UNDERGRADUATE STUDENTS' UTILIZATION OF ELECTRONIC INFORMATION RESOURCES IN JOSEPH SARWUAN TARKA UNIVERSITY LIBRARY, MAKURDI, BENUE STATE, NIGERIA

¹Ruth Yangu Ihuman, ²Asom Faga and ³ S. A. Uganneya

^{1&3}Department of Educational Foundations and General Studies, Joseph Sarwuan Tarka University, Makurdi, Benue State, Nigeria ²Department of Library and Information Science, Federal University of Lafia, Nasarawa State, Nigeria
² asomfaga@yahoo.com

Abstract

The study assessed the utilization of electronic information resources in Joseph Sarwuan Tarka University library Makurdi, Benue State Nigeria. Three objectives with corresponding research questions guided the study. The study adopted a descriptive survey research design. The population of the study was 1,547 libraries registered 400 level undergraduate student in Joseph Sarwuan Tarka University library, Benue State Nigeria. The sample size of 195 registered library undergraduate students was used for the study. The instrument for data collection was questionnaire. Data collected was analyzed using descriptive statistics of frequency counts, percentages, mean and standard deviation to answer the research questions. Findings of the study revealed that the types of electronic information resources utilized by undergraduates in Joseph Sarwuan Tarka University library are: e-newspapers, CD-ROM (computer disk-read only memory, e-thesis/dissertation, e-dictionaries and internet. In addition, the study found that the extent to which undergraduates utilize electronic information resources in Joseph Sarwuan Tarka University Library is low. Erratic power supply, lack of information retrieval skills, poor network, lack of subscriptions in specific fields of interest, among others were the main challenges hindering the utilization of electronic information resources in Joseph Sarwuan Tarka University Library. Based on the findings, it was recommended among others that Joseph Sarwuan Tarka University Library should provide regular training sessions for undergraduates which focus on search strategies, database usage, and critical evaluation of electronic sources to empower students with the necessary skills for effective utilization.

Keywords: Undergraduate Students, Utilization of Electronic Information Resources, Information Resources, Electronic Information Resources

Introduction

University libraries serve important purposes for meeting the information needs of students and staff of the institution. As a store house of knowledge established to house and disseminate different forms of information materials for user consumption; it also plays a significant role in the institution by accomplishing institutions stipulated goals and objectives. In modern times, the content of libraries is not restricted to prints formats such as books,

magazines or journals. Libraries are now shifting from traditional printed resources to the use of Information and Communication Technology (ICT) and other electronic-driven resources and services (Nnadozie & Nwosu, 2016; Okaze, 2016). However, the use of electronic resources does not take the place of printed resources but facilitates it through access to large stock of Library materials (Okaze, 2016). The changes that have occurred in the world of ICT are what have shifted the content of libraries' resources from printed information to online information resources (Israel & Edesire, 2016). They also make electronic sources of information available to users because e-learning is giving new dimension in learning and hence affecting education in many ways (Bajpai, Hada & Bajpai, 2016). Besides, following technological revolution, libraries do not need to be in a physical space to be able to provide information to its users. The main reason is that ICT is contributing significantly towards the removal of geographical barriers across the globe (Prakash, 2017). Besides, the application of ICT in libraries is providing opportunities to users like undergraduates in Universities to access and utilize Electronic Information Resources (EIR) for their academic activities.

Electronic information resources are information resources provided in electronic form and these include resources available on the internet such as e-books, e-journals and online data bases among others. These resources also include OPAC, CD-ROMs, Online-Databases, E-journals, E-books, Internet resources (Oak, 2016). The use of electronic resources has made users to become more technologically friendly. Shariful (2012) sees electronic information resources as those resources that deal with both digital and digitized materials which can be either accessible from library's in house databases or from the world -web-web. The digital resources include: e-books, e-journals, e-magazine, e-projects, ethesis, e-dissertations, e-reports, websites, WWW-resources and other related materials which can be converting the materials formats into electronic format". Popoola and Haliso in Adeoye (2011) identify library electronic information resources available in the university libraries in Nigeria to include: Compact Disc Read Only Memory (CD-ROM), databases, videotapes, cassettes, diskettes, magnetic disks, Internet/email, microfiche and microphones among others. The digital information resources are made available in university libraries to assist users finding information relevant to their needs. These resources provide accurate and timely information, especially for undergraduates who depend greatly on the electronic resources for information to advance research and collaboration with other researchers around the world for intellectual growth. It is therefore important that undergraduates are aware of the existence of electronic information resources in university libraries for them to effectively utilize them for their academic pursuits.

The rapid advancements in technology have revolutionized the way information is accessed and disseminated. Electronic information resources, such as online databases, e-journals, e-books, and digital libraries, have become invaluable tools for students, especially undergraduates, in their academic pursuits. The availability of vast digital collections offers convenience, accessibility, and a wealth of knowledge at students' fingertips. However, to

fully utilize these resources, students need to be aware of their existence and how to access them effectively

Utilization of electronic information resources refers to the active and purposeful use of digital or electronic tools and platforms to access, retrieve, evaluate, and apply information for various academic, research, or personal purposes. It involves effectively employing digital resources, such as online databases, e-journals, e-books, digital libraries, academic websites, and other digital platforms, to gather relevant and reliable information. Utilization of electronic library information resources is not only a choice but inevitable in the era of information technology (Yebowaah & Plockey, 2017). The utilization of electronic information resources may serve as a motivating factor to students as it provides them with the opportunity to transmit, acquire or download, process and disseminate information on a subject of interest. Hence university libraries are providing opportunities to users to utilize both online resources effectively for their academic pursuits.

From the foregoing therefore, the importance of electronic information resources to students and university libraries cannot be over emphasized. They offer undergraduates students the chance to access relevant and current information from different subject areas. The emergence of electronic resources, according to Ani and Edem (2012), has tremendously transformed the handling and management of information in Nigerian academic environments and university libraries in particular. However, despite the laudable importance placed on electronic information resources, researches have shown that, the use of EIRs is be devilled with a plethora of challenges. Yebowaah and Plockey (2017) identified some challenges associated with the use of e-resources in the library to include: problems with the password, low internet speed, inadequate staff in the library and lack of assistance from the librarians, inadequate computers in the Library, no or low bandwidth and negative attitude of staff in the library toward users. Others may be lack of awareness, lack of subject coverage, slow downloading, low speed internet, erratic power supply, lack of required full text journals and lack of time.

The utilization of electronic information resources is crucial for the academic and research pursuits of undergraduate students. These resources encompass a wide range of digital platforms, including online databases, e-journals, e-books, digital libraries, academic websites, and other web-based resources. Electronic information resources provide a wealth of up-to-date and diverse information, enabling students to access a plethora of scholarly materials from various disciplines. This study is to examine the utilization of electronic information resources by undergraduates in Joseph Sarwuan Tarka University Library, Benue State, Nigeria with a view to ascertaining the types of electronic information resources, the extent of utilization as well as the challenges hindering the utilization of electronic information resources by undergraduate students of the university

Statement of the problem

In the digital age, electronic information resources have become vital components of academic and research activities, providing undergraduates with a vast array of information to enhance their learning experiences. Electronic information resources have become an indispensable part of the academic and research landscape, providing students with easy access to a vast array of scholarly materials. Joseph Sarwuan Tarka University Library, Benue State, Nigeria have made efforts to offer these electronic resources to their students, recognizing their significance in supporting scholarly pursuits.

However, despite the benefits of these resources, there are concerns regarding the level of utilization among undergraduate students in Joseph Sarwuan Tarka University Library, Benue State, Nigeria. It is the researcher's observation that even among those students who are aware of the various types of electronic information resources, there may be a significant portion that does not fully utilize them in their academic endeavors. This underutilization could be attributed to various factors, such as inadequate information literacy skills, limited training, or misconceptions about the relevance of electronic resources.

In the light of these challenges, there is a pressing need to assess the utilization of electronic information resources by undergraduate students in Joseph Sarwuan Tarka University Library, Benue State, Nigeria. By identifying the types, utilization and the underlying challenges of electronic information resources, library administrators, educators, and policymakers can design targeted interventions to bridge the gaps and empower students to harness the full potential of these resources for their educational and research needs. Hence this study sought to identify the types, utilization and the challenges in the utilization of electronic information resources by undergraduates in Joseph Sarwuan Tarka University Library, Benue State, Nigeria.

Objectives of the study

The main objective of this study is to assess the utilization of electronic information resources by undergraduates in Joseph Sarwuan Tarka University Library, Benue State, Nigeria. Specifically, the study sought to achieve the following objectives:

- 1. Determine the types of electronic information resources utilized by undergraduates in Joseph Sarwuan Tarka University Library, Benue State, Nigeria
- 2. Determine the extent to which undergraduates utilize electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria
- 3. Determine the challenges hindering the utilization of electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria

Research Design

The design for this study is descriptive survey research design. The study was carried out in Benue State. The study covered Joseph Sarwuan Tarka University Library, Benue State, Nigeria. The population of the study is 1,547 library registered 400 level undergraduate students from Joseph Sarwuan Tarka University Library, Benue State, Nigeria. Using Taro

Yamane formula, a sample size of 195 was determined and used for this study. The instrument for data collection for this study was a self-developed structured questionnaire. Data collected was analyzed using descriptive statistics of Frequency Counts, Percentages, Mean and Standard Deviation to answer the research questions

Results of the study

Results are presented and discussed in line with the research questions as presented below.

Research Ouestion One:

What are the types of electronic information resources utilized by undergraduates in Joseph Sarwuan Tarka University Library, Benue State, Nigeria?

To answer this research question, data on the types of electronic information resources utilized by undergraduates in Joseph Sarwuan Tarka University Library, Benue State, Nigeria was collected and analyzed as presented on Table 1 below

Table 1: Frequency Counts and Percentage Analysis of the types of electronic information resources utilized by undergraduates in public University Libraries in Benue State

S/No	Item	Frequency		Percenta	ıge (%)	Decision
		\mathbf{U}	NU	\mathbf{U}	NU	
14	E-books	48	310	13.5	86.5	Not utilized
15	E-journals	71	287	19.8	80.2	Not utilized
16	E-newspapers	300	58	83.7	16.3	Utilized
17	E-magazines	91	267	25.4	74.6	Not utilized
18	OPAC (Online Public Access Catalogue)	79	279	22.1	77.9	Not utilized
19	CD-ROM (Compact Disk-Read Only Memory (CD-ROM)	299	59	83.5	16.5	Utilized
20	Online databases	58	300	16.3	83.7	Not utilized
21	E-thesis/dissertation	301	57	84.0	16.0	Utilized
22	Website Resources	48	310	13.4	86.6	Not utilized
23	E-dictionaries	286	72	79.9	20.1	Utilized
24	Internet	320	38	89.3	10.7	Utilized
25	E-encyclopedias	62	296	17.4	82.6	Not utilized
26	E-Audio/Visual Resources	69	289	19.3	80.7	Not utilized

U = Used, NU = Not Used

Table 1 shows the types of electronic information resources utilized by undergraduates in Joseph Sarwuan Tarka University Library, Benue State, Nigeria. As revealed in the Table,

only items 16, 19, 21, 23 and 24 with percentage values for 'Utilized' above 50% were considered as the types of electronic information resources utilized by undergraduates in the University Library. Other items such as 14, 15, 17, 18, 20, 22, 25 and 26 with percentage values for 'Utilized' below 50% were considered as the types of electronic information resources not utilized by undergraduates in Joseph Sarwuan Tarka University Library, Benue State, Nigeria.

Research Question Two:

To what extent do undergraduates utilize electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria?

To answer this research question, data on the extent to which undergraduates utilize electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria were collected and analyzed as presented on Table 2 below

Table 2: Mean and Standard Deviation Analysis of the extent to which undergraduates utilize electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria

S/No 27	Item E-books	N 358	Mean 2.04	SD 1.10	Decision Low extent
28	E-journals	358	2.22	0.73	Low extent
29	E-newspapers	358	2.63	0.99	High extent
30	E-magazines	358	2.27	0.59	Low extent
31	OPAC (Online Public Access Catalogue)	358	2.02	0.89	Low extent
32	CD-ROM (Compact Disk-Read Only Memory (CD-ROM)	358	2.62	1.15	High extent
33	Online databases	358	2.09	0.76	Low extent
34	E-thesis/dissertation	358	3.29	0.88	High extent
35	Website Resources	358	2.21	0.96	Low extent
36	E-dictionaries	358	2.38	0.83	Low extent
37	Internet	358	3.33	0.79	High extent
38	E-encyclopedias	358	2.15	1.07	Low extent
39	E-Audio/Visual Resources	358	2.27	0.98	Low extent
	Cluster Mean		2.42	0.90	Low Extent

N = Sample, SD = Standard Deviation

Table 2 shows the mean analysis of the extent to which undergraduates utilize electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria. As revealed in the Table, items 29, 32, 34, and 37 with Mean values ranging from 2.62 - 3.33

which are above the benchmark of 2.50 were considered utilized to a high extent while 27, 28, 30, 31, 33, 35, 36, 38, and 39 with the Mean values ranging from 2.04 - 2.38 which are below the benchmark of 2.50 were considered utilized to a low extent. The Table also revealed a cluster mean of 2.42 and SD = .90. With this cluster mean of 2.42 which is below the benchmark of 2.50, it can be deduced from this finding that the extent to which undergraduates utilize electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria is low.

Research Question Three:

What are the challenges hindering effective utilization of electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria?

To answer this research question, data on the challenges hindering effective utilization of electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria were collected and analyzed as presented on Table 3 below

Table 3: Mean and Standard Deviation Analysis of the challenges hindering effective utilization of electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria

S/No	Item	N	Mean	SD	Decision
40	Erratic power supply	358	2.89	0.88	Agree
41	Lack of information retrieval skills	358	2.81	1.02	Agree
42	Poor network	358	3.21	0.83	Agree
43	Low bandwidth	358	2.78	0.98	Agree
44	Lack of subscriptions in specific fields of interest	358	2.99	0.96	Agree
45	Access password issues	358	3.07	0.79	Agree
46	Lack of assistance from the librarians	358	2.95	1.10	Agree
47	Inadequate computers in the Library	358	2.90	0.74	Agree
48	Negative attitudes of staff towards users	358	2.79	0.92	Agree
49	Lack of user orientation/training	358	3.10	0.85	Agree
50	Lack of knowledge about electronic information resources	358	3.15	0.77	Agree
51	Non availability of required information	358	2.86	1.03	Agree
52	Lack of awareness about statutory provision for accessing e-resources by the university library	358	2.23	0.99	Disagree

N = Sample, SD = Standard Deviation

Table 3 shows the mean analysis of the challenges hindering effective utilization of electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria. As revealed in the Table, except for item 52 with a mean of 2.23 which is below the benchmark of 2.50, other items (40 - 51) have Mean values above 2.50 and were considered as the challenges hindering utilization of electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria.

Discussion of findings

The findings in research question one of this study revealed that the electronic information resources utilized by undergraduates in Joseph Sarwuan Tarka University Library, Benue State, Nigeria are e-newspapers, CD-ROM (computer disk-read only memory, e-thesis/dissertation, e-dictionaries and internet. These findings agree with that of Abdulganiyu, Msheliaand Bello (2019) who investigated the awareness, accessibility and use of library subscribed online electronic databases by students of university of Maiduguri and found that electronic information resource like online databases are not utilized by the students. The findings however disagree with that of Tariq and Zia (2014) who found that the types of electronic information resources used by the students include: e-books, e-journals, website resources, databases and e-prints. This finding as observed is implies that in spite of the high level of awareness of electronic information resources among the undergraduates, only a few of the resources are utilized by them.

The findings in research question two of the study also revealed that the extent to which undergraduates utilize electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria is low. It was found from the study that electronic information resources such as e-books, e-journals, e-magazines, OPAC (Online Public Access Catalogue), online databases, e-encyclopedias and E-Audio/Visual Resources are utilized to a low extent by the undergraduates. The findings agree with that of Yebowaah and Plockey (2017) who reported low level of utilization of electronic information resources among students. The findings also agree with that of Urhiewhu (2014) whose study on the availability and use of digital information resources by undergraduates of universities found that students make use of DIRs to a low extent. Also, in corroboration with this finding is that of Quadri, Adetimirin and Idowu (2014) who found that the utilization of other e-resources was low. This finding however does not corroborate with that of Akpojotor (2016) who revealed that students of library and information science highly use electronic information resources. The findings also disagree with that of Manjack, Danjani and Fari (2019) who study on utilization of electronic information resources by the undergraduate students in the university libraries found that electronic information resources such as e-books, e-journals, CD-ROM, DVD and E-magazines were utilized to a high extent. The findings of the present study as observed imply that despite the high level of awareness of electronic information resources by undergraduates in Universities in Benue State, their level of utilization of the information resources is low.

Lastly, the findings on the challenges revealed that erratic power supply, lack of information retrieval skills, poor network, lack of subscriptions in specific fields of interest, access password issues, inadequate computers in the Library, negative attitudes of staff towards users, lack of user orientation/training and lack of knowledge about electronic information resources are the main challenges hindering effective utilization of electronic information resources in Joseph Sarwuan Tarka University Library, Benue State, Nigeria. This finding corroborates that of Egberogbe (2011) and Quadri, Adetimirin and Idowu (2014) who revealed that some of the factors hindering the use of e- resources in university libraries include; lack of strategic planning, adequate or reliable funding, lack of use of internet to provide information services to users and a lack of consistent training for users in new ICT services.

The findings also corroborate that of Dukper, Sakibu and Arthur (2018) who found that the utilization of e-library resources by students comes with various challenges ranging from lack of ICT knowledge by students, difficulties in reading from the screen, slow internet speed or poor network, insufficient ICT facilities in the e-library facility and unskilled ICT librarians. Further, the findings agreed with that of Yebowaah and Plockey (2017), Soni, Gupta and Shrivastava (2018) and Manjack, Danjani and Fari (2019) who revealed the challenges faced by students in the utilization of electronic information resources to include: power outage, poor internet connectivity, inadequate computers in the library, lack of information on how to use E-resources, limited subscribe titles, non-availability of required information and insufficient search skills. Also in agreement with this finding is that of Tariq and Zia (2014) who revealed that students face a number of problems while using Electronic Information Resources among which include: slow connection, electricity failure, insecurity and fear of different viruses and errors, interruption by unnecessary advertisements, licensing issues, scattered data and screen reading problems. The implication of the present findings of the study is that there are a plethora of challenges that affect undergraduates in the effective utilization of electronic information resources in University Libraries in Benue State.

Conclusion

Based on the findings of the study, it was concluded that, the extent to which undergraduates in Joseph Sarwuan Tarka University Library, Benue State, Nigeria utilize electronic information resources is low. This suggests that although students may be aware of the various types of these resources, they are not making full use of them in their academic activities. Addressing the identified challenges and providing adequate support and training for students may enhance their engagement with these valuable resources, leading to better academic outcomes and research capabilities.

Recommendations

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

1. Upgrade Infrastructure: In order to mitigate the challenges of erratic power supply and poor network connectivity, the University Library should invest in reliable power

- backup systems and improve internet infrastructure. Adequate provision of computers and internet access points will ensure that students can access electronic resources without interruption.
- 2. Diversify Subscriptions: The Library should work towards acquiring subscriptions to electronic resources in specific fields of interest to cater to the varied academic needs of undergraduates. By expanding the range of available digital resources, students will have access to a more comprehensive collection of materials for their studies and research.
- 3. Improve User Support Services: Addressing challenges related to access password issues and negative staff attitudes towards users requires a focus on enhancing user support services. The Library staff should be trained to provide courteous assistance to students and promptly resolve access-related issues.
- 4. Orientation and User Training: Providing user orientation and training programmes for undergraduates can significantly increase their familiarity and confidence in utilizing electronic resources effectively. These programmes should be regular and tailored to meet the specific needs of students in the University Library.
- 5. Collaborative Efforts: The University Library can collaborate with academic departments and Faculty members to integrate the use of electronic information resources into the curriculum. Encouraging Faculty to incorporate digital resources in their course materials will reinforce the importance of utilizing these resources for academic purposes.

References

- Abdulganiyu, H O., Mshelia, P. Y. & Bello, R. A. (2019). Awareness, accessibility and use of library subscribed online electronic databases by students of University of Maiduguri. *MAJASS*, 18: 15-26
- Adeoye, M.O. (2011). Teaching effectiveness, availability, accessibility and use of library services. *Library Philosophy and Practice*, 201. Available at http://.unllib.unl.edu/lpp
- Akpojotor, O.J. (2016). Awareness and usage of electronic information resources among postgraduate students of Library and Information Science in Southern Nigeria. *Library Philosophy and Practice (e-journal)*
- Ani, O. & Edem, N. (2012) Access and usage of online databases in Nigerian universities in teaching/ research. *Library and information Practitioner* 5(1x2): 475-486.
- Bajpai, R.P., Hada, K. S. & Bajpai, G. (2016). Academic libraries and e-learning: initiative and opportunities. *International Journal of Library & Information Science (IJLIS)*, 5(3), pp. 159 165.
- Dukper, K. B., Sakibu, B. & Arthur, B. (2018). Awareness and utilization of electronic library resources by students of Tamale Technical University, Ghana" (2018). *Library Philosophy and Practice (e journal)*. 2078. http://digitalcommons.unl.edu/libphilprac/2078
- Manjack, F. U., Danjani, B. U. & Fari, S. A. (2019). Utilization of electronic information resources by the undergraduate students in the university libraries in Gombe State, Nigeria. Retrieved from https://www.researchgate.net/publication/331522293

- Nnadozie, C. O. & Nwosu, C. C. (2016). Analysis of final year students' satisfaction with information resources and services in four Nigerian federal university libraries. *International Journal of Advanced Library and Information Science*, 4(1): 333-345.
- Oak, M., (2016). Assessing the library users' expectations: A select study of management Institutions in Savitribai Phule Pune University (Sppu), Pune, India. International *Journal of Library & Information Science (IJLIS)*, 5(3), 149–158
- Okezie, C. A., (2016). Types of library and information science publications. Available in Selected Academic Libraries in Nigeria. *Journal of Library and Information Sciences*, 4(1), 63-72.
- Prakash, I. N., (2017). Resource sharing: A Library perceptive. *International Journal of Library & Information Science (IJLIS)* 6(1): 19–22.
- Quadri, G. O., Adetimirin A. E. & Idowu, O. A. (2014). A study of availability and utilization of library electronic resources by undergraduate students in private universities in Ogun State, Nigeria. *International Journal of Library and Information Science*, 6(3): 28-34.
- Shariful, I. (2012). Definition of Digital Information Resources. Accessed from http://univdhaka.academia.edu/sharifulislam/papers/203831/definition_of_digitalinfor mationresurces
- Soni, N. K., Gupta, K. K. & Shrivastava, J. (2018). Awareness and usage of electronic resources among LIS Scholars of Jiwaji University, Gwalior: A Survey. *DESIDOC Journal of Library & Information Technology*, 38(1): 56-62
- Tariq, H. & Zia, W. M. (2014). Use of electronic information resources by the students of faculty of science, University of Karachi. *International Journal of Digital Library Services*, 4(3): 80-92.
- Urhiewhu, L. O (2014). Availability and use of digital information resources by undergraduates of universities in Delta and Edo States, Nigeria. *International Journal of Advanced Research, (journal)*. Retrieved from https://www.journalijar.com/thesis/3 576/urhiewhu,-lucky-oghene
- Yebowaah, F. A. & Plockey, F. D. D. (2017). Awareness and use of electronic resources in university libraries: A Case Study of University for Development Studies Library. *Library Philosophy and Practice(ejournal)*.1562.http://digitalcommons.unl.edu/libphi lprac/1562