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ASSESSMENT OF ELECTRONIC INFORMATION RESOURCES AND UTILIZATION BY POSTGRADUATE STUDENTS IN FEDERAL UNIVERSITY LIBRARIES IN NORTH WEST, NIGERIA

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Abstract
This study was conducted to assess the utilization of electronic information resources by postgraduate students of federal university libraries in North West Nigerian. The purpose of investigation was to inquire about the respondents' appreciation of the types of resources, level of utilization based on availability as well as challenges encountered, as a result of usage. The descriptive design was adopted for the study. Samples of 214 of postgraduate students within five out 7 universities were purposively selected. Data were collected using questionnaire designed to elicit response from respondents and data were analyzed using descriptive statistics methods percentages, mean, and standard deviation. The study revealed that the available EIRs in their libraries are e-journals, e-books, OPACs, E-mail, DATAD (database of thesis and dissertation), online databases, Internet resources, CD-ROM databases and digitized resources among others; purposes for using electronic resources include: to source materials for research/writing project, use them to do class assignments, use the electronic information resources to augment my class works, use the e-resources to update my knowledge in subject areas of interest, a major barrier to usage was identified as lack of information technology (IT) knowledge to effectively utilize the available resources.
Keywords: Universities, University Libraries, Electronic Resources, Utilization, Postgraduate Students

Introduction

University is a community of persons, both males and females, who engage in study and research for the common goal of intellectual development and technological advancement. As observed by Alemu (2018), "A university is a higher learning institution that brings men and women to a high level of intellectual development in the arts and science, and the traditional professional disciplines, and promotes high-level research." However, it is important to understand that universities are not set up simply as degree mills to produce students in learning centers, but primarily to do research, and disseminate outcomes and propagate innovation through the society (Ibidapo-Obe 2012).

University libraries were established all over the world to purchase and make information resources available for use. University libraries are integral academic part of their universities therefore, they generally grow simultaneously with their parent bodies.

It is generally believed that the major objective of university library is to acquire, organize, reserve and make information resources accessible to users in supporting teaching, learning and research activities. The strongest pillar and hub of information dissemination is the university library as it supports its parent institution in teaching, learning and research through the provision of relevant information resources both in print and non-print forms.

The introduction of Information Communication Technology (ICT) facilities in the university libraries has immensely improved information generation, access, storage and dissemination (Mohammed & Philip 2017). Dissemination of timely and up-to-date information is made easier with the arrival of these technologies which aid the transmission of information through electronic information resources. As a result electronic resources have become the lively substance to the modern libraries reserve in satisfying needs of students, teachers and researchers with minimum risk and time (Dare 2017). Hence, libraries must re-evaluate their roles in this new information age that need students to have an unrestricted access to electronic resources.

The utilization of electronic information resources is necessary for students essentially because they offer better, faster and easier access to information than information accessed through print media. Electronic resources help to expand access, increase usability and effectiveness and establish new ways for students to use information to be more productive in their academic activities. The use of these electronic resources is aided by information and communication technology infrastructure in universities in North West Nigeria. It is against this backdrop that the study intends to identify the available electronic information resources in federal university libraries in North West Nigeria, the extent of utilization and purpose for which postgraduate students use electronic information resources.

Statement of Problem

University libraries in Nigeria and around the globe are investing huge sums of money to subscribe and purchase electronic information resources in order to meet the information needs of the university community. Electronic resources in this libraries have made information accessible to researchers and postgraduate students for study or research purposes. Electronic resources in libraries no doubt has numerous benefits in postgraduate students academic activities as it enables access to current information at the right time and in the right place, provides them the chance to search several files at a time and so on, it also presents a lot of challenges to maximum use electronic information resources .

However, preliminary observation has shown that electronic resources are grossly underutilized by postgraduate students in the federal universities in North West Nigeria despite the huge investment made by university libraries to ensure their provision and the potentials they hold for effective learning and research. This development could however affect the academic activities of the postgraduate students in the North West, Nigeria. Against this backdrop that the study intends to access electronic

information resources and it utilization by postgraduate students in federal university libraries in North West, Nigeria.

Objectives of the Study

The study was thus guided by the following objectives:

1. Identify the types of electronic information resources available in the federal university libraries in North West, Nigeria
2. Identify the extent of utilization electronic information resources for academic purposes by postgraduate students' in the federal university libraries in North West, Nigeria
3. Ascertain the purposes of utilization electronic information resources by postgraduate students' in the federal university libraries in North West, Nigeria

Research Questions

This research sought to answer the under-listed research questions:

1. What types of electronic information resources are available in the federal university libraries in North West, Nigeria?
2. What is the extent of utilization electronic information resources by postgraduate students' in the federal university libraries in North West, Nigeria
3. What are the purposes of utilization of1 electronic information resources by postgraduate students' in the federal university libraries in North West, Nigeria?

Literature Review

Electronic resources are ideas which were develop as a result of the speedy growth of information and communication technology. Electronic resources encompass all materials that contain information that can be accessed through digital or online means by the support of computer technologies. Kwafoaet al. (2019) define electronic resources as digitized information enabled by computers, electricity, and exterior components, as well as network connectivity which is generally operated by human beings. E-resources are in diverse formats, such as audio, texts, graphics, maps, and videos, among many others. They also include search engines, bibliographic databases, electronic reference books, CDROMs, full-text documents, and e-journals, including Online Public Access Catalogues (OPACs) (Kavithanjali, 2019; Okogwu, 2020). E-resources come in various types and forms, including e-journals; electronic databases (such as full-text databases, indexing and abstracting databases, numeric and statistical databases, and reference databases); biographies; dictionaries; directories and encyclopedias; e-books; e-images; and e-audio and visual resources (IFLA 2012).

Electronic information resources are utilized by postgraduate students in the universities for several academic purposes. These purposes according to Ukachi (2013) include: doing class assignments, writing term papers, augmenting class works, retrieving current literature for studies, following blog discussions on the subject area of interest, searching for scholarship opportunities, searching for internship placement and

for research purposes. In view of the fact that universities are institutions of higher learning where researches of various degree take place and equally, research requires the use of current and up-to-date literatures, it then becomes very necessary that ERs are greatly used by the students in the universities.

Utilizing e-resources, existing studies suggest a diversity of them. For instance, Shelton (2011) found that in UK universities, most people (87%) used e-resources in academic and research activities. In their investigation of e-resources usage by faculty and researchers in selected Indian Universities, Siwach and Malik (2019) perceived that the most important purpose for utilizing e-resources was writing research papers (mean = 4.62), writing research proposals/projects (mean = 4.38), and preparing for seminars, conferences, and workshops (mean = 4.35). Their findings further show that other purposes such as preparing teaching materials and lecture notes, guiding researchers and peers, exploring research grant opportunities, designing curriculum, and accessing general information held lesser significance (mean < 4). These findings are contrary to what was found by Adeniran (2013) in her study of usage of electronic resources at Redeemers University in Nigeria found that even though respondents were aware of the different types of electronic information resources available in the university library, their use rate of these resources was low. Other previous studies (e.g., Bamidele et al., 2018; Bala, Bansal & Sharma, 2018; Aladeniyi, 2017; Qasim & Khan, 2015; Nisha & Ali, 2013; Kalogiannakis, 2010) noted that e-resources were purposively used to up-date knowledge and collect different learning, teaching and research materials.

The importance of e-resources in university libraries and protecting its usage seems not encouraging. Postgraduate students' pursuit to use e-resources for their academic work encounters some difficulties in terms of access and usage. Therefore, in order for academic libraries and information centers to improve their e-resource services, it is very important to better understand the challenges users encounter in accessing these resources. The challenges limiting access and use of e-resources among postgraduate students slightly differ from one university to another. In general, several limiting factors are reported by different scholars from prior studies. For example, Kumar and Reddy (2016) revealed that most of these searchers faced various problems when it comes to e-resources use. It is documented that slow internet service, unfamiliar file formats, unreliable power supply, and inadequate access to subscribed e-resources and databases undermine effective use of the resources. This means some users are liable to be deprived of the necessary information for their academic work. Academic libraries are required to invest more in the training and provision of more e-resources to meet the information of all users.

Research Methodology

The study adopted a descriptive cross-sectional research design. The population of this study comprises 2,144 library-registered postgraduate students, as noted in the PG e-library Registration Portal for (2018/2019, 2019/2020 and 2020/2021) academic session, in 5 out of the 7 federal universities in the North West, Nigeria which met the criteria for

the study, the universities are: Ahmadu Bello University; Bayero University Kano; Usman Danfodio University; Federal University Dutse; Federal University Dutsin-Ma. Multistage sampling technic was used to arrive at the desired sample size. The sample size for this study is 214 which is 10 per cent of the postgraduate students who were registered users in five (5) federal university libraries, in North West, Nigeria. The 5 librarians heading the EIRs sections of the libraries were also included. Questionnaire and interview was used to collect data. The questionnaire was administered personally by the researcher with the help of research assistant after it was validated. The researcher personally conducted the interviews of the librarians by phone with responses being written down. The data collected were analyzed using frequency counts, percentages and Mean and standard deviation for RQ2 and RQ3. Information generated from the interview conducted was used to corroborate the information derived from the questionnaire.

Data analysis and Discussion of Finding

Data were analyzed and results were presented in line with the study research questions.

Questionnaire distribution and response rate

A total of 214 questionnaires were administered to the postgraduate students. Although 196 (92%) questionnaires were returned, 18 (8%) copies were found unusable.

Various types of electronic information resources available in the federal university libraries in North West, Nigeria

The above question was asked during the interview session with the librarians in charge of the EIRs units. Their responses indicated that the available EIRs in their libraries are e-journals, e-books, OPACs, E-mail, DATAD (database of thesis and dissertation), online databases, Internet resources, CD-ROM databases and digitized resources among others. It was also found out that most of the libraries under study have digitized resources as part of its EIRs and a couple of the libraries just recently commenced a digitization programme. The interview results also support that of Quadri, Adetimirin, & Idowu, (2014), who repot that e-books, e-journal, databases and Internet resources were available for students.

Academic purposes of utilizing electronic information resources by postgraduate students' in the federal university libraries in North West, Nigeria

Table 1: Mean Responses of Respondent on the Academic Purposes for which PG Students is Utilizing of Electronic Resources in Federal University Libraries
N=196

		Name of schools					OVERALL	
		ABU $\bar{x}$	BUK $\bar{x}$	UDU $\bar{x}$	FUDJ $\bar{x}$	FUDK $\bar{x}$	$\bar{x}$	SD
1	I use the library's electronic information resources to source materials for research/writing Project	3.55	3.56	3.67	3.75	3.75	3.65	.50
2	I use them to do class Assignments	3.53	3.72	3.42	3.75	3.50	3.58	.49
3	I use the electronic information resources to augment my class Works	2.73	2.83	3.33	3.25	2.00	2.82	1.04
4	I use the Internet access in the library to send e-mail	2.78	2.67	3.58	3.75	3.00	3.15	1.21
5	I use the Internet access in the library to chat with friends	2.78	2.67	3.58	2.75	3.00	2.95	1.02
6	Use it to search for scholarship Opportunities	2.09	2.17	3.67	3.00	1.75	2.53	1.12
7	To search for internship Opportunities	2.42	2.61	3.08	1.25	2.75	2.42	1.13
8	I use the e-resources to retrieve current literature for studies	2.13	3.11	3.33	3.50	3.25	3.06	.74
9	I follow blog discussions on subject area of interest via the library's Internet access	2.50	3.50	3.67	3.25	1.25	2.83	1.15
10	I participate in professional discussion group/list serve via the library's Internet access	2.77	2.11	2.83	3.75	3.75	3.04	1.14
11	I use the e-resources to update my knowledge in subject areas of interest	3.09	2.67	3.25	2.75	3.25	3.00	.89
12	I use the Electronic catalogue (OPAC) for sourcing information in the library	3.13	3.11	3.33	3.50	3.25	3.26	1.04
13	I use the Internet in the library to generally source materials and information	3.29	3.11	3.58	2.25	3.00	3.04	.72
14	I use the electronic books provided by the library to complement my class notes	2.87	2.91	3.33	2.98	2.75	2.96	1.12

15	I use the electronic journals provided by the library for my project writing	2.44	3.06	3.25	1.75	2.00	2.50	1.15
16	I use the online database in the library for my assignments	2.94	2.78	3.58	2.58	3.75	3.12	3.61
	Cluster Mean	2.81	2.91	3.40	2.98	2.87	2.99	.50

KEYS: ABU=Ahmadu Bello University; BUK=Bayero University Kano; UDU= Usman Danfodio University; FUDJ=Federal University Dutse; FUDK=Federal University Dutsin-Ma; A-Accepted, D Disagree

Result from Table 1 revealed the academic purposes for which postgraduate use electronic resources for in federal university libraries. The mean score of item 7 which is 2.42 fall short of the 2.50 acceptance benchmark which implies that respondents disagreed with it as academic purposes for which postgraduate use electronic resources for in federal university libraries. However, the overall mean scores of items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15 and 16 which are 3.04, 3.04, 2.82, 3.15, 2.95, 2.53, 3.58, 3.06, 2.83, 3.65, 3.00, 3.26, 2.96, 2.50 and 3.15 are above the 2.50 acceptance benchmark which implies that they are accepted as academic purposes for which postgraduate use electronic resources for in federal university libraries. These purposes include: to source materials for research/writing project, use them to do class assignments, use the electronic information resources to augment my class works, use the e-resources to update my knowledge in subject areas of interest, use the Internet in the library to generally source materials and information, use the Internet access in the library to chat with friends, to participate in professional discussion group/list serve via the library's Internet access, to search for scholarship opportunities, among others. The overall mean and standard deviation scores for the entire items in Table 1 is 2.99 and .50 respectively implies that respondents agree to the items on table 1 as the academic purposes for which postgraduate use electronic resources for in federal university libraries. The findings corroborates the result of Quadri and Adetimirin (2014) who studied the purpose of use of EIRs by postgraduate students in two private universities in Ogun State and found that students used EIRs for class assignment, research and study.

The result from various interview from the head of e-library units of the university libraries they also indicated that PG students use electronic resources to sources material for their project writing, to do their class assignment, to update their knowledge in subject areas of interest, to generally source materials and information, to send mail among others.

What are the challenges postgraduate students' faced in utilizing electronic information resources in federal university libraries in North West, Nigeria

Table 2: Mean Responses of Respondent on Challenges Faced by Postgraduate Students on the Utilizing of ERs in Federal University Libraries

N=196

		Name of schools					OVERALL	
		ABU $\bar{x}$	BUK $\bar{x}$	UDU $\bar{x}$	FUDJ $\bar{x}$	FUDMA $\bar{x}$	$\bar{x}$	SD
1	Lack of awareness	3.22	3.22	3.33	3.00	2.00	2.95	0.94
2	Lack of IT skill and knowledge	3.59	3.39	3.42	3.50	3.75	3.53	0.56
3	Insufficient computers with internet facilities	3.51	3.72	3.75	3.50	2.75	3.44	0.70
4	Poor power supply	3.47	3.11	3.42	3.50	4.00	3.50	0.83
5	Inadequate funds	3.50	3.06	3.67	2.75	3.00	3.19	0.71
6	Poor Internet connectivity	2.93	2.72	2.75	2.00	2.25	2.53	1.06
7	Problems to retrieve records relevant to my information need	3.43	3.44	3.42	3.00	3.75	3.40	0.79
8	Insufficient e-resources in my field of study	3.54	2.89	2.75	2.75	3.00	2.98	0.89
9	E-resources are not 24/7 Accessible	3.30	1.89	2.25	2.50	3.00	2.58	0.95
10	Attitude of library staff	3.30	2.61	2.92	3.75	3.00	3.11	1.02
11	Inadequate time towards ILS	2.78	1.44	3.17	3.50	2.25	2.62	1.09
	Cluster Mean	3.32	2.86	3.16	3.06	2.97	3.08	.65

Key: ABU=Ahmadu Bello University; BUK=Bayero University Kano; UDU= Usman Danfodio University; FUDJ=Federal University Dutse; FUDMA=Federal University Dutsin-Ma A= Agree; D= Disagree

Result in Table 2 revealed the challenges faced by postgraduate students in using ERs in federal university libraries in North West, Nigeria**.** The overall mean score items 1-11 which are 2.95, 3.53, 3.44, 3.50, 3.19, 2.53, 3.40, 2.98, 2.58, 3.11 and 2.62 are above the 2.50 acceptance benchmark which implies that they are accepted as challenges faced by postgraduate students in using ERs in federal university libraries in North West, Nigeria. These challenges include: lack of awareness, lack of IT skill and knowledge, insufficient computers with internet facilities, poor power supply, inadequate funds, poor internet connectivity, and problems relating to retrieval of records relevant to information need, among others. The overall mean score for table 6 which is 3.08 is also above the 2.50 acceptance benchmark which implies that respondents agree to all the items on table 6 as challenges faced by postgraduate students in using ERs in federal university libraries in North West, Nigeria. To corroborate the result of the study, Mulla (2011) listed challenges associated with postgraduate students' use of ERs as: lack of ICT skills, shortage of ICT equipment and facilities, poor power supply, malfunctioning of ICT equipment as well as cost of using ICT equipment.

Conclusion

Use of university libraries' electronic resources by Nigerian postgraduate students is essential for obtaining timely, up-to-date and current information needed for academic excellence. This would not only help them to have full mastery of their subject areas of specialization but would in this electronic era also, allow them to face the impending challenges in the society. The study has established the various types of EIRs available in the libraries under study in Nigeria. The contributing factors to the problem of EIRs is low utilization by postgraduate students which led to this study had similarly been identified as the study shown that majority of the postgraduate students have low IT skill and knowledge, insufficient e-resources in my field of study, insufficient computers with internet facilities, poor power supply, inadequate funds challenges.

Recommendations

Based on the findings from this study, the following recommendations were made:

1. There is need for libraries to organize constant orientation programs and training on how to use the electronic resources by postgraduate students during their first few months in the university
2. There is urgent need for academic libraries to prioritize electronic resources as the major information resources and ensure its effective and efficient usage
3. Library managements should endeavor to provide adequate Internet-connected computer, uninterrupted power supply and also subscribe to electronic resources that have user-friendly interface to facilitate ease of use of the resources by the users

References

Aladeniyi, F. R. (2017). "The use of e-journals by academic staff of Rufus Giwa polytechnic, Owo,
Ondo State, Nigeria. *International Journal of Library and Information Science*. Vol. 9(5) 37-43.

Alemu, S. K. (2018). Meaning, idea and history of university higher education: Brief literature review. *FIRE: Forum for International Research in Education*, *4*(3), 6-11. https://doi.org/10.32865/fire20184312.

Bala, S. Bansal, S., & Sharma,Y. (2018). Awareness of Open Access Resources among the researchers of Punjab Agricultural University, Ludhiana, *International Journal of Library Information Network and Knowledge*. Vol. 3 (1), 139- 145.

Bamigboye, D., Bamidele, D., Opeyemi, R., Idayat, O. A., & Sunday O. E. (2018). Electronic resources as a panacea for research output of academic staff: A case study of Nigerian University. *Journal of Library and information Sciences, 6(1), 32-36.* https://doi.org/10.15640/jlis.v6nla5.

Bhatt, S. & Rana, M. S. (2011). E-information usage among engineering academics in India with special reference to Rajasthan State. *Library Hi Tech*, 29(3), 496-511.

Bitagi, A. M. & Garba S. K. (2008). An advocate for the expanding role of university library resources and services for the benefit of disable users. Borno Library Archival and Information Science Journal. 7(2): 62-70

Dange, J. K. (2010). Postgraduate students computing confidence: computer and internet usage at Kuvempu University-an Indian Study. *International Journal of Instruction*, *3*(2), 71.88.

Dare, S. A. (2017). Availability, use and constraints to use of electronic information resources by postgraduates students at the University of Ibadan. *International Journal of Knowledge Content Development & Technology,* 7(4), 51-69.

Ibidapo-Obe, O. (2012). Reconstructing the Nigerian education landscape: Road maps for driving innovations and development. In: Obayan, A.; Awonuga, C. & Ekeayanwu N. (eds.) *Idea of a University;* Ota: Covenant University Press.

IFLA. (2012). Key issues for e-resources collection development: a guide for libraries. Retrieved from http://www.ifla.org/files/acquisiton-collection development /publications/key%20Issues%20for%.

Kalogiannakis, M. (2010). Training with ICT for ICT from the trainee's perspective. A local ICT teacher training experience. *Education and information technologies.* 15(1), 3-17.

Kavithanjali, J. (2019). E-Resources, their importance, types, issues and challenges: An analysis. *IJRAR- International Journal of Research and Analytical Reviews*, 6 (1), 66-85.

Kumar, K.G., & Kumbar, M. 2015. "Use of electronic information resources and search pattern bythe faculty of autonomous engineering colleges in Karnataka: A survey". SRELS Journal ofInformation Management, vol. 52, no.4, pp. 259-266. doi:10.17821/srels/2015/v52i4/74833

Kwafoa, P. N. Y., Kwaku A, B. & Emmanuel M. A. (2019). Use of electronic resources by postgraduate students in University of Cape Cost. *Library philosophy and practices (-journal)*. 11(2), 7-13.

Madhusudhan, M. (2008). Use of UGC-Infonet e-journals by research – scholars and students of the university of Delhi, Delhi: A study. *Library Hi Tech*. Vol. 26(3), 369-386.

Madhusudhan, M. (2010). Use of electronic resources by research scholars of Kurukshetra University. *Electronic Library*, 2010, 28(1), 492–506.

Mohammed, S. A. & Philip U. A. (2017). Availability and utilization of electronic information databases for research by agricultural scientists in federal university libraries in north central Nigeria. Library Philosophy and Practice (e-journal). 1600. http://digitalcommons.unl.edu/libphilprac/1600.

Mulla, K. R. (2011). Use of electronic resources by faculty members in HKBK College of Engineering: A survey. *Library philosophy and practice.* [Accessed on 13-11- 2020]. Retrieved from: http://digitalcommons.unl.edu/cgi/view content.

Mwantimwa, K. (2012). The use of pull information mode to support poverty reduction programmes in rural Tanzania: A case of Monduli and Bagamoyo districts. PhD Thesis. University of Antwerpen: Belgium. Okiy, R. B. (2014). History of Libraries. 2nd ed. Edo State: Ambik Press, p. 120.

Mwantimwa, K., Elia, E. and Ndenje Sichwale, E. (2017). Utilization of E-Resources to

Support Teaching and Research in Higher Learning Institutions, Tanzania. *University of Dares Salam Library Journal*. Vol. 12(2), 98-123.

Nisha, F. & Ali, P. M. N. (2013). Awareness and Use of E-Journal by IIT Delhi and Delhi University Library Users. *Collection building*. Vol. 32(2), 51-64.

Okogwu, F. I. (2020). Electronic resources collection development in university libraries: an empirical review of selected literature. Library Philosophy and Practice (e-journal). 4094. https://digitalcommons.unl.ed u/libphilprac/4094.

Oyedapo, R. O. & Ojo, R. A. (2013). A Survey of the use of electronic resources in Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile-Ife, Nigeria. *Library Philosophy Sand Practice*. Retrieved fromhttp://digitalcommons.unl.edu/libphilprac/884.

Qasim, J., Khan, A. M. (2015). Use of e-Journals by the Scientist of CSIR-Institute of Genomics and Biology (IGIB), Delhi, India: A study. *The electronic library*. Vol. 33(5), 928-942.

Quadri, G. O., Adetimirin, A. F. & 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*. Vol. 6(3), pp 28-34.

Rehman, R. & Ramzy, H. (2004). Awareness and Use of Electronic Information Resources at the Health Science Centre of Kuwait University. *Library Review*. Vol. 53(3), p.150 - 156.

Sethi, B. & Panda, K. C. (2011). Use of e-resources by Life Science: A case study of Sambalpur University, India. *Library philosophy and practice (e-journal)*. Paper 681.

Sharma, C. (2009). Use and impact of e-resources at Guru Gobind Singh Indraprastha University (India): A case study. *Electronic Journal of Academic and Special Librarianship*. http://southernlibrarianship.icaap.org/content/v10n01/sharma_c01.html Accessed on 14/06/11.

Shukla, P. & Mishra, R. (2011). Use of e-resources by research scholars of Institute of Technology, Banaras Hindu University, India. *International refereed research journal. 11*(2).Retrieved from: http://www.researchersworld.com. [Accessed 6-09- 2023].

Siwach, A. K. & Malik, S. K. (2019). Use of Electronic Resources by Science Faculty and Research in Selected North Indian Universities. *Library philosophy and practice e-Journal*.

Tella, A., Akande, F. T., & Bamidele S. S. (2018). ICT knowledge and skills required for recruitment of academic libraries in the digital age. *Library Philosophy and Practice (e-journal)*.

Ukachi, B. N. (2013). Accessibility and students variables as correlates of the use of electronic information resources in university libraries in South-west, Nigeria. An Unpublished Dissertation. Submitted to the department of library and information science, University of Nigeria, Nsukka.