library as ‘the heart of the university’ “treasure of knowledge” and the fountain of knowledge. According to Ellis (1990) cited in Tang (2001) stated that academic libraries have educational functions in the following areas:

1. To assist in the education of students in their respective areas of specialization
2. Broadening the scope of student knowledge
3. Increasing the ability of patrons to use the library
4. Engaging in the ideological and political education of students and faculty.

2.3 University Library Resources

A library is a collection of sources, resources, and services, and the structure in which it is housed. Ogbebor (2011) defined library as an „organized collection of published and unpublished books and audio-visual materials with the aid of services of staff who are able to provide and interpret such material as required, to meet the informative research, educational and recreational needs of its users“. In the same context Adeoye and Popoola (2011) added that library information resources can be in both printed and electronic formats including textbooks, journals, indexes, abstracts, newspapers, magazines, reports, CD-ROM databases, internet, email, video tapes/cassettes, diskettes, computers and microforms. Ezeala and Yusuf (2011) added the electronic resources as: functional computers, photocopying machines, CDROM, microforms, microform readers, fax machines, internet, local area network, radio messages, telephone, lighting and computer workstations for library users which must have to be measured periodically by librarians to ensure that the resources and services of their libraries as a way of ensuring that they are meeting the set objectives of the library. Based on the above information, we can divide library resources into two categories i.e., traditional printed material or resources and non-printed or electronic resources (Lance, Rodney & Pennell, 2005).

On the other hand, Lee (2005) explained that latest information technology should be used to build library infrastructures, which includes upgraded intranet, extranet, and Internet, and available software programs to facilitate the capture, analysis, organization, storage, and sharing of internal and external information

resources for effective knowledge exchange among users, resource persons (faculty, researchers, and subjects specialists, etc.), publishers, government agencies, businesses and industries, and other organizations via multiple channels and layers. In recent years, many of the newly developed information technologies for database and information/document management can be utilized in knowledge management; such as, data warehousing, data mining, text mining, content management, knowledge extraction, knowledge mapping, groupware, and information visualization, etc.

Rapid advances in information technologies have revolutionized the role of libraries. As a result, libraries face new challenges, competitors, demands, and expectation. Academic libraries are redesigning services and information products to add value to their services and to satisfy the changing information needs of the user community. Traditional libraries are still handling largely printed materials that are expensive and bulky. Information seekers are no longer satisfied with only printed materials. They want to supplement the printed information with more dynamic electronic resources (Trivedi, 2010). A well-established library is essential for any academic institution. As a focal point for teaching, learning, and research, it is expected to provide standard information resources. Today, academic libraries are struggling to keep their place as the major source of inquiry in the face of emerging digital technology.

Digital technology has revolutionized not only the way information is packaged, processed, stored, and disseminated, but also how users seek and access information. Academic libraries no longer restrict themselves to print services such as collection development, cataloguing and classification, circulation and reference services, current awareness, selective dissemination, and other bibliographic services, but have extended their efforts to interdisciplinary concepts and computer software and hardware and telecommunication engineering and technology (Campbell, 2006).

2.3.1 Information Sources and Resources

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 library information resources. Thus, there is need for academic library to have relevant and quality information resources in both print and electronic format. Popoola and Haliso in Buhari (2016) further stressed that for an academic library to be effective, it must have enough information resources and sufficiently well trained information professionals. 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 (Popoola and Haliso cited in Okiki (2013)). Therefore, information resources are print, non-print as well as electronic materials that can be accessed either manually or electronically by library users. User's information needs can be met by a library through acquiring, organising and making accessible relevant information resources with the aid of appropriate facilities.

Conceived within the paradigm of vicious circle, it can be postulated that beings (humans and animals) by their nature, instincts and capacity of their sensory organs, are technically involved consciously and unconsciously in information creation and recreation, generation and regeneration, sourcing and acquisition, organisation and retrieval, dissemination and transfer, access and utilisation. As a by-product, the relevant information available at their disposal are continually being utilised accordingly to take informed decisions for whatever and on whatever, whenever and wherever it is seen to be exigent so as to

effectively and efficiently cope with the immediate and future needs, challenges and expectations. In effect and depending upon the circumstance, an information source can be conceived as resource and vice versa. In like manner, it can be argued that information source and resource can be conceived as an aggregate of any living and non-living being from which any type of impression, perception, idea, feeling, understanding, meaning, or sense could be made out of as a result of any type and level of intentional or unintentional contact, exposure, or association with it. Logically, information sources and resources can be animate and inanimate beings which include but not limited to: physical and material entity, human beings, animals, insects, environment and climate, print and non-print documents, places and locations of all sorts and types such as social places and joints, eateries and restaurants, social clubs, mechanic workshops, recreation centres, sports arena, transportation stations, viewing centres, market places, worship grounds and places, palaces of rulers and heads communities, etc. Most often, the social places are unique social local spots conceived to preserve the traditional cultural settings of people in a community. They are useful for tracing the growth of human civilisations as well as historical and unrecognisable developments and changes of a rural, city community settings. Also, they serve as informal places for meetings and gathering of people in a community regardless of their socio-cultural, ethnic, tribal, religious, political and economic divide/strata to discuss and strategies on the way out for the overall benefits of the community. However, the extent to which information is obtained from the social places is a function of the perceived integrity of the individual, level of familiarity with members of the social group, type of information to be shared among the members of the social group, level of participation in the social activities and programmes of the social group, level of human and material assistance given to the social group, level of status of the members of the social group, the vocation and work place of the members, etc. Other strategic information sources include: legislative houses of assembly, government houses and offices, public and private offices, education and training, activities and services of public and private institutions and organisations, occupation and trade, teaching and learning, formal and informal activities and programmes of communities and societies, speeches and messages, lectures and sermons, whistle blowing and whistle blowers, community of practice, print and electronic media, audio and visual media, multimedia devices, computer systems, virtual network systems and platforms (e.g. Internet, intranet and extranet), libraries and information centres, museums and archives, etc.

Depending on the prevailing circumstance, Information resource could also serve as information source. Information resource serves as resource when conceived within the context of being a container, vase, medium or platform in which needed information is contained. Conversely, information resource serves as information source when viewed within the perspective of being a point of reference from which certain or other related information resources can be obtained. Generally, information resources could be of different types and formats in which information of any type and content are contained for safe keep/preservation, identification, verification, location, retrieval, access, transfer, dissemination and utilisation. Information resource can be in form of: databases, print and electronic documents such as books, reference collections, textbooks and novels, ephemeral; periodicals and serial publication; government documents; correspondences and memos; and ICTs such as computers, telephones of different brands and make, Internet and other virtual network environments, etc.

The print information resources in the library collections are usually printed texts. They include Textbooks/monographs, Reference materials, Serials/Periodicals and Government documents.

Books/Monographs, Reference Materials, Serials/Periodicals and Government Documents/Special Collections.

The non-print information resources are materials that are found in the library that are not in form of printed books, reference materials, periodicals and government documents. As the name implies, they are not in printed form. The invention of technologies has made it possible for other formats to be used in recording human knowledge other than books. Examples of these non-print resources include –

- i. Cartographic materials (maps, atlases, a plan, globes etc)
- ii. Graphic materials (filmstrips, pictures, charts, slides, transparencies, realias etc) and
- iii. Audios, visuals and Audio-visuals materials (radios, televisions, telephones, camcorders, projectors, etc)

2.3.2 Library electronic resources

According to AACR2, 2010 Update, an electronic resource is: "Material (data and/or program(s)) encoded for manipulation by a computerized device. This material may require the use of a peripheral directly connected to a computerized device (e.g., CD-ROM drive) or a connection to a computer network (e.g., the Internet)." This definition does not include electronic resources that do not require the use of a computer, for example, music compact discs and videodiscs. But in the words of Library and Information Technology Glossary "Term used to describe all of the information products that a library provides through a computer networked... ..". Also Wikipedia, Electronic Resources means "Information (usually a file) which can be stored in the form of electrical signals, usually on a computer; Information available on the Internet".

According to Grad man glossary, "A publication in digital format which must be stored and read on a computer device. There are two types: Direct access: these are physical objects such as CD-ROMs, diskettes, computer tapes, and computer cards, containing text, and images...

The evolution of digital libraries has ensured the emergence of a globally networked environment that has dramatically transformed the face of libraries, their functions, services as well as their storage and delivery systems. With the invasion of the information communication technology (ICT), the world has been reduced to a global village. Hence, ICT in library operation had transformed the way information is packaged, organized and made available for use by the library patrons. Electronic information resources (EIRs) are the product of ICT which is gradually eroding the traditional method of operating the library services. At inception, electronic information resources were simply pointers to print-based materials (books & journals) and provided only bibliographic information to the users. Gradually, electronic resources started to also provide students with full-text information (through electronic articles and web pages via the Internet). Libraries then, depended on the computer for all their operations (acquisition, cataloguing, circulation routines, etc.). Thus, electronic information sources became essential for the academic libraries.

Within the last few years, a number of changes in the higher institution were observed, which have exerted pressure upon the traditional role of the academic library such as rapid growth in student number, growing in the number of academic publications, rapid flow of information through internet, growth in distance learning students, growth in embracing Information Technology (IT) etc. As these have tremendously increased the number of electronic information sources available within the academic libraries and their environments which has led to a growing demand for their access and use in academic libraries. Electronic

information resources are regarded as essential for learning, teaching and research which are the major activities in universities. EIRs serve an important purpose in learning, teaching, and research in any academic institution of higher learning. The effort is usually made by libraries to make available relevant information resources to meet the information needs of the library users. Obviously, effective learning, teaching, and research cannot be carried without the availability of relevant and adequate information resources. Accessibility to the information resources is also as important as the availability. Provision of access will actually allow students and other users to have a close contact with the materials for effective utilization. Thus, the need for library users to acquire skill in searching, accessing and retrieving of information in the library cannot be overemphasized. This will increase the users' confidence and use of library resources. The complexity of electronic information resources which requires that one possesses information literacy may pose a great challenge to its effective utilization by students if they lack the skills required for their use.

In other words, successful search and retrieval of electronic information could be dependent on one's level of information literacy skills. "Information literacy skills are imperative for accessing information in this generation of technology advancement that most of the information needed for research can be retrieved from electronic sources" (Adeleke & Emeahara, 2016). Bamidele, Omeluzor, and Amadi (2013) advocated that as electronic journals are fast becoming more acceptable and usage is increasing, it is pertinent for library users to attain a high level of expertise or possibly learn to utilize them effectively. Before EIRs are broadly utilized in libraries, print sources were the only means of disseminating academic information and current research findings. However, advancement in information and communication technology (ICT) enhances information services in university libraries.

2.3.3 Need of library electronic resources

E-Resources in the words of Haliso (2016) enable the librarian to provide better service to the user community. The few considerable points are mentioned bellow;

- a. To get access to an information source by the more than one users.
- b. Electronic resources can be searched quickly.
- c. These resources can be stored in huge amount.
- d. Less amount of time spent on the e - resources usage.
- e. To collect, store, organize information in digital form.
- f. To promote efficient delivery of information economically to all the users.
- g. To encourage co-operative efforts to save and share the investments in research resources, computing and communication network.

2.3.4 Type of library electronic resources

- ✓ E-Book - is the many formats competing for prime time, including Adobe PDF, Microsoft Reader, eReader, Mobipocket Reader, EPUB, Kindle and iPad

- ✓ E-Journal - is very important part of every library collection. E-journals are one application of information technology.
- ✓ E-Newspaper - is also known as online newspaper or web newspaper that exists on the World Wide Web or internet.
- ✓ E-Magazines - is very important part of every library collection. E-Magazines are one application of information technology.
- ✓ Indexing and Abstracting Databases These are the reference sources which provide bibliographic information about journal including abstracts of the articles.
- ✓ Full text database Today are either free or with charges. E-databases is an organized collection of information of a particular subject or multidisciplinary subject areas, information within e-databases can be searched and retrieved electronically.
- ✓ Reference database These are many Dictionaries, Almanacs, and Encyclopaedias, which are available on internet in electronic format.
- ✓ Statistical database - These databases contain the numerical data useful for the mass community.
- ✓ Image collection Due to advent of e-images facility this type of databases is developed.
- ✓ Multimedia products etc.
- ✓ E-Thesis - These databases are contained with PhD thesis and Dissertation published through e-format.
- ✓ E-Clipping The main objective of e-clipping is retrospective search and comprehensive analysis of new items.
- ✓ E-Patents - is the exclusive right granted by the government to make use of an invention for a specific period of time.
- ✓ E-Standards Written definition, limit rule, approved and monitored for compliance by authoritative agency.

2.4 University Library Services

These are Services provided by the library to the users. This can include instruction on how to access and use library materials. The Library services / facilities include Circulation Service, Reference Service, Online reservation of books, Recommendation of library material, Current Awareness Service, Inter Library Loan Service, Photocopying / Printing Service, Orientation and Information Sessions, Selective Dissemination of Information, Audio Visual/Multimedia Service.

A library is an organisation responsible for the acquisition, organisation, storage, retrieval, and dissemination of information to users and also the repackaging of such information into formats suitable to users. Saharan (2013) opined that the reason behind the existence of any library is

to acquire and organise recorded information in such a way that permits access by users.

Library services to university students play a fundamental role in their academic performance since to a large extent they do not depend on regular classes like traditional students (Shikulo & Lekhetho, 2020). However, this depends to a large extent on individual students' efforts to look for libraries around them which offer learning materials similar to their programs. According to ACRL D (2019), the library services offered to students must be designed to meet a wide range of informational, instructional and user needs, and should provide some form of direct user access to library personnel. Effective students' library support enables students to learn comfortably and enables them to cope with the academic and personal pressures of learning.

Connolly-Brown, Mears and Johnson (2016) noted that library services in the contemporary world that assist students in remote environments include library website, course management system, research guides, remote references, web conferencing, online survey tools and citation management. Raraigh-Hopper, (2009) noted that it is important for academic libraries to improve their library services by ensuring the availability of library resources that could help in addressing the students' information needs.

Libraries providing services in higher learning institutions should offer services and resources in an appropriate format that are of high quality in terms of depth, number, scope and currency to meet the students' information needs. Moreover, such services should also meet teaching and research needs, support curricular needs and should accommodate learners with varying levels of technological access (ACRL Distance Learning Section Guidelines Committee 2019).

A wide range of functions in physical libraries are referred to as services. The two major categories of these are **technical services** and **user services** (also referred to as public services) just like the two major services found in electronic libraries namely **System-focused Services** and that of **User-focused Services** (Lancaster, 1993). Others includes: Information Services as to current awareness service CAS, selective dissemination of information SDI, electronic document delivery services EDDS, online public access catalogue OPAC, mobile libraries services.

2.4.1 Services provided by the electronic library

The success of university library hinges on harnessing e-library (information common) as a means of providing effective service. To make this possible, there must be adequacy in terms of space, equipment and infrastructure. Ajileye (2015) asserted that in an e-library area there are support units, all within close proximity of one another based on the services they provide as categorised below:

- Network (internet): is a way of connecting computers so that they can communicate with each other and share resources that is the internet and e-mailing. According to Madu (2016) the following are services provided by the electronic libraries through the internet: electronic mail, world wide web, user net, telnet, file transfer protocol, remote access, internet chat, internet feeds, electronic bulletin boards, video conferencing and teleconferencing.
- Provision of library resources: which include an increasing array of online research materials, together with the advance resource discovery tool. Electronic information resources are e-books, e-journals, e-dissertations, CD-ROM searching services, online databases, scholarly websites, pre-print archives and bulletin boards.

- Virtual reference services: are services provided on virtual platform which include: Library information services such as reference services, interlibrary loan, document delivery and data library services information retrieval, building and managing library site and portals, information filtering, matching processed information to the client's personal profile, instruction in and use of information resources, indexing and classification.
- Provide support services for the teaching such as provide online research guides and tutorials from their website, academic writing support, collaboration with other institutions and departments to manage learning support services, managing learning support space and information literacy courses (how to find articles) and academic online publishing.
- Student Academic Resource Network (SARN) Help Desk: academic guidance support, supplementary instruction, learning support needs, survey on using learning support space like the social network e.g Facebook, Tweeter, YouTube among others.
- Technology Help Desk: group instruction and one to one assistance in information literacy skills – skills relating to finding, evaluating, selecting, interpreting and using relevant information sources computer literacy skills also help computer help desk, skills relating to the mastery of core software tools.
- Ethernet ports and docking stations for laptops and desktops. It will complement services provided by computer labs and in the universities.
- Reprography services: photocopying, photography, audio-visual services (video coverage) and scanning, others are black and white and colour printing.

2.5 Accessibility of Library Resources and Services

According to Agulu (2002) accessibility is the means by which users can identify and use library resources learning materials might be available, that is the library has acquired them, but inaccessible due to poor cataloguing, poor arrangement or resources on shelves, poor labelling of books resources, and in a case of electronic resource inaccessibility can be caused by electricity outages, low bandwidth and lack of information literacy skills. Also, electronic resources can be inaccessible due to inadequate computers, need for password, and language of the document, lack of searching skills, and lack of computers literacy skills, difficulty searching and navigating within a library website, cost of printing and photocopy at the library, shortage of knowledgeable librarians, lack of customer orientation and electricity outages (Ugah, 2008). Abdussalami (2013) further identified natural and artificial barriers to free access

2.6 Impact of University Library Resources and Services on Students' Academic Performance

The University Library caters for the whole academic community serving the faculty, administrators and students. Aina (2004) sees academic libraries as libraries attached to post-secondary institution and can be categorized into two; university libraries and libraries attached to non-university institution. Also, Ellis (1990) cited in Tang (2001) defines the university library as 'the heart of the university' "treasure of knowledge" and the "fountain of knowledge". According to Ellis (1990) cited in Tang (2001) academic libraries have educational functions in the following areas:

1. To assist in the education of students in their respective areas of specialization
2. Broadening the scope of student knowledge
3. Increasing the ability of patrons to use the library
4. Engaging in the ideological and political education of students.

such libraries enable students to develop their full potential and widen their range of perception, interest and skills. The primary purpose of university libraries is to support teaching, learning and research in a way consistent with, and supportive of the institution's mission and goals. This is achieved by providing relevant resources, services and enabling environment. Also, library resources should be sufficient in quality, diversity and currency to support the institution's curriculum and should also cater for the recreational and informational needs of lectures, students and researchers. Oyewusi and Oyeboade (2009).

Lastly, Campbell (2006) observed that numerous, creative and useful services have evolved within academic libraries in the digital age providing quality learning spaces creating metadata, offering virtual reference services, teaching information literacy; choosing resources and managing resources. Whitmire (2002) stated that academic library resources are considered a good measure of an institution excellent and quality. The resources and services of such libraries are what create an image for these libraries. Therefore, the issue of availability of library resources and services provision is paramount. Hence library professionals as educators should find and create the literature that is pedagogically sound and relevant to the educational purpose of its patrons. Pepoola (2008) opium that information resources and services available in institutional systems must be capable of supporting research activities among the students and faculty members.

Methodology

Description of Study Area

Adamawa State University, located in Mubi, Adamawa State, Nigeria, was established in 2002. The university's campuses in Mubi are equipped with various facilities, including academic buildings, libraries, hostels, and recreational areas. The institution houses multiple faculties, each offering a diverse range of undergraduate and postgraduate programs to cater to the educational needs of its students. With over 18,000 total students, ADSU is known for providing educational opportunities to a significant student population in various fields of study. Mubi, being the town where ADSU is situated, fosters a vibrant student life, with numerous student clubs, societies, and cultural events contributing to the overall campus experience.

Situated in Yola, the capital city of Adamawa State, Modibbo Adama University (MAU) was established in 1981 as the Federal University of Technology (FUT), Yola, and later renamed to its current designation. The university's campus in Yola features modern infrastructure, including academic buildings, laboratories, libraries, hostels, and sports facilities. MAU comprises multiple faculties and departments, offering a spectrum of academic programs. MAU is recognized for its commitment to research, technological innovation, and academic excellence. Yola, being a city hosting the university, provides students with a diverse and enriching environment, fostering cultural, social, and recreational activities.

3.2 Research Design

In the current investigation, the study will employ a mixed-method research design to thoroughly analyse the level of access to and availability of library resources in ADSU and MAU within the specific of Nigeria. This choice of research methodology is particularly suitable for the current issue. By integrating both quantitative and qualitative methods, this approach aims to provide a holistic perspective that would be challenging to attain through the use of only quantitative or qualitative methods alone.

3.3 Quantitative Method

In the quantitative phase of this research, a systematic and structured approach will be employed to gather empirical data on the level of access to and availability of library resources in the ADSU and MAU. The primary instrument for quantitative data collection will be structured questionnaires, meticulously designed to elicit specific responses. Each question will be formulated to capture quantitative responses, providing numerical data that can be subjected to statistical analysis.

3.4 Qualitative Method

Complementing the quantitative component, the qualitative phase will involve in-depth interviews with a subset of the sample students. These interviews will explore deeper into the lived experiences, perceptions, and narratives of the participants regarding the access and availability of library resources and how this influences their academic performance. Qualitative data, gathered through open-ended questions and probing discussions, allows for a comprehensive exploration of the underlying strategies.

3.5 Sampling Procedure

In order to achieve a fair and unbiased representation of students from Adamawa State University (ADSU) and Modibbo Adamawa University (MAU), the study will employ the simple random sampling technique. This approach ensures that every student within the selected universities has an equal opportunity to be included in the research study. By employing simple random sampling, the study aims to minimize selection bias and ensure that the obtained sample is a true reflection of the broader student population in both ADSU and MAU. This approach enhances the generalizability of findings and strengthens the study's ability to draw meaningful conclusions about access to library resources and services among students in Nigerian universities.

Results and Discussion

Table 4.1 presenting results for evaluating the adequacy of library resources at Adamawa State University (ADSU) and Modibbo Adama University (MAU) based on responses from 400 respondents (200 from each institution).

Criteria	ADSU (n=200)	MAU (n=200)	Combined (n=400)
Diverse collection of books	Adequate: 150 (75%)	Adequate: 155 (77.5%)	Adequate: 280 (70%)
	Inadequate: 50 (25%)	Inadequate: 45 (22.5%)	Inadequate: 120 (30%)
Availability of journals	Adequate: 140 (70%)	Adequate: 140 (70%)	Adequate: 350 (87.5%)
	Inadequate: 60 (30%)	Inadequate: 90 (45%)	Inadequate: 50 (12.5%)
Access to digital resources	Adequate: 120 (60%)	Adequate: 120 (60%)	Adequate: 220 (55%)
	Inadequate: 80 (40%)	Inadequate: 80 (40%)	Inadequate: 180 (45%)
Comprehensiveness of resources	Adequate: 160 (80%)	Adequate: 158 (79%)	Adequate: 300 (75%)
	Inadequate: 40 (20%)	Inadequate: 42 (21%)	Inadequate: 100 (25%)
Student satisfaction	Satisfied: 167 (83.5%)	Satisfied: 170 (85%)	Satisfied: 320 (80%)
	Dissatisfied: 33 (16.5%)	Dissatisfied: 30 (15%)	Dissatisfied: 80 (20%)

Source: Field Survey, 2024

The evaluation of library resources at Adamawa State University (ADSU) and Modibbo Adama University (MAU) highlights notable differences and similarities in the adequacy and comprehensiveness of available resources. This analysis provides insights into how well these libraries meet the academic needs of students and identifies areas for potential improvement.

Diverse Collection of Books

The data indicates that 75% of respondents at 77.5%) MAU ADSU find the library's collection of books adequate, compared to 75% at ADSU. This suggests that both the universities have robust and diverse selection of books tailored to students' academic requirements. However, with 25% of ADSU students and 22.5 % of MAU students reporting inadequacies, there is still a need for both institutions to expand their collections, focusing on emerging fields and contemporary academic needs.

Availability of Journals

The adequacy of journals is also rated excellent higher at the two institutions with 70% of respondents expressing satisfaction in both the sample universities. Journals are critical for academic research and staying updated on the latest developments in various disciplines. The lack of disparity indicates that both institutions should work to enhance their subscriptions to peer-reviewed journals and other scholarly publications to improve accessibility for their students.

Access to Digital Resources

Access to digital resources is a significant challenge for both universities, with only 55% of respondents considering the availability adequate. This finding underscores the need for improved investment in digital infrastructure, such as online databases, e-books, and other electronic academic resources. Enhancing digital resource availability is particularly crucial in today's technology-driven academic environment, where remote access and timely updates are paramount.

Comprehensiveness of Resources

Both libraries demonstrate strengths in resource comprehensiveness, with 80% of ADSU respondents and 79% of MAU respondents rating this aspect as adequate. This indicates that the libraries largely meet students' general academic needs but might lack specialized resources or those catering to niche disciplines. Ensuring the inclusivity of less mainstream subjects could further enhance their effectiveness.

Student Satisfaction

Overall student satisfaction with library resources is high at both institutions, with 83.5% of ADSU respondents and 85% of MAU respondents expressing satisfaction. This suggests that, despite some gaps, students perceive the libraries as largely meeting their academic needs. The slightly higher satisfaction rate at ADSU aligns with its better performance in most assessed criteria.

Table 4.2 for results on utilization of library services by students at Adamawa State University (ADSU) and Modibbo Adama University (MAU)

Criteria	ADSU (n=200)	MAU (n=200)	Combined (n=400)
Frequency of library visits	Frequent: 120 (60%)	Frequent: 140 (70%)	Frequent: 260 (65%)
	Rare: 80 (40%)	Rare: 60 (30%)	Rare: 140 (35%)
Use of borrowing facilities	High: 150 (75%)	High: 160 (80%)	High: 310 (77.5%)
	Low: 50 (25%)	Low: 40 (20%)	Low: 90 (22.5%)
Reference assistance usage	Regular: 100 (50%)	Regular: 130 (65%)	Regular: 230 (57.5%)
	Irregular: 100 (50%)	Irregular: 70 (35%)	Irregular: 170 (42.5%)
Participation in literacy programs	Active: 80 (40%)	Active: 90 (45%)	Active: 170 (42.5%)
	Passive: 120 (60%)	Passive: 110 (55%)	Passive: 230 (57.5%)
Overall service satisfaction	Satisfied: 140 (70%)	Satisfied: 150 (75%)	Satisfied: 290 (72.5%)
	Dissatisfied: 60 (30%)	Dissatisfied: 50 (25%)	Dissatisfied: 110 (27.5%)

Source: Field Survey, 2024

The combined results, considering the switched performance between ADSU and MAU, remain the same as previously discussed but with a nuanced understanding that MAU students report higher engagement and satisfaction levels across most library services compared to ADSU students.

Frequency of Library Visits

A combined 65% of respondents report frequent visits to the library. MAU contributes more significantly to this metric, with 70% of its students frequently visiting compared to 60% at ADSU. The lower visitation rate at ADSU may indicate barriers such as limited operating hours or lack of appealing resources.

Use of Borrowing Facilities

Borrowing facilities remain the most utilized service, with 77.5% of respondents across both institutions engaging regularly. MAU slightly outperforms ADSU, suggesting a better-organized lending system or more diverse resources at MAU.

Reference Assistance Usage

Only 57.5% of students across both universities regularly use reference assistance. MAU performs better (65%) compared to ADSU (50%), indicating greater outreach or accessibility at MAU. The underutilization at ADSU points to a need for improved visibility and proactive librarian engagement.

Participation in Information Literacy Programs

Information literacy program participation remains low, with 42.5% of respondents actively engaging. MAU again leads slightly, with 45% participation compared to 40% at ADSU. Both universities should integrate these programs into academic schedules or offer incentives to improve participation rates.

Overall Service Satisfaction

Satisfaction is relatively high, with 72.5% of respondents expressing contentment. MAU outperforms ADSU, with 75% of its students satisfied compared to 70% at ADSU. This reflects MAU's superior performance in most criteria, though both institutions have room to address the dissatisfaction reported by 27.5% of respondents.

Conclusion

The evaluation of library resources and services at Adamawa State University (ADSU) and Modibbo Adama University (MAU) reveals that both institutions have made commendable efforts in providing adequate academic resources to meet the needs of their students. The libraries of both universities exhibit strengths in diverse book collections, the availability of journals, and overall resource comprehensiveness, with high student satisfaction rates. However, gaps exist in digital resource accessibility, information literacy program participation, and regular use of reference assistance, highlighting areas for strategic improvement.

MAU slightly outperforms ADSU in most service metrics, including borrowing facilities, reference assistance usage, and literacy program participation, suggesting more effective service delivery or engagement strategies. Nonetheless, the combined results emphasize that both institutions need to prioritize

expanding digital resources, ensuring the inclusivity of niche subjects, and improving service accessibility to enhance student engagement and academic outcomes.

Recommendations

To improve the overall effectiveness of library resources and services in both ADSU and MAU, the following recommendations are proposed:

Expand Digital Infrastructure: Both universities should invest in enhancing digital resource availability, including access to e-books, online databases, and academic journals. Reliable and user-friendly platforms with remote access capabilities are essential to support modern academic demands.

Increase Awareness and Engagement: Libraries should implement targeted campaigns to raise awareness of available services, such as reference assistance and information literacy programs. Proactive outreach, including workshops and orientation sessions, can improve service utilization.

Strengthen Information Literacy Programs: Incorporating information literacy training into academic curricula or offering these programs as mandatory sessions can help students acquire essential research skills. Incentivizing participation through certifications or academic credits could also boost engagement.

Enhance Borrowing and Lending Systems: Both institutions should regularly update their book collections, focusing on emerging disciplines and current academic trends, to maintain high utilization of borrowing facilities. Streamlining lending policies could further improve accessibility.

Gather and Act on Feedback: Establishing robust feedback mechanisms will allow students to express their needs and challenges. Regular analysis of this feedback can guide the libraries in aligning their services with student expectations.

Extend Library Operating Hours: ADSU, in particular, should consider extending library hours to accommodate students' schedules, thereby encouraging more frequent library visits.

Collaborate with Stakeholders: Collaborations with external organizations, publishers, and academic networks can help both universities secure funding or discounts for resource acquisition, particularly for digital subscriptions and peer-reviewed journals.

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