



ELECTRONIC INFORMATION RESOURCES NEEDS AND USES: THE CASE OF UNIVERSITY OF JOS LIBRARY AND INFORMATION SCIENCE MASTER'S STUDENTS

by

Grace Iyabo Nwokedi PhD

University of Jos Library, Jos, Plateau State, Nigeria

Email: grace.nwokedi@yahoo.com

Abstract

The focus of this study is to investigate the electronic information (e-information) resources utilization among Library and Information Science (LIS) master's students of University of Jos. The objectives of the study are: to find out the LIS master's students' e- information resources needs, purposes of seeking e-information resources to satisfy their needs, identify the student's library e-information resources awareness level, student's frequency of use of the library e- resources, and barriers they encounter when using the library e-information resources to satisfy their needs. Descriptive research method was adopted as the research methodology. The questionnaire was used as the data collection instrument. Total enumeration method was used to obtain the required data from the study population. A total of 28 master's students participated in the study. The data obtained were analyzed quantitatively through frequency counts and percentages. The major findings of the study revealed that: majority of the LIS master's students require current library and information science electronic textbooks (e-textbooks) for their academic activities; their major topic areas of need/ purposes for needing e-information resources are to carry out their educational activities; 17(60.7%) are moderately aware of the library e-resources and 20 (71.4%) became aware through lectures; more than half 22 (78.5%) of the students use the library e-resources for their academic activities; the e-resources that are most frequently used by most of the students are e-books and databases; 19 (67.8%) consult the Open Web as an alternative electronic source of information and this source is the source that best satisfies their e-information needs; 18 (64.2%) complained about lack of sufficient relevant e-resources as a barrier to their use of the library e-resources. From the study's findings, it was recommended amongst others that the library should acquire more relevant e-resources that would further satisfy the information needs of the participants, they should organize training to improve the students' online searching skills, and should improve the library's internet speed to encourage the students to visit and use the library's e-resources.

Keywords: information needs; library electronic information resources; use; barriers; University of Jos; library and information science; master's students

Introduction

Information is important to students because they need it for their academic activities such as carrying out assignments, writing examinations and conducting research. It goes without saying that students need information for their academic pursuit, therefore they cannot do without it. Naumer and Fisher (2017) mention that "information need" is one of the most fundamental concepts in library and information science. Case and Given (2016) define "information need" as a recognition that an individual's knowledge state is inadequate to satisfy a given goal.

According to Nicholas and Herman (2009) information use is a manifestation of need. This implies a relationship between the need for information and the use of information by an individual. It also suggests that information need gives rise to information seeking, and use of the information by the individual with the information need, that is if the needed information is found. It also implies that without "information need", there will be no "information use". According to Julien (2019), individuals use information to seek meaning in different situations such as to acquire a skill, reach a goal, generate new ideas or derive pleasure. However, for an individual to use information, the individual needs to be aware of the availability



and location of the information. Therefore, awareness precedes the usage of information by an individual. Julien (2019) views “information use” as the comprehension of information sources that people select or choose, and the ways people apply information to make sense of their situations and lives.

The advent of Information and Communication Technology (ICT) has created an avenue for modern academic libraries to acquire e-resources for their users. Today, most academic libraries are hybrid. For more than a decade, most academic libraries in Nigeria have incorporated e-resources to their regular resources which is the resources that exist in print format. Also, nowadays, in Nigeria universities, during accreditation of programmes, the panelists usually inquire about the availability of e-resources during their visits to the library. They also ask about the awareness and use of the e-resources by the university students. This implies that the availability of e-resources in a university library, and the awareness and use of the e-resources by students of a given university are parts of the criteria for the accreditation. According to Uzoagba and Okichie (2018) universities’ achievements depend largely on the condition of their libraries because universities cannot achieve academic excellence without functional libraries.

Contextual setting

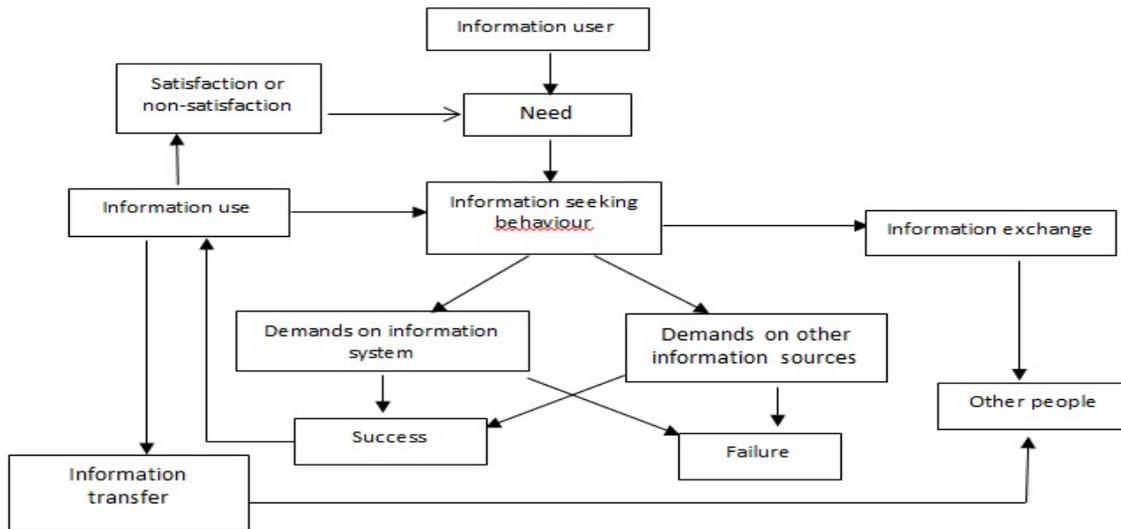
University of Jos, Nigeria was established in 1971 as a campus of the University of Ibadan. Initially,

the University started operating with four faculties (Achuenu & Auta 2015). Today, the University has eleven faculties (University of Jos 2024). The University also has a college of health sciences which is made up of four faculties (University of Jos College of Health Sciences 2025).

The Department of Social Science Education is a department in the Faculty of Education. The Department is made up of three units. One of the units is the Library and Information Science (LIS) Unit (Department of Social Science Education, Faculty of Education 2018). In 2023, the Unit started a postgraduate program. The postgraduate program is at the master’s and doctoral levels. The University of Jos library has transformed significantly from a manually operated library into an increasingly digital environment (Akintunde 2015). Hence, apart from the resources in print format, the library also has e-resources on its website. The e-resources include electronic books (e-books), databases, Open Access (OA) resources, Open Educational Resources (OERs) and resources in the Institutional Repository (IR).

Theoretical framework

Wilson’s (1999:251) model of Information-Seeking Behaviour (ISB) was adopted as the theoretical framework of this study. The model was adopted because it provides a general set of ideas within which this research work belongs.





Literature review

The concept of “information need” was coined by America Information Journalist Robert S. Taylor in his 1962 article “The process of asking questions (Information need, 2024). Hjørland (1997) maintains that the concept of information need is closely related to relevance. He argues that if information is relevant to a person concerning a given task, it could be said that the person needs the information for that task. In the literature, several studies were found on the information needs of postgraduates. Amongst such studies is the study that was carried out by Majyambere (2015), Delaney and Bates (2018), Mwangi (2018), and Nwokedi (2025).

According to Sundin and Johannisson (2005), the purpose of seeking information is an expression of an individual’s need for information. Borlund and Pharo (2019) carried out a study to investigate the day-to-day information needs of some students and educators in Denmark. In the result obtained, it is made known that the participants’ information needs serve several purposes such as to write an assignment, learn something new, and make decisions.

Nwankwo, Chukwu, Igbokwe and Agbanu (2019:188) state that awareness of library resources usually facilitates the use of the resources. This statement connotes that the higher the awareness level of library resources among users, the higher the level of utilization of the resources among the users and vice versa.

Brown and Swan (2007) point out that nowadays many libraries are adapting their policies to focus more on electronic access to their resources. Similarly, Ani, Ngulube and Onyancha (2014) point out that accessibility and utilization of e-resources are fast becoming a standard employed for the conduct of research in universities all over the world. During the literature review for this study, several studies were found on the use of e-resources by postgraduates. Amongst such studies is the study that was carried out by Nwachukwu and Faga (2017), Shorunke, Ajayi and Ibikunle (2018), and Nwokedi and Schellnack-Kelly (2023).

Apart from using their academic library resources, at times library users also access and

use the resources of other academic libraries and resources on the Open Web. Brown and Swan (2007) point out that researchers visit libraries outside their institutions to consult information sources such as to examine journals to which their institution’s library does not subscribe or books the library has not procured. The use of other academic libraries by researchers is reported in the study conducted by Brown and Swan (2007).

Wilson (1999) submits that to find information that would satisfy a need, there is a likelihood that the inquirer will come across different types of barriers. In the same vein, Savolainen (2016) submits that researchers have identified various barriers to information-seeking since the 1970s. In the study that was carried out by Nwachukwu and Faga (2017), Shorunke et al. (2018), and Nwokedi and Schellnack-Kelly (2023), the barriers or problems that the students usually encounter during their use of library e-resources were mentioned. According to Julien (2019), barriers to information use can be lessened by increasing the future usefulness or valuableness of the information. Other factors that can minimize the difficulties include information accuracy, preciseness, completeness, trustworthiness, timeliness and consistency (Julien 2019).

In 2015, Saunders, Kubaniglu, Boustany et al. reported that there is relatively little research on the information literacy and behaviour of librarians and library students. During the literature review for this study, a few studies were found that examined the information needs of LIS students and their use of library e-resources. Some of the studies found include the study that was carried out by O’ Farrell and Bates (2009), Okello-obura and Ikoja-Odongo (2010), Tracy and Searing (2014), and Saunders et al. (2015). This affirms the submission of Saunders et al. (2015) that there is relatively little research on information literacy and behaviour of LIS students.

O’ Farrell and Bates (2009) studied LIS students’ information behaviour during group projects and the location was in Ireland. Okello-Obura and Ikoja-Odongo (2010) investigated electronic information-seeking among LIS postgraduate students, and the study’s location was in Uganda.



Tracy and Searing (2014) investigated library use by LIS graduate students, and the locality was at a University in the United States of America. Saunders et al. (2015) investigated how LIS students search for, evaluate, and use information in various contexts, and on whom they rely for help. The study was an international study that included participants from universities in 18 countries.

In Nigeria, one study was found on the information needs of LIS students. The study was conducted by Horsfall, Nsirim and Orubebe (2020). The study's location was at a university in southern Nigeria. Another study was found on the use of e-resources by LIS postgraduate students. The study was carried out by Akporhonor and Akpojotor (2016). The location of the study was also in southern Nigeria. This study will add to the literature on the information needs of LIS students and their use of library e-resources.

Statement of the problem

In the present digital era, there is a proliferation of e-information resources for accessibility, and globally, many academic libraries subscribe to these resources. Moreover, these days, many students access and use these e-resources for their academic activities. At the University of Jos, the present LIS master's students are the first set. Considering their status as future professionals in the field of LIS. There is a need to investigate their e-information resources needs and their use of library e-resources. Moreover, from past literature, in Nigeria and beyond, only a few studies were found on the information needs of LIS scholars and their use of library e-resources. This study will add to the existing literature.

Objectives of the study

The general objective of this study is to investigate the e-information resources of University of Jos master's students, their use of

library e-information resources, and barriers to their use. The objectives are subdivided into six. These are to find out:

1. Their e-information resources needs.
2. Their topic areas of need or purposes of seeking information to satisfy their needs.
3. Their awareness level about the library e-information resources.
4. Their frequency of use of the library e-resources.
5. Other electronic sources of information they consult aside from their academic library.
6. Barriers they encounter when using the library e-information resources to satisfy their needs.

Methodology

This study examined the e-information resources utilization of University of Jos LIS master's students. Descriptive research design, which is a type of quantitative research design, was adopted as the research design for the study. The study population comprised the University of Jos master's students. Numeric data were obtained from the participants; therefore, questionnaire was used as the data collection instrument. Due to the size of the population of the master's students (37), the total enumeration method was used. Hence, no sample size was determined. Out of 37 copies of questionnaire distributed to the participants, 28 copies were filled out and returned to the researcher which gave a response rate of 75.6%. The questionnaire was analyzed quantitatively using simple frequency counts and percentages.

Results and discussion

In this section, the results of the study are presented and discussed according to the research objectives as shown below:

Table 1: Type(s) of e-information resources needed for coursework by the participants

N=28



S/No	E-information resources	Frequency (%)
1.	Current LIS electronic textbooks (e-textbooks)	17 (61%)
2.	Dated LIS e-textbooks	6 (21.4%)
3.	E-textbooks on research methodology	9 (32.1%)
4.	Current electronic serials (e-serials)	12 (42.8%)
5.	Dated e-serials	5 (17.8%)
6.	Electronic reference (E-reference) materials	5 (17.8%)
7.	Electronic theses/dissertations (E-theses/dissertations)	7 (25%)
8.	E-resources in other academic disciplines	2 (7.1%)

Table 1 shows the type(s) of e-information resources needed for coursework by the participants. From the table, it could be seen that all the e-resources listed are relevant to the participants. However, more than half of the participants 17 (61%) indicated that they require current LIS e-textbooks. This finding is followed by 12 (42.8%) participants who indicated that they require current e-serials for their

coursework, and 9 (32.1%) participants who also indicated that they require e-textbooks on research methodology. The resources indicated by the least number of participants, 2 (7.1%) are e-resources in other academic disciplines. From the results obtained, it could be seen that the participants require a broad range of current e-information resources for their coursework.

Table 2: Type(s) of e-information resources needed for research work by the participants

N=28

S/No	E-information resources	Frequency (%)
1.	Current LIS e-textbooks	16 (57.1%)
2.	Dated LIS e-textbooks	6 (21.4%)
3.	E-textbooks on research methodology	10 (35.7%)
4.	Current e-serials	13 (46.4%)
5.	Dated e-serials	5 (17.8%)
6.	E-reference materials	7 (25%)
7.	E- theses/dissertations	8 (28.5%)
8.	E-resources in other academic disciplines	4 (14.2%)

Table 2 shows that all the e-resources are relevant to the participants' research needs. This is because the participants indicated the need for all of them. However, the resources required by most participants 16, 57.1%) for their research activities are current LIS e-textbooks. Followed by current e-serials, which are required by 13 (46.4%) participants; e-textbooks on research methodology, which are required by 10 (35.7%) participants; and e-theses/dissertations, which are

required by 8 (28.5%) participants. The resources that are required by a few participants are dated e-serials and e-resources in other academic disciplines. These resources are needed by only 5 (17.8%) participants and 4 (14.2%) participants, respectively. This finding shows that the participants require a broad range of e-resources for their research activities, especially current resources.



Table 3: Participants’ area(s) topic of needs/purpose(s) for needing e-information resources

N=28

S/No	Purpose	Frequency (%)
1.	Course work	14 (50%)
2.	Research	23 (82.1%)
3.	Employment opportunities	5 (17.8%)
4.	Health	6 (21.4%)
5.	Recreation	4 (14.2%)
6.	Financial matters	1 (3.5%)
7.	Prices of commodities	4 (14.2%)
8.	Crime and safety	7 (25%)
9.	Political	6 (21.4%)
10.	For other purposes not mentioned	3 (10.7%)

Table 3 shows the participants’ areas topic of needs/purposes for needing e-resources. From the table, it could be seen that majority of the participants 23 (82.1%) need e-resources to carry out their research activities. This is followed by 14 (50%) participants who indicated that they need the resources for their coursework. Other areas that were indicated by some of the participants include crime and safety, health, political, and employment purposes. However,

only 1 (3.5%) participant indicated that s/he requires the resources for gaining knowledge on financial matters. This finding clearly shows that the major reason(s) or purpose(s) for needing information by the participants is/are to carry out their academic work. This implies that the participants are focused on their study which takes priority over any other activity they are engaged in.

Table 4: Awareness of library e-information resources by the participants

N=28

library e-information resources	Frequency (%)
Not aware	0 (0%)
Moderately aware	17 (60.7%)
Very aware	11 (39.2%)
Total	28 (100%)

Table 4 shows the awareness level of library e-resources among the participants. From the results obtained, it could be seen that majority of the participants, 17 (60.7%), are moderately aware of the library e-resources; this figure is followed by 11 (39.3%) participants who indicated that they are very aware. Moreover, from the results, none 0 (0%) of the participants indicated that they are not aware of the resources. This finding shows that the participants are all aware of the e-resources in the library.



Table 5: Awareness of the different types of library e-information resources by the participants

N=28

S/No	Electronic resources	Not aware: Frequency (%)	Moderately aware: Frequency (%)	Very aware Frequency (%)	Total (%)
1.	E-books	0 (0%)	14 (50%)	14 (50%)	28 (100%)
2.	Databases	0 (0%)	16 (57.1%)	12 (42.8%)	28 (100%)
3.	Resources in the IR	2 (7.1%)	9 (32.1%)	19 (67.8%)	28 (100%)
4.	OA resources	0 (0%)	14 (50%)	14 (50%)	28 (100%)
5.	OERs	0 (0%)	21 (75%)	7 (25%)	28 (100%)

Table 5 shows the awareness level of different types of library e-information resources among the participants. From the table, it could be seen that half of the participants 14 (50%) are moderately aware of the library e-books, and the OA resources. Half are also very aware of the library e-books, and OA resources. More than half of the participants 16 (57.1%), and 21 (75%)

are moderately aware of the library databases and the OERs. Then, 19 (67.8%) of the participants are very aware of the resources in the IR. The result indicates that the awareness level of the different types of library e-resources among the participants is within the range of average and high.

Table 6: Avenue(s) through which the participants became aware of the library e-information resources

N=28

S/No	Avenue	Frequency (%)
1.	By visiting the library’s website	13 (46.4%)
2.	Through lectures	20 (71.4%)
3.	Through course mates	7 (25%)
4.	Through library periodic sensitization exercise	12 (42.8%)
5.	Through other avenues not mentioned	3 (10.7%)

Table 6 shows the avenue(s) through which the participants became aware of the library e-resources. From the table, it could be seen that most 20 (71.4%) of the participants became aware through lectures. This is followed by those 13 (46.4%) who became aware by visiting the library’s website, and through the library’s periodic sensitization exercise 12 (42.8%). This finding indicates that the students’ curriculum

teaches them about the library e-resources. It also specifies that the students attend and take their lectures seriously. Furthermore, the finding shows that the students on their own also visit the library’s website to find out information that would be relevant to their studies. It further indicates that they also attend the periodic library sensitization exercise.



Table 7: Use of library e-information resources by the participants

N=28

Use of library e-resources	Frequency (%)
Yes	22 (78.5%)
No	6 (21.4%)
Total	28 (100%)

Table 7 shows the use of the library e-resources by the participants. From the table, it could be seen that majority 22 (78.5%), of the participants use the library e-resources. This implies that the LIS master's students understand the benefits of using the library e-information resources for their academic activities. It also indicates that as future information specialists, they are actively involved in the use of e-resources, which is the focal point in most academic libraries today. Furthermore, it

signifies that they are also preparing themselves to set the pace for other library users to follow and to teach other library users about how to access the library e-resources. However, from the results obtained, 6 (21.4%) participants indicated that they do not use the library's electronic resources. This could be due to certain barriers, which will be discussed subsequently. It also shows that although all the students are aware of the available e-resources, not all use them.

Table 8: Type(s) of library e-information resources used and frequency of use

N=22

S/No	Type of e-resources	Never used: Frequency (%)	Rarely use: Frequency (%)	Occasionally use: Frequency (%)	Frequently use: Frequency (%)	Total (%)
1.	E-books	3(13.6%)	3(13.6%)	8(36.3%)	8(36.3%)	22 (100%)
2.	Databases	6 (27.2%)	1 (4.5%)	7 (31.8%)	8 (36.3%)	22 (100%)
3.	Resources in the IR	7 (31.8%)	5 (22.7%)	7 (31.8%)	3 (13.6%)	22 (100%)
4.	OA resources	7(31.8%)	4(18.1%)	9 (40.9%)	2(9.0%)	22(100%)
5.	OERs	10(45.4%)	5(22.7%)	7(31.8%)	0 (0%)	22(100%)

Table 8 shows the type(s) of e-resources used by the participants and the frequency of use of the resources. From the table, it could be seen that the majority of the participants frequently use e-books and databases. This is indicated by 8 (36.3%) and 8 (36.3%) participants. Also, the majority of the participants 7 (31.8%), and 9

(40.9%) occasionally use resources in the IR and the OA resources. However, the majority 10 (45.4%) have never used the OERs. This finding shows that the participants use specific types of library e-resources more than others. This could probably be because they find more relevant resources in those sites compared to the others.



Table 9: Other e-information sources consulted by the participants besides the institution’s library

N=28

S/No	Source	Frequency (%)
1.	E-resources from other academic libraries	9 (32.1%)
2.	Open Web resources	19 (67.8%)
3.	Other e-sources not mentioned	0 (0%)
	Total	28 (100%)

Table 9 shows the other electronic sources of information consulted by the participants besides the institution’s library. From the table, it could be seen that the majority of the participants 19 (67.8) consult the Open Web as an information source. This figure is followed by 9 (32.1%) participants who consult the e-resources in other academic libraries. This finding implies that the participants also use relevant e-resources from supplementary sources to satisfy their information needs.

Table 10: The e-information source that best satisfies the participants’ information needs

N=28

S/No	Source	Frequency (%)
1.	E-resources from the institution’s library	10 (35.7%)
2.	E-resources from other institution’s libraries	3 (10.7%)
3.	Open Web resources	13 (53.5%)
4.	Other e-sources not mentioned	0 (0%)
	Total	28 (100%)

Table 10 shows the e-information source that best satisfies the participants’ information needs. From the table, the Open Web as an information source is the source that best satisfies the needs of most 15(53.5%) of the participants. This is followed by the institution’s library as an information source which is indicated by 10 (35.7%) participants, and other academic

libraries, which is indicated by 3 (10.7%) participants. This finding indicates that Open Web resources satisfy the information needs of most of the participants more than the resources in their institution’s library. The inability of the library e-resources to best meet the needs of the participants could be due to certain barriers which will be discussed subsequently.

Table 11: Barriers encountered by the participants when seeking to use the library e-information resources

N=28

S/No	Barrier (s)	Frequency (%)
1.	Lack of adequate online searching skills	15(53.5%)
2.	Lack of time/ busy schedules	13 (46.4%)
3.	Unawareness of the availability of relevant library electronic information resources	0 (0%)
4.	Lack of personal ICT facilities	12 (42.8%)
5.	Lack of constant power supply	3 (10.7%)
6.	Lack of money	7 (25%)
7.	Lack of sufficient relevant e-resources in the library	18 (64.2%)
8.	Slow internet connectivity in the library	12 (42.8%)



9.	Technophobia (fear of technology)	0 (0%)
10.	Computer related illnesses	10 (35.7%)
11.	Other barriers not mentioned	0 (0%)

Table 11 shows the barriers encountered by the participants when seeking to use the library e-information resources. From the table, it could be seen that the majority 18 (64.2%) of the participants indicated a lack of sufficient relevant e-resources in the library as a barrier to their access. This is followed by 15 (53.5%) participants who indicated a lack of adequate online searching skills as a barrier. This figure is closely followed by 13 (46.4%) participants who specified lack of time as a barrier. Other notable barriers are a lack of ICT facilities, slow internet connectivity, computer-related illnesses, and lack of money. These were indicated by 12 (42.8%), 12 (42.8%), 10 (35.7%) and 7 (25%) participants respectively. This finding implies that there are barriers that are hindering the participants from fully utilizing the library e-resources. The presence of barriers also signifies the necessity of the library to improve its services to its users. Nevertheless, from the table, it could be seen that technophobia is not a barrier to the use of library resources by the students. This indicates that the students are not afraid of using ICT facilities to access library e-resources in the present Internet age.

Conclusions

This study was designed to investigate the e-information resource needs and uses of University of Jos LIS master’s students. From the findings of the study, the following conclusions were reached: the participants need a wide variety of current e-resources; they also have different topic areas of need; they are moderately aware of the library e-resources through different means/avenues; they use some specific types of the library e-resources more than others; they consult other e-sources of information especially the Open Web; they prefer the Open Web to other e-information sources; there are barriers to their use of the library e-sources.

Recommendations

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

1. The library should endeavour to acquire more current e-resources that would further satisfy the students’ information needs in the present digital age.
2. The library should organize training for the LIS students on how to effectively search for the library e-resources to enhance their use of the resources.
3. The library should improve its internet bandwidth/speed to enable the students to access and use the e-resources whenever they desire to visit the library for that purpose.
4. The library should organize a series of workshops for the students about computer ergonomics at the workstation. This would enable the students to know how to avoid computer-related illnesses during their use of computers to carry out their academic activities including accessing the library e-resources.
5. The students with busy schedules should liaise with their faculty librarian to assist them with their literature searches and retrieve relevant educational materials from the library’s website for the students.
6. The federal government should re-introduce scholarship/bursary schemes to postgraduate students. This would augment their financial status as students and enable them to carry out their academic activities without financial constraints.



REFERENCES

- Achuenu, E., & Auta, H.G. (2015). Physical development of University of Jos, in *The University of Jos at 40: Leapfrogging with resourcefulness and planning*, edited by MY Mangvwat, ZSC Okoye, SA Akintunde, SU Fwatshak. University Press Limited: 23-36.
- Akintunde, S.A. (2015). The University of Jos Library, 1975 to 2015, in *The University of Jos at 40: Leapfrogging with resourcefulness and planning*, edited by MY Mangvwat, ZSC Okoye, SA Akintunde, SU Fwatshak. Jos University Press Limited: 139-146.
- Akporhonor, B.A., & Akpojotor, L.O. (2016). Challenges confronting postgraduate library and information science students in the use of electronic resources in Southern Nigeria. *Library Philosophy and Practice* (e-journal) 1319. [Challenges Confronting Postgraduate Library and Information Science Student in the Use of Electronic Resources in Southern Nigeria](https://www.libraryphilosophyandpractice.com/Challenges-Confronting-Postgraduate-Library-and-Information-Science-Student-in-the-Use-of-Electronic-Resources-in-Southern-Nigeria)
- Ani, OE, Ngulube, P & Onyancha, B. (2014). Effect of accessibility and utilisation of electronic information resources on productivity of academic staff in selected Nigerian universities. *Science Research*, 2(6):166-171. <https://www.sciencepublishinggroup.com/journal/paperinfo.aspx?journalid=181&doi=10.11648/j.sr.20140206.13>
- Borlund, P., & Pharo, N. (2019). A need for information on information needs, in CLIS: the 10th International Conference on Conceptions of Library and Information Science, 2019. <http://informationr.net/ir/24-4/colis/colis1908.html>
- Brown, S., & Swan, B. (2007). *Researchers' use of academic libraries and their services: a report commissioned by the Research Information Network and the Consortium of Research Libraries*. <https://eprints.soton.ac.uk/263868/1/libraries-report-2007.pdf>
- Case, D.O., & Given, L. M. (2016). *Looking for information: a survey of research on information seeking, needs and behaviour*. (4th ed.). Emerald Group. <https://www.pdfdrive.com/looking-for-information-a-survey-of-research-on-information-seeking-needs-and-behavior-4th-ed-d187826122.html>
- Department of Social Science Education Faculty of Education. (2018). *Academic Brief*. Great Future Concept.
- Delaney, G., & Bates, J. (2018). How can the university library better meet the information needs of research students? Experiences from Ulster University. *New Review of Academic Librarianship*, 24(1), 63-89. <https://doi.org/10.1080/13614533.2017.1384267>
- Hjørland, Birger. (1997). *Information seeking and subject representation. An activity-theoretical approach to information science*. Greenwood Press.
- Horsfall, M.N., Nsirim, O., & Orubebe, E.D. (2020). Information needs and seeking behaviour of library and information science students of Rivers State University in Digital age. *International Journal of Information Processing and Communication (IJIPC)*, 8(1), 26-34. [informationneedsandseekingbehaviourofLISstudentsIJIPC_Vol8_No1_pp26-34.pdf](https://www.ijipc.com/informationneedsandseekingbehaviourofLISstudentsIJIPC_Vol8_No1_pp26-34.pdf)
- Information need. (2024, November 19). In *Wikipedia*. [Information needs - Wikipedia](https://en.wikipedia.org/wiki/Information_needs)
- Julien, H. 2019. Use of information, in *Encyclopedia of Communication and Information*. <https://www.encyclopedia.com/media/encyclopedias-almanacs-transcripts-and-maps/use-information>
- Majjambere, M. (2015). *Information seeking behaviour of humanities/arts international postgraduate students in public universities in KwaZulu-Natal Province, South Africa*. [PhD thesis, University of KwaZulu-Natal]. <http://hdl.handle.net/10413/12111>
- Mwangi, S. (2018). *Assessment of information needs and seeking behaviour of postgraduate students at the University of Nairobi*. [Master's dissertation, University of Nairobi]. <http://erepository.uonbi.ac.ke/handle/11295/105105>
- Naumer, C., & Fisher, K. E. (2017). Information needs, in *Encyclopedia of Library and Information Sciences*. (4th ed.). 2452-2458. https://www.researchgate.net/publication/288949939_Information_needs
- Nicholas, D., & Herman, E. (2009). *Assessing information needs in the age of the digital consumer*. Routledge. <http://dx.doi.org/10.4324/9780203855799>
- Nwachukwu, V.N., & Faga, A. (2017). Availability and use of library digital information resources by postgraduate students of University of Abuja. *International Journal of Development Research*, 7(6), 12983-12986. <https://www.journalijdr.com/sites/default/files/issue-pdf/8487.pdf>
- Nwankwo, N.G., Chukwu, I.L., Igbokwe, O.P., & Agbanu, N.A. (2019). Awareness and use of library information resources: a conceptual approach. *International Journal of Social Sciences and Humanities Review*, 9(2), 188-197.



- <https://www.researchgate.net/publication/341781602>
- Nwokedi, G.I., & Schellnack-Kelly, I.S. (2023). Digital resources in an academic hybrid library: assessment of usage pattern among history and international studies postgraduates in a Nigerian university. *Library Philosophy and Practice (e-journal)* 7631. [Digital resources in an academic hybrid library: assessment of usage pattern among history and international studies postgraduates in a Nigerian University](#)
- Nwokedi, G.I., & Schellnack-kelly, I.S. (2025). Information needs of history and international studies postgraduates. *Library and Information Perspectives and Research*, 6(3), 73-86. <http://doi.org/10.47524/lipr.v6i3.74>
- O'Farrell, M., & Bates, J. (2009). Student information behaviours during group projects: a study of LIS students in University College Dublin, Ireland. *Aslib Proceedings* 61(3), 302–315. [Student information behaviours during group projects: A study of LIS students in University College Dublin, Ireland | Emerald Insight](#)
- Okello-Obura, C., & Ikoja-Odongo, J.R. (2010). Electronic information seeking among LIS postgraduate students at Makerere University, Uganda. *Library Philosophy and Practice (e-journal)*. [Electronic Information Seeking Among LIS Postgraduate Students at Makerere University, Uganda](#)
- Saunders, L., Kubaniglu, S., & Boustany, J. et al. (2015). Information behaviours and information literacy skills of library and information science students: an international Perspective. *Journal of Education for Library and Information Science*, 56, 80-99. [Information Behaviors and Information Literacy Skills of LIS Students](#)
- Savolainen, R. (2016). Approaching the affective barriers to information seeking: the viewpoint of appraisal theory. *Information Research*, 21(4), 1-1. <http://www.informationr.net/ir/21-4/istic/istic1603.html>
- Shorunke, O., Ajayi, S.A., & Ibikunle, F. (2018). Awareness and use of electronic databases by postgraduate students in University of Ibadan. *Library Philosophy and Practice (e-journal)* 2065. [Awareness and use of electronic databases by postgraduates in the University of Ibadan.](#)
- Sundin, O., & Johannisson, J. (2005). The instrumentality of information needs and relevance. *CoLIS 2005: Proceedings of the 5th International Conference on Conceptions of Library and Information Science 2005*, (pp.107-118). https://www.researchgate.net/publication/221507640_The_Instrumentality_of_Information_Needs_and_Relevance
- Tracy, D.G., & Searing, S.E. (2014). LIS graduate students as library users: a survey study. *The Journal of Academic Librarianship*, 40(3-4), 367–378. [LIS Graduate Students as Library Users: A Survey Study - ScienceDirect](#)
- University of Jos. (2024). *Faculties and Departments. FACULTIES AND DEPARTMENTS | University of Jos - Nigeria*
- University of Jos College of health Sciences. (2025). *Faculties. COLLEGE OF HEALTH SCIENCES | University of Jos - Nigeria*
- Uzoagba, N., & Okiche, L.E. (2018). The library and accreditation of Nigeria universities: the case of the University of Nigeria Nsukka, Enugu State. *International Journal of Academic Library and Information Science*, 6(6), 142-150. https://www.researchgate.net/publication/330684766_The_Library_and_Accreditationof_Nigerian_Universities_The_case_of_the_University_of_Nigeria_Nsukka_Enugu_State
- Wilson, T.D. (1999). Models in information behaviour research. *Journal of Documentation*, 55(3), 249-270. https://www.researchgate.net/publication/228784950_Models_in_Information_Behaviour_Research