Availability, Awareness and Challenges of Resource Sharing in Academic Libraries in Adamawa State, Nigeria

Abbas Lamido Gora Adamu[1], **Zainab Mohammed Abdullahi[2]**, **Tukur Abba[3]✉** iD, and **Rabiyatu Tukur Bashir[4]**

1. Department of Library and Information Science, Modibbo Adama University, Yola, Nigeria. E-mail: abbasadamu@mau.edu.ng
2. Department of Library and Information Science, Modibbo Adama University, Yola, Nigeria. E-mail: talk2zainabmautech@gmail.com
3. Corresponding author, Department of Library and Information Science, Modibbo Adama University, Yola, Nigeria. E-mail: tukurabba@mau.edu.ng
2. Department of Library and Information Science, Adamawa State Polytechnic, Yola, Nigeria. E-mail: rabiyatbt@gmail.com

Article Info	ABSTRACT
	Objective: The importance of resource sharing in academic libraries cannot be overemphasized. This study determined the level of availability, awareness and challenges of resource sharing in academic libraries in Adamawa State, Nigeria. The study was guided by three objectives, three research questions and one hypothesis. For this purpose, the related literature was reviewed to strengthen the theory of the study. **Methods**: A descriptive survey research design was adopted for the study. The population of the study comprised of all professional and paraprofessional librarians working in federal and state owned institutions in Adamawa State, Nigeria. A self-developed questionnaire was designed. The data generated from the research questions were analyzed using mean and standard deviation, while Analysis of Variance (ANOVA) was used to test the null-hypothesis at 0.05 level of significance. **Results**: The findings of the study revealed that resource sharing is rarely available in Adamawa State University, Mubi and Modibbo Adama University, Yola. The study also found that Librarians were moderately aware of resource sharing in their libraries. The challenges bedeviling the adoption of resource sharing in academic libraries in Adamawa State, Nigeria include: high costs of information resources discourage libraries from participating in resource sharing, inadequate knowledge of benefits of resources sharing, epileptic power supply in the academic libraries and lack of alternative sources, among others. **Conclusion**: The study recommended institutions management support towards the academic libraries to establish cooperation with other local, national and international libraries, collaboration or cooperation with other libraries towards resource sharing, increase funding, provision of alternative power supply, training and retraining of staff as well as provision of ICT infrastructure and connectivity to provide conducive environment for resource sharing to thrive in the libraries.

Disclaimer/Publisher's Note: The statements, opinions and data contained in the article are solely those of the individual author(s) and not of *Informology* and/or the editor(s). *Informology* and/or the editor(s) disclaim responsibility for any injury to persons or property resulting from any ideas, methods, instructions or products referred to in the content.

Introduction

Academic libraries are established with the objectives to support the mission and vision of their parent institutions through the provision of current, quality, reliable and up to date information resources and effective information services to library users such as staff, students and researchers. Library users are increasingly demanding information to satisfy their numerous information needs ranging from research, academic, business and personal development among others. To achieve these objectives, the academic libraries have the core mandates to acquire, process, organize, evaluate and disseminate information resources to the users regardless of distance and time. However, the advent of information explosion, proliferation of information and communication technology, shortage of current information resources coupled with dwindling financial resources have posed numerous challenges to library and information services especially in developing countries. No library, no matter its size or number of staff, can be self-sufficient and be able to adequately meet the varied information needs of its teeming users. To meet the increasing demands for information in the 21st century, academic libraries must as a matter of necessity engage in functional and sustainable resources sharing initiatives with other libraries.

The concept of resource sharing refers to mutual agreement between libraries to share their resources for providing better services to their clients. Such resources may include: document collection, staff members, technical facilities and mechanical support among participating libraries. Orbis Cascade Alliance (2021) defines resource sharing as coming together in the spirit of innovation and combined expertise, seeking efficiency and productivity to strongly promote the success of students, faculty, staff, and researchers by bringing multiple perspectives together to challenge traditional thinking and elevate our ability to deliver outstanding services, programs, and collections by bringing multiple perspectives together to challenge traditional thinking and elevate our ability to deliver outstanding services, programs, and collections. The main purpose for such arrangements is to achieve what the members of a group cannot achieve individually (Bangoni et al., 2018). Resource sharing incorporates all activities that originate from formal or informal commitment among a collective of libraries to share data, collections, infrastructure, and human resources for the benefit of their users and to realize economies of scale (Victor & Chinedu, 2022). Resource sharing activities therefore are very essential to the existence of any library world over, in as much as that library want to meet the endless demand of their patron community for accessing, information, resources and services effectively.

The objectives of information resource sharing could include, but not limited to: promoting inter-library loan/reciprocal borrowing privileges, facilitates co-operative acquisition, enhance centralized processing such as shared cataloguing / cooperative cataloguing, facilitate sharing of bibliographical data, preparation and maintenance of union catalogue and union list of serials,

cooperative reference service, facilitate cooperative processing of library resources, help in capacity building among the staff of the cooperating libraries, facilitate easy document delivery services and facilitate exchange of professional ideas / expertise with other libraries among others. Looney (2020) established that for the library to remain relevant and deliver content which library members find useful; it is vital to adopt good information resources sharing techniques that would at least help to address the information needs of library patrons.

Availability of resource sharing in the context of this study refers to the existence of cooperation between or among libraries to share resources, services and expertise for the overall purpose of meeting the information needs of users. Awareness on the other hand, refers to having knowledge of; consciousness; cognizance or knowingness of something. It is a state or condition of being aware, having knowledge, consciousness or cognizant of something. Therefore, awareness is revealed as the ability to perceive (perception), know (knowledge) or the state of being conscious(consciousness) (Princeton University Wordnet, 2015). It is also concerned about how well informed or having knowledge and understanding of an individual towards something. Studies have shown that resource sharing exists in most libraries in developed countries with few instances in libraries in developing countries like Nigeria. Oghenetega, Bauka and Gogmin (2015) revealed that academic libraries in South-East of Nigeria carry out resource sharing activities like co-operative acquisition; inter-library loan/document delivery; exchange of bibliographic data; cataloguing; sharing of human resources; electronic content licensing and harmonization of ICT application in library management to a low extent. This implies that even in libraries where resource sharing is available, it is carried out at low extent. Ogba and Ikeazota (2021) revealed that law librarians clearly understood resource sharing despite the fact that they do not practice it; more so, they seek for their self-development by visiting other libraries. Eromosele and Ugwulebo (2022) reported that there is a positive, encouraging, willing and reassuring attitude towards Information resource sharing among Librarians in Federal University Libraries in North Central, Nigeria. Onwubiko (2022) revealed that inadequate funding by the government, poor internet connectivity/low bandwidth, absence of IT strategies for the exchange of information, epileptic power, poor maintenance in publish network, non-commitment of the university and inadequate information and communication facilities were major factors militating against networking and resource sharing in federal university libraries in Nigeria. Furthermore, Victor and Chinedu (2022) revealed that the major challenges affecting functional electronic resources sharing in Nigerian university libraries was escalating cost of connectivity and attitude of heads of libraries towards e-resources sharing. These and other numerous studies consulted by the researcher were carried out in other geopolitical zones of Nigeria, none was carried out in North East Nigeria. It is against this thrust that this study was carried out to bridge the gap.

Statement of Problem

Academic libraries are expected to engage in resource sharing activities with other libraries for the purpose of providing effective information resources and efficient information services to their information users that could assist their users in areas of research, academic, business and personal needs. It is believed that no library can be self-sufficient in meeting the information needs of its users especially in this era of globalization, information explosion and proliferation of information and communication technology which has made information an important economic resource that is always needed by the users. This necessitates the need for the libraries to cooperate with other libraries in the areas of interlibrary loan, cooperative acquisition, shared cataloguing / cooperative cataloguing, sharing of bibliographical data, preparation and maintenance of union catalogue and union list of serials, cooperative reference service, capacity building among the staff, document delivery services and exchange of professional ideas / expertise with other libraries among others.

Despite the significance or importance of resource sharing in libraries, preliminary investigation conducted by the researcher revealed that resource sharing has not received adequate attention that it deserves in some selected academic libraries in Adamawa State. Most of the libraries are yet to establish resource sharing initiatives with other libraries which could go a long way in enhancing information provision and services to their users. Some of the librarians who ought to be experts in library practices were yet to be aware of the rudiments of resource sharing activities because of the absence of resource sharing in their libraries. This form the thrust upon which this research is conducted to ascertain the level of availability and awareness of librarians on resource sharing activities as well as find out the challenges bedeviling the adoption resource sharing in academic libraries in Adamawa State, Nigeria.

Objectives of the Study

The objectives of the study were to:
1. Find out the level of availability of resource sharing in academic libraries in Adamawa State, Nigeria.
2. Determine the level of Librarians' awareness on resource sharing in academic libraries in Adamawa State, Nigeria.
3. Determine the challenges bedeviling resource sharing in academic libraries in Adamawa State, Nigeria.

Research Questions

The following research questions guided the study:
RQ1. What is the level of availability of resource sharing in academic libraries in Adamawa State, Nigeria?

RQ2. What is the level of Librarians' awareness on resource sharing in academic libraries in Adamawa State, Nigeria?

RQ3. What are the challenges bedeviling resource sharing in academic libraries in Adamawa State, Nigeria?

Research Hypothesis

The following null-hypothesis was tested at 0.05 level of significance in the course of this study:

Ho1: There is no significant difference in the mean scores on the level of Librarians' awareness of resource sharing among academic libraries in Adamawa State, Nigeria.

Literature Review

Resource sharing is not a new concept in academic libraries, especially in the developed world as it has been in practice several decades ago. In developing countries, researchers have reported variations in availability, awareness and challenges that the libraries and librarians are experiencing. Obaro (2013) investigated the practices of resource sharing among academic libraries in Federal Universities in South-South Nigeria. The study revealed that resource sharing was not fully practiced by the Academic libraries of the South-South Federal Universities in Nigeria. All the studied libraries claimed to practice it but in a skeletal form. Oghenetega, Bauka and Gogmin (2015) conducted a study on global tools for resource sharing among Academic libraries in Nigeria revealed that academic libraries carry out other resource sharing activities like co-operative acquisition; inter-library loan/document delivery; exchange of bibliographic data; cataloguing; sharing of human resources; electronic content licensing and harmonization of ICT application in library management to a low extent; thus the mean scores of 2.21; 2.43; 2.37; 2.19; 2.28; 2.11 and 2.30 respectively. A grand mean of 2.30 shows that resource sharing activities among the academic libraries are to a low extent. The study also found that the academic libraries use such tools like Blogs; social media; Z39.50; Micro-blogging; Wikis; Social Bookmaking; Online Public Access Catalogue; Indexes and Abstracts; Bibliographies; Union catalogue; Web OPAC; Social network software and Directories in carrying out resource sharing activities among the academic libraries in south-east of Nigeria.

Moreover, Kalbande (2018) surveyed resource sharing and networking in Agricultural College Libraries in India. The study revealed that out of the total 40 libraries 30(75%) respondents says resource sharing models are adequate for libraries and only 10 (25%) says it was not adequate for libraries, however 38 (95%) librarians agree on the opinion of resource sharing and network activity in increasing becoming important into next generation libraries and only 2(05%) respondents are not agree, while, 39 (97.5%) respondents like to share resources under Networking Program and 1 (2.5%) respondents disagree with this opinion. The study further

revealed that out of the total 40 libraries only 7(17.5%) libraries have preferred Face to Face method, and 25(62.5%) libraries have preferred Postal and Currier and while 24 (60%) libraries have preferred Web Based resource sharing method for sharing resources among each other.

Furthermore, Francis (2011) surveyed resource sharing activities in academic libraries services in Nigeria and showed that one hundred and eighty-two (representing 80%) of the respondents were aware of resource sharing facilities, that it should be part and parcel of any library services. However, 135 (representing 60.86%) claimed that they knew this from their individual knowledge of the library services. Forty-seven respondents (representing 21.15%) claimed to have gotten this awareness from the librarians/libraries. The other forty respondents (representing 18%) also claimed not to be aware of such a phenomenon. The study further showed that fifty claimed to be ignorant and were not even aware of such facilities. However, twenty-three (representing 10.35%) and nineteen (representing 8.55%) cited lack of library automation and poor communication respectively. Ogba and Ikeazota (2021) explored resource sharing among academic law libraries in Nigeria. The study revealed that law librarians clearly understood resource sharing despite the fact that they do not practice it; more so, they seek for their self-development by visiting other libraries. Eromosele and Ugwulebo (2022) studied Librarians' attitude towards information resource sharing in Federal University Libraries in North Central, Nigeria. The study also reported that there is a positive, encouraging, willing and reassuring attitude towards Information resource sharing despite the challenges facing resource sharing.

Consequently, on challenges bedeviling resource sharing in academic libraries, Onwubiko (2022) assessed networking and resource sharing in Federal University Libraries in Nigeria and revealed that majority of the respondents agreed that inadequate funding by the government and poor internet connectivity/low bandwidth were major factors militating against networking and resource sharing in federal university libraries in Nigeria. They were closely followed by absence of IT strategies for the exchange of information – 82.56% representing 71 respondents, epileptic power supply – 68 respondents or 79.07%, poor maintenance in publish network – 76.74% or 66 respondents, non-commitment of University Librarians – 65 respondents representing 75.58% and inadequate information and communication facilities – 63 respondents or 73.26%. On the other hand, the respondents did not agree that lack of technical know-how to develop internet knowledge and political intervention as both scored 65.12% representing 56 respondents and 76.74 or 66 respondents in the negative respectively. Furthermore, Victor and Chinedu (2022) carried out a study to ascertain the electronic information resources sharing in university libraries in South East Nigeria. The study revealed that the major challenges affecting functional electronic resources sharing in Nigerian university libraries was escalating cost of connectivity and attitude of heads of libraries towards e-resources sharing. Eromosele, Ahmed and Madu (2022) carried out a study on Information Communication Technology (ICT) facilities and

information resource sharing activities in Federal University Libraries in North Central, Nigeria. The study revealed lack of sufficient fund, erratic power supply, lack of technical know-how (manpower), lack of ICT infrastructure and connectivity, lack of co-ordination/ co-operation, inadequate library collec¬tion and lack of adequate training for staff as factors restricting the use of ICT facilities for information resource sharing in the libraries.

Antwi, Ankrah and Frimpong (2020) conducted a study to ascertain electronic resources sharing in academic libraries in Ghana: A comparative study of Ghana Technology University College and Presbyterian University College Libraries. The findings of the study revealed the barriers that affect the effectiveness of e-resource sharing including lack of funds and inadequate ICT facilities contributed to the ineffectiveness of e-resources sharing in their libraries. Participants mentioned that needed funds to acquire adequate ICT facilities to support the libraries' operations were not forthcoming and for that matter users find it very difficult to access and retrieve relevant information. Some of the participants were of the view that sharing electronic resources depends solely on computers and fast internet connectivity. However, these facilities were inadequate. The study also determined the level of consortium involvement in resource sharing to be very significant. The library's representation in the management of the consortium was determined as very high (90%), meanwhile its level of participation in decision making with respect to resource sharing was determined as moderate (57.5%). The consortium (KLISC) was also shown to be responsible for the provision of access to the bulk of shared information resources available to users (95%).

Materials and Methods

A descriptive survey research design was adopted for the study. The population of the study comprised of all professional and paraprofessional librarians working in federal and state owned institutions in Adamawa State, Nigeria. The institutions included: Adamawa State College of Agriculture, Ganye, Adamawa State College of Education, Hong, Adamawa State Legal and Islamic Studies, Yola, Adamawa State Polytechnic, Yola, Adamawa State University, Mubi, Federal Polytechnic, Mubi, Federal College of Education, Yola and Modibbo Adama University, Yola. Preliminary investigation revealed that there were one hundred and seven (107) professional and paraprofessional librarians working in these institutions. Due to the manageable number, total enumeration was adopted. The research instruments used were checklist and self-developed questionnaire. The questionnaire solicited for information regarding availability of resource sharing in the studied libraries. The questionnaire was designed using Google Form mobile application with 4-Points-Likert scale to probe about the level of awareness and challenges bedeviling resource sharing in the libraries. The title of the questionnaire was "Questionnaire on Availability, Awareness and Challenges of Resource Sharing in Academic Libraries in Adamawa State, Nigeria" (QAACRSALASN) and was administered by the

researcher by posting the links to the respondents on various professional WhatsApp platforms which is called Monkey Survey. The demographic data of the respondents was analyzed using frequency counts, table and simple percentages for descriptive analysis. The data generated from the research questions were analyzed using mean and standard deviation. The decision rule was, any mean score of 2.50 and above was accepted, while any mean score of 2.49 and below was rejected. Analysis of Variance (ANOVA) was used to test the null-hypothesis at 0.05 level of significance. The analysis was conducted using Microsoft Excel and Statistical Package for Social Sciences (SPSS Inc., Chicago, IL) version 23.

Results and Discussion

Response Rate

Out of the 107 respondents, 59(55.1%) responded to the instrument. This is not surprising, because, the online instrument is a new trend and perhaps, a lot of the library staff were either not yet conversant with it or do not have smart phones to have access to it.

Demographic Data of Respondents

Table 1. Demographic Data of Respondents.

Responses	Frequency	Percentage
Adamawa State College of Education, Hong	5	8.5
Adamawa State Legal and Islamic Studies, Yola	4	6.8
Adamawa State Polytechnic, Yola	8	13.6
Adamawa State University, Mubi	9	15.3
Federal Polytechnic, Mubi	13	22.0
Federal College of Education, Yola	11	18.6
Modibbo Adama University, Yola	6	10.2
Total	**148**	**100**

Source: Field survey, 2024

Table 1 showed the demographic variables of the respondents. The results indicated that 5 (8.5%) of the respondents were from Adamawa State College of Education, Hong, 4 (6.8%) were from Adamawa State Legal and Islamic Studies, Yola 8 (13.6%) were from Adamawa State Polytechnic, Yola, 9 (15.3%) were from Adamawa State University, Mubi, 13 (22.0%) were from Federal Polytechnic, Mubi, 11(18.6%) were from Federal College of Education, Yola, while, 6(10.2%) were from Modibbo Adama University, Yola. Furthermore, 3 (5.1%) of the respondents were PhD holders, 29 (49.2%) had Masters, 21 (35.5%) were BLIS/B.Tech holders, while 6 (10.2%) were Diploma/NCE holders.

RQ1. What is the level of availability of resource sharing in academic libraries in Adamawa State, Nigeria?
  i.   Does your library engage in resource sharing?

Table 2. Availability of resource sharing in academic libraries in Adamawa State

S/N	Institution	Yes	No	Total	Decision
1	Adamawa State College of Agriculture, Ganye	1	2	3	Not Available
2	Adamawa State College of Education, Hong	2	3	5	Not Available
3	Adamawa State Legal and Islamic Studies, Yola	1	3	4	Not Available
4	Adamawa State Polytechnic, Yola	3	5	8	Not Available
5	Adamawa State University, Mubi	6	3	9	Available
6	Federal Polytechnic, Mubi	5	8	13	Not Available
7	Federal College of Education, Yola	4	7	11	Not Available
8	Modibbo Adama University, Yola	4	2	6	Available
	Total	**26**	**33**	**59**	

Source: Field survey, 2024

Table 2 indicates the availability of resource sharing in academic libraries in Adamawa State, Nigeria. The results showed that resource sharing is available only in Adamawa State University, Mubi and Modibbo Adama University, Yola while, not available in the other six studied libraries studied.

ii.   What is the extent of resource sharing in the academic library?

Table 3. Extent of resource sharing in academic libraries in Adamawa State.

S/N	Institution	Always	Occasionally	Rarely	Never	Total	Decision
1	Adamawa State College of Agriculture, Ganye	0	0	1	2	3	Never
2	Adamawa State College of Education, Hong	0	0	2	3	5	Never
3	Adamawa State Legal and Islamic Studies, Yola	0	0	1	3	4	Never
4	Adamawa State Polytechnic, Yola	0	0	6	2	8	Rare
5	Adamawa State University, Mubi	0	0	5	4	9	Rare
6	Federal Polytechnic, Mubi	0	0	7	6	13	Rare
7	Federal College of Education, Yola	0	1	7	3	11	Rare
8	Modibbo Adama University, Yola	0	0	4	2	6	Rare
	Total	**0**	**1**	**33**	**25**	**59**	**Rare**

Source: Field survey, 2024

Table 3 reveals the extent of libraries engaging in resource sharing in academic libraries in Adamawa State. The results showed that the availability of resource sharing in Adamawa State Polytechnic, Yola, Adamawa State University, Mubi, Federal Polytechnic, Mubi, Federal College of Education, Yola and Modibbo Adama University, Yola were rare, while, it was never available in Adamawa State College of Agriculture, Ganye, Adamawa State College of Education, Hong and Adamawa State Legal and Islamic Studies, Yola.

RQ2. What is the level of Librarians' awareness on resource sharing in academic libraries in Adamawa State, Nigeria?

Table 4. Level of Librarians' awareness on resource sharing in academic libraries in Adamawa State

S/N	Statements	N	Sum	Mean	Std	Decision
1	I am aware that resource sharing can promote inter-library loan/reciprocal borrowing privileges for our users.	59	180	3.05	1.04	Moderately Aware
2	I am aware that resource sharing facilitates co-operative acquisition	59	165	2.80	0.69	Moderately Aware
3	I am aware that resource sharing can enable centralized processing such as shared cataloguing / cooperative cataloguing	59	168	2.85	0.58	Moderately Aware
4	I know that resource sharing can facilitate sharing of bibliographical data	59	149	2.53	0.90	Moderately Aware
5	Preparation and maintenance of union catalogue and union list of serials	59	160	2.71	0.81	Moderately Aware
6	I know that resource sharing also involves cooperative reference service	59	191	3.24	0.84	Moderately Aware
7	I am aware that resource sharing can enable the libraries carry out cooperative processing of library resources	59	154	2.61	0.79	Moderately Aware
8	I know that resource sharing can help in capacity building among the staff of the cooperating libraries	59	149	2.53	0.80	Moderately Aware
9	I am aware that resource sharing can facilitate easy document delivery services	59	171	2.90	1.03	Moderately Aware
10	I know that resource sharing can help the libraries towards exchange of publications	59	155	2.63	0.89	Moderately Aware
11	Resource sharing can facilitate development of common Online Public Access Catalogues (OPACs).	59	162	2.75	0.84	Moderately Aware
12	Resource sharing can facilitate joint projects, workshops, conferences and workshop among the libraries	59	158	2.68	0.82	Moderately Aware
13	I am aware that resource sharing can enhance our reference and referral services	59	175	2.97	1.02	Moderately Aware
14	I am aware that resource sharing can facilitate exchange of professional ideas / expertise with other libraries	59	153	2.59	0.79	Moderately Aware
15	I know that resource sharing can facilitate collaboration in the digitization of materials in our libraries	59	154	2.61	0.83	Moderately Aware
	Total		**2,444**	**2.76**	**0.85**	**Moderately Aware**

Source: Field survey, 2024

Table 4 represents the level of Librarians' awareness on resource sharing in academic libraries in Adamawa State. From the table, all the items listed had attracted acceptable mean scores above 2.5. They include: awareness that resource sharing can promote inter-library ($\overline{X}$ = 3.05, SD = 1.04), facilitates co-operative acquisition ($\overline{X}$ = 2.80, SD = 0.69), centralised processing such as shared cataloguing/cooperative cataloguing ($\overline{X}$ = 2.85, SD = 0.58), facilitate sharing of bibliographical data ($\overline{X}$ = 2.53, SD = 0.90), preparation and maintenance of union catalogue and union list of serials ($\overline{X}$ = 2.71, SD = 0.81), involves cooperative reference service ($\overline{X}$ = 3.24, SD = 0.84), enable the libraries carry out cooperative processing of library resources ($\overline{X}$ = 2.61, SD = 0.79), help in capacity building among the staff of the cooperating libraries ($\overline{X}$ = 2.53, SD = 0.80), facilitate easy document delivery services ($\overline{X}$ = 2.90, SD = 1.03), help the libraries towards exchange of publications ($\overline{X}$ = 2.63, SD = 0.89), facilitate development of common Online Public Access Catalogues (OPACs) ($\overline{X}$ = 2.75, SD = 0.84), facilitate joint projects, workshops,

conferences and workshop among the libraries ($\overline{X}$ = 2.68, SD = 0.82), can enhance our reference and referral services ($\overline{X}$ = 2.97, SD = 1.02), facilitate exchange of professional ideas / expertise with other libraries ($\overline{X}$ = 2.59, SD = 0.79) and facilitate collaboration in the digitization of materials in our libraries ($\overline{X}$ = 2.61, SD = 0.83).With this result, it is concluded that the Librarians were moderately aware that resource sharing can promote inter-library loan/reciprocal borrowing privileges for our users, facilitates co-operative acquisition, enable centralised processing such as shared cataloguing / cooperative cataloguing, and facilitate sharing of bibliographical data, among others in academic libraries in Adamawa State.

RQ3. What are the challenges bedeviling resource sharing in academic libraries in Adamawa State, Nigeria?

Table 5. Challenges bedeviling resource sharing activities in academic libraries in Adamawa State.

S/N	Statements	N	Sum	Mean	Std	Decision
1	High costs of information resources discourages libraries from participating in resource sharing	59	196	3.32	1.04	Moderate
2	Inadequate knowledge of benefits of resources sharing	59	189	3.20	0.92	Moderate
3	Epileptic power supply in the academic libraries and lack of alternative sources.	59	200	3.39	0.70	Moderate
4	Lack of internet connectivity in the academic libraries	59	183	3.10	1.01	Moderate
5	Poor budgetary allocation to the library / low funding	59	201	3.41	0.65	Moderate
6	Non-existence of resources sharing policy	59	198	3.36	0.83	Moderate
7	Uncooperative attitude of sister libraries	59	186	3.15	0.87	Moderate
8	Lack of technical Know-how (manpower)	59	196	3.32	0.75	Moderate
9	Lack of ICT infrastructure and connectivity	59	188	3.19	1.03	Moderate
10	Inadequate library Collection	59	183	3.10	0.94	Moderate
11	Inadequate training for staff	59	190	3.22	1.00	Moderate
12	Ignorance of resources sharing activities	59	176	2.98	1.07	Moderate
13	Lack of cooperation among academic librarians	59	185	3.14	1.01	Moderate
	Total		**2471**	**3.22**	**0.91**	**Moderate**

Source: Field survey, 2024

Table 5 explains the challenges bedeviling the adoption resource sharing in academic libraries in Adamawa State, Nigeria. From the table, all the items listed had attracted acceptable mean scores above 2.5. They include: high costs of information resources discourages libraries from participating in resource sharing ($\overline{X}$= 3.32, SD = 1.04), inadequate knowledge of benefits of resources sharing ($\overline{X}$= 3.20, SD = 0.92), epileptic power supply in the academic libraries and lack of alternative sources ($\overline{X}$= 3.39, SD = 0.70), lack of internet connectivity in the academic libraries ($\overline{X}$= 3.10, SD = 1.01), poor budgetary allocation to the library/low funding ($\overline{X}$= 3.41, SD = 0.65), non-existence of resources sharing policy ($\overline{X}$= 3.36, SD = 0.83), uncooperative attitude of sister libraries ($\overline{X}$= 3.15, SD = 0.87), lack of technical know-how (manpower) ($\overline{X}$= 3.32, SD = 0.75), lack of ICT infrastructure and connectivity ($\overline{X}$= 3.19, SD = 1.03), inadequate library collection($\overline{X}$= 3.10, SD = 0.94), lack of adequate training for staff ($\overline{X}$= 3.22, SD = 1.00),ignorance of resources sharing service ($\overline{X}$= 2.98, SD = 1.07) and lack of cooperation among academic librarians ($\overline{X}$= 3.14, SD = 1.01). With this result, it is concluded that the

challenges bedeviling the adoption resource sharing in academic libraries in Adamawa State, Nigeria include: high costs of information resources discourages libraries from participating in resource sharing, inadequate knowledge of benefits of resources sharing, epileptic power supply in the academic libraries and lack of alternative sources, lack of internet connectivity in the academic libraries, poor budgetary allocation to the library/low funding, non-existence of resources sharing policy, among others.

Hypothesis Testing

Ho1. There is no significant difference in the mean scores on the level of Librarians' awareness of resource sharing among academic libraries in Adamawa State, Nigeria.

Table 6. Descriptive statistics on significant difference in the mean scores on the level of Librarians' awareness of resource sharing among academic libraries in Adamawa State, Nigeria.

S/N	Institutions	N	%	Mean	Std. Deviation
1	Adamawa State College of Agriculture, Ganye	3	5.08	2.73	0.16
2	Adamawa State College of Education, Hong	5	8.48	2.70	0.23
3	Adamawa State Legal and Islamic Studies, Yola	4	6.78	2.47	0.29
4	Adamawa State Polytechnic, Yola	8	13.56	2.79	0.19
5	Adamawa State University, Mubi	9	15.25	2.89	0.37
6	Federal Polytechnic, Mubi	13	22.03	2.79	0.19
7	Federal College of Education, Yola	11	18.64	2.80	0.26
8	Modibbo Adama University, Yola	6	10.18	2.91	0.20
	Total	**59**	**100**	**2.76**	**0.26**

Source: Field survey, 2024

Table 6 indicates the descriptive statistics on the significant difference in the mean scores on the level of Librarians' awareness of resource sharing among academic libraries in Adamawa State, Nigeria. The results show that Modibbo Adama University, Yola accounted the highest mean score of ($\overline{X}$ = 2.91, SD = 0.20), followed by Adamawa State University, Mubi which had a ($\overline{X}$ = 2.89, SD = 0.37) and Federal College of Education, Yola which had a ($\overline{X}$ = 2.80, SD = 0.26). Furthermore, Federal Polytechnic, Mubi and Adamawa State Polytechnic, Yola accounted for ($\overline{X}$ = 2.79, SD = 0.19), Adamawa State College of Agriculture, Ganye had ($\overline{X}$ = 2.73, SD = 0.16), Adamawa State College of Education, Hong had ($\overline{X}$ = 2.73, SD = 0.16), while, Adamawa State Legal and Islamic Studies, Yola accounted for the least among the studied academic libraries which had a ($\overline{X}$ = 2.47, SD = 0.29). This implies that Modibbo Adama University, Yola accounted for the highest level of awareness of Librarians on resource sharing activities among academic libraries in Adamawa State.

Table 7. One-Way ANOVA on significant difference in the mean scores on the level of Librarians' awareness of resource sharing among academic libraries in Adamawa State, Nigeria.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.570	7	.081	1.204	0.318
Within Groups	3.450	51	.068		
Total	**4.020**	**58**			

Source: Field survey, 2024

Table 7 showed a one-way between group ANOVA on significant difference in the mean scores on the level of Librarians' awareness of resource sharing among academic libraries in Adamawa State, Nigeria. From the analysis using two-tailed test at the significant level of 0.05, the p-value = 0.318 > 0.05, the degree of freedom is 58 and F-value of 1.204. With this result, the p-value is greater than the critical value of 0.05. Hence, the null hypothesis of no significant is hereby accepted and concluded that, there is no significant difference in the mean scores on the level of Librarians' awareness of resource sharing among academic libraries in Adamawa State, Nigeria.

The study determined the level of availability, awareness and challenges of resource sharing in academic libraries in Adamawa State, NigeriaThe findings of the study showed that resource sharing is rarely available in Adamawa State University, Mubi and Modibbo Adama University, Yola while, not available in the other six studied academic libraries. This could be attributed to lack of commitment on the part of the management of the institutions. This finding agrees with Obaro (2013) who reported that resource sharing was not fully practiced by the Academic libraries of the South-South Federal Universities in Nigeria and that all the studied libraries claimed to practice it but in a skeletal form.Also, a study conducted by Oghenetega, Bauka and Gogmin (2015) revealed that academic libraries of federal owned higher institutions in the South East of Nigeria carry out resource sharing activities like cooperative acquisition, interlibrary loan / document delivery, exchange of bibliographic data, cataloguing, sharing of human resources, electronic content licensing and harmonization of ICT application in library management to a low extent. The study disagrees with Kalbande (2018) which found that majority of Librarians in Agricultural College Libraries attested that resource sharing models were adequate in their libraries.

The study also found that Librarians were moderately aware that resource sharing can promote inter-library loan/reciprocal borrowing privileges for our users, facilitates co-operative acquisition, enable centralized processing such as shared cataloguing / cooperative cataloguing, and facilitate sharing of bibliographical data, among others in academic libraries in Adamawa State, Nigeria. This could be attributed to the fact that the librarians were not conversant with the rudiments of resource sharing activities because of unavailability in their libraries and only got to be aware from the knowledge acquired in schools or elsewhere. This finding is in line with Francis (2011) which reported that majority of librarians in three academic institutions in Nigeria were aware of resource sharing facilities, that it should be part and parcel of any library services and claimed that they knew this from their individual knowledge of the library services. Moreover, Ogba and Ikeazota (2021) explored resource sharing among academic law libraries in Nigeria and revealed that law librarians clearly understood resource sharing despite the fact that they do not practice it; more so, they seek for their self-development by visiting other libraries.

While Eromosele and Ugwulebo (2022) showed that there is a positive, encouraging, willing and reassuring attitude towards information resource sharing despite the challenges facing resource sharing in Federal University Libraries in North Central, Nigeria.

Furthermore, the study revealed that the challenges bedeviling the adoption resource sharing in academic libraries in Adamawa State, Nigeria include: high costs of information resources discourages libraries from participating in resource sharing, inadequate knowledge of benefits of resources sharing, epileptic power supply in the academic libraries and lack of alternative sources, lack of internet connectivity in the academic libraries, poor budgetary allocation to the library/low funding, non-existence of resources sharing policy, among others. The study corroborates the finding of Onwubiko (2022) which revealed inadequate funding by the government and poor internet connectivity/low bandwidth were the major factors militating against networking and resource sharing in federal university libraries in Nigeria. They were closely followed by absence of IT strategies for the exchange of information, epileptic power supply, poor maintenance in publish network, non-commitment of University Librarians and inadequate information and communication facilities. Also, Victor and Chinedu (2022) revealed that the major challenges affecting functional electronic resources sharing in Nigerian university libraries was escalating cost of connectivity and attitude of heads of libraries towards e-resources sharing; while, Eromosele, Ahmed and Madu (2022) reveled lack of sufficient fund, erratic power supply, lack of technical know-how (manpower), lack of ICT infrastructure and connectivity, lack of co-ordination/ co-operation, inadequate library collec¬tion and lack of adequate training for staff as factors restricting the use of ICT facilities for information resource sharing in the libraries. Antwi, Ankrah and Frimpong (2020) found that the barriers that affect the effectiveness of e-resource sharing include lack of funds and inadequate ICT facilities in Ghana Technology University College and Presbyterian University College Libraries.

The hypothesis tested showed that there were no significant differences in the mean scores on the level of Librarians' awareness of resource sharing among academic libraries in Adamawa State, Nigeria. However, despite the insignificant differences, the study discovered that Modibbo Adama University, Yola accounted the highest level of Librarians' awareness, while, Adamawa State Legal and Islamic Studies, Yola accounted for the least level of Librarians' awareness on resource sharing among the academic libraries in Adamawa State, Nigeria.

Conclusion

The discourse is that no library today can boast of having everything sufficiently required to satisfy its teeming users especially in the 21st century necessitates the need for effective resource sharing among the libraries. This study has revealed that resource sharing is rarely available in Adamawa State University, Mubi and Modibbo Adama University, Yola. The study also found that Librarians were moderately aware that resource sharing can promote inter-library

loan/reciprocal borrowing privileges for our users, facilitates co-operative acquisition, enable centralized processing such as shared cataloguing / cooperative cataloguing, and facilitate sharing of bibliographical data, among others in academic libraries in Adamawa State, Nigeria. The challenges bedeviling resource sharing in academic libraries in Adamawa State include: high cost of information resources discourages libraries from participating in resource sharing, inadequate knowledge of benefits of resources sharing, epileptic power supply in the academic libraries and lack of alternative sources of power, lack of internet connectivity in the academic libraries, poor budgetary allocation to the library/low funding, non-existence of resources sharing policy, among others and the hypothesis tested showed that there was no significant differences in the mean scores on the level of Librarians' awareness of resource sharing among academic libraries in Adamawa State, Nigeria. Based on these findings, the following were recommendations:

1. Management of tertiary institutions in Adamawa State need to step up and support the academic libraries to establish cooperation with other local, national and international libraries so as to boost their quests in providing effective and efficient information resources and services.
2. Heads of academic libraries in Adamawa State should seek collaboration or cooperation with other libraries towards resource sharing to provide unrestricted access to information for their users.
3. Governments at all levels should support the academic libraries in Adamawa State towards increasing funding, provision of alternative power supply, training and retraining of staff as well as provision of ICT infrastructure and connectivity to provide conducive environment for resource sharing to succeed in the academic libraries.

Author Contributions

All authors contributed equally to the conceptualization of the article and writing of the original and subsequent drafts.

Data Availability Statement

All data generated or analyzed during this study are included in this published article.

Ethical considerations

No ethical approval is required as the study did not involve any human participants.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

References

Antwi, J. K., Ankrah, E., & Frimpong, A. D. (2020). Electronic resources sharing in academic libraries in Ghana: A comparative study of Ghana Technology University College and Presbyterian University College libraries. *Library Philosophy and Practice (e-journal)*. 4256. Accessed via: https://digitalcommons.unl.edu/libphilprac/4256

Bangoni, S., Chizwara, S., & Moyo, M. (2018). An analysis of interlibrary loan services: A case study of university of South Africa. *Information Discovery and Delivery*, *46* (1), 26-37.

Eromosele, P. O., Ahmed, A. O., & Madu, E. C. (2022). Information communication technology (ICT) facilities and information resource sharing activities in federal university libraries in North Central, Nigeria. *Ghana Library Journal*, *27*(2), 233-241. https://dx.doi.org/10.4314/glj.v27i2.9.

Eromosele, P. O., & Ugwulebo, J. E. (2022). Librarians' attitude towards information resource sharing in federal university libraries in North Central, Nigeria. *Library Philosophy and Practice (e-journal)*. 7314. https://digitalcommons.unl.edu/libphilprac/7314

Francis, E. E. (2011). Resource sharing activities in academic libraries services: Result of a survey. *Information Impact: Journal of Information and Knowledge Management*, *2*(1), 1- 12.

Kalbande, D.T. (2018). Resource sharing and networking in agricultural college libraries. *International Research: Journal of Library & Information Science*, *8*(1), 100–113.

Obaro, G. O. (2013). An investigation into the practices of resource sharing among academic libraries in Federal Universities in South-South Nigeria. *Information Impact: Journal of Information and Knowledge Management*, *4*(1), 123-136.

Ogba, C. O., & Ikeazota, O. L. (2021). Resource sharing among academic law libraries in Nigeria: Exploring the practicability so far. *International Journal of Library and Information Science*, *13*(1), 1-7. https://doi.org/10.5897/IJLIS2020.0928

Oghenetega, L. U., Bauka, S. A., & Gogmin, P. (2015). Global tools for resource sharing among academic libraries in Nigeria. *International Academic Journal of Educational Research*, *1*(1), 43-41.

Onwubiko, E. C. (2022). An assessment of networking and resource sharing in federal university libraries in Nigeria. *Library Philosophy and Practice (e-journal)*. Paper 7455. https://digitalcommons.unl.edu/libphilprac/7455

Orbis Cascade Alliance (2021). Definition of resource sharing. https://www.orbiscascade.org/about

Victor, O. B., & Chinedu, G. O. (2022). Electronic information resources sharing in university libraries in South East Nigeria. *Communicate: Journal of Library and Information Science*, 24(2): 1-12.