



**UTILISATION OF ONLINE DATABASES IN LIBRARIES ON ACADEMIC
ACTIVITIES OF LIBRARY AND INFORMATION SCIENCE DEPARTMENTS
POSTGRADUATE STUDENTS IN NORTH-WEST, NIGERIA**

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Abstract

The study is on the utilisation of online databases in libraries for academic activities of library and information science departments' postgraduate students in North-west, Nigeria. The study was guided by two objectives and two corresponding research questions. The objectives of the study were to: identify the level of utilisation of online databases in libraries for academic activities by postgraduate students of library and information science department in North-west, Nigeria; determine the influence perceived of utilisation of online databases in libraries on academic activities by postgraduate students of library and information science department in North-west, Nigeria. The population for the study was 376 postgraduate students of Library and Information Science Department in three (3) universities in North-west, Nigeria. Descriptive survey research was adopted for the study. The study adopted census or total enumeration to arrive at the sample size due to the manageable size of the population. Out of 376 copies of questionnaire administered, 329 copies were filled, returned and used for the analysis representing 88% response rate. Descriptive statistical tool involving mean and standard deviation were used to analyse the data. The findings of the study revealed among others that postgraduate students of library and information science Department revealed high level of satisfaction with the use of DOAJ, AJOL, EBSCOHost, JSTOR, HHINARI, AGORA, ProQuest and Science direct databases for their academic activities and low level of satisfaction of Research 4life, ProQuest theses Global, Scopus and Bio one. The study concluded that no library irrespective of the type or kind can achieve its goals and objectives of meeting the information needs of users without the provision of online databases to augment their academic and research needs. The study recommended among others that the management of university libraries in North-west, Nigeria should ensure that online databases such as Scopus, Reserach4life. Bio One and ARDI are provided and made available for academic activities of postgraduate students of library and information science department.

Keywords: Academic Activities, Library and Information Science, Postgraduate Students, Online Databases, Utilisation

Introduction

In the digital era, online databases have become indispensable tools in academic libraries, providing access to a wide range of scholarly content such as journal articles, theses, dissertations, conference papers, and e-books. These databases are particularly vital for postgraduate students who require reliable, current, and peer-reviewed sources to support their academic work and research. In the field of Library and Information Science (LIS), where students are trained to manage, retrieve, and evaluate information resources, effective utilisation of online databases is not just important it is foundational.

Globally, institutions of higher learning have integrated online databases into their library systems to promote research efficiency and academic productivity. In developed countries, the utilisation rate of academic databases among postgraduate students is notably high due to institutional investment, digital literacy programs, and strong research cultures. In contrast, developing nations like Nigeria face several challenges including inadequate infrastructure, limited funding for subscriptions, and lack of digital skills among users, which often hinder full exploitation of these resources.

In Nigeria, several public universities and LIS departments have subscribed to digital resources through consortia like EBSCOhost, ScienceDirect, JSTOR, and Research4Life. However, studies have shown that postgraduate students often underutilize these resources either due to lack of awareness, poor training, or limited access (Afolabi, Bada & Akinwumi, 2024). Particularly in the North-West region of Nigeria, there are concerns about the extent to which LIS postgraduate students make use of online databases for core academic activities such as writing term papers, literature reviews, and dissertations.

Postgraduate students in LIS programs are expected to be proficient in navigating online databases to support both theoretical and empirical research. However, the current trend shows that many students still rely heavily on non-scholarly or freely accessible sources, which may compromise the quality and depth of their academic work. As such, it becomes essential to examine how these students interact with online databases and to what extent this interaction supports or limits their academic success.

Information resources housed and organised in library and information centres in the academic spaces are meant to be accessed and utilised by researchers, students and seekers of information from the academic community. In view of this, Oni *et al.*, (2017) observed that postgraduate students in tertiary institutions are the major users of information resources. It is the duty of

every student to seek and use information resources for academic activities and carrying out of assignments. It is equally the duty of libraries and librarians to provide for the information needs of students both in print and electronic format in the library environment and beyond.

Postgraduate programs in library and information science depend upon the system of awarding higher degree at different levels such as Postgraduate Diploma, Masters and Doctor of Philosophy among others. Research is hallmark of postgraduate programmes in library and information science as majority of the students may require information resources such as online databases to enable them pursue their respective programs (Mbagwu *et al.*, 2018). On this note, postgraduate students of library and information sciences academic activities could be influence by the availability and utilisation of online databases in library.

In line with the above, postgraduate students of all levels conduct researches, write assignments or term papers in terms of academic activities. The primary objectives of these activities are to promote student learning and develop motivation among them towards the implementation of job duties, and lead to up-gradation of the overall system of education. According to Darby (2019) academic activities are actions that promote learning and knowledge through a formal, credit earning based educational system. It is organized to provide solutions to the problems of the students and assist them in understanding of lesson plans and achievement of educational goals. The various types of academic activities are debates, group discussions, assignments, projects, reports, competitions, events, quizzes, presentations, field-work, seminars, workshops and so forth. There is a need to take into account various factors to encourage the participation of library and information sciences postgraduate students in these activities, such as grade levels of students, academic subjects and concepts, learning abilities of students, academic goals and objectives and the overall system of education.

It is worthy to note that the quality of online databases determines faculty satisfaction and foster willingness for sustained use of same. In this direction, the ability to use online databases efficiently depends on the basis of computer skills, knowledge of what is available and how to use it, and the ability to define a research problem (Wahab *et al.*, 2016). In this regard, postgraduate students of library and information science must know how to use online databases available as it's linked to computer literacy level and may feel more comfortable in using e-resources and thus gain more from using them.

On the utilisation of online databases, it is a procedure that gives researchers access to soft copy, online, or digital information material with the goal of improving the caliber and efficacy of their research efforts. Musa *et al.*, (2017) opined that utilisation of digital information resources constitutes the process that enables researchers to effectively and efficiently access the soft copy, online or offline databases for their research activities. With this, effective utilisation of digital information resources depends on the information resources available in the library and also accessible to the student. From the foregoing discussions and observations, online databases could influence postgraduate students of library and information sciences in their daily academic activities.

Statement of the Research Problem

Academic success in postgraduate studies relies significantly on the ability of students to access, evaluate, and utilise scholarly resources. In Library and Information Science (LIS) programs, this skill is even more crucial, as students are not only consumers of information but also future custodians of knowledge resources. Online databases are meant to provide these students with up-to-date, peer-reviewed literature to enhance learning and research. However, in many LIS departments across North-West Nigeria, there is growing concern over the underutilisation of these critical tools.

Despite institutional access to various digital databases, many postgraduate students either lack the skills or the motivation to use them effectively. Factors such as inadequate orientation, poor information literacy, irregular internet access, and lack of mandatory user education programs contribute to the problem. Furthermore, library systems in the North-West, Nigeria may not provide sufficient technical support or updated user interfaces, which can further discourage use.

As a result, students may turn to less credible sources like random Google searches or outdated textbooks, which undermines the quality of their academic work. The gap between availability and utilisation of online databases creates a disconnect between what is expected and what is practiced in LIS postgraduate programs. If this trend continues, it may affect the academic competence and professional readiness of graduates in the LIS field.

This study, therefore, seeks to assess the extent to which online databases are being utilised by postgraduate students in Library and Information Science departments across North-West Nigeria and to determine how this impacts their academic activities. It will also identify the

challenges students face in using these databases and propose strategies for more effective utilisation.

Objectives of the Study

1. Identify the level of utilisation of online databases in libraries for academic activities by postgraduate students of library and information science department in North-west, Nigeria;
2. Determine the influence perceived of utilisation of online databases in libraries on academic activities by postgraduate students of library and information science department in North-west, Nigeria.

Literature Review

Level of utilisation of online databases by postgraduate students

The utilisation of e-resources does not replace printed resources but provides access to large repositories of library materials (Okezie, 2016). The ability to use online databases efficiently depends on the basis of computer skills, knowledge of what is available and how to use it, and the ability to define a research problem. With this, postgraduate students of library and information science must know how to access online databases available as it's linked to computer literacy level and may feel more comfortable in using e-resources and thus gain more from using them. Musa *et al.* (2017) opined that utilisation of digital information resources constitutes the process that enables researchers to effectively and efficiently access the soft copy, online or offline databases for their research activities. With this, effective utilisation of digital information resources depends on the information resources available in the library and also accessible to the student.

Utilisation of online databases is a procedure that gives researchers access to soft copy, online, or digital information material with the goal of improving the caliber and efficacy of their research efforts (Sejane, 2017). This deduces that utilisation of online databases refers to the level to which users make use of the information resources of a library so as to meet their information needs. According to Daramola (2016), the use of online resources at university libraries aims to increase the scope of information resources in the library and increase the importance of content by enabling access to them, through digital sources so that students, researchers, and all university members can access the e-resources at anytime and anywhere.

He also added that the university system provides infrastructure and Internet access for students to increase the availability of online resources.

In view of the above, Daramola, (2017) conducted a study on the reasons for utilisation of digital information resources in Federal University of Technology Akure library, The study revealed that most of the student visited the digital library section so as to do their assignment and also access their emails. The study further revealed that there was fair utilisation of the digital information resources by the undergraduate student. However, the researcher noted some challenges faced by the student in utilisation and accessibility; the challenges are lack of information literacy skills, large number of irrelevant information resources, poor internet connectivity, epileptic power supply and inconsistency in databases subscription among others.

Level of satisfaction with the use of online databases by postgraduate students

Utilisation and availability of different online databases can enhance academic activities of postgraduate students of library and information science. In view of this, according to Khan *et al.*, (2019) “Success of any library is hidden in satisfaction level of the users. Users’ feedback helps to strengthen the collection and services of the library”. As stated by Mahmood *et al.*, (2020) “It has become the regular feature of the academic libraries to assess the library service quality from the users’ perspective in the developed world. It helps them to examine the customer needs, satisfaction, and performance of the library as viewed by the patrons”. The extent to which a library fulfills the needs of its users with available information resources and services results in user satisfaction or dissatisfaction.

Yeboah *et al.* (2018) carried out a study on users’ satisfaction with library resources in Public Colleges of Education in Ghana. Population for study was selected through Multi-stage sampling technique. Data collection was completed through distribution of questionnaires by using survey research method. Results of the study showed satisfaction of users with design, location, reading spaces, furniture and reference sources. Users were dissatisfied from computers and internet facility in the library. Tiemo and Ateboh (2016) investigated users' satisfaction with library information resources and services at the College of Health Sciences (CHS) library Niger Delta University, Nigeria. Data analysis discovered satisfaction of users with renewal of library materials, lending services of library and longer hours of internet services in the library. Users were not satisfied with reference material and research journals.

Methodology

The study adopted survey research design, which involves collecting data from a specific group to understand their characteristics, behaviours, or opinions. This design was considered appropriate because it is relatively cost-effective, time-saving, and suitable for gathering information on the influence of online database utilisation on academic activities among postgraduate students in Library and Information Science departments. The population of the study comprised 376 postgraduate students from the Library and Information Science Departments of three selected universities in North-West, Nigeria. The selection of this region was informed by a review of existing literature, which revealed a lack of recent empirical studies on this topic in North-West Nigeria compared to other regions of the country. To include the entire study population and ensure comprehensive coverage, the total enumeration technique (also known as the census method) was adopted, since the population size was considered manageable.

A self-structured and validated questionnaire served as the primary instrument for data collection. The face and content validity of the questionnaire were reviewed by two lecturers from the Department of Library and Information Science at the Federal University of Technology, Minna, who provided expert input to ensure the instrument accurately measured the key concepts of the study. The data collected were primary data, meaning they were obtained directly from the respondents. For analysis, the study employed descriptive statistical tools such as frequencies, means, and percentages to summarise and interpret the data. The analysis was conducted using Statistical Package for the Social Sciences (SPSS), version 23.0, a widely recognised software tool in social science research for handling and analysing quantitative data.

Results and Discussion

Table 1: Extent of Academic Activities of Postgraduate Students in Library and Information Science

S/N	Statements	VHE	HE	LE	VLE	n	FX	\bar{x}	STD	Decision
		4	3	2	1	329				
1	Conducting researches	142	147	32	8	329	1081	3.29	0.78	High
2	Writing papers and theses	131	136	39	23	329	1033	3.14	0.64	High

3	Attending, presenting seminars and workshops	124	145	32	28	329	1023	3.11	0.61	High
4	Collaborating with peers and faculty members	133	140	42	14	329	1050	3.19	0.69	High
5	Literature reviews	125	140	43	21	329	1027	3.12	0.62	High
6	Data Analysis	121	136	49	23	329	1013	3.08	0.58	High
7	Assignments and Examinations	80	95	74	80	329	833	2.53	0.03	Low
8	Grant proposal writing	90	104	75	60	329	882	2.68	0.18	Low
9	Fieldwork or experiments	59	64	106	100	329	740	2.25	0.25	Low
10	Professional development	123	127	48	31	247	1000	3.04	0.54	High
Weighted mean								2.94		

Key: Very High Extent (VHE), High Extent (HE), Low Extent (LE), Very Low Extent (VLE), n = Number of Retrieved Copies of Questionnaire, \bar{X} =Mean and (Weighted mean = 2.94).

Table 1 showed the extent of academic activities of postgraduate students. Out of the ten items listed, seven items listed produced high mean scores which were above the weighted mean of 2.94. These items include item 1: Conducting of research (\bar{x} =3.29; SD=0.78), item 4: Collaborating with peers and faculty members (\bar{x} =3.19; SD=0.69), item 2: Writing papers and theses (\bar{x} =3.14; SD=0.64), item 5: Literature reviews (\bar{x} =3.12; SD=0.62), item 3: Attending seminars and workshops (\bar{x} =2.98; SD=0.48), item 6: Data Analysis (\bar{x} =3.11; SD=0.61) and item 10: Professional development (\bar{x} =3.04; SD=0.54). On the other hand, three items produced low mean scores which were below the weighted mean of 2.94. These items include item 8: Grant proposal writing (\bar{x} =2.68; SD=0.18), item 7: Teaching and learning (\bar{x} =2.53; SD=0.03) and item 9: Fieldwork or experiments (\bar{x} =2.25; SD=0.25). The weighted mean of 2.94 and above is considered as the mean rate of the extent of academic activities of library and information science postgraduate students in the study areas. Above all, the highest mean score was discovered from item 1 on conducting research. This is not far from the peculiarity of postgraduate programme where postgraduate students are expected to carry out or conduct researches towards effective writing of their theses/dissertations, conference papers and preparing for test and examination. From the analysis, the study revealed that item 1, 2 and 4

were rated very high extent by the respondents, while item 3, 5, 6 and 10 were rated high extent by the respondents for their academic activities. On the other hand items 8 was rated as low extent, while item 7 and 9 were rated as very low extent by the respondents as the extent of their academic activities.

Table 2: Level of Utilisation of Online Databases by Postgraduate Students of Library and Information Science Department for their Academic Activities

S/N	Statements	VH	H	L	VL	N	FX	\bar{x}	STD	Decision
		4	3	2	1	329				
1	DOAJ	96	107	67	59	329	898	2.73	0.22	High
2	AJOL	89	104	81	55	329	885	2.69	0.19	High
3	EBSCOHost	91	78	103	57	329	861	2.62	0.12	High
4	JSTOR	91	99	93	46	329	893	2.71	0.21	High
5	HINARI	117	100	76	36	329	956	2.91	0.41	High
6	AGORA	103	109	82	35	329	938	2.85	0.35	High
7	ProQuest	99	97	72	61	329	892	2.71	0.21	High
8	Research4life	57	81	108	83	329	770	2.34	0.16	Low
9	LexisNexis	30	57	107	135	329	640	1.94	0.55	Low
10	Scopus	39	72	108	110	329	698	2.12	0.37	Low
11	Elsevier	81	78	113	57	329	841	2.56	0.06	Low
12	Science direct	138	99	51	41	329	992	3.02	0.52	High
	Weighted mean							2.60		

Key: Very High (VH), High (H), Low (L), Very Low (VL), n = Number of Retrieved Copies of Questionnaire, \bar{X} =Mean and (Weighted mean = 2.60).

Table 2 showed the level of utilisation of online databases by postgraduate students of library and information science department for academic activities. Out of the twelve items listed, eight items listed produced high mean scores which were above the weighted mean of 2.60. These items include item 12: Science direct (\bar{x} =3.02; SD=0.52), item 5: HINARI (\bar{x} =2.91;

SD=0.41), item 6: AGORA (\bar{x} =2.85; SD=0.35), item 1: DOAJ (\bar{x} =2.73; SD=0.22), item 4: JSTOR (\bar{x} =2.71; SD=0.21), item 7: ProQuest (\bar{x} =2.71; SD=0.21), item 2: AJOL (\bar{x} =2.69; SD=0.19) and item 3: EBSCOHost (\bar{x} =2.62; SD=0.12). On the other hand, four items produced low mean scores which were below the weighted mean of 2.60. These items include item 11: Elsevier (\bar{x} =2.56; SD=0.06), item 8: Research4life (\bar{x} =2.34; SD=0.16), item 10: Scopus (\bar{x} =2.12; SD=0.37) and item 9: LexisNexis (\bar{x} =1.94; SD=0.55). The decision mean of 2.60 and above is considered as the level of utilisation of online databases by postgraduate students of library and information science department for academic activities and vice versa. Consequently, the weighted mean of 2.60 shows that level of utilisation of online databases by postgraduate students of library and information science department for their academic activities is high.

Above all, the highest mean score was discovered from item 12 which is Science direct. From the analysis, the study revealed that items 1, 2, 3, 4, 5, 6, 7 and 12 were rated high by the respondents as their of utilisation of online databases for academic activities, while items 8, 9, 10 and 11 were rated low as their level of utilisation of online databases for academic activities.

Discussions

The findings of the study as regards to research question 1 it revealed that the level of utilisation of online databases by postgraduate students of library and information science department for their academic activities is high. The reason for the use of these databases among Postgraduate students of library and information science Department could be because they are popular online databases and most subscribed by universities for the community of users. This is in line with the findings of Nanda (2017) who points out that the majority of students, faculty members and research scholars efficiently utilised science direct and springer link. These findings echoed those of Anil-Kumar and Reddy (2016), who discovered that Science Direct, Springer Link and JECC were the most popular and widely used databases among students, academic staff and researchers.

However, Research4life, Scopus, LexisNexis and Elsevier were lowly utilised among postgraduate students of library and information science department for their academic activities. These could be because they lack skills in the use of these databases for their academic activities. This support the findings of Daramola (2017) who revealed some of the challenges faced by student in the utilisation and accessibility of digital information resources which include lack of information literacy skills, large number of irrelevant information

resources, poor Internet connectivity, epileptic power supply and inconsistency in databases subscription among others.

For research question 2, the study revealed that the level of satisfaction with the use of online databases among the respondents is high. Postgraduate students of library and information science Department revealed high level of satisfaction with the use of DOAJ, AJOL, EBSCOHost, JSTOR, HHINARI, AGORA, ProQuest and Science direct databases for their academic activities. These online databases have high impact on the academic activities of postgraduate students of library and information science Department. This is in line with the findings of Owolabi *et al.* (2016) who indicated that the undergraduate students of the University of Ibadan derived satisfaction from the use of e-resources of the university library. With this, online databases are now major resources in every university library and it has significantly transformed information handling and management in academic environments. This also corroborates the findings of Olabode (2016) who explored the impact of usage of e-resources on the academic activities of the undergraduates of Federal University Oye-Ekiti, (FUOYE), Nigeria. The results indicated that use of electronic resources had a positive impact on students' academic activities. Based on the findings of this study, it is recommended that more emphasis should be laid on the acquisition of electronic resources so as to give room for wider and multiple access to information resources in order to meet the information needs of diverse users. On the other hand, postgraduate students of library and information science Department were not satisfied with the use of Research4life, Scopus, LexisNexis and Elsevier for their academic activities.

Conclusion

In conclusion, the findings of the study revealed that no library irrespective of the type or kind can achieve its goals and objectives of meeting the information needs of users without the provision of functional online databases to augment their academic and research needs. The study revealed that the availability of online databases positively influences the academic activities of postgraduate students of library and information science Department. Postgraduate students of library and information science Department indicated that they use DOAJ, AJOL, EBSCOHost, JSTOR, HHINARI, AGORA, ProQuest E-books and Science direct for their academic activities.

Recommendations

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

1. The management of university libraries in North-west, Nigeria should ensure that online databases are made user friendly in terms of set up. That is, search, access and retrieval of information or document. This will improve the level of satisfaction with the use of online databases by postgraduate students of library and information science department for their academic activities.
2. The management of university libraries in North-west, Nigeria should ensure that online databases such as Scopus, Reserach4life., Bio One and ARDI are provided and made available for academic activities of postgraduate students of library and information science department.

References

- Daramola, C. F. (2016). Perception and utilisation of electronic resources by undergraduate students: The case of the Federal University of Technology Library, Akure. *American Journal of Educational Research*, 4(5), 366-370.
- Darby, A. (2019). Academic activities: Actions, interactions and outcomes. *Journal of Education Research and Practice*, 9(1), 1-12.
- Khan, D. K. M., Ali, M. K. & Sunil-Kumar, R. (2019). User's satisfaction on library & information resources, facilities and services: A case study in Vidyavardhaka First Grade College, Mysore. *Research Gate*, 1-21.
- Mahmood, K., Ahmad, S., Ur-Rehman, S. & Ashiq, M. (2021). Evaluating library service quality of college libraries: the perspective of a developing country. *Sustainability*, 13(5), 2989.
- Mbagwu, F. C., Okoye, I. B. A., Augustine, I. (2018). Pedagogy in library and information science programme in Nigeria, *Library Philosophy and Practice (e-journal)*. 1734. <https://digitalcommons.unl.edu/libphilprac/1734>.
- Musa, A. U., Sahabi, M. K., Lawal, D. & Amishe, D. (2017). Academic librarians research productivity amidst open access resources: issues and challenges, library and information management Forum 19 (1 & 2), 56 -70.
- Okezie, E. C. (2016). Utilisation of electronic resources by academic in Nigerian universities. *Journal Library and Information Science*, 42(1), 34-43.
- Oni, J. O. (2017). Resource and resource utilization as correlates of school academic performance. *Unpublished Ph.D Thesis*, University of Ibadan, Ibadan, Nigeria.
- Rukwaro, M. W. (2015). Conducted a study on Factors Affecting the Utilisation of Products and Services in University Libraries . *Category: Library Science and Administration*, 1-3.
- Sejane, L. (2017). Access to and use of electronic information resources in the academic libraries of the Lesotho library consortium; Thesis submitted to information studies program, School of social sciences, college of humanities, University of KwaZulu-

Natal, Pietermaritzburg, South Africa, Available at https://researchspace.ukzn.ac.za/bitstream/handle/10413/14345/Sejane_Lefuma_2017.pdf?sequence=1&isAllowed=y retrieved 17th November, 201

- Tiemo, P. A., & Ateboh, B. A. (2016). Users' satisfaction with library information resources and services: A Case Study College of Health Sciences Library Niger Delta University, Amassoma, Nigeria. *Journal of Education and Practice*, 7(16), 54-59.
- Wahab, E., Shamsuddin, A., Abdullah, N. H. & Hamid, N. A. A. (2016). Users' Satisfaction and Return on Investment (ROI) for online database library databases: A Malaysian Technical University Perspective. *Procedia - Social and Behavioral Sciences*, 219, 777- 783.
- Yeboah, F., Adams, M., & Boakye, E. (2018). User satisfaction with library resources in public Colleges of Education in Ghana. *Library Philosophy and Practice (e-journal)*. 1824. <https://digitalcommons.unl.edu/libphilprac/1824>.